MAKING SENSE OF WELL-BEING: A MIXED-METHODS STUDY APPLYING SENSE-MAKING THEORY TO EXPLORE THE ROLE OF COMMUNICATION COMPETENCE AND SOCIAL SUPPORT IN PHYSICAL, EMOTIONAL, MENTAL AND COMPREHENSIVE WELL-BEING

by

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Making Sense of Well-being: A Mixed-methods study applying sense-making theory to explore the role of communication competence and social support in physical, emotional, mental and comprehensive well-being

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DEDICATION

Chris, Brandon and Sophia --
With my love and unequivocal hope for their well-being.

To Pattie and Dixie (Mom)-
For pennies.

To Pat (Dad)
For always being there no matter what.

And to Bob –
For smiles, understanding, and making things happen.

ACKNOWLEDGEMENTS

About halfway through my doctoral studies in health communication, I stumbled upon a well-known quote attributed to the World Health Organization: “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO, 1948).

I smiled as I thought about my discipline of health communication, with regards to this quote. A scary thought emerged.

If health is really well-being, why are we calling it health communication? Why not well-being communication?

This proved to be a dangerous question.

I began investigating well-being as a construct separate from health, and discovered that well-being was quite a challenging construct. It was and it wasn’t health. It was and it wasn’t wellness. It was and it wasn’t physical, mental, emotional, spiritual, legal or financial. It lived in many academic disciplines, to include economics, sociology, anthropology, psychology and business to name just a few. It seemed to be everywhere, and yet nowhere at all.

The more I tried to define it, the more illusive it became.

The study of well-being was actually starting to have a negative effect on my own well-being. Like a lost set of keys that you know you put “somewhere,” I knew, and felt, that I could find it if I only searched a little more. And yet, the more I looked, the more I was confused by more possibilities, and the more I was at a loss. To use Dervin’s (2008) methodology, I was in the gap. I was having a hard time making sense of well-being.

I then decided to approach well-being as a health promotion strategist. Health communication-based health promotion begins with the user. By asking your public to define their problems, you not only learn what they need; you create an entire campaign that is more likely to succeed because (1) it is actually needed and (2) it involves the user in its design. Collaborating with a public to discover whether or not a problem exists in the first place, and then, if one does, creating a solution for the problem is a lot different than handing a public a pre-fabricated solution and telling them that should like it because its good for them. It goes over better too.

So, I got myself out of my scholarly gap, by deciding that whether or not I could personally and academically “get” well-being, I could at least approach a population and learn how *they* understood well-being. More importantly, I sought to understand what well-being *meant* to them. How did well-being function in their lives? Did they already have well-being? If they didn’t, what problems were in their way? How could I, as a health communication scholar, help them access it if they did not? How could I help them maintain well-being if they already had it? And perhaps most importantly, did well-being

matter as much to them, as it mattered to me? Would well-being communication really make a difference?

With these questions as groundwork, I then began to construct this study. I decided to place the study into a global community health context. Although I would self-identify as an interpretive scholar with a constructivist perspective, I know that social influence is a strong factor in one's lived experience and ones health. And, as a global and community health-trained scholar, I really wanted to know if well-being was something that is not only grounded in the individual's lived experience, but also available to, embedded within and influenced by organizations and communities. I decided to choose a culture that I was already standing in; namely, the very university I was attending. This choice was deliberate on my part; I knew I would have immediate access to this population and that it would offer at least the possibility of diversity in subjects with regards to age, gender and race.

Interestingly enough, midway through my proposal process when I was knee-deep in my literature review, I was surprised to learn that the very place where I was studying well-being, George Mason University, had decided to become a well-being university. Suddenly my otherwise theoretical study had potentially new meaning and significance; it was no longer about me and my own questions. It was now a translational project.

I soon learned that the university task force that was created to establish GMU as a well-being university, was asking the same questions I was. What is well-being? Why is it important in higher education for and at George Mason University in particular? Over the course of a year and a half, the answers did not come easy, and in some cases did not come at all. Nevertheless, the task force ultimately decided to stand in similar intellectual curiosity (ground) that I chose to stand in. -- to accept that diversity exists with regards to well-being scholarship, perspectives and lived experiences, and to move forward towards a better understanding of it anyway by making a conscious effort to promote it. This led a decision to change the name of The Center for Consciousness and Transformation to the Center for the Advancement of Well-being. The center is dedicated to researching, promoting and understanding well-being, for GMU, higher education, and the world.

Slightly daunted by the new significance my research suddenly had, I decided to press forward into bigger questions. I consoled myself with the realization that if nothing else my scholarship would enable future well-being promotion efforts at the university to have an important baseline of well-being.

As the study was defined, proposed, defended, launched, recruited, and (data) crunched, I saw an amazing transformation take place. The entire process of talking about well-being within the Mason culture was creating a campaign; subjects repeatedly emailed me after the interviews (phase 1) and the surveys (phase 2) to tell me that the process of completing the protocol had actually been a positive experience for them. In other words, thinking about well-being (through interviews or survey completions), discussing well-being, and/or answering questions about well-being had helped them with their well-being (or so they told me).

And, another transformation took place: my own. I learned to pay deeper attention to how well-being functions in my own life. Specifically, I realized that my well-being does not function in isolation – in the physical, mental, emotional, social, professional,

financial, and/or familial dimensions of my lived experience. Instead, well-being for me functions best when I feel as though I am giving each of these dimensions the time and energy they need in order for all of them to thrive, and when I am promoting well-being to others. Admittedly, I learned this while trying to juggle professional and personal demands, complete this degree, and conduct this study.

It has not been easy. Ironically the very communication scholarship that has challenged my work/life balance in unprecedented ways, has also given me the tools I have needed to handle the busy workload and also some Very Big (Tragic) Life Events over these past two years. I'll choose not to list them here to maintain decorum and privacy, and to not derail this discussion into territory which does not belong here. But, that's what communication scholarship is all about:– staying on point and respecting the receiver and the context.

To conclude I would like to thank the people and agencies that helped make this project happen. Thanks to Nance Lucas, Mark Thurston and their team at the Center for the Advancement of Well-being of George Mason University for their funding support of this project. I am also very grateful to have received a dissertation completion grant from the Office of the Provost at GMU, which gave me a semester sabbatical from my graduate teaching assistantship so that I could devote my full-time attention to this project.

My advisor, Gary L. Kreps has been an inspiring mentor to me. Since the day I walked into his E-health class as a non-degree student wearing yoga attire, he has not only supported, but shown respect for the translational (and nontraditional) nature of my scholarship. He has also been accessible for every phase of this project, despite the fact he has been on sabbatical and has traveled the globe more than once since I began. Thank you Gary for the mentorship, the support.

To my advisor Joshua G. Rosenberger, thank you for making this health communication scholar feel welcomed in your global community health class. I continue to be inspired by your ability to work hard, think outside the box, hold your own as a scholar and talk faster than anyone I know (except possibly me). Thank you for helping me through difficult moments professionally and personally, for facetime conversations from around the world, and for reminding me that my work matters when I needed to hear it.

To Xiaoquan Zho, thank you for your support as a committee member, and as a faculty member. I am very grateful for your willingness to serve as an advisor to this study, despite the fact that you were on your own professional sabbatical for the year.

To my other mentors in the department of communication at George Mason University, especially: Carl Botan, Kathy Rowan, Lance Schmeidler, Don Boileau, Xiaomei Cai, Mark Hopson, Anne Nicotera, Tim Gibson, Kevin Wright and Carla Fisher: thank you for everything you have taught me. You have challenged me in ways I would not have thought were possible three years ago, and yet I could not be more grateful for what I have learned from you.

To my colleagues in my consulting practice, thank you for understanding why and when I needed to disappear to conduct my literature review, write the proposal, complete the interviews, conduct recruitment, track survey data, and ultimately write this

document. There were many times I saw you covering for me, and I am sure there were many times where you did so and I had no idea. Thank you for both, especially the latter. A special thanks to Phyllis Cook, Angelique Lockhart, Michelle Starkey, and ChiChi Mallari for always having my back, and thanks to the rest of my team for your hard work and dedication: Kathleen Dawson, Anne and Bill McDow, Branden Garnett, Ashleigh Enriquez, Clare Davidson, Gina Piccoli, Christie Thomas, Alexis Rose, Alexis Wales.

To my clients, and my students (both at my studio and at GMU) thank you for allowing me to have the privilege to work with you. I learn more from our work together than I do from journals, both about well-being and about myself. I hope some day to take what I have learned from each of you, and to share it in the literature. But first things first – let's get this project done.

And most of all thanks to my family and dear friends.

To my Mom (who died when I was an undergraduate student) and my Sister, (who died while this manuscript was being written) thank you for what you have taught me about life: that it is meant to be lived and it is meant to be shared. I will continue to dedicate my scholarship, and my lived experience to ensuring that others do not leave too soon like you both did.

To Jane Easler, thanks for teaching me long ago that life is meant to be lived without worrying so much, for always being there when I needed support, and for long talks at your kitchen table. Cyndi Carmack, my big sister, thanks for the dream catchers and for being one yourself. Ed Carmack, my not-so-little brother, thanks to you and your colleagues for your daily commitment to protecting the well-being of others as a police officer. We should all thank you more often. Cousin Brenda Wolfram, thanks for long talks in your hair salon while you made me look and feel beautiful.

To my Dad, Pat Carmack, thank you for always being there whenever I (or any of my siblings) needed you, and for inspiring me to be a teacher.

To my children, Chris, Brandon and Sophia, thank you for understanding that at times my role as your mother and my role as a scholar were in direct conflict with each other. I know this process has not been easy on you, so to say thank you for your support seems inadequate. Instead, I will tell you that I am proud of you, and I am grateful that someday, that you will understand what I went through and why I did it. When "life happened" to us 3 years ago, and I did not know where I could go next to support you and take care of you, I chose to do the most insane thing possible: I chose to fulfill a lifelong dream and pursue this PhD. I hope that someday you will realize that I did it not just for me, and not just to support you (although those were important factors in the decision). I did it to show you, by my example, that anything is possible. Even if its late. And crazy. And not perfect. It is still possible. I believe in each of you, and your dreams. I know you have it in you to go get them. It's my job to do what I can to clear your path, get out of your way, and cheer you on. I am grateful for each of you more than you will ever know.

And finally, thank you to Bob Shircliff. Thank you for the times I was late because I was stuck somewhere in my head, or traffic. Thank you for the reminders to "go be brilliant today." Thank you for not giving me a hard time over the trips we did not take because I couldn't get away – not once, but twice. Thank you for keeping the martini glass chilled just in case. Most of all, thank you for being awesome. In our two years

together you have shown me more love and unconditional support than I have ever experienced let alone researched.

I am grateful to be here, at this place of outcome, and to be past the gaps which were at times so dark I couldn't see. I am hopeful about what's next. In the meantime, I am glad to be moving through, and that for now at least, life makes sense.

Suzie Carmack, PhD
April 18, 2014

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ABSTRACT

MAKING SENSE OF WELL-BEING: A MIXED-METHODS STUDY APPLYING SENSE-MAKING THEORY TO EXPLORE THE ROLE OF COMMUNICATION COMPETENCE AND SOCIAL SUPPORT IN PHYSICAL, EMOTIONAL, MENTAL AND COMPREHENSIVE WELL-BEING

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George Mason University, 2014

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In keeping with the World Health Organization's definition of health as a "state of complete physical, mental and social well-being and not merely the absence of disease or infirmity," (WHO, 1948) this study investigated well-being from a health communication perspective. Expanding upon previous interdisciplinary literature which has sought to define what well-being is, and what it is not, in often complex and competing ways, this investigation explores how individual members of the George Mason University culture (i.e. faculty, staff and students) make sense of well-being with regards to their health and their lived experience. Inspired by Kreps's (1988) Relational Health Communication Competence Model (RHCCM), Dervin's (2008) Sense-Making methodology and Weick's (2005) sensemaking theory, this mixed-methods study qualitatively explores well-being as a sensemaking process, and quantitatively explores the influence of communication competence and social support on physical, mental and emotional well-being outcomes. In the first and qualitative portion of the study, a small (n=38) self-selected, non-randomized sample population of faculty, staff and students of George Mason University were interviewed using open-ended questions inspired by Sense-Making methodology (Dervin, 2008) to uncover how these respondents make sense of their well-being. In the second and quantitative portion of the study, a larger and more diverse sample population (n=644) completed a multi-faceted self-report survey instrument measuring interpersonal communication competence, social support, and comprehensive, emotional, mental and physical well-being. RESULTS In both qualitative and quantitative data, communication competence, social support, and the communicative act of Sense-making (Dervin, 2008) were shown to positively correlate with the self-reported and subjective well-being of the participants in this study. Additionally, dimensions of social support and communication competence predicted all four dimensions of well-being examined (i.e. comprehensive, mental, emotional and physical

well-being). CONCLUSION Based on the study's quantitative and qualitative findings, the discussion offers a new theoretical framework for well-being research, entitled centered well-being. This centered well-being model posits that well-being functions as a Sense-Making experience, influenced by intrapersonal, interpersonal, and intercultural communication. Ultimately, this study offers health communication and public health scholars and practitioners mixed-methods insights into the role that well-being plays in the three central avenues of health communication scholarship: health literacy, patient-provider communication and health promotion.

CHAPTER ONE: STUDY PURPOSE

A Well-being Lens for Health Communication

The World Health Organization defines health as "a state of complete physical, mental and social well-being" (WHO, 1948). Additionally, the terms "health" and "well-being" are often used interchangeably in the literature and in everyday conversation. However, there is a long-standing disagreement amongst scholars and general populations regarding the definition of well-being as a construct distinct from health (Angner, 2011; Makoul, Clayman, Lynch & Thompson, 2009, p. 12; Conceicao & Bandura, 2008; Kahnemann 2010; Diener, 1984; Kashdan, 2013). It is beyond the scope of this investigation to challenge existing well-being scholarship in regards to either a definition or a description of the term well-being (although an overview of these long-standing definitions will be provided in chapter 2 of this discussion). Instead, this investigation will contribute to the complex landscape of well-being literature by offering a communication-based perspective to the discussion. In so doing, it is hoped that this study will also contribute to the health communication literature and practice which "often fails to engage people to change behavior within the complex contexts of their lives" (Kreps & Neuhauser, 2010).

This mixed methods study will qualitatively investigate ways that the communicative act of sensemaking (as defined by Dervin, 2008, and Weick, 2005),

enables an individual to operationalize their well-being in physical, mental, emotional and comprehensive well-being domains. Further, this study will quantitatively investigate the influences of communication competence and social support on well-being (i.e. comprehensive, mental, emotional, and physical well-being) and the ways that well-being influences communication competence and social support..

It should be noted here that this study purposefully specifies the term "well-being" rather than the similar terms of "health", or "wellness" for its investigation. Although the terms health, wellness and well-being are often used interchangeably, this choice to examine well-being (as a construct that is related to, yet distinct from health and wellness) is made purposively.

The construct of well-being is surprisingly complicated given its frequent use in everyday conversations and empirical research. A review of the literature (found in chapter 2) reveals that well-being is often discussed with regards to its objective and subjective nature. Objective well-being (OWB) refers to an individual's safety, security and welfare. Subjective well-being (SWB) typically refers to a host of individual (self-determined) perspectives on life, health and meaning, including: life satisfaction, goal satisfaction, life meaning/purpose, and happiness (Stanton 2007; Sumner, 2006; Conceicao & Bandura, 2008; Van Hoorn, 2007, p 1; Diener, 1990; Diener & Emmons, 1984; Andrews & Withey, 1976; Judge & Hulin, 1990; Liang, 1985; Stock, Okun, & Benin, 1986; McGillivray and Clarke, 2006, p. 4; Bruni and Porta, 2007, p. xviii; Gallup-Healthways, 2012; Diener, Suh, Lucas & Smith 1997; Campbell, 1976). Both aspects of objective and subjective well-being can be understood, examined and evaluated with

regards to physical, mental and emotional dimensions.

This investigation does not seek to challenge the complexities and frequent contradictions of these multi-disciplinary perspectives of well-being. Instead, this investigation seeks to integrate these prior complex and multi-disciplinary examinations of well-being that have generally focused on attempts to define well-being (i.e. delineating what it is, and what it is not). It is hoped that this act of bringing a communication lens to well-being scholarship and practice, will provide new and practical insights into the complexities of well-being investigation and inquiry. By examining the role that communication plays in the individual's experience of well-being, this investigation seeks to explore ways that well-being can function for the individual as a communication (sensemaking) process, and ways that communication competence and social support can influence well-being.

In addition to offering well-being scholarship a communication-based perspective, this investigation also offers communication practice and scholarship, especially health communication scholarship, a well-being perspective. Through the lens of well-being, health communication scholars and practitioners can acknowledge the lived experience of the "whole person." This perspective has the potential of integrating the sub-domains of health communication scholarship: health literacy, patient-provider communication, and health promotion. As noted by Cronin de Chavez, et. al. 2005):

> "'Well-being' may offer considerable potential for unifying diverse sectors and interests around the goal of improving health and therefore health promotion and health research should reflect on the meaning of the term. [There has been] surprisingly….relatively little attention given to understanding the concept of well-being in our review of health promotion and health studies. Where it was used, this tended to be in an uncontested manner and rooted in the biomedical paradigm"

(Cronin de Chavez, et. al., 2005, p. 71-75.)

Surprisingly, health communication scholarship has paid very limited attention to distinguishing between the nuances found in the terms "health," "wellness," and "well-being" and their implications for health literacy, patient-provider and health promotion contexts. As noted in a literature review of well-being for *Health Education Journal*, Cronin de Chavez, Backett-Milburn, Parry, and Pratt (2005), when well-being is discussed from a health promotion perspective, it is usually done so under a biomedical paradigm (i.e. on the basis of physical health outcomes), and it is usually with an interchangeable, almost casual use of the terms "health" and "well-being".

This mixed methods study is based on the premise that while well-being is difficult for scholars and the public to define, it functions as a communication (sensemaking) process in which the individual makes sense of health outcomes, life situations, and/or lived experience. For the purposes of this discussion, well-being will be discussed as having four dimensions (i.e. comprehensive, physical, mental and emotional well-being). Although each dimension can operate independently, each is also linked with the other dimensions for comprehensive well-being. The study posits that the communication-based process of sensemaking, as well as communication competence and social support, positively correlate with physical, mental, emotional and comprehensive well-being. The investigation therefore examines (1) the ways that individuals engage in the communication process of sensemaking (Dervin, 2008; Weick, 2005) with regards to well-being; and (2) correlations between communication competence, social support, and physical, mental, emotional and comprehensive well-being.

This study used both qualitative and quantitative analysis to understand the complex role of sensemaking, communication competence and social support in well-being. Phase 1 of the study explored individual respondents' sensemaking processes with regards to well-being, relying heavily upon Dervin's (2008) Sense-Making interview methodology. Open-ended interviews were conducted with a non-randomized, self-selected members of George Mason University's faculty, staff and student populations (n=38). The first and qualitative portion of the study investigated (1) whether or not respondents describe their well-being as a Sense-Making process, and (2) how they evaluated their lived experience relative to their conceptualization of well-being. (i.e. whether or not they would describe themselves as having, or not having, well-being). Each individual was asked to describe their conceptualization of comprehensive well-being, as well as the ways that they conceptualize physical, mental and emotional well-being. The interviewees were then asked to articulate their perceptions of their current well-being status relative to their own and unique conceptualization. Ultimately, this open-ended question methodology sought to explore whether or not descriptions of Sense-Making processes (Dervin, 2008) emerged in each respondent's descriptions of their well-being. As will be shown, the majority of respondents did describe their well-being using Sense-Making processes (Dervin, 2008).

In follow-up qualitative data analysis, trends were noted amongst individual respondents' conceptualizations of well-being. Both numerical and thematic content analyses were conducted with the qualitative data (i.e. answers to open-ended questions), to determine levels of agreement in responses and whether thematic trends of the

sensemaking process exist within the population. Findings from this analysis can be found in chapter four (results).

In phase 2 of the mixed methods study, a quantitative examination of a larger cross-section of the George Mason University community (n=644) was conducted. This portion of the study utilized a survey instrument that combined measures of interpersonal communication competence inspired by the work of Spitzberg & Cupach (1983), social support (Sarason, Sarason, Shearin, & Pierce, 1987) and well-being. Comprehensive well-being was measured with the WHO-5 instrument (Bech, 2012). Emotional well-being was measured in two types. Emotional well-being type 1: happiness was measured via Lyubomirsk & Lepper's (1999) 4-item subjective happiness scale, while emotional well-being type 2: cheerfulness was measured via a question regarding cheerfulness on the WHO-5 instrument (Bech, 2012). Mental well-being was measured through the WHO-5 instrument (Bech 2012), in two particular types: life satisfaction and calm mood. Physical well-being was measured in four types. Physical well-being type 1: cardiovascular activity and type 2: strength training and/or stretching such as yoga were measured through the RAPA: Rapid Assessment of Physical Activity (University of Washington Health Promotion Research Center, 2006). Physical well-being type 3: energy balance and type 4: well-restedness were both measured through questions from the WHO-5 instrument (Bech, 2012).

By contending that well-being functions as a Sense-Making process that depends upon communication competence and social support, this study offers health communication and well-being scholarship new possibilities for linking the well-being

literature with the health education, health promotion, and health communication literature. Ultimately, this investigation offers health communication and public health scholars mixed-methods insights into the role that well-being can play in the three central contexts of health communication: health literacy, patient-provider communication and health promotion contexts.

CHAPTER TWO: LITERATURE REVIEW

As stated in chapter 1, this investigation seeks to explore the relationship between communication competence, social support and well-being, and the role that sensemaking plays in this process. As will be shown, empirical evidence does support the capacity for communication competence and social support to positively influence health outcomes. However, a survey of the literature reveals that much less is known with regards to the relationships between communication competence, social support, sensemaking and well-being. This chapter's discussion will (1) examine the complexities of that exist in the empirical literature with regards to the problem of defining well-being; (2) explain how communication-based perspectives on sensemaking will inform this investigations of well-being; (3) summarize prior research citing the influence of communication competence and social support on biopyschosocial health outcomes; and (4) conclude with an explanation of this study's specific choice to explore how sensemaking, communication competence and social support influence well-being in the campus culture of George Mason University.

The Complexities of Well-being

Attempts to examine and define well-being vary in the literature and in popular culture, from the objective to the subjective, and from the societal (epidemiological) to the

individualistic (interpretative and critical). Ironically, "there is more agreement about how to measure well-being than about how to define it" (Angner, 2011).

Objective well-being (OWB) is concerned with one's safety and security (welfare) and is often measured across populations, epidemiologically. Income, GDP, life expectancy, mortality and poverty rates are examples of how OWB has been conceptualized and measured in the literature and in the marketplace (Gallup-Healthways, 2012; Conceico & Bandura, 2008). The Physical Quality of Life Index (PQLI) monitors infant mortality, life expectancy and adult literacy rates as measures of OWB (McGillivray 2007; Stanton 2007; Sumner 2006). The Human Development Index (HDI) combines income per capita, life expectancy at birth, adult literacy and education enrollment ratios to understand OWB (UNDP 2007). Stamina (relative to age, sex, lifestyle and state of health) can also be considered an objective measure of well-being (Ewin, 2000). These societal/epidemiological measures of well-being are meaningful in the sense that they are able to provide valid and reliable information on how well people and societies as a whole are doing, and can be used to shape and appraise policy (vanHoorn, 2007).

Alternatively to these objective attempts to define and describe well-being for populations, individual-based measures of well-being are generally more subjective in nature. A variety of authors conceptualize subjective well-being (SWB) in their own unique way (Van Hoorn, 2007; Diener, 1990; Diener & Emmons, 1984; Andrews & Withey, 1976; Judge & Hulin, 1990; Liang, 1985; Stock Okun, & Benin, 1986; McGillivray and Clarke, 2006, p. 4; Gallup-Healthways, 2012). Subjective well-being

investigations are increasingly conducted by health and human service professionals, to investigate the strengths, capacities, and resources that an individual needs to become emotionally resilient to life's problems and challenges (Seligman & Peterson, 2003) and to flourish (Joseph & Linley, 2006; Seligman, 2011).

Subjective definitions of well-being (SWB) can generally be grouped into two categories: how an individual perceives their life and/or moments within their life, and/or how an individual feels about their life and/or moments within their life (Gallup-Healthways, 2012; Angner, 2011; Kashdan, 2013; Kahnemann, 2010). Subjective definitions of well-being can also be grouped into measures of one's experience of life (i.e. happiness) or one's evaluation of life (i.e. life satisfaction) (Campbell, Converse, & Rodgers 1976; Eid & Larsen 2008; Ryan &Deci 2001; Sirgy 2002; van Praag & Ferrer-I-Carbonell 2004; Zumbo, 2002). To simplify this brief overview of well-being scholarship, definitions of well-being will be discussed by grouping affect-based definitions and cognitive-based definitions.

Affect-based definitions of subjective well-being refer to both the presence of positive affect (i.e. happiness) and the diminished presence or absence of negative affect (i.e. depression). These affect-based and experiential approaches to well-being are hedonic, guided by emotions and feelings, and place a premium on happiness. On the other hand, cognitive-based and evaluative approaches to well-being are information-based: the individual compares their current life with their envisioned ideal life (Van Hoorn, 2007, p 1; Diener et al., 1999: p. 277; Van Hoorn, 2007; Diener, 2006; Shin & Johnson, 1978; Kahneman, 2010; Beiser, 1974; Campbell, Converse & Rogers, 1976;

DeHaes, Pennink, & Welvaart, 1987). Cognitive-based descriptions of well-being can refer to one's global judgment of their life, as well as their specific satisfaction levels with key life domain areas (Pavor and Diener, 1993). The cognitive well-being determinants most often cited in the literature include: life evaluation, goal satisfaction, quality of life and sense of meaning and purpose (Conceicao & Bandura, 2008; Van Hoorn, 2007, p 1; Diener, 1990; Diener & Emmons, 1984; Andrews & Withey, 1976; Judge & Hulin, 1990; Liang, 1985; Stock, Okun, & Benin, 1986; McGillivray and Clarke, 2006, p. 4; Bruni and Porta, 2007, p. xviii; Gallup-Healthways, 2012; Diener, Suh, Lucas & Smith 1997; Campbell, 1976).

Angner (2011) notes that the construct of preference hedonism (Crisp, 2006) may be a key to comprehensively understanding and contextualizing these affective and cognitive components of subjective well-being:

> Proponents of subjective measures of well-being can easily be understood as presupposing an eclectic account of subjective well-being. Those who think of subjective well-being in terms of happiness can be interpreted as preference hedonists who believe that people want to be happy. Those who think of subjective well-being in terms of satisfaction can be understood as preference hedonists who believe that people want to be satisfied. And those who think of subjective well-being in terms of multiple positive evaluations can be read as preference hedonists who think that people desire such things (Angner, 2009, p. 20).

Although Angner (2009) focuses his discussion on preference hedonism in regards to subjective dimensions of well-being, one can also suppose that preference hedonism has a place in discussions of objective well-being as well. It is assumed that humanity in general, and individual humans in particular, prefer their welfare (security and safety), rather than the alternative. However, not all individuals prefer what is best for them, nor

what is in their best interest (Angner, 2009).

Well-being as Sense-Making (Dervin) and sensemaking (Weick)

As has been shown, there is disagreement in the literature with regards to what well-being is, and what it is not. This investigation does not seek to challenge the complexities and frequent contradictions of these multi-disciplinary perspectives that seek to explore "what" well-being is. Instead, this investigation seeks to examine the "how" of well-being – how individuals make sense of well-being with regards to their health and their lived experience. It is the "how" of well-being that has particular relevance to health communication scholarship, because it can inform the ways that health campaigns, and healthcare delivery is designed from a patient-centered perspective. As noted by Neuhauser & Kreps (2011), "We [health communication and campaign designers] have messages to send, but people have lives to live, and rarely do we bridge that gap."

In order to better understand and investigate the "how" of well-being, this investigation explores the possibility that well-being can function as a sensemaking (communication) process, that is influenced by communication competence and social support. As a health communication study, this discussion draws from three theoretical perspectives. The first two theoretical perspectives focus on sensemaking, specifically Dervin's Sense-Making methodology (1983; 1986; 1992; 1996; 1999; 2003; 2005; 2008) and Weick's sensemaking theory (1995; 2003; 2005). [Author's note: Dervin uses the term Sense-Making, using two words and capital letters. Weick uses one word without capital letters. In this discussion, both spellings will be used.] The third theoretical

framework, the relational health communication competence model (RHCCM) (Kreps, 1988), offers one possible application of ways that a well-being perspective can inform health communication scholarship and practice. RHCCM will be discussed later in this chapter.

The choice to apply sensemaking theoretical frameworks to well-being is in keeping with Ancona's (2012) discussion of sensemaking as a tool to examine confusing and at times contradictory themes (such as well-being):

> "Sensemaking involves coming up with a plausible understanding—a map—of a shifting world; testing this map with others through data collection, action, and conversation; and then refining, or abandoning, the map depending on how credible it is…..As we try to map confusion and bring coherence to what appears mysterious, we are able to talk about what is happening, bring multiple interpretations to our situations, and then act. Then, as we continue to act, we can change the map to fit our experience and reflect our growing understanding." (Ancona, 2012, p.3-6)

Dervin (2008) articulates Sense-Making (capital letters intended by Dervin) as a construct relative to the individual: Sense-Making is an individual's ability to make sense of a situation, desired outcomes and gaps and/or bridges of time and space perceived by the individual to exist between the two. Weick (2008) describes sensemaking as a reality that "is an ongoing accomplishment that emerges from efforts to create order and make retrospective sense of what occurs" (Weick, 1993, p. 635). Weick's approach infuses the importance of retrospection and organizational (cultural) influence on the individual's sensemaking process; we make sense of events as we look back in time and process what has occurred. Dervin's conceptualization of sensemaking (which she terms Sense-Making, capital letters and hyphen intended) is a non-linear process that occurs as the individual

ponders forward in time. If the individual can conceptualize where they are, where they are going, and how they might get there, Sense-Making occurs (Dervin, 2008). If the individual has difficulty clarifying any and/or all three of these dimensions, then the individual is in a Sense-Unmaking process.

Dervin's Sense-Making framework (2008) is at once a paradigm, a metatheory, a theory and a methodology all in one. Under Dervin's Sense-Making paradigm (2008) reality is constructed by an individual who seeks to make sense of data – the observations of others as well as their own observations. The theory originated in the discipline of library sciences, and informs much of the information-seeking and information use behavior literature. According to Dervin (2008), the individual's Sense-Making process occurs when the individual processes their (a) situation in time/space (the context and the role of power within that context); (b) their desired outcomes; (c) the bridge of beliefs/values/thoughts between the two; (d) the context in which this scenario occurs and (e) its perceived importance and relevance for the individual's lived experience. Gaps occur in this process that either create sense (Sense-Making) or change/alter/shift sense (Sense-Unmaking). The entire endeavor is a communication process that challenges prior communication literature that describes communication as a transmission-based process between sender and receiver. Instead, Dervin (2008) posits that information is co-created by the individual in the gap-bridging process between situation, context and outcome (Dervin, 2008); as sense is made, information is co-created.

The figure below was created by Dervin (2008) to depict the framework; the metaphor depicted is also a key feature of the theoretical framework.

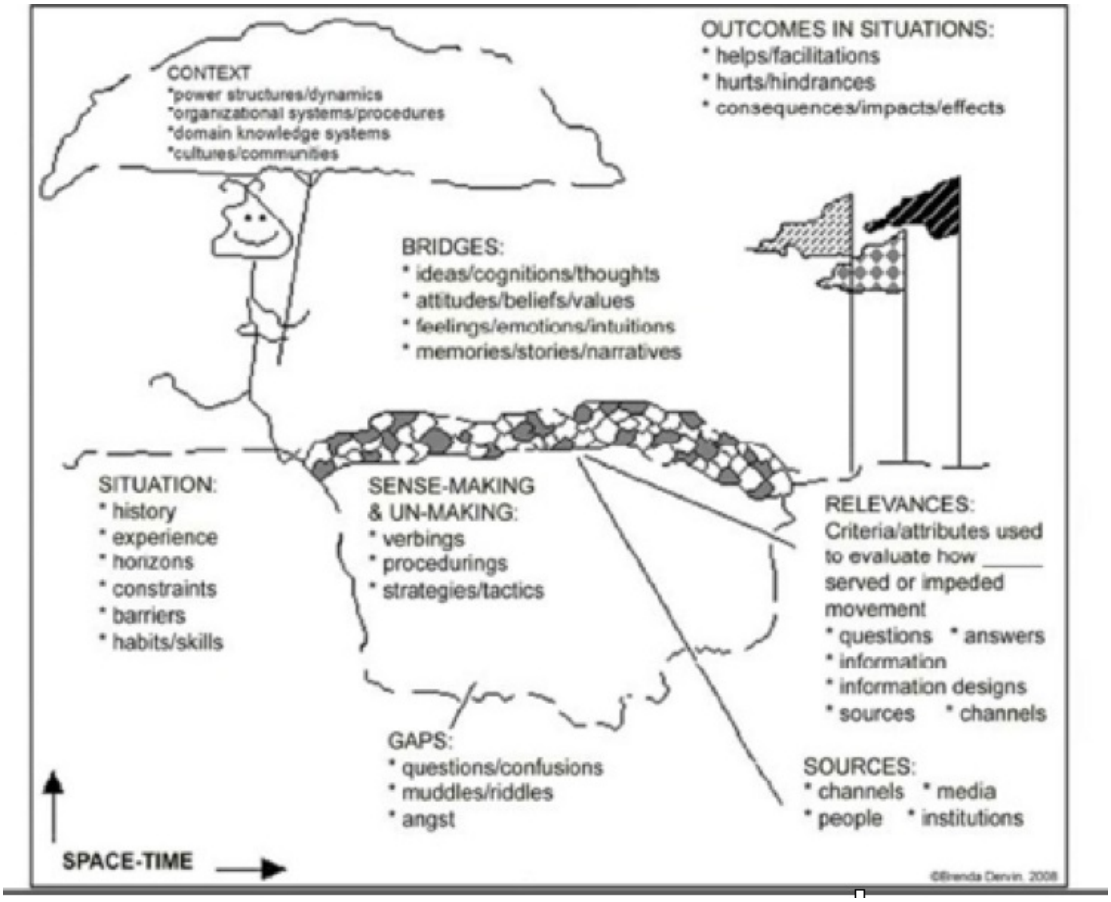


Figure 1: Dervin (2008) Sense-Making

Ultimately, the entire Sense-Making process (Dervin, 2008) acknowledges that human beings are complex and live their life as “verbs” rather than as “nouns”. Dervin (2008) specifically notes that human beings in this process are “centered and decentered; ordered and chaotic; cognitive, physical, spiritual, and emotional; and potentially differing in all these dimensions across time and across space" (Dervin, 2005).

While Dervin’s work focuses especially on the individual’s Sense-Making process, Weick notes seven primary components that are integral to the ongoing process of

sensemaking which can take place within an individual, or an organization. According to Weick, (2005) sensemaking is:

> 1) Grounded in identity construction:
> Sensemaking is a complex process by which the individual, through interaction with self and others, defines the self. The more identities one has the more meanings one can create.
>
> 2) Based on retrospection:
> Individuals consider and contemplate the conversations, artifacts, and happenings and try to make sense of them – sensemaking is retrospective not prospective.
>
> 3) Enacted through sensible environments:
> Sensemaking is not simply interpretation because it also includes "the ways people generate what they interpret" (Weick, 1995, p. 13).
>
> 4) A social and systemic process based in communication:
> Sensemaking is in the "durable tension in the human condition" that resides between the individual and society (Weick, 1995, p. 6).
>
> 5) An ongoing process:
> Sensemaking has no past tense, because problems (cognitive dissonance) are forever present in the equivocal gap between our expectations and reality
>
> 6) Both focused on, and extracted by social cues
> "The social context is crucial for sensemaking because it binds people to actions that they then must justify, that constrain explanations" (Weick, 1995, p. 53)
>
> 7) Plausible, not necessarily accurate
> When people are sensemaking, they are not striving for accuracy but rather plausibility and sense.

Weick's model for sensemaking has been offered as a valuable way to recognize the equivocal and complex nature of both health communication and health promotion (Kreps, 2009). Weick's socialization-based approach to sensemaking is constructivist (like Dervin's). However, because the theory specifically notes a particular dependence on social interaction, Weick's conceptualization of sensemaking especially recognizes the

importance of organization via the rules and cycles of communication. According to Weick's approach, social influence is part of the chaos that begins sensemaking, and can also be part of the process of systemically organizing reality into a plausible (not necessarily accurate) story that leads to decision-making and enactment. As noted by Weick, Sutcliffe and Obstfeld (2005):

> "Sensemaking is importantly an issue of language, talk and communication. Situations, organizations and environments are talked into existence….When action is the central focus, interpretation, not choice, is the core phenomenon….The language of sensemaking captures the realities of agency, flow, equivocality, transience, reaccomplishment, unfolding and emergence, realities that are often obscured by the language of variables, nouns, quantities and structures." (Weick, Sutcliffe and Obstfeld, 2005).

While there are obvious similarities between Dervin's Sense-Making methodology (Dervin, 2008) and Weick's sensemaking theory (Weick, 2005) it is interesting to note that the two scholars did not collaborate in their theories' development. Although they were developing their theories at approximately the same time and they do refer to each others' work, they developed their theories independently. Dervin, whose theory development work began in 1972 and continues to present day, refers only once to the distinctions between her work and Weick's (Dervin, 1999, p. 729). On the other hand, Weick refers to Dervin multiple times in his conceptualization of the construct (Weick, 1969, 1993, 1995, 2003, 2005, 2006, 2007; Weick & Roberts, 1993; Weick & Sutcliffe, 2001; Weick, Sutcliffe, & Obstfeld, 2005; Wenger, 1999, 2001, 2005a, 2005b; Wenger, McDermott, & Snyder, 2002; Wenger & Snyder, 2000; Wenger, White, Smith, & Rowe, 2005).

Both Dervin's and Weick's approaches to sensemaking offer productive implications for this discussion of well-being as a sensemaking process, as well as for health communication researchers working in both healthcare and health promotion contexts. As discussed here, both theoretical approaches offer the possibility that well-being can function as a sensemaking process, where one takes well-being determinants (i.e. objective and subjective well-being) and makes sense of them (in physical, mental, emotional and comprehensive well-being dimensions). This process may be constructed by the individual within a given context (Dervin, 2008) and/or may be influenced by a sense of social engagement and retrospective ordering of data (Weick, 2005).

Both approaches to sensemaking acknowledge the dialectic tensions and complexities of the human condition. This acknowledgement is in keeping with Kreps & Neuhauser's (2010) previously noted acknowledgement (in chapter 1) that health communication efforts – in health literacy, patient-provider communication, and health promotion -- are not always successful because of such complexities. This acknowledgement is also in keeping with the complexities found (and discussed previously in this paper) in examinations of the construct of well-being. It is therefore proposed that sensemaking offers a theoretical perspective that is useful to both health communication and well-being scholarship with regards to well-being. By shifting focus and attention away from the "nouns" of well-being (i.e. what it is and what it is not) and towards the "hows" of well-being (i.e. how individuals define and make sense of their physical, mental, emotional, and comprehensive well-being outcomes), sensemaking theories (Dervin, 2008; Weick, 2005) enable health communication and well-being

scholarship to focus on what ultimately really matters: improving the individual's life and lived experience.

Well-being as Sense-Making (Dervin, 2008) Model

The following is an illustration of how well-being functions as a Sense-Making process. First, an individual creates and defines their own unique, particular and desired well-being outcomes. These *outcomes* can include physical well-being, mental well-being, emotional well-being, a combination thereof and/or a comprehensive well-being outcome or outcomes. Then the individual "sees" the *situation* of their current lived experience relative to these well-being outcomes; in other words, they perceive themselves as experiencing or not experiencing their desired well-being. The experience of well-being is dependent upon (a) the *context* surrounding the individual's well-being situation and (b) the individual's ability or inability to make sense of the connection between the situation and outcomes (i.e. cross the bridge of *Sense-Making* or fall into the gap of *Sense-Unmaking*).

As noted on Dervin's model (2008), context can be envisioned as an umbrella over the individual and their situation, and can include themes regarding power, organizational systems, domain knowledge, and/or cultures and communities. The bridge between situation and outcome/s is designed, built and/or traveled via ideas, cognitions, thoughts, attitudes, beliefs, values, feelings, emotions, intuitions, memories, stories, narratives, and behaviors). Well-being suffers, and is even lost, when the ability to design, create and/or travel this bridge is compromised from either internal or external forces. Sense-Making

methodology refers to this sense unmaking as falling into the "gap" between situation and outcomes (Dervin, 2008)

From this Sense-Making perspective (Dervin, 2008), well-being is not necessarily achieved via life and health outcomes (i.e. satisfying a life-long goal, finding security and safety, achieving happiness, or becoming healthy). Well-being is achieved by the individual's ability to envision, create and/or travel between situation and desired outcomes. It should be noted here, that since these outcomes and bridgings are self-defined, they may or may not be ethical, adaptive or plausible (as noted in Weick's sensemaking framework).

Well-being as Sensemaking (Weick, 2005) Model

An illustration of Weick's (2005) seven sensemaking axioms can also illuminate this investigation's inquiry with regards to the role of sensemaking in well-being. According to Weick (2005), sensemaking is first, grounded in identity construction, and multiple meanings are found within this identity negotiation. This axiom helps to explain the divergent definitions of well-being that exist in the literature, and why individuals may or may not agree upon the applications of these definitions. Second, Weick's second axiom explains that sensemaking is retrospective; an individual may take certain conversations, artifacts and/or happenings in order to make sense. This axiom helps to explain why individuals do not necessarily live in constant awareness or concern for their own well-being, but when asked, can illustrate examples from their life of how they do, or

don't experience well-being. It can also help explain why the same situation (i.e. an adverse health outcome) is interpreted differently by different people.

According to Weick's (2005) third axiom, environmental influences both manifest and support sensemaking. This may help to explain why it is generally accepted in the literature and in popular culture that the act of supporting the well-being of others can improve one's own well-being. The fourth axiom by Weick notes the "durable tension" (Weick, 1995, p. 6) between the individual and society. This tension helps to explain the previously discussed tensions that exist between objective definitions of well-being (which concentrate on societal and epidemiological perspectives of well-being) and subjective definitions of well-being (which concentrate on the individual's affective experience and cognitive evaluation of life). The fifth axiom acknowledges that there is an "equivocal gap" of cognitive dissonance between an individual's expectations and reality. This sensemaking axiom helps to support the illusive and equivocal nature of well-being studies.

The sixth axiom of sensemaking, as noted by Weick (2005) illustrates the importance of social systems and organization in the sensemaking process. As has been previously discussed here, health outcomes improve with increased communication competence and social support. This study will investigate whether well-being improves from either one's ability to understand and explain a social system or organization (i.e. communication competence) and/or from one's ability to navigate such a system (i.e. social support). The seventh axiom of sensemaking (Weick, 2005) notes that the individual's act of sensemaking is a process of storytelling that is not necessarily accurate

but must be plausible. This axiom may help to explain why as Anger notes (2011), an individual's preferences are not always in their best interest or welfare.

Communication Competence, Social Support, Sense-Making & Well-being

There is empirical evidence to support this study's central premise – that an individual's communication competence and social interactions (i.e. social support) can influence their ability to make sense (sensemaking) of their biopsychosocial health and their life, and in so doing, improve their self-defined physical, mental, emotional and/or comprehensive well-being. This discussion will now define the constructs of communication competence and social support and explain how previous literature supports their potential influences on physical, mental, emotional and/or comprehensive well-being.

Communication competence is a construct that (like well-being and sensemaking) is difficult to define and measure (Spitzberg and Cupach, 1984; McCloskey & McCloskey, 1988). There are multiple (over 136) definitions of communication competence in the literature; this discussion will highlight five commonly used definitions. Cooley and Roach's definition places communication competence in a biopsychosocial context; they suggest that a theory of communication competence should consider the physiological, psychological and social/cultural makeups of individuals (Cooley & Roach, 1984). McCroskey takes a performance (evidence)-based approach, noting that communication competence should be defined as "the ability of an individual to *demonstrate* knowledge of the appropriate communicative behavior in a given

situation" (McCroskey, 1982, p. 5). Parks takes a slightly more effectiveness-based, outcome-oriented approach, defining communication competence as "the degree to which individuals perceive they have satisfied their goals in a given social situation without jeopardizing their ability or opportunity to pursue their other subjectively more important goals" (Parks, 1985, p. 175). Spitzberg and Cupach (1984) take a capacity approach, stating that communication competence depends upon a blend of motivation, skill, and knowledge. *Motivation* refers to the propensity to either approach or avoid an interpersonal interaction, and to manage shyness and/or apprehensions. *Skill* refers to the ability to enact behaviors of communication, including nonverbal and verbal behaviors. *Knowledge* refers to the cognitive information needed to carry out appropriate and effective conversations in interpersonal contexts. Wiemann & Backlund (1980) add a social influence to a situation/outcome (sensemaking) perspective. They define communication competence as:

> "The ability of an interactant to choose among available communicative behaviors in order that he (sic) may successfully accomplish his (sic) own interpersonal goals during an encounter while maintaining the face and line of his (sic) fellow interactants within the constraints of the situation. (Wiemann & Backlund, 1980, p. 188).

Communication Competence's Role in Sense-Making and Well-being

When viewed in their entirety, these definitions of communication competence demonstrate the five key components of the Sense-Making process (Dervin, 2008). Cooley & Roach's (1984) biopsychosocial perspective of communication competence exemplifies Dervin's (2008) belief that the individual begins the Sense-Making process as a body/mind/heart/spirit. Wiemann and Backlund (1980)'s socially influence-based

approach exemplifies the umbrella of social, cultural and historical context in Dervin's (2008) Sense-Making model. Spitzberg and Cupach's (1984) capacity-oriented approach exemplifies the bridge of thoughts, beliefs, values and behaviors that bridge the individual from situation to outcome in the Dervin (2008) Sense-Making model. McCloskey's (1988) performance-orientation exemplifies the "verbings" of Sense-Making and Sense-Unmaking (i.e. the act of bridge crossing or falling into the gap, respectively). Parks' outcomes-based approach and its emphasis on goals exemplify the importance of goal-orientation (i.e. outcomes) in the Sense-Making framework; in order to make sense, and engage in the Sense-Making process, we must have defined goals (sense) that we are headed towards.

Social Support's Role in Sense-Making and Well-being

Just as these communication competence definitions can be applied to the Sense-Making (Dervin, 2008) framework, so too can social support. Whether considered from the perspective of context and relevance (Dervin, 2008) or one's ability to adapt to and make sense of social cues (Weick, 2005), social support is an important factor that influences the individual in the Sense-Making process.

According to Sarason & Sarason (2009), social support is a construct with multiple dimensions and multiple layers that can be considered both as "what the individual brings to a [social] situation and what [social] situations do to them". (Sarason & Sarason, p. 115). In a similar way, Albrecht and Adelman (1987), define social support as:

> "…verbal and nonverbal communication between recipients and providers that reduces uncertainty about the situation, the self, the other, or the relationship, and

> functions to enhance a perception of personal control in one's life experience" (Albrecht and Adelman 1987, p. 19).

Based on these definitions of communication competence and social support, this discussion posits that communication competence and social support influence the Sense-Making process (Dervin, 2008). Furthermore, since this discussion proposes that well-being is a Sense-Making (communication) process, it is posited that communication competence and social support will influence well-being.

Making Sense of Communication Competence, Social Support and Well-being

Empirical evidence supports the likelihood that communication competence and social support will improve well-being, because this evidence has shown repeatedly that both communication competence and social support decrease stress and improve overall health. Communication competence has been shown to influence perceived social support (Query and Kreps, 1996; Query & Wright, 2003). In addition, communication competence has been shown to positively correlate with stress reduction (Wright, Banas, Bessarabova, & Bernard, 2010) and to positively influence health outcomes (Wright, Rosenberg, Egbert, Ploeger, Bernard, & King, 2013; Wright, 2011; Gilchrist, & Query, 2010; Gilchrist, & Weinstein, 2010; Wright, Banas, Bessarabova, & Bernard, 2010; Weathers, Query & Kreps, 2010; Dankoski, 2007; Kazaak, 2006; Query, & Wright, 2003; and Kreps, 1988). In a parallel fashion, social support has been shown to reduce perceived life stress (Burleson, Albrecht, Goldsmith, & Sarason, 1994) and to positively influence health outcomes (Weathers, Query & Kreps, 2010).

Moreover, affectionate and supportive communication (two communication dimensions that rely on communication competence and social support) have been shown to buffer the effects of acute and long-term stress response on the body (Floyd & Dies, 2012). Furthermore, the quantity and quality of social relationships has been shown to buffer the physiological effects of stress (Dankowski, 2007) morbidity and mortality (Blazer, 1982; Broadhead, Kaplan, James, Wagner, Schoenbach, Grimson, Heyden, Tibblin, & Gehlbach, 1983; Cassell, 1976, Cobb, 1976; Cohen, 1988; and Cohen, Kamarck, & Mermelstein, 1983).

The Relational Health Communication Competence Model (Kreps)

One particular way to understand the interactive effects of communication competence and social support, is through research that has supported the Relational Health Communication Competence Model (Kreps, 1988). The RHCCM describes a process in which communication competence and social support influence health outcomes (Gilchrist, & Query, 2010; Gilchrist, & Weinstein, 2010; Kreps, 1988; Query, & Wright, 2003; Wright, 2011; Wright, Banas, Bessarabova, & Bernard, 2010; Weathers, Query & Kreps, 2010). Multivariate testing has supported this model (Gilchrist, & Query, 2010; Gilchrist, & Weinstein, 2010; Query, & Wright, 2003; Wright, 2011; Wright, Banas, Bessarabova, & Bernard, 2010;Weathers, Query & Kreps, 2010).

The RHCCM is a model depicting "the interdependent relationships that exist between providers and consumers in the delivery of health-care" (Kreps, 1996, p. 337). The healthcare consumer (patient) is placed at the center of a wheel of communication that extends out to healthcare providers (i.e. physicians, nurses, administrators, social workers,

dentists, pharmacists, mental health therapists) to imply the importance of the patient in patient-provider health communication. Unlike the healthcare delivery system (Kreps & Thornton, 1984) which integrated a similar wheel of patient-provider communication, the RHCCM delineates the importance of the communication context as the terrain on which the wheel (of patient-provider communication) resides. The model implies that when communication contexts are supportive and/or communication processes are adaptive, the wheel can more readily move in the contextual terrain towards increased communication competence. And, when communication contexts are not supportive and/or communication processes are maladaptive, the wheel moves towards decreased communication competence.

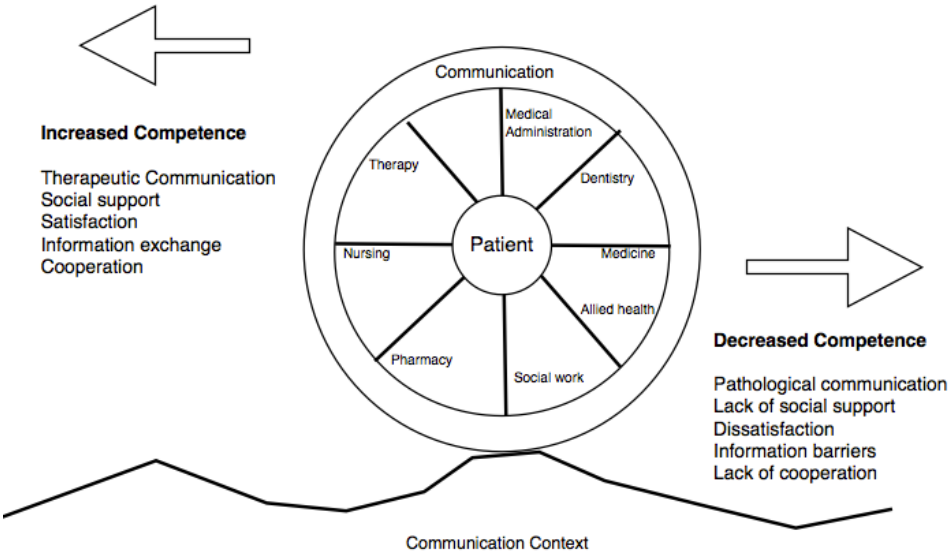


Figure 2: RHCCM Model, Kreps, (1988)

In the RHCCM model, the individual's communicative behaviors with healthcare providers, family members and support group members influence health outcomes:

> "High levels of communication competence positively influence health communication goals, such as increased interpersonal satisfaction, therapeutic communication outcomes, cooperation between providers and consumers, social support, and effective information exchange." (Kreps, 1988).

The RHCCM illustrates the notion that when an individual applies their communication competence and receives appropriate social support they are better able to negotiate the demands of the healthcare system, as "consumer" on their 'healthcare journey" (Kreps, 1988). They are therefore more likely to achieve desired health outcomes. It should be noted that while the RHCCM model has been applied in both health communication scholarship and clinical practice, the role of sensemaking and well-being have not previously been investigated with regards to the RHCCM model.

Approached from the RHCCM, well-being can be understood functionally as the activity of this Sense-Making process that occurs when the individual (patient or provider) harnesses their inner and outer resources in order to move the RHHCM patient-provider communication wheel in the desired (increased) competence direction. Well-being becomes, to use both Dervin's (2008) and Weick's (2005) sense-making literature terminology, a verb, an action, rather than a noun. Here, well-being can then be understood as functioning as a sense-making process, an action, which outputs the many and divergent dimensions (nouns) of well-being outcomes that have been studied in the philosophical, psychological, economic and sociological literature. It is posited that just as health outcomes are positively influenced by adaptive communication competence and social support, so too will well-being be positively influenced by communication competence and social support in physical, mental, emotional and comprehensive dimensions.

As shown in this discussion, empirical evidence has indicated that communication competence and social support can influence objective well-being determinants, such as (acute and long-term stress, mortality and morbidity). Additionally, communication competence and social support have positively influenced some determinants of subjective well-being, such as goal satisfaction and quality of life. However less is known about the complex relationship between communication competence, social support and comprehensive well-being. And, even less is known about the potential influences of sensemaking, communication competence and social support with regards to physical, mental, and emotional well-being. For these reasons, this study seeks to explore the role of sensemaking, communication competence and social support with regards to physical, mental, emotional and comprehensive well-being.

Making Sense of Well-being on a College Campus

As stated previously, this research study will investigate the influences of communication competence, social support and the sensemaking process with regards to well-being. This mixed methods two-phased study will be conducted amongst faculty, staff, and students of George Mason University for four primary reasons. First, both Dervin's (2008) and Weick's (2005) conceptualizations of well-being imply that social support and/or organizational culture can influence the sensemaking process. By limiting the study to this university organizational culture, I hope to capture this potential influence. Second, as a scholar, graduate lecturer and researcher at George Mason University, I have more immediate access to these populations than other (off-campus)

populations. With this access, I hope to establish trust and rapport that will be especially critical for the qualitative interview portion of the study. Third, the George Mason University Center for the Advancement of Well-being has established a Well-being Initiative (task force and health intervention) for the GMU university culture, and seeks to promote well-being campus-wide as part of the university's long-term strategic vision. This study can offer these and other well-being intervention efforts an important baseline perspective on the well-being of this university population. Fourth, well-being is an area of increased research and interest for college campuses. Colleges and universities are becoming increasingly interested in studying and promoting well-being, because it can help to promote admissions, attendance and alumni attendance rates; improve learning outcomes in the classroom; and ideally prevent horrific outcomes such as campus suicide (Gallup, 2013).

Research Questions / Hypotheses

In order to investigate the potential correlations between Sense-Making, communication competence, social support, and well-being, the following research questions were posed:

(RQ1) How does a small sample of individual faculty, staff, and student members of the George Mason University population personally make sense of their well-being?

(RQ2) How are communication competence, social support and well-being determinants represented and correlated in a cross-section of the campus population? These research questions seek to investigate individual acts of well-being Sense-Making across faculty, staff and student population members (RQ1), and, to examine possible

correlations between communication competence, social support and well-being (RQ2).

The following hypotheses were proposed for qualitative phase (phase 1) of the study:

(RQ1: H1) Individuals in part 1 of the study will describe "what well-being means to them" in physical, mental, emotional and/or comprehensive well-being terms. This hypothesis is based in Dervin's (2008) sensemaking model, which indicates that the individual is at once a "body/mind/heart/spirit," and the wide-ranging well-being literature which defines well-being in both objective and subjective terms.

(RQ1: H2) Individuals in part 1 of the study will describe their well-being as a Sense-Making process (Dervin, 2008) in which they make sense of their current life situation by examining it relative to where they feel their life is going (i.e. outcomes) and whether or not they perceive they are moving towards their goals (i.e. traveling a bridge toward them or stuck in a gap along the way). This hypothesis is based on the work of Angner (2011), who described well-being in terms of preference hedonism (i.e. one's ability to determine and realize preference-based outcomes); the work of Dupuy (1977), who inferred that general health is the level to which a person is "bothered, concerned or worried" about illness, bodily disorders, and pain (i.e. fears about health outcomes); the work of Query, Kreps and Weather (2010) who found that social support improved health outcomes, as well as Weick's sensemaking framework (Weick, 2005); and the work of Kashdan (2012) and Peterson, Park & Seligman (2005) who generally concur that the "good life" is influenced by in some way by pleasure or happiness.

Part two of the study will quantitatively measure communication competence, social support and well-being determinants that are chosen in direct response to results derived from the first portion of the study. The following hypotheses are posed for the study's part two:

(RQ2: H1) Communication competence, social support and comprehensive well-being determinants will be positively correlated. (RQ2: H2) Communication competence, social support, and physical well-being determinants will be positively correlated. (RQ2: H3) Communication competence, social support and mental well-being determinants will be positively correlated. (RQ2: H4) Communication competence, social support and emotional well-being determinants will be positively correlated. These hypotheses are based on prior research which has indicated a positive relationship between self-control and communication competence (Lindsey, Cremeens, Colwell, & Caldera (2009) and that communication skills training can significantly improve emotional intelligence as well as life satisfaction (Ghorbanshiroudi, Khalatbari, Salehi, Bahari, & Keikhayfarzaneh, 2011). Recent research has also indicated a negative relationship between depression and communication competence (Wright, Rosenberg, Egbert, Ploeger, Bernard, & King, 2013).

Summary

This chapter has examined 1) the complexities that exist in the empirical literature with regards to the problem of defining well-being; (2) how communication-based perspectives on sensemaking inform this investigation of well-being; (3) prior research

citing the influence of communication competence and social support on biopyschosocial health outcomes; and (4) an explanation of this study's specific choice to explore how sensemaking, communication competence and social support influence well-being in the campus culture of George Mason University.

As has been discussed in this chapter, this investigation examines ways that well-being can be understood as a communication process in which the individual utilizes the tools of communication competence and social support to engage in Sense-Making (Dervin, 2008) and sensemaking (Weick, 2005) in order to "make sense" of objective and subjective determinants of well-being. This investigation seeks to build on prior well-being and health communication research, by outlining some of the nuanced differences that are inferred by the terms "health, wellness, and well-being." Rather than challenging competing and complex definitions of well-being that exist in the literature, this discussion acknowledges these complexities -- without implying that one definition is to be favored and preferred over another. Instead, this discussion specifically focuses on "how" an individual constructs (makes sense of) their own personally defined well-being outcomes, in physical, mental, emotional and comprehensive dimensions, utilizing the communication process of sensemaking. Moreover, this investigation seeks to explore the ways that individuals employ the communication act of sensemaking in order to define, make sense of, and experience physical well-being, mental well-being, emotional well-being and comprehensive well-being.

Kreps's (1988) Relational Health Communication Competency Model, and its widespread and validated use in empirical research, offers support for the possibility that

communication competence, social support and sensemaking can improve physical, mental, emotional, and comprehensive well-being outcomes. The RHCCM also offers a glimpse into practical ways that the influences of sensemaking, communication competence, and social support on well-being outcomes can inform scholarship and practice in health communication. Dervin's (2008) Sense-Making and Weick's sensemaking (2005) theories offer tools by which we can make sense of the intersections between communication competence, social support, and objective and subjective determinants of well-being.

Ultimately, this study seeks to investigate the ways that individual faculty, staff and students of George Mason University make sense of their well-being (RQ1), and, to examine possible correlations with regards to their communication competence, social support and well-being outcomes (RQ2).

CHAPTER THREE: METHODS

Because this study explores relationships between communication competence, social support, and well-being determinants, as well as ways that well-being functions as a sensemaking process, this study utilized a mixed methods approach integrating both quantitative and qualitative forms of inquiry. Mixed-method research which utilizes both quantitative and qualitative techniques has been shown to be useful as a means of scientific inquiry of public health problems (Baum, 1995) and is used by researchers who wish to address different perspectives and phenomena with regards to their inquiry (Clarke & Yaros, 1988). The study was conducted in accordance with the Institutional Review Board (IRB) guidelines of George Mason University.

Study Design

The first and qualitative portion of the study examined individual sensemaking processes with regards to well-being, relying heavily upon Dervin's (2008) Sense-Making framework and Weick's (2005) sensemaking framework. These open-ended interviews were conducted with self-selected members of George Mason University's faculty, staff and student populations (phase 1: n=38), and investigated (1) the unique ways that individuals define their well-being outcomes and, (2) how they makes sense of their lived experience (i.e. well-being situations) relative to these desired outcomes. Each individual was asked to define and describe their ideal conceptualization of physical, mental and

emotional well-being, as well as their conceptualization of comprehensive well-being. The interviews then explored how each respondent perceived their own well-being status, relative to these conceptualizations.

The first phase of the study sought to answer the following research question: (RQ1): How does a small sample of individual faculty, staff, and student members of the George Mason University population personally make sense of their well-being? Two hypotheses were posed with regards to this first research question. The first hypothesis (RQ1: H1) stated that individuals in part 1 of the study would describe what well-being means to them in physical, mental, emotional and/or comprehensive well-being terms. This hypothesis is based in Dervin's (2008) sensemaking model, which indicates that the individual is at once a "body/mind/heart/spirit," and the wide-ranging well-being literature which defines well-being in both objective and subjective terms. The second hypothesis for research question one (RQ1:H2) states that individuals in part 1 of the study would describe their well-being in ways that are consistent with the Sense-Making framework (Dervin, 2008).

The second phase of this mixed methods study consisted of a quantitative examination of a larger cross-section of the George Mason University population (phase 2, n=644). This portion of the study utilized a survey instrument that combined three major components. First, an 18-item communication competence instrument inspired by Spitzberg & Cupach's (1984) relational communication competence model explored communication competence via self-report; second, a 12-item social support instrument by Sarason, Sarason, Shearin, & Pierce (1987) measured social support size (quantity) and

quality; and third, combination of instruments documented comprehensive, emotional, mental and physical well-being. Open-ended questions were also included in the full survey, which sought to understand the individual's perception of their own well-being status, and the ways that respondents viewed the university's efforts to support their well-being (i.e. organizational support for well-being).

The phase 2 quantitative survey was designed to measure communication competence, social support and well-being determinants that were chosen in direct response to results derived from the first portion of the study. The following hypotheses are posed for the study's part two:

(RQ2: H1) Communication competence, social support and comprehensive well-being determinants will be positively correlated. (RQ2: H2) Communication competence, social support, and physical well-being determinants will be positively correlated. (RQ2: H3) Communication competence, social support and mental well-being determinants will be positively correlated. (RQ2: H4) Communication competence, social support and emotional well-being determinants will be positively correlated. These hypotheses are based on prior research which has indicated that communication skills training can significantly improve emotional intelligence as well as life satisfaction (Ghorbanshiroudi, Khalatbari, Salehi, Bahari, & Keikhayfarzaneh, 2011). Recent research has also indicated a negative relationship between depression and communication competence (Wright, Rosenberg, Egbert, Ploeger, Bernard, & King, 2013).

Qualitative Portion of the Study: Interviews

The qualitative portion of the study consisted of open-ended interviews. Questions sought to determine how participants make sense of their comprehensive well-being, as well as the ways that these individuals make sense of their physical, mental and emotional dimensions of well-being. Questions were designed based on Dervin's Sense-Making methodology (2008), which encourages the interviewer to focus on one dimension of the Sense-Making metaphor, such as outcomes, situation, context, gap or bridge (see Figure 1). Specifically, this study explored how each respondent clarified their independent well-being outcomes (i.e. by explaining their personal conceptualization of physical, mental, social and comprehensive well-being) and how they evaluated their current well-being situation (lived experience) relative to those desired outcomes.

As noted by Spurgin (2009):

> Sense-Making assumes that each individual is the expert on his own world, or experience of it. Since each individual is involved in developing strategies for bridging his own gaps, each individual consciously or unconsciously theorizes why certain strategies are appropriate or useful for him. A researcher using the Sense-Making Approach must take care to frame research questions and gather data in such a way that the expertise of the individual participant in the research can be uncovered and his theories elicited. This includes asking explicitly about gaps, how they are defined by the individual, what has helped in the process of bridging the gap, what has hindered, what has been done, why it has been done, what the individual would like to be able to do if there were no barriers, and why. All researchers come to their work through the lenses of their own experiences, biases, theories, understandings, and hunches. The Sense-Making Approach requires the researcher to acknowledge this, and reflect upon how it may affect her research. It also requires that the researcher ensure any study using the approach is framed in such a way that participant has the opportunity to share his own experiences, biases, theories, understandings, and hunches, and that these will be considered and represented in the analyses and reporting. (Spurgin, 2009, p. 103)

As a result, the interviews encouraged participants to explain their own "theories" of well-being, and to explain the ways that they perceive "gaps" and/or "hindrances" to their desired well-being outcomes. Questions designed to encourage participants to explain their conceptualizations of well-being included:

> What does the term well-being mean to you?
> What does the term physical well-being mean to you?
> What does the term mental well-being mean to you?
> What does the term social well-being mean to you?
> What does the term emotional well-being mean to you?

Next, and after the participants had the opportunity to explain their conceptualizations (self-determined theories) of well-being, the interviews encouraged participants to discuss the ways that they personally made sense of their own (lived experience of) well-being. Participants were asked the following question, which sought to reach past optimism bias and to uncover the participants' real (and uncensored) experience of well-being. This question sought to bring difficulties (i.e. gaps) that the participant was having with regards to well-being to the surface, in order to more accurately determine how each participant engages in Sense-Making or Sense-Unmaking. It should be noted that this question is part of Dervin's Sense-Making Methodology (2008):

> *"If you had a magic wand that could improve your well-being in any possible way, how would you use the magic wand?"*

The final open-ended question of the survey sought to explore the overall, comprehensive process of Sense-Making for each individual with regards to their lived experience. This question is based on the work of Angner (2009) who indicated that one

way to approach investigating well-being is to measure one's preference hedonism: their ability to live a life that is right for them:

Overall, do you feel you are living the life that is right for you? Why/why not?

Quantitative Portion of the Study: Online Survey

After qualitative interviews were conducted, data analysis was conducted to determine trends with regards to physical, mental, emotional and comprehensive well-being. These trends then informed decision-making with regards to the creation of the quantitative survey (phase 2). The survey was designed and distributed using SurveyMonkey software, in keeping with rules pertaining to the use of human subjects (i.e. George Mason University's Institutional Review Board requirements and guidelines).

Although the majority of the phase 2 quantitative survey was designed in a quantitative format, a total of three open-ended questions were also included in the online survey. The first two open-ended questions were posed at the beginning of the survey, and duplicated two questions noted above that were used in the first (qualitative) phase of the study. These two initial open-ended questions were:

"What does the term well-being mean to you?"

"If you had a magic wand that could improve your well-being in any possible way, how would you use the magic wand?"

These questions were placed at the beginning of the survey, to increase the likelihood that quantitative question content did not significantly influence participant responses. The final question of the survey sought to provide additional insights into the organizational culture influences of well-being for the participant. This question was:

"What can George Mason University do to support your well-being?"

Quantitative Instruments

In addition to these qualitative questions, the comprehensive (predominantly quantitative) survey also included measures of interpersonal communication competence (Spitzberg and Cupach, 1984) and social support (Sarason, et. al., 1994), as well as instruments designed to capture dimensions of comprehensive, mental, emotional, and physical well-being. The combined survey was distributed via SurveyMonkey software. Table 1 offers an overview of these instruments, their validity, the items measured, and their relevance to the study.

Table 1: Directory of Quantitative Measurements

Survey Instrument	Brief Description of Instrument	Validity / Reliability of the instrument	Items Measured
Interpersonal Communication Competence: Self-Assessment Scale (Colangelo, 2011) measuring Spitzberg and Cupach's model for communication competence (1984)	A 18-item self-report survey that examines nine dimensions of interpersonal communication competence: motivation, knowledge, skill, adaptability, conversational involvement, conversational management, empathy, effectiveness and appropriateness	Although this scale has not been validated, it has been used in the communication classroom (Colangelo, 2011). The instrument asks participants to self-report dimensions of Spitzber and Cupach's (1984) relational model for interpersonal communication competence: motivation, skill, and knowledge. This measure was chosen because it was less likely to encourage	**Communication competence** has many definitions and is therefore difficult to define. Weather, Query & Kreps (2010) define communication competence as "the perceived tendency to seek out meaningful interaction with others, render support, be relaxed, appreciate others' plight, and turn-take appropriately." Spitzberg and Cupach (1984) state that communication competence depends upon knowledge, skill and motivation. K*nowledge* refers to the cognitive information needed to carry out appropriate and effective conversations in an interpersonal context. *Motivation* refers to the

		participant fatigue than other longer measures of communication competence.	propensity to either approach or avoid an interpersonal interaction. *Skill* refers to the ability to enact the desired behavioral interaction (i.e. verbal and nonverbal behaviors).
Social Support: Scale Brief Measure (Sarason, et. al., 1987)	A 12-item instrument that assesses one's social support	The test has been shown to be both valid and reliable. Inter-item correlation ranges from 0.35 to 0.71 (m=0.54). The Cronbach's alpha for internal reliability was 0.97. Test-retest correlations of 0.90 for overall number scores and satisfaction scores of 0.83 were obtained (Sarason et al., 1983).	**Social Support is** one's satisfaction/dissatisfaction with the number of close relationships, and the quality/operationalization of those relationships. (i.e. If you needed help, which people would you call? Are you happy with that list?)
Comprehensive Well-being: WHO-5 Well-being Scale (*Bech, 2012)*	A 5-item instrument that utilizes 5 questions to determine an individual's: cheerfulness; energy balance; calm mood; feeling of being well-rested; and sense of (life) meaning and purpose.	According to the Mental Health Services division of the World Health Organization, "The WHO-5 was first presented by the WHO Regional Office in Europe at a 1998 WHO meeting in Stockholm as an element in the DEPCARE project on the measures of well-being in primary health care. Since this time the WHO-5 has been validated in a number of studies with regard to	**Comprehensive Well-being** is a construct that can have both subjective and objective dimensions. This scale measures one's perceived (subjective) well-being in five areas: cheerfulness; energy balance; calm mood; feeling of being well-rested; and sense of (life) meaning and purpose.

		both clinical and psychometric validity."	
Emotional Well-Being Type 1: Happiness Subjective Happiness Scale (Lyubomirsky & Lepper, 1999).	This 4-item scale examines one's level of happiness.	"Despite its brevity…this measure correlates highly with other happiness measures and moderately with constructs theoretically and empirically related to well-being." (Lyubomirsky & Lepper, 1999, p. 148).	**Happiness** is a measure of positive affect, and is therefore a measure of subjective well-being (SWB). Happiness is measured in this instrument relative to one's self and in comparison to others.
Emotional Well-being Type 2: Cheerfulness	Question 1 from the WHO-5 instrument: "Over the past 2 weeks, I have felt cheerful and in good spirits"	This instrument has not been validated as a separate question (i.e. the entire WHO-5 instrument has been validated but not each individual question).	**Cheerfulness** is a construct distinct from happiness; it represents a positive outlook and/or an expression of good will. It is an affect-based measure of subjective well-being (SWB).
Mental Well-being Type 1: Life Satisfaction	Question 5 from the WHO-5 instrument: "Over the past 2 weeks, my daily life has been filled with things that interest me."	This instrument has not been validated as a separate question (i.e. the entire WHO-5 instrument has been validated but not each individual question).	**Life satisfaction** examines one's cognitive perception of where their life is, and where it is headed in the future. It is a cognitive-based measure of subjective well-being (SWB).
Mental Well-being Type 2: Calm Mood	Question 2 from the WHO-5 instrument: "Over the past 2 weeks, I have felt calm and relaxed."	This instrument has not been validated as a separate question (i.e. the entire WHO-5 instrument has been validated but	**Calm mood** examines one's ability to manage stress and/or find a sense of peace and calm throughout the day. This construct was chosen as an indicator of mental well-being because it is primarily cognitive-based.

		not each individual question).	
Physical Well-being Types 1 and 2 The RAPA: Rapid Assessment of Physical Activity (University of Washington Health Promotion Research Center, 2006)	This 9-item measure examines one's level of physical activity and/or physical inactivity. It also measures types of activity.	This measure was developed by CDC and University of Washington Health Promotion Research Center, 2006. The RAPA has been shown to be statistically valid in measuring physical activity patterns of the elderly population; further research is needed to determine if the instrument is statistically valid with multi-generation populations such as the population included in this study.	RAPA1 measures **cardiovascular activity level** (physical well-being type 1) RAPA2 measures one's self-report of **strength training and/or stretching to include yoga** (physical well-being type 2)
Physical Well-being Type 3: Energy Balance	Question 3 from the WHO-5 instrument: "Over the past 2 weeks I have felt active and vigorous."	This instrument has not been validated as a separate question (i.e. the entire WHO-5 instrument has been validated but not each individual question).	**Energy balance** can be conceptualized as one's ability to perceive themselves as active and vigorous in terms of their overall health status and management. (If an individual is healthy and/or managing their health, they will feel more active than if they are not).
Physical Well-being Type 4: Well-Rested	Question 4 from the WHO-5 instrument: "Over the past 2 weeks, I woke up feeling refreshed and rested."	This instrument has not been validated as a separate question (i.e. the entire WHO-5 instrument has been validated but not each individual question).	**Well-rested** is the ability for a person to awaken refreshed and rested. It is indicative of the individual's ability to sleep, eat, and exercise at appropriate levels.

Communication Competence Instrument

Communication competence was documented through a survey that sought to capture the three major domains and six sub-domains of interpersonal communication competence noted by Spitzberg and Cupach (1984). The 18-item self-assessment instrument measures the three main domains of communication competence, as defined by Spitzberg and Cupach (1984): knowledge, skill and motivation. In addition, the assessment also measures the following sub-domains: adaptability, conversation involvement, conversation management, empathy, effectiveness, and appropriateness. Although this instrument has not been statistically validated, it has been used in the communication classroom (Colangelo, 2011) as a means of student self-report.

McCroskey and McCroskey (1988) note that self-report measures are the most common form of measurement in communication competence, and there are an abundant amount of measurements to choose from. Ultimately, each self-report asks

> "a variety of specific questions which the researcher has decided in advance are related to competence. Not surprisingly, the questions on one such measure are not very similar to those on another such measure." (McCroskey and McCroskey, 1988, p. 110).

Although this self-report survey has not been validated in other studies, it does follow the tradition of communication competence self-report measures noted above: it measures elements of competence that directly correlate to Spitzberg and Cupach's (1984) related communication competence model. While not an ideal (validated) measure, this instrument was chosen for its brevity in order to avoid respondent fatigue for the full phase 2 survey. It was also chosen because it was a quantitative measure which captured elements (sub-domains) integral to the sensemaking process: knowledge, skill, motivation,

involvement, management, empathy effectiveness, appropriateness and adaptability. Future studies should include validated instruments with regards to communication competence.

Well-being Instruments

Comprehensive well-being was measured with the WHO-5 instrument (Bech, 2012). This instrument was developed by the European offices of WHO (World Health Organization), and measures well-being by asking five key questions which each exemplify the five subjective (SWB) and objective (OWB) themes of well-being that exist in the literature (see chapter 2). The first question: "Over the past 2 weeks, I have felt cheerful and in good spirits," exemplifies the affect-based (emotional) dimension of subjective well-being. The second question: "Over the past 2 weeks, I have felt calm and relaxed," exemplifies the cognitive-based (mental) dimension of subjective well-being, specifically the ability to manage stress for an improved quality of life.

The third question: "Over the past 2 weeks, I have felt active and vigorous" exemplifies the objective well-being dimension of welfare. The individual's report of feeling active and vigorous is one non-invasive way to ascertain whether or not the individual feels energetic and able to manage their health outcomes (ie. active and vigorous). The fourth question, "Over the past 2 weeks, I woke up feeling rested and refreshed" exemplifies the objective well-being dimension of welfare in terms of the individual's ability to manage their energy through wellness behaviors. (If an individual does not sleep, eat, and/or move at healthy levels, then they will not awaken feeling rested

and refreshed). The fifth question, "Over the past 2 weeks, my daily life has been filled with things that interest me" exemplifies the subjective well-being sub-domains of life satisfaction and meaning and purpose.

Emotional well-being was documented in two different types: happiness and cheerfulness. Emotional well-being type 1: happiness was measured utilizing Lyubomirsk & Lepper's (1999) 4-item subjective happiness scale. This is a well-validated scale that has been used widely in the literature. Emotional well-being type 2: cheerfulness was measured utilizing the first question from the WHO-5 survey: "Over the past two weeks, I have felt cheerful and in good spirits."

Mental well-being was documented in two different types: life satisfaction and calm mood. Both of these mental well-being dimensions (types) were documented utilizing questions from the WHO-5 survey. Mental well-being type 1: life satisfaction was measured with the fifth question from the WHO-5 survey: "Over the past two weeks, my daily life has been filled with things that are interesting to me." Mental well-being type 2: calm mood was measured with the second question from the WHO-5: "Over the past two weeks, I have felt calm and relaxed."

Physical well-being was documented in four types: (1) cardiovascular activity, (2) strength-training and/or stretching to include yoga, (3) energy balance, and (4) well-restedness. Physical well-being type 1: cardiovascular activity was measured utilizing the RAPA1: Rapid Assessment of Physical Activity 1 (University of Washington, 2006). This tool documents the participant's self-report of physical activity and its regularity, ranging from a light (sedentary) and infrequent level to a vigorous and regular (weekly) level.

Physical well-being type 2: strength-training and/or stretching to include yoga was measured utilizing the RAPA2: Rapid Assessment of Physical Activity 2 (University of Washington, 2006). This tool asks respondents to indicate if they have engaged in strength training, stretching activities (to include yoga), or both. Physical well-being type 3: energy balance was measured with the third question from the WHO-5: "Over the past two weeks, I have felt active and vigorous." Physical well-being type 4: well-rested was measured with the fourth question from the WHO-5: "Over the past two weeks, I woke up feeling fresh and rested."

Social Support Instrument

Social Support was measured via the Social Support Scale Brief Measure (Sarason, et. al., 1987). This measure examines one's satisfaction or dissatisfaction with the number of their close relationships (i.e. social support quantity), and the quality and operationalization of those relationships (i.e. social support quality). This instrument has been shown to be both valid and reliable. Inter-item correlation ranges from 0.35 to 0.71 (m=0.54). The Cronbach's alpha for internal reliability was 0.97. Test-retest correlations of 0.90 for overall number scores and satisfaction scores of 0.83 were obtained (Sarason et al., 1983).

Recruitment and Selection of Sample Population

In order to secure a sample population representative of the total university population (of approximately 39,926 faculty, staff and students), a strategic campaign was conducted to recruit participants for both the qualitative phase of the study (phase 1) as

well as the quantitative phase (phase 2). Recruitment for the qualitative phase of the study was conducted from October 2013 through November 2013, and interviews also took place during this time period. Recruitment for the quantitative phase of the study was conducted from December 4, 2013 through January 31, 2014.

All recruitment efforts received approval from the Human Subjects Review Board of George Mason University. As noted in Appendix 2, recruitment efforts included (1) targeted emails to colleagues with George Mason University; (2) facebook and twitter posts on the author of this study's pages, on several friends' pages, and on several key GMU sites; (3) targeted emails to administrators of each of GMU's 9 colleges; (4) a public announcement (post) regarding the study on the psychology department's list serve (which promotes studies seeking participants); and a public announcement (post) on the university's e-files news service (distributed to all three campuses of the university). In addition, a project support grant from the Center for the Advancement of Well-being was applied to purchase gift cards for study participants who completed the survey prior to December 18, 2013.

Study Procedures

Subjects in the qualitative phase (1) of the study were interviewed using the protocol noted above. These interviews took an average of 30 3minutes to complete. The majority of interviews (n=35) were conducted by phone, while the remaining three interviews (n=3) were conducted in person. All interviews were audio recorded with the

subject's permission, and following protocols established by the institutional review board. These interviews were later transcribed so that content analysis could be conducted.

Subjects in quantitative phase (2) of the study received a link to a survey designed with SurveyMonkey software. Each participant was able to complete the survey anonymously online. Participants were asked at the end of the survey to email the research team to receive their gift card (in the case of those completing the survey prior to December 18) and to receive a thanks from the researcher (in the case of those who completed the survey after December 18, 2013). The author of this study then sent each participant who qualified for a gift card, an online link to the gift card, as well as a personalized note thanking them for participation.

Conclusion

This chapter has discussed the methodology used in this exploratory study including study design, instrument selection, participant recruitment, and study implementation procedures. The next chapter will discuss qualitative and quantitative findings.

CHAPTER FOUR: RESULTS

As noted previously, this study used both qualitative (phase 1) and quantitative (phase 2) research techniques to explore the relationship between communication competence, social support and well-being. The results of each of these phases will be discussed separately below.

Phase 1: Qualitative Results

Phase 1 (Qualitative) Sample Population

Recruitment efforts strategically targeted throughout the university population resulted in a phase 1 study population of n=38. It should be noted that a total of 40 participants were interviewed. Unfortunately, two of the interviews' audio recordings were not successful, and were therefore not included in the final results noted below. It was determined that 38 participants was sufficient, because content saturation had occurred. In qualitative data analysis, it is generally acceptable to cease recruiting efforts when saturation occurs (i.e. when responses are duplicative). As noted by Morse (1995),

> "In qualitative analysis, there are no published guidelines or tests of adequacy for estimating the sample size required to reach saturation equivalent to those formulas used in quantitative research. Rather, in qualitative research, the signals of saturation seem to be determined by investigator proclamation and by evaluating the adequacy and comprehensiveness of the results." (Morse, 1995)

The sample population for phase 1 was comprised of 10 faculty members, 4 staff members, 5 graduate students, and 20 undergraduate students. As noted below (Table 2), the majority (52%) of participants in phase 1 (qualitative interviews) were undergraduate students; this proportion is in keeping with the George Mason University population in which 55% of the university population is composed of undergraduate students. Although the proportion of other types of participants in this sample population did not directly correspond to the proportion of the full George Mason University population (i.e. faculty, staff and graduate students), every effort was made to ensure that participants were interviewed representing these sub-populations.

Table 2: Phase 1 Qualitative Interviews Sample Population vs. University Population

	Phase 1 Participants (Interviews)	University Population
Faculty	10	3,218
Staff	4	2,881
Graduate Students	5	11,927
Undergraduate Students	20	21,990
Total	38	39,926

Although data are not available to indicate the age, gender, and race representations of the full George Mason University population, every effort was made in this phase 1 of the study to recruit participants representing age, gender and racial diversity. As shown on Table 3 below, a total of 29 participants in the phase 1 survey self-identified their race as Caucasian/white; 4 self-identified Asian; 2 self-identified as

African American; and 1 self-identified Pacific Islander. Future studies should seek to create a more diverse sample with regards to race.

Table 3: Qualitative Interviews Demographic breakdown

Age Range	Race	Gender
18 – 22 years (n=13)	White / Caucasian (n=29)	Female: (n=29)
23 – 30 years (n=12)	Asian American (n=4)	Male: (n=9)
31-40 years (n=7)	African American (n=2)	
41 – 50 years (n=3)	Pacific Islander (n=1)	
51- 60 years (n=2)	Hispanic (n-1)	
61 + years (n=0)	Non-responding (n=2)	
Non-responding (n=1)		

Table 3 also indicates that a total of 13 participants in the phase 1 study self-identified their age within the 18 – 22 year range; 12 participants self-identified their age within the 23 – 30 year range; 7 participants self-identified their age within the 31-40 age range; 3 participants self-identified their age within the 41 – 50 year range; and 2 participants self-identified their age within the 51 – 60 year range. One participant did not report her age in the study. Future studies should seek to create a more diverse sample with regards to age.

As shown on Table 3 a total of 29 participants were female (n=29), while the remaining participants were male (n=9). Future studies should seek to create a more diverse sample with regards to gender.

Qualitative Interviews: RQ1, Hypothesis 1

For research question one (RQ1), a content analysis of transcribed interviews was conducted to determine if the first hypothesis (RQ1: H1) was or was not supported. This hypothesis (RQ1:H1) stated that individuals in part 1 of the study would describe "what well-being means to them" in physical, mental, emotional and/or comprehensive well-being terms". This hypothesis is based in the wide-ranging well-being literature (discussed in detail in chapter 2) which defines well-being in both objective and subjective terms across multiple (i.e. physical, mental, emotional and social) domains.

As shown in Appendix 2, Table 6, (RQ1:H1) was supported. This table indicates participants in phase 1 mentioned the following factors as "what well-being means to them:" mental/cognitive factors (n=23); emotional/affect factors (n=14); social factors (n=7); physical factors (n=21); spiritual factors (n=9); life balance issues (n=9); resilience capability/ability to adapt to difficulty (n=2); lack of stress/feeling of calm (n=14); goals/ability to move towards them (n=14); hope/having a sense of moving forward (n=3); having health/being healthy (n=18); specific reference to being happy (n=8) and taking care of one's self (n=7).

In addition to this numeric content analysis, a narrative-based content analysis was also conducted to determine if further support exists for RQ1:H1. As noted in the examples below, as well as the Appendix 3 Table 7, narrative analysis further supports this hypothesis. The following discussion will illustrate several narratives which indicate that participants described well-being in comprehensive, physical, mental and emotional domains.

Comprehensive well-being was described by participant 1 (a white male graduate student, aged 23 – 30 years) as a combination of several factors:

> "Uh, engaging in efforts to, um, make sure that physical, mental, spiritual, emotional aspect, um, of - of a person's life are - are, uh, in balance. Um, I don't have a word other than - than healthy, uh - or well balanced. But I - I think the idea would be that, um, you are tending to your physical needs, your relational needs, your mental needs, um, your spiritual needs, um, in a way that - that maintains balance in your life."

Similarly, participant 5 (a white male undergraduate student aged 31 – 40 years) described well-being as a construct which depends upon bringing the mind and body into more than just balance, but a homeostatic equilibrium:

> "Uh, well-being is probably, the way I would describe it is more of a home – homeostasis, um, of like mind and body, and along the lines of not too stressed, not too lackadaisical, um, and just a – kind of finding a neutrality of those."

Additionally, participant 28 (a white female staff member aged 41 – 50 years) described well-being as a process which takes concerted effort to move from one's current state, toward desired physical and mental goals and outcomes:

> "So your well being is … you feel like you are where you want to be or at least making steps towards being where you want to be with, you know, um, yourself physically or yourself mentally, rather than, um, fighting against what you're not willing to change."

These narratives, as well as those listed in Appendix 2, indicate that research question 1, hypothesis 1 was positively supported. Participants did conceptualize well-being in comprehensive ways, as well as in physical, mental, and emotional dimensions. It should be noted that this finding further supports this paper's posit, that well-being can function as a (communicative) Sense-Making process. In Dervin's (2008) Sense-Making framework, the individual is referred to as a "body/mind/heart/spirit." This reference

indicates that the physical (body), the mental (mind), the emotional (heart) and the social and spiritual (spirit) can be best conceptualized as interrelated, rather than separated, and is in keeping with the narratives' inclusion of physical, mental, emotional and comprehensive conceptualizations of well-being.

Qualitative Interviews: RQ1, Hypothesis 2

Recognizing RQ1:H1 as being supported, this discussion next explores whether research question 1, hypothesis 2 was supported. This hypothesis (RQ1: H2) stated: individuals in part 1 of the study will describe their well-being as a Sense-Making process (Dervin, 2008) in which they make sense of their current life situation by examining it relative to where they feel their life is going (i.e. outcomes) and whether or not they perceive they are moving towards their goals (i.e. traveling a bridge toward them or stuck in a gap along the way). This hypothesis is based on the previously discussed work of Angner (2011), which describes well-being in terms of preference hedonism (i.e. one's ability to determine and realize preference-based outcomes); the work of Dupuy (1977), which infers that general health is the level to which a person is "bothered, concerned or worried" about illness, bodily disorders, and pain (i.e. fears about health outcomes); the work of Query, Kreps and Weather (2010) which found that social support improved health outcomes; Weick's sensemaking framework (Weick, 2005) which determined that the individual creates order out of chaos in the act of sensemaking; the work of Kashdan (2012) and Peterson, Park & Seligman (2005) which support the notion that the "good

life" is influenced by in some way by pleasure or happiness; and the work of Dervin (2008) and her Sense-Making model.

As noted above and discussed in further detail in Chapter Two: Literature Review, Dervin's Sense-Making model acknowledges that an individual is at once a "body/mind/spirit/heart" and engages in Sense-making through the simultaneous processing of three primary factors: situation, outcomes, and context. The action of Sense-Making (i.e. traveling a bridge of beliefs, thoughts and values towards one's outcomes) or the action of Sense-Unmaking (i.e. falling into gap of confusion between situation and outcomes) occurs depending on whether or not the individual can process where they are (situation), relative to where they are going (outcomes), how they will get there (bridge) and what overall meaning and significance they place on this process (importance). It should be noted that in this Sense-Making model, the individual's bridge of beliefs (belief system and assumptions), and their outcomes (goals) may or may not be desirable, accurate or plausible. Nevertheless, Sense-making (Dervin, 2008) occurs when we understand where we are, where we are going, and how we are getting there. Sense-Unmaking occurs when we don't know where we are, where we are going and/or how we are getting there. In the case of Sense-Unmaking, we are stuck in a gap of angst and confusion in which we literally cannot see outcomes to move towards. Sense-Making implies that we are moving forward and there is a sense of hope; we are engaging in what Dervin terms verbings because Sense-Making is an active (-ing) process. Sense-Unmaking on the other hand, implies that we are stuck, like a noun, in a place of angst, confusion and

what Dervin terms muddlings. Sense-Unmaking occurs when sense is not being made, or when sense is unraveled; it resides in the gap.

As shown previously in the discussion of RQ1:H1, most of the 38 participants answered the question "*What does the term well-being mean to you*" with a multiple-factored and complex answer. Dervin's (2008) assertion that the individual is at once a "body/mind/spirit/heart" is demonstrated with this complexity, giving support to RQ1:H2. Additionally, it should be noted that the complexity of well-being scholarship (discussed in chapter 2) is also demonstrated by these multi-factored answers; the majority of respondents either struggled to articulate their own personal definition of well-being and/or included multiple factors in an attempt to explain their conceptualization of what the term well-being means to them.

Dervin's Sense-making model (2008) is also exemplified in the responses to the protocol's open-ended questions, namely: "*What does the term well-being mean to you?;"* "*If you had a magic wand, and you could improve your well-being in any possible way, how would you use the magic wand?*;" and "*Overall, do you think you are living the life that is right for you?"* Despite the fact that none of the participants were exposed to Dervin's Sense-Making method (nor its metaphor for Sense-Making noted in Figure 1), many participant responses alluded to key components of the Sense-Making model (Dervin, 2008): situation, outcomes, context, bridge (i.e. Sense-Making occurs as one moves between situation and outcomes), and gap (i.e. Sense-Unmaking occurs as one falls into a gap of confusion and angst somewhere between situation and outcome). The following discussion will illustrate several examples of ways that participants used Sense-

Making concepts in their descriptions of what well-being means to them, the ways that well-being is elusive to them, and whether or not they are living a life that is right for them.

Narrative Examples of Sense-Making

Participant 3 (a white male faculty member aged 31 – 40 years) and participant 12 (a female faculty member also aged 31 – 40 years) both described well-being in ways that encompass the complex nature of well-being, while acknowledging the sense of process (i.e. Sense-Making) that occurs within achieving it. This is in keeping with the Sense-Making model (Dervin, 2008) which acknowledges that the individual is at once a body/mind/heart/spirit and creating and heading toward multiple outcomes. Participant 3 described well-being by emphasizing the importance of the individual in setting a personal agenda of outcome preferences, having the resilience to head towards goals, and the importance of social support in the process. He stated that well-being is:

> "…you know, the best version that uh, you're striving to be…I'm physically capable of functioning, that, um, I'm mentally fit to cope with the challenges that I go through. I have people in my life to support me. And that, uh, emotionally, I feel pretty good."

Participant 12 (the female faculty member noted above) also discussed an inter-dependent set of themes when asked to describe what well-being meant to her. Her description highlights the importance of individual preference, fulfillment (from goal/outcome achievement) as well as an overall sense of engagement (i.e. being active in

the process). These key components (choice, outcome, activity) are all key factors in the act of Sense-Making (Dervin, 2008):

> "Hmm. I think of that as sort of an overall sense of balance, like thinking about your physical and your mental and your spiritual and emotional health all together…Um, thinking about balancing relationships, um, thinking about sort of where your energy is going, what you're putting yourself into and what you get back from that, um, not – yeah, and just sort of finding a nice balance that's totally sustainable, um, and that, uh, is really fulfilling."

Participant 53 (a white female faculty administrator), described her well-being in a way that illustrates the importance of context. Notice the reference to the American cultural work-ethic (i.e. under the umbrella of cultural context) and her statement that she is happy (i.e. not in a gap currently):

> "I accept where I am and I feel like I've achieved a lot, both in terms of my mental well being, my emotional well being, my physical well being. I have worked probably – I try – but try to be very conscious of those things since I graduated from college and – you know, almost a decade and I've worked really hard to achieve the things that I want, um, in my life. And so right now I'm very happy with where I am, especially because I think I've cultivated a – awareness in my own well being, the things that I can do to – to, you know, what makes me feel the most emotionally content, what makes me feel the least stressed, the – the most physically fit, all those sorts of things. But that doesn't mean that I don't have goals for my well being for the future. So as – as much as I'm content with where I am right now, um, I think I'm also mindful of what my goals would be to improve or at least maintain my well being for the future.

Participant 53 conceptualizes her well-being as being non-static and active, consistent with Dervn's assertion that Sense-Making is an active (verb-based) process.

It should be noted that part of Participant 53's Sense-Making process is knowing that she has the capability and self-efficacy to head towards goals, and the contextual freedom to set them. Whether or not she can see particular outcomes she is headed

towards, she perceives herself as able to move forward (i.e. on a bridge of thoughts, beliefs and values as described in the Sense-Making framework), and, has made sense of her life as having a sense of direction towards outcomes that are both short-term and long-term. In both cases, she feels as though she is moving forward, and therefore does not feel as though she is stuck (i.e. she is traveling on the bridge of thoughts, beliefs and values and is not stuck in the gap of angst, confusion and muddlings). Her sense of moving forward (i.e. not in the gap) is consistent with her statement she is, "very happy where I am." In the Sense-Making framework, she is happy (i.e. not in angst or confusion) because she is engaging in Sense-Making. Since happiness is on measure of well-being (as discussed in chapter 2), this example illustrates one example of how well-being functions as a Sense-Making process.

Participant 28 (a white female faculty administrator) conceptualized what well-being meant for her in ways that are also consistent with the Sense-Making process (Dervin, 2008):

> "So your well being is … you feel like you are where you want to be or at least making steps towards being where you want to be with, you know, um, yourself physically or yourself mentally, rather than, um, fighting against what you're not willing to change.

Her description of well-being highlights the importance of the Sense-Making model's component of Situation (i.e. "you are where you want to be") and the component of staying above the gap, and making sense (i.e. being where you want to be…rather than, um, fighting against what you're not willing to change." That is, she is in the process of Sense-Making, because she has not fallen into the gap that would be created if she could

not change her circumstances and/or her outcomes (i.e. she is not fighting against what cannot be changed).

Participnat 53's narrative describing her own well-being status was especially illustrative of the fluctuating and active process of Sense-Making; it is a process that is ongoing, not time bound, and never static. When she described her well-being, she discussed how at times she is felt she is achieving and demonstrating well-being (i.e. the times she is engaging in Sense-Making with regards to her lived experience) and in other areas she feels as though she is not in well-being (i.e. she is struggling to make sense in areas in which she does not see outcomes readily, and/or she is trying to avoid falling into the gap of Sense-Unmaking). As she stated:

> **"**Um, I think it's – it's, it's going really well. I mean or it's, you know, good. I – I would say I'm – I'm very satisfied with my well-being right now. I'm certainly, um, I go back to my – of acceptance. I accept where I am and I feel like I've achieved a lot, both in terms of my mental well being, my emotional well being, my physical well being. I've worked probably – I try – I try to be very conscious of those things since I graduated from college and – so that's been, you know, almost a decade, and I've worked really hard to achieve the things that I want, um, in my life.
>
> And so right now I'm very happy with where I am, especially because I think I've cultivated a – awareness of my own well being and the things that I can do to – to, you know, what makes me feel the most emotionally content, what makes me feel the least stressed, the – the most physically fit, all those sorts of things.
>
> But that doesn't mean that I don't have goals for my well being for the future. So as much as I'm content with where I am right now, um, I think I'm also mindful of what my goals would be to improve or at least maintain my well being for the future.
>
> No, I'm not where I want to be. I'm not a published author, but I'm working towards making that happen or maybe not. I'm not exactly professionally where I want to – want to be, but I'm having the opportunity every day to take one more step towards those things.

> It doesn't mean I've achieved everything I ever want to achieve, but I'm where I want to be in terms of, um, really feeling like the opportunities are out there and that I'm able in my life to – to just gain knowledge from both reading things or listening to things or just the people me. And I – and I feel, um, very fortunate for that and it makes me think about what my goals are for the future."

In the last portion of her narrative, she indicates that she can "think about what my goals are for the future." This is not only active Sense-Making, it is also indicative of ways that outcomes are generated through the "bridge of thoughts, beliefs, values and behaviors" in Dervin's (2008) Sense-Making framework. It is this ability to get out of a gap, regain hope and conceptualize her life forward, that enables her to engage in Sense-Making and maintain well-being, despite the challenges she experiences by not feeling as though she can achieve her desired outcomes.

In addition to participants 28 and 53, several other participants described their well-being in generally positive ways (see Appendix 3 for narrative excerpts). However, the questions: "*How would you describe your well-being*" and "*If you had a magic wand, and you could improve your well-being in any possible way, how would you use the magic wand?,"* encouraged participants to share the complex landscape of their well-being, including challenges to well-being.

When asked to describe her well-being, participant 31, (a white undergraduate student, aged 18 – 22 years), described her mental well-being in a way that is consistent with being in aa "Gap" (Sense-Unmaking) moment:

> "And I don't know sometimes it's overwhelming, sometimes it's too much. Like I get stressed a lot so I'm not very mentally like healthy. But when - you know when I - when I'm just learning and I'm having like a good experience with that, then it's - it's good. But I think the stress the school can really, uh, cause like anxiety problems and that's when I'm not very mentally - *[laughter]* - well.

Her description indicates that when she feels overwhelmed, she has anxiety problems (i.e. she is stuck in a gap in which she cannot foresee a solution or an positive outcome). However, when she is learning she feels good (i.e. she is heading towards her desired outcome, of doing well in school). Notice that her description of feeling good describes an active process, a verbing (i.e. I'm just learning) whereas her anxiety is a static condition, describing a state (i.e. I'm not well). These descriptions are consistent with Dervin's (2008) model of Sense-Making which posits that Sense-Making is an active process, that is demonstrated by "verbings" and is not a noun. In this framework, Sense-Unmaking is a static state of confusion, a gap, a noun. This noun vs. verb function is consistent with the posit of this paper, that well-being functions as a Sense-Making process (verb) and is difficult to determine as a noun (as shown by the complex and often contradictory literature that surrounds what well-being is, and what it is not).

Just as participant 31's description of her well-being indicated that she was in a gap (of Sense-Unmaking), participant 10 (an Asian female staff member in her late 20's), recollected a time when she felt she did not have well-being (i.e. was in a gap):

> "Yeah, it (well-being) takes effort and if you're already so tired, you probably should have done more reading so like I'm trying to skim stuff before class and it was just – I just felt like I could never keep up with all the things I was supposed to be, and that really weighed heavily on my mental well being because it was – like knowing a thing you're doing …I just felt like I couldn't do a good job on everything so I didn't feel like I could do a good job on anything."

Participant 10's description of the gap illustrates a key component of the Sense-Making framework (Dervin, 2008). Not only does the individual need to set outcomes in order to

make sense, they must also feel as though they can travel the bridge between the current situation and the desired outcomes. In participant 10's description, context as well as her own thoughts/beliefs/values influenced her ability to feel as though she could engage in Sense-Making (i.e. achieve well-being by keeping up with things) vs. falling into Sense-Unmaking (i.e. fall into the gap into the feeling of angst).

Participant 13, (an Asian male psychology undergraduate student), described his current state of being in the gap in a very succinct way:

> "[If I had a magic wand] I guess I would remove the nervous or anxious feeling of what the future will bring and how you'll fit into that on graduation into the real world, you know?"

In addition to these discussions of well-being which illustrate key components of the Sense-Making framework (i.e. namely, situations, outcomes, context, gaps), several other participants mentioned these components in ways that illustrated (through rhetorical use of visual imagery) the Sense-Making metaphor. For example, participant 21 (an undergraduate student in her 30's), described her experience of being in the gap (i.e. not having well-being) by using the terms which illustrate dimensions of the Sense-Making metaphor of well-being (i.e. figure 1)

> "Well, when you're under that kind of stuff and you're not taking time for yourself or, you know, acting healthy it takes a – a stress that's a toll on your health obviously. Um, it takes a toll on your relationships 'cause you're usually in a bad mood. Um, it takes a toll on, oh, geez, lots of things. Like you don't get sleep. It's all kind of all related. I don't know. It's like a domino effect. I think you go through walls and, you know, valleys and hills or whatever."

Note the use of the terms "under" (i.e. under the bridge) and "hills and valleys". These images are directly indicative of the Sense-Making model (Dervin, 2008), despite the fact that participants were not shown this model.

Similarly, participant 19 (a white female faculty member in her 50's), described her current high state of well-being as being dependent upon her ability to evolve and become more resilient after difficulty (i.e. breaking out of prior gaps):

> "So I went through a period of time, when, eeh, when I was married where there were struggles. And then I went through a divorce, and there were really struggles. And it was a – it was painful. Um, I went through a very, very painful time. And I had a lot of adversity to overcome. And I think – and I worked hard at it. I mean I, I went into therapy and I went into a training program. And, um, I was just –I did not want to spend the rest of my life in a dark place And so I feel like, um – that I'm in a place right now where I feel like my hard work has paid off. And there were many years of confusion and self-doubt and lack of self-worth and a lot of that. And a lot of that has been lifted. …. I think that I'm definitely moving in a positive direction….So, in part, my belief is that the people who go through a difficult thing in life and overcome it and get to the other side of it often have a lightness about them that you might equate with happiness. And, um, there's something about overcoming adversity that helps people grow a lot."

Notice that participant 19 specifically describes a "dark place" (i.e. gap) and currently being in a new "place" (i.e. situation) now. She also describes "moving in a positive direction," being "lifted," getting to the "other side," and "overcoming adversity." All of these references imply locations within the Sense-Making model (i.e. being low = gap; going up = getting back on the bridge; getting to the other side = outcome). Notice that her description also implies a sense of "paying it forward" (social responsibility) in terms of well-being. Her well-being is now improved, because she has dedicated a portion of her professional attention towards helping others improve their well-being. This is consistent with the well-being literature, which notes that a sense of meaning and purpose positively

influences well-being, and family communication literature, which notes that a sense of legacy is an important lifespan developmental milestone for the 40's and 50's.

Participant 11, (an African American graduate student aged 31 – 40 years), explained that her well-being improved when she stopped following societal influences and established her own set of rules (desired self-defined outcomes) with regards to her well-being. This shift is consistent with Dervin's Sense-Making model (2008) which is based on the constructivist assumption that the individual is his/her own theorist. In her narrative, she describes a process where she evolved into "her own person" (i.e. setting her own agenda and thereby engaging in Sense-Making):

> "I definitely think I'm in a good place and a better place than I was. I will say that I think that emotional and social well being is really, really, really I would say kind of fucked up for the average American because of the stereotypes… where you have all this –media influence nonsense about the way that you should be, or the way that you should look, or the way that you should feel, rather than just paying attention to how you as your own self feel. So being my own person I kind of had to go through that process and there are many other people that have as well, or that haven't yet and you kind of see that suffering, or that lapse, or that façade, and so I think that was a very important thing for me was to kind of go through that process.
>
> So now I feel a lot better about myself, a lot more stable emotionally, a lot more open and honest social versus kind of closed off social where you're in a group but how much are you going to say about yourself or how do you judge other people, things like that."

The final open-ended interview of the protocol, asks the participant to give a summative description of their well-being by answering the question, "*Are You Living the Life That's Right for You?."* Despite her prior challenges, she had a very positive summative assessment of her well-being:

> "Definitely. I can't imagine doing anything else and I can't imagine anybody else doing what I do. So I really think that this is just exactly where I need to be, what I need to be doing, and I'm pretty grateful for all of it because I could be jobless on the street or in my parent's basement and I have all these things to do and people that really care about me around me. So those are kind of what's important to me right now."

Notice that her assessment includes a sense of reaching her own desired outcomes – a listing of ways that she has reached her self-defined goals and avoided gaps.

These narratives, as well as those that are listed in Appendix 2, illustrate ways that participants explained their well-being utilizing particular concepts from Dervin's (2008) model of Sense-Making. Furthermore, they indicate that well-being did function as a Sense-Making process for most of the participants in this study. As a result, both RQ1:H1 and RQ1:H2 were supported. As has been shown, participants in the first and qualitative portion of this study described "what well-being means to them" in physical, mental, emotional and/or comprehensive well-being terms (RQ1:H1). In addition, most participants in phase 1 of the study described their well-being in ways that were consistent with the Sense-Making framework (Dervin, 2008); they made sense of their current life situation by examining it relative to (1) where they feel their life has been and is (situation and context); (2) is going (i.e. outcomes) and (3) whether or not they perceive they are moving towards their goals (i.e. actively engaged in the process of Sense-Making) or stuck in a gap along the way (i.e. caught in a state of Sense-Unmaking).

Phase 2: Quantitative Study Results

Building on the themes discovered in the first and qualitative phase of this study, phase two of the study sought to explore, from a quantitative perspective, potential

correlations between communication competence, social support and well-being determinants. (RQ2) Is there a relationship between communication competence, social support, and well-being for this university population? The following hypotheses were posed for the study's phase two and this second research question.

RQ2: Hypotheses (RQ2: H1, H2, H3, and H4)

(RQ2: H1) Communication competence, social support and comprehensive well-being determinants will be positively correlated. (RQ2: H2) Communication competence, social support, and physical well-being determinants will be positively correlated. (RQ2: H3) Communication competence, social support and mental well-being determinants will be positively correlated. (RQ2: H4) Communication competence, social support and emotional well-being determinants will be positively correlated.

These hypotheses are inspired by prior research which has indicated that communication skills training can significantly improve emotional intelligence as well as life satisfaction (Ghorbanshiroudi, Khalatbari, Salehi, Bahari, & Keikhayfarzaneh, 2011). Recent research has also indicated a negative relationship between depression and communication competence (Wright, Rosenberg, Egbert, Ploeger, Bernard, & King, 2013).

Phase 2 (Quantitative) Population Sample / Participants

Strategic recruitment efforts (discussed in chapter 4) ultimately led to n=953 participants attempting to complete the survey, with n=644 participants completing the

survey (phase 2) in its entirety. Participant fatigue is attributed to the discrepancy between the number of participants who began the survey, and the number of those who completed it.

Nevertheless, the sample size was generally reflective of the full university population. Although recruitment efforts were strategic in nature, to reach as diverse a cross-section of the full university population as possible, the sample population was subject to self-selection bias and was not randomized. The full university population (n=39,926) consists of 3218 faculty, 2881 staff, 11,927 graduate students, and 21,990 undergraduate students. The phase 2, non-randomized sample population consisted of a total of n=644 participants, with 90 faculty participants, 72 staff participants, 105 graduate student participants, and 401 undergraduate participants. It should be noted that several participants self-identified in multiple categories; for example one participant listed themselves as staff member and as a graduate student.

The following chart (table 4) illustrates the demographic composition of the full university population, and the study's phase 2 (quantitative survey) population. As shown on table 4, phase 2 participation included a greater proportion of undergraduate students than faculty, staff, and graduate students, which is consistent with the sub-group composition of the full university population. It should be noted that although recruitment efforts were designed to reach as many university population members as possible, the phase 2 participant population was self-selected and non-randomized.

Table 4: Phase 2 Quantitative Study Sample vs. University Population

	Phase 2 Participants (Quantitative Surveys)	University Population
Faculty	90	3,218
Staff	72	2,881
Graduate Students	105	11,927
Undergraduate Students	401	21,990
Total	644	39,926

Correlations I: Communication Competence and Well-being

For research question two (RQ2), data analysis was conducted using SPSS software to determine if correlations existed between communication competence, social support, and well-being (i.e. comprehensive, physical, mental and emotional well-being). Results (as shown on table 5) indicated that interpersonal communication competence was positively correlated with comprehensive well-being (r=.236), emotional well-being type 1: happiness (r =.328), emotional well-being type 2: cheerfulness (r=.185), mental well-being type 1: life satisfaction (r=.200), mental well-being type 2: calm mood (r=.120), physical well-being type 2: strength training and/or stretching such as yoga

Table 5 Correlations of Well-being, Communication Competence and Social Support

	Interpersonal Communication Competence	Social Support Quantity	Social Support Quality
Comprehensive Well-being (WB)	.236 ** n=625	.264** n=630	.325 ** n=634
Emotional Well-Being Type 1: Happiness	.328** n=631	.246** n=636	.367** n=640

Emotional Well-Being Type 2: Cheerfulness	.185 ** n=631	.247 ** n=636	.315 ** n=640
Mental Well-Being Type 1: Life Satisfaction	.200 ** n=631	.284 ** n=636	.295** n=640
Mental Well-Being Type 2: Calm Mood	.120 ** n=631	.167 ** n=636	.224 ** n=640
Physical Well-Being Type 1: Cardiovascular Activity (RAPA 1)	.070 n-631	.078 * n=636	.104 ** n=640
Physical Well-Being Type 2: Strength Training and/or Stretching Such as Yoga (RAPA2)	.146 ** n=631	.089 * n=636	.066 n=640
Physical Well-Being Type 3: Energy Balance	.190 ** n=630	.154 ** n=635	.189 ** n=639
Physical Well-Being Type 4: Well-Rested	.166 ** n=630	.194 ** n=635	.223 ** n=639

***p<.01 Correlation is significant at the 0.01 level (2-tailed). * p<.05 Correlation is significant at the 0.05 level (2-tailed).*

(r=.146), physical well-being type 3: energy balance (r=.190), physical well-being type 4: well-rested (r=.166) at a 99% confidence level (p<.01). Interpersonal communication competence was not shown to correlate with physical well-being type 1: cardiovascular activity for this population.

Correlations 2: Social Support and Well-being

As shown on table 5, social support quantity (i.e. the number of supportive relationships that the participant self-reports) was positively correlated with comprehensive well-being (r=.264), emotional well-being type 1: happiness (r =.246), emotional well-being type 2: cheerfulness (r=.247), mental well-being type 1: life satisfaction (r=.284), mental well-being type 2: calm mood (r=.167), physical well-being

type 1: cardiovascular activity (r=.078), physical well-being type 2: strength training and/or stretching such as yoga (r=.089), physical well-being type 3: energy balance (r=.154) and physical well-being type 4: well-restedness (r=.194). Comprehensive well-being, both types of emotional well-being, both types of mental well-being and physical well-being types 3 and 4 (energy balance and well-rested) were all shown to correlate with social support quantity at a 99% confidence level ($p<.01$). Physical well-being types 1 and 2 (cardiovascular activity and strength training and stretching to include yoga) correlated with social support quantity at 95% confidence levels ($p<.05$).

Social support quality (i.e. the participant's satisfaction with their social support) was positively correlated with comprehensive well-being (r=.325), emotional well-being type 1: happiness (r =.367), emotional well-being type 2: cheerfulness (r=.315), mental well-being type 1: life satisfaction (r=.295), mental well-being type 2: calm mood (r=.224), physical well-being type 1: cardiovascular activity (r=.104), physical well-being type 3: energy balance (r=.189) and physical well-being type 4: well-restedness (r=.223). All of these correlations were significant at the 99% confidence level ($p<.01$).

Correlations 3: Communication Competence Sub-Domains and Well-being

Based on the discovery of such strong correlations between communication competence, social support, and well-being, further statistical analysis was conducted to explore the relationship between the four types of well-being examined in this study (i.e. comprehensive, mental, emotional, and physical well-being) with nine sub-domains of interpersonal communication competence (i.e. motivation, knowledge, skill, adaptability,

conversation involvement, conversation management, empathy, effectiveness, and appropriateness). These results are indicated on table 6.

Table 6: Correlations of Well-being and Communication Competence Sub-Domains

	Comm Mo-tivation	Comm Know-ledge	Comm Skill	Comm Adapta bility	Conv. Involve	Conv. Mgmt	Comm: Empathy	Comm Effect-iveness	Comm Appro-priateness
Comprehensive Well-being	.079 * n=632	.246** n=624	.244** n=625	.067 n=636	.172** n=636	.244** n=633	.071 n=631	.373 n=628.	.142** n=637
Emotional Well-Being Type 1: Happiness	.128** n=637	.323** n=630	.342** n=631	.126** n=642	.273** n=642	313** n=638	.149** n=637	.405** n=634	.226** n=643
Emotional Well-Being Type 2: Cheerfulness	.039 n=637	.183** n=630	.199** n=631	.064 642	.165** n=642	.218** n=638	.050 n=637	.296** n=634	.115** n=643
Mental Well-Being Type 1: Life Satisfaction	.103** n=637	.216** n=630	.182** n=631	.050 n=642	.165** n=642	.174** n=638	.062** n=637	.328** n=634	. 111** n=643
Mental Well-Being Type 2: Calm Mood	(.007) n=637	.142** n=630	.134** n=631	.016 n=642	.065 n=642	.166** n=638	.094 n=637	.227** n=634	.090* n=643
Physical Well-Being Type 1: Cardiovascular Activity (RAPA 1)	.041 n=637	.085* n=630	.077 n=631	.010 n=642	.068 n=642	.029 n=638	.042 n=637	.043 n=634	.081* n=643
Physical Well-Being Type 2: Strength Training and/or Stretching Such as Yoga (RAPA 2)	.105* n=637	.158** n=630	.122** n=631	.035 n=642	.144 n-642	.071 n=638	.077* n=637	.118** n=634	.134** n=643
Physical Well-Being Type 3: Energy Balance	.088* n=636	.184** n=629	.185** n=630	.082* n=641	.137** n=641	.193** n=637	.071 n=636	.298** n=633	.093* n=642
Physical Well-Being Type 4: Well-Rested	.041 n=636	.172** n=629	.184** n=630	.026 n=641	.098* n=641	.175** n=637	.055 n=636	.263** n=633	.103** n=642

***correlation is significant at the p<.01 level (two-tailed)*
** correlation is significant at the p<.015 level (two-tailed)*

As shown on table 6, comprehensive well-being correlated with the following communication competence sub-domains: motivation (r=.079), knowledge (r=.246), skill (r=.244), conversation involvement (r=.172), conversation management (r=.244), effectiveness (r=.373) and appropriateness (r=.142). These correlations were all significant

at a 99% confidence level ($p<.01$), with the exception of motivation, which was significantly correlated at a 95% confidence level ($p<.05$).

As shown on table 6, emotional well-being type 1: happiness was shown to positively correlate with all nine sub-domains of interpersonal communication competence at a 99% confidence interval ($p<.01$): motivation ($r=.128$), knowledge ($r=.323$), skill ($r=.342$), adaptability ($r=.126$), conversation involvement ($r=.273$), conversation management ($r=.313$), empathy ($r=.149$), effectiveness ($r=.405$) and appropriateness ($r=.226$). Emotional well-being type 2: cheerfulness was shown to positively correlate with the following sub-domains of interpersonal communication competence: knowledge ($r=.183$), skill ($r=.199$), conversation involvement ($r=.165$), conversation management ($r=.218$), effectiveness ($r=.296$) and appropriateness ($r=.115$). All of the above correlations were significant at a 99% confidence interval ($p<.01$).

Table 6 also illustrates how mental well-being type 1: life satisfaction correlated with motivation ($r=.103$), knowledge ($r=.216$), skill ($r=.182$), conversation involvement ($r=.165$), conversation management ($r=.174$), empathy ($r=.062$), effectiveness ($r=.328$) and appropriateness ($r=.111$). All of these correlations were significant at a 99% confidence level ($p<.01$). Mental well-being type 2: calm mood correlated with knowledge ($r=.142$), skill ($r=.134$), conversation management ($r=.166$), effectiveness ($r=.227$) and appropriateness ($r=.090$). All of these correlations were significant at a 99% confidence level ($p<.01$), with the exception of appropriateness which was significant at a 95% confidence level ($p<.05$).

Physical well-being was measured in four types as follows. Physical well-being type 1 (cardiovascular activity) and type 2 (strength training and stretching activities such as yoga) were measured via the self-report measure RAPA (rapid assessment of physical activity). Physical well-being type 3 (energy balance) and 4 (well-restedness) were measured via questions from the comprehensive well-being instrument (WHO-5).

As shown on table 6, physical well-being type 1: cardiovascular activity was shown to correlate with knowledge (r=.085) and appropriateness (r=.090) at a 95% confidence level (p<.05). All other sub-domains of interpersonal communication competence did not correlate with physical well-being type 1 (cardiovascular activity) for this population. Physical well-being type 2: strength training and stretching activities such as yoga was shown to positively correlate with sub-domains of motivation (r=.105), knowledge (r=.158), skill (r=.122), empathy (r=.077), effectiveness (r=.118) and appropriateness (r=.134). All of these sub-domains of communication competence correlated with well-beng at 99% confidence levels (p<.01), with the exception of motivation, which was significant at the .05 level..

As shown on table 6, physical well-being type 3: energy balance (i.e. the feeling of being active and vigorous over the past two weeks) was shown to positively correlate with the following sub-domains of communication competence: motivation (r=.088), knowledge (r=.184), skill (r=.185), adaptability (r=.082), conversation involvement (r=.137), conversation management (r=.193), effectiveness (r=.298) and appropriateness (r=.093). All of these correlations were illustrated at 99% confidence levels (p<.01), with

the exception of motivation, adaptability and appropriateness, which were significantly correlated at a 95% confidence level.

As shown on table 6, physical well-being type 4: well-restedness (i.e. the feeling of awakening refreshed and rested) was shown to positively correlate with the following sub-domains of communication competence: knowledge (r=.172), skill (r=.184), conversation involvement (r=.098), conversation management (r=.175), effectiveness (r=.263) and appropriateness (r=.103). All of these sub-domains correlated with well-restedness at 99% confidence levels ($p<.01$), with the exception of communication involvement, correlated with well-restedness at a ($p<.05$) level.

Regressions: Communication Competence, Social Support (IVs) and Well-being Determinants (DVs)

Once correlations were determined, additional analysis was conducted utilizing SPSS software, to explore whether or not a predictive relationship existed between communication competence, social support, and the four types of well-being examined in this study: comprehensive, mental, emotional and physical well-being. Linear regressions were conducted with the independent variables of interpersonal communication competence, social support (quantity and quality), and the nine communication competence sub-constructs noted above. Dependent variables included comprehensive well-being, mental well-being, physical well-being, and emotional well-being.

As shown on table 7, social support quantity ($p<.001$), social support quality ($p<.001$), interpersonal communication competence ($p<.001$), and communication effectiveness ($p<.001$) predicted comprehensive well-being. Social support quantity

(p<.001) social support quality (p<.001), communication competence (p=.006), conversation involvement (p=.022), and communication competence effectiveness (p<.001) predicted mental well-being type 1: life satisfaction. Communication effectiveness (p<.001), social support quantity (p=.024), and social support quality (p<.001) predicted mental well-being type 2: calm mood. Communication competence (p<.001), communication effectiveness (p<.001), conversation involvement (p=.007), social support quantity (p=.035), and social support quality (p<.001) predicted emotional well-being type 1: happiness. Communication competence (p=.008), communication effectiveness (p<.001), conversation involvement (p=.005), conversation management (p=.036), communication knowledge (p=.028), social support quantity (p=.001) and social support quality (p<.001) predicted emotional well-being type 2: cheerful mood (cheerfulness).

Table 7: Comprehensive, Mental, and Emotional Well-being (DV's) and Communication Competence and Social Support (IV's)

	Comprehensive Well -Being	**Mental Well –Being 1: Life Satisfaction**	**Mental Well -Being 2: Calm & Relaxed**	**Emotional Well -Being 1: Happiness**	**Emotional Well -Being 2: Cheerful Mood**
Communication Competence	p<.001	p=.006		p<.001	p=.008
Communication Competence - Effectiveness	p<.001	p<.001	p<.001	p<.001	p<.001
Conversation Involvement		p=.022		p=.007	p=.005
Conversation Management					P=.036
Communication Competence Knowledge					p=.028
Social Support Quantity	p<.001	p<.001	p=.024	p=.035	p=.001

Social Support Quality	p<.001	p<.001	p<.001	p<.001	p<.001

As shown on table 8, communication competence, social support did not predict physical well-being type 1. Communication competence and the communication competence sub-domain of conversation involvement predicted physical well-being type 2: strength training and stretching activities such as yoga (p=.002). Communication competence (p<.001), communication effectiveness (p<.001), and social support quality (p=.002), predicted physical well-being type 3: energy balance. Communication competence (p=.007), communication effectiveness (p=.005), social support quantity (p=.005), and social support quality (p<.001), predicted physical well-being type 4: well-restedness.

Table 8: Physical Well-being (DV's) and Communication Competence and Social Support (IV's)

	Physical Well –Being 1: RAPA 1	Physical Well –Being 2: RAPA 2	Physical Well –Being 3: Energy Balance	Physical Well –Being 4: Well-Rested
Communication Competence		p=.002	p<.001	p=.007
Communication Competence - Effectiveness			p<.001	p=.005
Conversation Involvement		p=.042		
Social Support Quantity				p=.005
Social Support Quality			p=.002	p<.001

Summary of Phase 2 (Quantitative) Findings

In summary, the four hypotheses examining RQ2 (How are communication competence, social support and well-being determinants represented and correlated in a

cross-section of the university population?) were all positively supported. (RQ2: H1) Communication competence, social support and comprehensive well-being determinants were positively correlated. (RQ2: H2) Communication competence, social support, and physical well-being determinants were positively correlated. (RQ2: H3) Communication competence, social support and mental well-being determinants were positively correlated. (RQ2: H4). Communication competence, social support and emotional well-being determinants were positively correlated. Additionally, predictive relationships were found between communication competence, social support, and various dimensions of well-being (i.e. comprehensive, physical, mental, and emotional).

Communication competence ($p<.001$), communication effectiveness ($p<.001$), social support quantity ($p<.001$), and social support quality ($p<.001$), predicted comprehensive well-being.

Social support quantity ($p<.001$) social support quality ($p<.001$), communication competence ($p=.006$), conversation involvement ($p=.022$), and communication competence effectiveness ($p<.001$) predicted mental well-being type 1: life satisfaction. Communication effectiveness ($p<.001$), social support quantity ($p=.024$), and social support quality ($p<.001$) predicted mental well-being type 2: calm mood.

Communication competence ($p<.001$), communication effectiveness ($p<.001$), conversation involvement ($p=.007$), social support quantity ($p=.035$), and social support quality ($p<.001$) predicted emotional well-being type 1: happiness. Communication competence ($p=.008$), communication effectiveness ($p<.001$), conversation involvement

(p=.005), conversation management (p=.036), communication knowledge (p=.028), social support quantity (p=.001) and social support quality (p<.001) predicted emotional well-being type 2: cheerful mood (cheerfulness).

Communication competence and the communication competence sub-domain of conversation involvement predicted physical well-being type 2: strength training and stretching activities such as yoga (p=.002). Communication competence (p<.001), communication effectiveness (p<.001), and social support quality (p=.002), predicted physical well-being type 3: energy balance. Communication competence (p=.007), communication effectiveness (p=.005), social support quantity (p=.005), and social support quality (p<.001), predicted physical well-being type 4: well-restedness.

The next chapter will discuss these findings, as well as their limitations and their implications for future research.

CHAPTER FIVE: DISCUSSION

This investigation sought to explore the role of Sense-Making, communication competence and social support in well-being. Through both qualitative and quantitative inquiry, Sense-Making, communication competence and social support were shown to correlate with various dimensions of well-being (i.e. comprehensive, mental, emotional and physical well-being). Additionally, communication competence, social support quantity and social support quality predicted well-being for a self-selected, non-randomized sample population (n=682) of faculty, staff and students at George Mason University. This chapter will discuss implications of this investigation for health communication and well-being scholarship, as well as limitations of the study.

Implications for the Field of Health Communication

This exploratory study investigated how Sense-Making, communication competence and social support influence ways that individuals operationalize well-being in their lives. Because both correlations and predictive results were shown with regards to Sense-Making, communication competence, social support and well-being, there are many possibilities for future explorations of well-being with regards to health communication scholarship.

A Well-Being Lens for Health Communication

As noted in chapter 1, health communication is a field that examines the ways that communication influences health, specifically in disease prevention and health promotion (Kreps, 2001). Prior research (discussed at length in chapter 2) has shown that improved communication and social support can improve health outcomes. This exploratory study has shown that improved communication competence and social support can also improve well-being. Since health is "not merely the absence of disease or infirmity, but a state of complete physical, mental and social well-being" (WHO, 1948), this study offers the possibility that a well-being lens can be applied to the field of health communication.

Well-Being as Sense-Making Application to the RHCCM Model

One possible avenue for applying a well-being lens to health communication scholarship exists in the previously discussed Relational Health Communication Competence model (RHCCM) by Kreps (1988). As discussed in chapter 2, this model explains how patient-provider interactions lead to adaptive or maladaptive health outcomes, based on the communication competence of patients and providers. According to the model, if communication competence is high, positive health outcomes are more likely to be achieved. Conversely, lower communication competence can lead to less desirable (adverse) health outcomes.

This study's findings offer the possibility that a well-being perspective could be added to the RHCCM framework, for patients, providers and advocates. In order to apply a well-being lens to the RHCCM framework, providers can be taught to apply Sense-Making processes to patient-provider interactions. In other words, providers can be

coached to integrate Sense-Making frameworks into their patient-provider interactions, throughout the healthcare process. Since Sense-Making is the process of redrafting one's story to comprehension (Weick, Sutcliffe and Obstfield, 2005), and since this study has shown that well-being can function as a Sense-Making experience, it is posited that providers can be trained in Sense-Making models to help patients not only understand their health outcomes and treatment protocols, but to also make sense of the story that is their health and/or disease.

Specifically, providers could be taught to help their patients to "make sense" of their health and/or illness in ways that help the patient to make their story more comprehensible to themselves and to others (i.e. their social support networks including advocates, family and friends). To use Dervin's (2008) framework, providers could be taught to help patients (as well as their social network) to get out of the "gap" that is often created during the initial shock of the diagnosis and disclosure phases of illness, by coaching them through the Sense-Making process. By helping the patient and their social support network to understand that gaps are to be expected in illness diagnosis, and by helping the patient create sense (sensemake) by "redrafting their story" to a series of new and adaptive outcomes, providers can promote well-being while promoting health utilizing Sense-Making processes.

As an example, in traditional healthcare patient-provider models, diabetes patients who are newly diagnosed are offered a series of health treatment plans to address their disease. These treatment plans may include daily testing of insulin, dietary and exercise guidelines, and other biomedical protocols. Healthcare delivery training typically

(although not always) stops there; it is based in treatment plans and protocols that are designed to either manage an illness or prevent its progression. Traditional applications of the RHCCM framework focus on ensuring that the patient understands these plans and protocols, and feels empowered enough to ask for assistance when needed in the treatment process.

However, with a well-being lens added to this RHCCM framework, providers would also be trained to encourage patients to consider ways that they can create a more happy, and satisfying life, with (and despite) their illness (in this case, diabetes). Instead of focusing on the illness itself, such a Sense-Making perspective would encourage providers, as well as patients to consider life satisfaction, happiness, meaning and purpose, quality of life, and other dimensions of subjective well-being (previously discussed in chapter 2) into the matrix of patient plans and protocols. In sum, providers would be encouraged to promote their patient's cognitive, affective, and kinesthetic lived experience of well-being as much as they are trained to promote their patient's adherence to illness management plans. Providers would assist patients in understanding not only how to manage their illness, but how to achieve and maintain their well-being with their illness. Conversely, patients and their advocates would be encouraged (and trained) to ask for assistance with their well-being.

As shown in the theory discussion in chaper 2, sense is made by an individual who thinks and feels as though they can move toward self-defined goals and outcomes (Dervin, 2008) and who feels culturally supported in doing so (Weick, 2005). In this framework, sense does not come from externally driven events or influences; sense is made by the

individual and is influenced by social support. If we accept that well-being can function as a Sense-Making experience, we can see that an individual's situation of illness or disease does not have to be the "end of their story". Instead, the individual can be encouraged to "make sense" of their illness, by creating new outcome goals for their body, mind, the heart and spirit (Dervin, 2008). The individual can be encouraged to not only make sense of their illness in their "body/mind/heart/spirit" (Dervin, 2008) but to also seek out social support as part of their treatment and healing process (Weick, 2005).

It should be noted that the findings of this study support the possibility that well-being can be encouraged and fostered for individuals in tandem with, if not separately from, their health outcomes. It should be noted that the majority of respondents did not mention their health status and/or disease when asked how they would improve their well-being (if they had a magic wand to do so). Fourteen individuals mentioned that they would prefer not to be sick or to be ill; however, a large majority of participants discussed the ways that they experienced, and evaluated their lives when they discussed how they would improve their well-being. They did not refer to their health status. This omission of health status when discussing well-being is in keeping with the World Health Organization's conceptualization of health as more than the absence of disease or infirmity (WHO, 1948), and is in keeping with this investigation's posit that well-being can function as a Sense-Making experience.

Well-Being as Sense-Making for Health Promotion

In addition to the patient-provider and illness management applications noted above, a well-being lens can also be applied to health promotion scholarship and practice. One way to make sense of the complexities of health behavior promotion is through the lens of well-being. According to the Sense-Making framework (Dervin, 2008), the individual is their own theorist and therefore has their own ability to make sense. Health promotion campaigns can therefore be built upon the assumption that well-being is in the eye of the individual beholder. As such, health promotion campaigns can be created to support the individual's self-determined understanding and conceptualization of well-being, rather than imposing a pre-determined conceptualization upon the individual or population. In other words, public health campaigns can be designed as less population-based (which is the traditional model for global and community health) and more individual-based. It should be noted that this approach is in keeping with the majority of health communication scholarship and practice, which focuses on identifying, examining and solving health care and promotion problems (Kreps, 2001).

Centered Well-Being: An Integrated Model

This study explored the importance of Sense-Making, communication competence and social support in various dimensions of well-being. The study was originally conceived based on three theoretical models: Sense-Making (Dervin, 2008), sensemaking (Weick, 2005) and RHCCM (Kreps, 1988). This discussion will now offer an integrated theoretical model that emerged both from this exploratory study, and the author's grounded work in mind/body disciplines.

The Centered Well-Being model acknowledges that well-being functions as a Sense-Making experience, and is therefore a communication process. The model is inspired by the three theoretical models discussed in this investigation's chapter 2, namely: Dervin's constructivist assertion that the individual is a body/mind/heart/spirit; Weick's summative assertions that sensemaking is a constantly shifting, culturally influenced process, and in part by Krep's assertion that patient-provider interactions can be positively or negatively influenced through communication competence and social support.

The centered well-being model begins with the assumption that well-being is homeostatic in nature; as a Sense-Making process, it is influenced by both objective forces (i.e. life events) and subjective experiences (i.e. lived experiences). The model assumes that the Sense-Making process is either adaptive (i.e. well-being functions) or maladaptive (well-being malfunctions and ill-being prevails). If we assume that well-being functions as a Sense-Making, communication-based process, it is therefore influenced by three sub-dimensions, namely: intrapersonal communication, interpersonal communication, and intercultural communication contexts.

The first sub-dimension to be explored is intrapersonal communication. Although other conceptualizations of intrapersonal communication include speaking aloud to one's self, repeating what one hears, and reading aloud (Cunningham, 1992), intrapersonal communication in the centered well-being model refers specifically to one's self-dialogue, self-awareness, and self-efficacy for achieving and maintaining well-being. This form of intrapersonal communication is influenced by both consciousness and mindfulness, as

well as the "bridge" of thoughts, beliefs and values that Dervin (2008) discusses in her model; the role of identity that Weick (2005) discusses in his model of sensemaking; and the individual's self-evaluation of communication competence, which has been largely applied to the testing of Kreps's RHCCM model (1988).

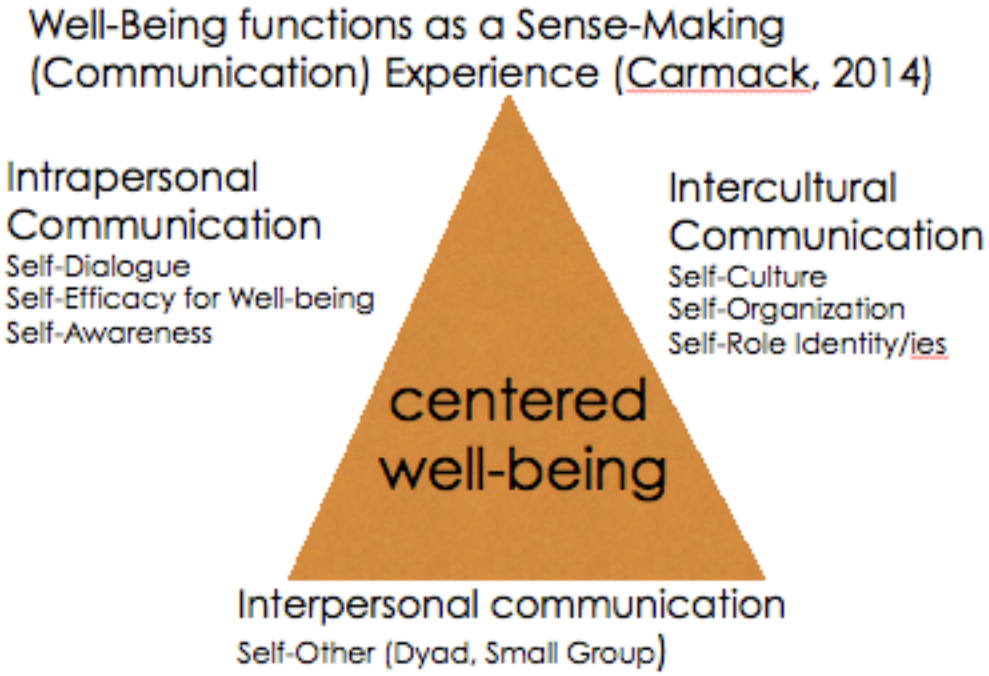
The second dimension of centered well-being, is interpersonal communication. Although there are many definitions of interpersonal communication, this centered well-being framework assumes that interpersonal communication is grounded in dyad and small group communicative interactions. This dimension assumes that the individual's well-being will be influenced by the adaptive or maladaptive nature of their dyad and small-group engagements. These dyad and small groups may include but are not limited to intimate relationships, family, friends, co-workers, teammates, and health provider interactions. Although there are many ways to assess the success or failure of interpersonal communication, the centered well-being model assumes that the interpersonal communication sub-domain is adaptive when the individual has the motivation, knowledge and skill (Spitzberg and Cupach, 1985) to create meaningful interactions and manage conflict in dyad and small group settings, in ways that enhance both subjective (self-evaluated) and objective (externally-determined) well-being. This model therefore integrates previously discussed theory including Weick's (2005) assumption that the sensemaking process depends in part on enacted dialogue, and Krep's (1988) assumption that patient-provider interactions can move the patient either towards, or away from, adaptive health outcomes.

The third sub-dimension in the centered well-being model, is intercultural communication. Although multiple interpretations and definitions of intercultural communication exist, the centered well-being model is influenced in large part by Ting-Toomey's (1993) assumption that the individual's experience of intercultural communication is bound in "multiple self identity images." The individual is at once part of several cultures, and has many self identity images as part of those cultures. However, the more the individual has a coherent sense of self despite these at times divergent self-identity images, the more resourcefulness they have, and the more effective they are in interactive identity confirmation, coordination, and attunement (Ting-Toomey, 1993). This dimension acknowledges the complexities of the individual's lived experience, and the simultaneous management of "multiple outcomes" that is embedded within both Dervin's (2008) and Weick's (2005) model for sensemaking. The inclusion of intercultural communication, as per Ting-Toomey's (1993) framework, acknowledges that the individual must make sense of their lived experience from the vantage point of multiple contexts (as noted in Dervin's, 2008 framework) and that sensemaking is a culturally-bound endeavor (as per Weick, 2005).

The centered well-being model then offers a framework to integrate prior work by Dervin (2008), Weick (2005) and Kreps (1988) to explain the ways in which well-being can function as the communication process of Sense-Making. In this model, centered well-being is a homeostatic Sense-Making process influenced by the interactive effect of the three sub-domains of intrapersonal, interpersonal and intercultural communication. If one of the sub-domains has an adverse event (i.e. negative self-talk is constructed, an

unresolved interpersonal conflict occurs, or an individual's self-identities compete), then one's centered well-being will be negatively effected. Conversely, if one of the sub-domains has an adaptive event, well-being will be positively effected. The interactive effects of these sub-domains on one's overall centered well-being is a potential avenue for future studies to explore.

Figure 3: Centered Well-Being Model



By integrating the influences of Sense-Making, communication competence and social support on well-being, the centered well-being model offers a new theoretical framework for future health communication and well-being studies to explore and examine. It is posited here that adaptive intrapersonal, interpersonal, and/or intercultural communication will promote health outcomes and well-being, while maladaptive

intrapersonal, interpersonal, and/or intercultural communication processes will adversely affect health outcomes and well-being. Future studies can explore these possibilities.

Limitation 1: Instruments

The most important limitation for this study is briefly mentioned in chapter 3: methods. Specifically, the largest limitation for this investigation is that the survey instruments used in this study were short, not comprehensive, and in some cases, not validated statistically. (For a description of each instrument, see chapter 3, methods). In an effort to avoid and prevent participant fatigue, the choice was made to accept this limitation, and to combine several short instruments so that multiple dimensions of well-being could be explored. The decision to choose these measurements was made grounded in the assumption that this was meant to be an exploratory study with regards to communication competence, social support, and multiple domains of well-being, and that future studies could utilize more in-depth measures of comprehensive, mental, emotional, and physical well-being.

Limitation 2: A Limited Scope for Well-being

As noted in the literature review (chapter 2), well-being is generally discussed in the literature as either objective (OWB) or subjective (SWB). Objective measures of well-being are generally concerned with issues regarding personal welfare; OWB can be measured by others. For example, an individual's well-being may be compromised if he has a cancer diagnosis, or if she lives in an area where water is unsafe to drink (especially

if she is unaware of the problem). Subjective well-being, on the other hand, is grounded on the assumption that the individual determines their SWB. Specifically, the individual can assess their well-being as an affect-based experience, or as a cognitive-based appraisal or evaluation.

For the purposes of this study, the author chose to focus on subjective well-being, as opposed to objective well-being in both the quantitative and qualitative phases of the study. This choice was made in order to explore subjective well-being determinants. Future studies should explore objective measures of well-being, as well as subjective measures.

Within subjective dimensions of well-being, assessments of physical, mental, and emotional dimensions of well-being were chosen for this study. This choice was made based on the results of the open-ended qualitative interviews; the majority of respondents discussed their well-being from these comprehensive, mental, emotional and physical well-being perspectives.

Future studies should explore three other areas of well-being, senesemaking, and communication: spiritual well-being, financial well-being and personal security or welfare (safety and security). Two of the 38 qualitative interviewees discussed their spiritual well-being and faith in God as being a central component of their well-being. In addition, results from the quantitative survey also support the possibility that spiritual well-being should be investigated further: three respondents in the social support section of the phase 2 quantitative survey listed "God" as one of their friends that they go to when they are "down in the dumps."

In addition to spiritual well-being, financial well-being is another area of well-being scholarship for future studies to investigate. Two of the qualitative interviewees discussed their financial well-being as being an important part of their overall well-being. Additionally, sixteen of the survey respondents mentioned that a new and/or more lucrative job would be what they would ask for if a "magic wand" could improve their well-being, and nine respondents mentioned that they would remove debt if they could do so. Clearly, spiritual well-being and financial well-being are areas that are in need of further exploration.

One particular narrative from the open-ended question portion of the quantitative survey, poignantly highlights how financial well-being effects many other dimensions of well-being. In this narrative, physical, mental, emotional, social and even cultural dimensions of well-being are referenced:

> Money . It's sad but it really does fuel our society. If I had money , I could pay for college, pay for my girlfriend's college, pay for my PhD, pay for my girlfriend's law degree. I could take a year off and write my book. I could travel. I could help out my extended family who is very poor. I could donate to several causes and tip waiters and waitresses 100% every time I ate out. I would do so many things with money and money would take away so many life stresses. I would never have to worry about paying the bills or living expenses. I mean, this of course is if I had A LOT of money. But even 1000 dollars would be amazing. I'd give it all to my girlfriend, so she could get out of debt. Money would make my girlfriend and I independent so we could support ourselves if our families end up not supporting us. But, you know, if I really had a magic wand, then I guess more than money I would wave that wand and make anyone who comes into contact with my girlfriend and I be acceptant and supportive of the lgbt community.

In addition to these areas (i.e. spiritual well-being and financial well-being), one other area is recommended for future study, namely: safety and security. These can be

considered from the point of view of the individual's physical, relational, financial, and legal well-being. Interestingly, 16 of the quantitative survey respondents mentioned security as being one way that they defined well-being, and 7 participants mentioned stability as such. It is widely accepted that security (i.e. environmental, relational, and sexual) are important topics on college campuses. Future studies should explore these areas in more depth. It is interesting to note that none of the respondents in the open-ended interviews, nor in the open-ended surveys, mentioned sexuality or sexual well-being with regards to well-being; however, it is possible that respondents used the terms "safety and security" in order to refer to their sexual life without mentioning sexuality per se.

Limitation 3: Self-Report and Self-Selection Bias

The final limitation to be discussed with regards to this study, is the inherent self-selection and self-report biases that are present. Although efforts were made to reach a population that represented the full university population for both phases of the study, the study was unsuccessful in achieving its goal of having a more diverse sample of participants (with regards to gender, age, and race) in both phases. Because diversity was not optimal and because participants were self-selected, it is plausible that results are skewed. It is also plausible that individuals who have more positive self-assessment of their well-being and/or communication competence are more likely to complete an interview or survey which examines these areas. Future studies should extend this investigation to a randomly chosen representative population in order to avoid this self-selection bias.

In addition, future studies should also utilize a variety of measures that not only ask for self-reports of communication competence, social support and various dimensions of well-being, but also request external assessments of these by individuals who know the participant. As mentioned above, objective appraisals of an individual's well-being, conducted by those who are close to the individual participant, would add a new dimension to understanding well-being in general, and the role of Sense-Making in the process of well-being in particular. For example, a participant's report of well-being could be validated by an appraisal by their family members, co-workers and/or friends. This would ensure that optimism bias, as well as issues of self-efficacy, would be less likely to adversely affect the accuracy of such self-report measures.

Conclusion

This mixed-methods, two-phase investigation explored relationships between communication competence, social support and well-being in a campus (George Mason University) culture. This study contributed to the health communication, well-being and public health literature by (1) investigating the role of sensemaking in the establishment and maintenance of individual definitions and perceptions of well-being; (2) observing quantitative and qualitative trends of communication competence, social support, and well-being determinants amongst faculty, staff and students within the George Mason University campus culture; and (3) offering a new framework of well-being entitled centered well-being, which posits that well-being is a Sense-Making experience influenced by intrapersonal, interpersonal, and intercultural communication. Ultimately, it

is hoped that this investigation will assist health communication and well-being scholarship by highlighting the ways that communication competence, social support, and the communication process of Sense-Making influence ways that individuals operationalize well-being in the complex landscape of their lives.

APPENDICES

Appendix 1: Recruitment Letters

Phase 1: Qualitative Interviews

Subject heading: Please help with an important study of well-being at GMU!

Greetings Mason faculty, staff and students --

I write today asking for your help in an important research project.

I am a doctoral student in health communication, currently in search of Mason faculty, staff and students to participate in my dissertation project, which will explore the correlations between communication and well-being. This project has received funding support from the Center for Consciousness and Transformation.

Would you consider participating in my study, and/or know someone who may like to participate?

All that would be required is a 30 minute interview, in which you would answer open-ended questions in regards to communication, social support and well-being. These interviews can be completed either in person, or by phone.

Your identity will be kept anonymous throughout either phase of the process, and you can choose to cancel participation at any time.

If you agree to participate, our research team will offer you a $5 gift card to thank you for your time.

1) Please email me at scelenta@gmu.edu, with the subject heading "Well-being communication study."
2) Please state whether you are willing to participate in the interview by phone, in person (on campus), or either.

You will then be sent an informed consent form. Upon that form's completion and submission you will then be sent directions with regards to participation in phase 1 of this study (i.e. participating in an interview). Please note that you can choose to stop the interview or survey process at any time.

All participants will receive a gift card, whether they complete the full research process or not. In-person interviewees will receive their gift card in person at the conclusion of the interview. By-phone interviewees will receive their gift card by mail.

If you have questions with regards to this process, please feel free to email me.

Thank you for your consideration. We would also greatly appreciate your help in letting other members of the Mason community (faculty, staff and students) know about this research opportunity to learn more about the correlations between communication and well-being.

Sincerely,
Suzie Carmack, PhD/ABD, MFA, MEd
PhD Candidate, Dept. of Communication
Graduate Lecturer, Recreation, Health and Tourism
Researcher, Center for Consciousness and Transformation

Phase 2: Qualitative Interviews

Twitter:

The following is a Tweet that was posted on the weekends @Mason page, to help promote the survey.

"#GMU faculty students & staff, fill out this brief survey. Do so before 12/17 and you can receive a free gift card! https://www.surveymonkey.com/s/gmuwellbeing "

"#GMU faculty students & staff, please fill out this brief 10 minute survey. https://www.surveymonkey.com/s/gmuwellbeing "

Facebook:

Are you a Mason student, faculty or staff member? If so, please complete the following 10-minute survey that examines your well-being, conducted by GMU doctoral student Suzie Carmack and sponsored by the Department of Communication, the Center for the Advancement of Well-being, and a dissertation completion grant from the Office of the Provost: https://www.surveymonkey.com/s/gmuwellbeing " IRB 503337-1. Questions can be addressed to: scelenta@gmu.edu.

E-files (a university list-serve)

Are you a Mason student, faculty or staff member? If so, please complete the following 10-minute survey that examines your well-being, conducted by GMU doctoral student Suzie Carmack and sponsored by the Department of Communication, the Center for the Advancement of Well-being, and a dissertation completion grant from the Office of the

Provost: https://www.surveymonkey.com/s/gmuwellbeing " IRB 503337-1. Questions can be addressed to: scelenta@gmu.edu.

Email:

Greetings -- I am a doctoral student in the GMU department of Communication, currently conducting my dissertation research. I am surveying Mason faculty, staff and students, to observe the prevalence of well-being here at Mason. I would greatly appreciate it if you could please:

1) *forward this email to GMU faculty staff and students within the ******* school, and ask them to participate?*

and/or

2) please consider completing this survey (10 minutes) yourself https://www.surveymonkey.com/s/gmuwellbeing

**** Those who complete the survey by December 17th will receive a free gift card!*

Thanks in advance for your help. It is truly appreciated.

Suzie Carmack aPhD Candidate/GTA Department of Communication
scelenta@gmu.edu
This survey is the dissertation of Suzie Carmack, a doctoral student in the department of Communication. It is made possible by support from the Center for the Advancement of Well-being, the Office of the Provost (through a dissertation completion grant), and the Department of Communication at George Mason University. IRB 503337-1. Questions or concerns can be directed to Carmack at scelenta@gmu.edu.

Appendix 2: Consent Form

I am a doctoral student in the George Mason University Communication Department studying health communication. I am currently in search of Mason faculty, staff and students to participate in my dissertation research project, which explores the relationship between communication and well-being.

If you click the "agree to participate" box below you will be taken directly to an online survey. This survey should take about 15 minutes for you to complete.

You will receive a gift card for your participation if you respond to this request by December 15, 2013.

This research has been reviewed according to George Mason University Human Subjects Review Board procedures governing your participation in this research. (IRB approval number 503337-1). This project has received funding support from the GMU Center for the Advancement of Well-being, and additional support from the Office of the Provost and the Department of Communication.

RISKS
There are no foreseeable risks for participating in this research.

BENEFITS
There are no direct benefits to you as a participant. However, your participation may help increase understanding about relationships between well-being and communication, as well as help to advance the field of health communication.

CONFIDENTIALITY
This survey is designed to protect your confidentiality. The data in this study will be kept confidential. Your responses will be separated from your identifying information. Only the researcher (myself, Suzie Carmack) and our investigative team (Dr. Gary Kreps, Dr. Xiaoquan Zhao and Dr. Joshua Rosenberger) will have access to the information collected. All results will be kept in a secure location.

As a participant, you will be asked to anonymously complete an online survey. The Survey Monkey software system used will keep your name and email (identity) separate from your survey responses, thereby protecting your identity. Every effort will be made to keep full confidentiality in survey responses.

PARTICIPATION
Your participation is voluntary, and you may withdraw from the study at any time and for any reason. If you decide not to participate or if you withdraw from the study, there is no penalty or loss of benefits to which you are otherwise entitled. There are no costs to you or any other party.

CONTACT
This research is being conducted by PhD Candidate Suzie Carmack as part of her doctoral dissertation, and, Dr. Gary Kreps, Dr. Xiaoquan Zhao, and Dr. Joshua Rosenberger at George Mason University. Suzie Carmack may be reached at scelenta@gmu.edu and Dr. Gary Kreps may

be reached at gkreps@gmu.edu to report a research-related problem. You may contact the George Mason University Office of Research Integrity & Assurance at 703-993-4121 if you have questions or comments regarding your rights as a participant in the research.

STATEMENT OF INFORMED CONSENT

Please click the appropriate boxes below indicating your consent to participate in this study by completing this survey.

__ I agree to participate. I understand I will now complete the online survey.
__ I do not agree to participate because I already participated in phase 1 of this study.
__ I do not agree to participate because I do not wish to participate.

Appendix 3: Sample Narratives of Sense-Making (Qualitative Interviews)

The following excerpts were drawn from interviews conducted in the qualitative study. References which illustrate Dervin's (2008) Sense-Making framework are illustrated with author's comments in bold/italics.

Subject	References to Sense-Making and/or Movement
1	When asked to define well-being: ***[Verbings towards outcomes: crossing the bridge]*** "Uh, engaging in efforts to, um, make sure that physical, mental, spiritual, emotional aspect, um, of - of a person's life are - are, uh, in balance. Um, I don't have a word other than - than healthy, uh - or well balanced. But I - I think the idea would be that, um, you are tending to your physical needs, your relational needs, your mental needs, um, your spiritual needs, um, in a way that - that maintains balance in your life.
3	Sense-Making Process **[*Bridge Crossing/Verbings]*** as Well-being: "…you know, the best version that uh, you're striving to be… I'm physically capable of functioning, that, um, I'm mentally fit to cope with the challenges that I go through. I have people in my life to support me. And that, uh, emotionally, I feel pretty good."
4	Sense-Making Process **[*Bridge Crossing/Verbings]*** as Well-being: "…maybe not necessarily the absence of stress, but being able to manage stress, you know?"***[Being in the Gap / Sense-Unmaking]*** Um, I think right now what I'm trying to do is I'm trying to figure out what to do, how to balance everything
5	Sense-Making Process ***[Bridge Crossing/Verbings*]** as Well-being: "Uh, well-being is probably, the way I would describe it is more of a home – homeostasis, um, of like mind and body, and along the lines of not too stressed, not too lackadaisical, um, and just a – kind of finding a neutrality of those."
7	***Merging Situation and Outcome*** [Crossing the Bridge/Making Sense] "Uh, to me it means are you happy with your life and, um, are you happy with your place in the world. Are you happy with your emotional, uh, uh, place, where you are financially, academically, everything else…So, being happy with the state of those different areas."
8	Sense-Making Process **[*Bridge Crossing/Verbings]*** as Well-being: "Um, well-being, I guess to me, means taking care of yourself and, um, having a balanced life."
9	Sense-Making Process ***[Bridge Crossing/Verbings]*** as Well-being **(avoiding the Gap)** Hmm, well, well-being, generally I supposed, means that you're healthy in terms of a physical body and a phys – or, uh, mentally, I suppose means that you don't have any, um, outstanding problems that are preventing you from doing anything that you'd, um, have to do to get through life.
10	***Living in the GAP: What Low Well-being (Sense-Unmaking) feels like:*** 'Yeah, it (well-being) takes effort and if you're already so tired, you probably should have done more reading so like I'm trying to skim stuff before class and it was just – I just felt like I could never keep up with all the things I was supposed to be, and that really weighed heavily on my mental well being because it was – like knowing a thing you're doing …I just felt like I couldn't do a good job on everything so I didn't feel like I could do a good job on anything." ***Coming out of the Gap into Sense-Making: Setting Outcomes*** "So yeah, I think also forward planning is a big part of my well being. Having things to

look forward to. Um, especially these kinds of trips where you know you can see someone new and have different experiences I need to have where I live and go all the time really makes me very, very happy."

11 ***Coming out of the Gap into Sense-Making: Setting Outcomes***

"I definitely think I'm in a good place and a better place than I was. I will say that I think that emotional and social well being is really, really, really I would say kind of fucked up for the average American because of the stereotypes… where you have all this –media influence nonsense about the way that you should be, or the way that you should look, or the way that you should feel, rather than just paying attention to how you as your own self feel. So being my own person I kind of had to go through that process and there are many other people that have as well, or that haven't yet and you kind of see that suffering, or that lapse, or that façade, and so I think that was a very important thing for me was to kind of go through that process. So now I feel a lot better about myself, a lot more stable emotionally, a lot more open and honest social versus kind of closed off social where you're in a group but how much are you going to say about yourself or how do you judge other people, things like that.

When asked, *Are You Living the Life That's Right for You?*

"Definitely. I can't imagine doing anything else and I can't imagine anybody else doing what I do. So I really think that this is just exactly where I need to be, what I need to be doing, and I'm pretty grateful for all of it because I could be jobless on the street or in my parent's basement and I have all these things to do and people that really care about me around me. So those are kind of what's important to me right now."

12 ***Setting Outcomes: Defining what well-being means to them***

Hmm. I think of that as sort of an overall sense of balance, like thinking about your physical and your mental and your spiritual and emotional health all together…Um, thinking about balancing relationships, um, thinking about sort of where your energy is going, what you're putting yourself into and what you get back from that, um, not – yeah, and just sort of finding a nice balance that's totally sustainable, um, and that, uh, is really fulfilling.

13 ***Being in the Gap:***

Not knowing where the outcomes are

"[If I had a magic wand] I guess I would remove the nervous or anxious feeling of what the future will bring and how you'll fit into that on graduation into the real world, you know? "

14 Specific reference to **situations** and our ability to make sense of them"…being able to handle any situation that you find yourself in.

15 ***Sense-Making as being at outcomes and avoiding gaps:*** …

– or just in, in general you're not struggling.

16 ***Sense-Making as bridging over or past (any) gap***

"…functioning at its best. Uh, almost in, in no matter what circumstance, I guess. Well-being for me means that you can function no matter what, uh, what surroundings you have…You know? To, to reach that true potential."

17 **Sense-Making as a choice – choosing not to go into angst**

"Well-being means you have a positive outlook and a positive mindset…

18

19 ***Being in the Gap***

"So I went through a period of time, when, eeh, when I was married where there were struggles. And then I went through a divorce, and there were really struggles. And it was a – it was painful. Um, I went through a very, very painful time. And I had a lot of adversity to overcome. And I think – and I worked hard at it. I mean I, I went into therapy and I went into a training program. And, um, I was just –I did not want to

spend the rest of my life in a dark place And so I feel like, um – that I'm in a place right now where I feel like my hard work has paid off. And there were many years of confusion and self-doubt and lack of self-worth and a lot of that. And a lot of that has been lifted. …. I think that I'm definitely moving in a positive direction….So, in part, my belief is that the people who go through a difficult thing in life (GAP) and overcome it (GET BACK TO THE BRIDGE) and get to the other side of it (REACH OUTCOMES) often have a lightness about them that you might equate with happiness. And, um, there's something about overcoming adversity that helps people grow a lot (SENSE-MAKING)."

20 **Described physical well-being in terms of verbs**:
Um, I think just like taking care of your body and, like, eating right and exercising and stuff.
Described mental well-being in terms of verbs:

Um, I guess being like in the right frame of mind, not like necessarily just –worrying about like your physical health and everything, but how you're feeling in your mind also

21 ***Being in the Gap:***
"Well, when you're under that kind of stuff and you're not taking time for yourself or, you know, acting healthy it takes a – a stress that's a toll on your health obviously. Um, it takes a toll on your relationships 'cause you're usually in a bad mood. Um, it takes a toll on, oh, geez, lots of things. Like you don't get sleep. It's all kind of all related. I don't know. It's like a domino effect. I think you go through walls and, you know, valleys and hills or whatever. **[Bridge]**
Sense-Making as a choice – getting out of the gap
I think, um, I think that people need to understand when they're not in a good place and make steps towards it and I feel like this year has been really big for me doing that.
The feeling of making sense: after leaving a bad job and getting out of gap **"**Oh, yeah. I knew it the second I left. The second I walked out and I started grinning from ear to ear and blasting the music in my car *[laughs]* and, you know, when you don't feel bad about something and you're looking forward to the new thing then you know it's the right choice."

22 **Sense-Making may be long-term**, helping to maintain well-being despite challenges
"I think I'm on the right track to – to – to doing what I want to be doing. I may not be there right now, but I think in the future I will be. Like I'm on – I'm on the right track to be where – to where I wanna be."

28 ***Best explanation of Well-being as Sense-Making:***
"So your well being is … you feel like you are where you want to be **(situation) -** or at least making steps towards **(bridge crossing = sensemaking)** being where you want to be with, you know, um, yourself physically or yourself mentally, rather than, um, fighting against what you're not willing to change. **(Being stuck in gap = sense-unmaking)."**

Situation:
Um, I think it's – it's – it's going really well. I mean or it's, you know, good. I – I would say I'm – I'm very satisfied with my well being right now. I'm certainly, um, I go back to my – of acceptance. I accept where I am and I feel like I've achieved a lot, both in terms of my mental well being, my emotional well being, my physical well being. I've worked probably – I try – I try to be very conscious of those things since I graduated from college and –

Sense-Making: Crossing the bridge of thoughts, beliefs, values
so that's been, you know, almost a decade, and I've worked really hard to achieve the

things that I want, um, in my life. ***(Outcomes)***

And so right now I'm very happy with where I am, especially because I think I've cultivated a – awareness of my own well being and the things that I can do to – to, you know, what makes me feel the most emotionally content, what makes me feel the least stressed, the – the most physically fit, all those sorts of things.

Sense-Making as an ongoing process, shifting in response to goals

But that doesn't mean that I don't have goals for my well being for the future. So as much as I'm content with where I am right now, um, I think I'm also mindful of what my goals would be to improve or at least maintain my well being for the future.

No, I'm not where I want to be. I'm not a published author, but I'm working towards making that happen or maybe not. I'm not exactly professionally where I want to – want to be, but I'm having the opportunity every day to take one more step towards those things.

It doesn't mean I've achieved everything I ever want to achieve, but I'm where I want to be in terms of, um, really feeling like the opportunities are out there and that I'm able in my life to – to just gain knowledge from both reading things or listening to things or just the people me. And I – and I feel, um, very fortunate for that and it makes me think about what my goals are for the future.

29 ***Sense-Making based on having and choosing one's own flags/goals (power):***

"And so that kind of excites me, because if I'm in control of how I want to dictate my wellbeing in, in all areas, then I feel like, you know, it can only, it can only kind of go up. It's almost like, not to be cliché, the best is yet to come. I, I, I at least am optimistic, and, you know, I, I firmly believe that."

30

On avoiding gaps and going with the flow*:*

Um, emotional well-being I guess is the same as – as what I would consider, um, mental well-being. I think that, um, you've given yourself enough time daily or weekly at least to kind of, um, reconnect with your body and what's going on, um, to understand, um, uh, maybe to – to understand, you know, that there are gonna be obstacles that, um, if you take the time to slow down enough, um, that then you're not – you're not getting too overwhelmed or upset by what life has to throw at you. That you, you kind of learn to – to ride through it. You know, to – to just kind of go with the flow and – and understand it's something that you're going through, um, and – and not let it – your emotions over take you.

31 ***Being in the Gap in some aspects, but not others:***

"And I don't know sometimes it's overwhelming, sometimes it's too much. Like I get stressed a lot so I'm not very mentally like healthy. But when - you know when I - when I'm just learning and I'm having like a good experience with that, then it's - it's good. But I think the stress the school can really, uh, cause like anxiety problems and that's when I'm not very mentally - *[laughter]* - well.

33 ***Situation – standing in the ability to choose outcomes***

"Wellbeing to me means, um, a general sense of peace within yourself.

Who you are, how you think, feel. Um, yeah, it's just, um, feeling like you have your life together and you're able - able to do whatever. Nothing holding you back. You don't have an illness, you're not, you know mentally or physically, uh, incapable of living. "

35 ***Driving to Outcomes***

"being comfortable - comfortable and confident in yourself and being able to accomplish the things that you, uh, as the individual need to accomplish."

Sense-Making = Setting Outcomes by Creating Lists

"…like, um, instead of obsessing over something that's stressing myself out, I have to like write it down and make like a list so that I can see it all in front of my in the form of like a checklist that I - when I like accomplish something I can cross it off and makes - you know it reduces it that much more. Um, but I realize that obsessing over it doesn't really do much of anything. And so I kind of have to like focus on one task at a time. And that definitely helps. "

Outcomes short-term vs long-term:

Well, I mean my ultimate goal is to be able to have my doctorate, um, in psychology. And before that, I just kind of feel like I don't want to - I don't want to rush into because I don't think that it's necessarily important to rush into it. But I think that the experiences of like meeting different people in different places and really getting a - like a more broad knowledge of how people interact with one another in any given kind of like context, um, is more important to me. And kind of making I guess little changes,

36 **This participant refers to communication as a wellbeing goal** (i.e.

Oh gosh. Um… I'm not sure. Um… I would probably use it, um, to help like communication between my family and I. Um – in some way to do that. Um, so it's easier to communicate our actual feelings

39 ***Staying in Sense-Making (Feeling like the bridge will hold)***

"I'm just such, I guess, a big go-getter that I like to have everything in my life kind of balanced. So, um, there is – I don't think there's really one more thing that I would concentrate more on…as long as everything gets done."

40 ***Sense-Making as sense of direction***

"Um, I associate it with health. I definitely think of - I think I think of more of the emotional aspect of health. just because I'm a psych major so I - I - think more of, um, someone having, um, a sound mind and a sound body, but r - really having direction in their life and knowing, um, what it is that they want to do and being cautious - and having a lot of introspection."

41 ***Knowing an outcome is desirable but there is a "hole" in the bridge of values: she doesn't want to go forward and can't go back***

"If I had a magic wand I think it would be fun to start over the way young people do…. Because we're tied financially it would be crazy to sell the house: we'd never get anything – we'd only get a much smaller place for the same price, um, it doesn't make financial sense to move but I've outgrown the neighborhood – because it was really fun when we were raising kids — and we went to soccer games and we knew everybody, but I'm really tired of it and I wish I could move.

42 ***Sense-Making without Outcomes: Even if outcomes aren't set or apparent Sense-Making into Well-being is knowing you are heading towards outcomes that you can define and are not prevented towards them***

"So, you know, when I was in grad school life for me was very important and hanging out with friends and, um, through with my degree now. It's, um, you know, hanging out with colleagues and friends and then further my research in teaching and stuff like that. Uh, so I'm – I'm content with who I am now. I'd be interested in the next couple years to, um, you know, meet someone and get married and then buy a house and, you know, renting, although I do like my apartment very much. Um, so yeah. I think – I think I – I like where I am now, but I'm still interested in moving forward."

43

Interpretive (individual) nature of well-being, specifically emotional well-being:

Uh, for emotional well-being I think it most of depends on me, uh, for me mentally and I – I mean, I would try to do something to make myself at ease. Um, uh, emotional well-being, well, um, I think for me emotional well-being is – is not relevant to

anybody else. It's only about me.

44 ***Falling off the bridge of health behavior, and visiting the gap***
Like that I go through phases, you know, like where it's kind of this cumulative effect where I know I'm overworked or I'm stressed out psychologically and not taking care of myself physically and my relationships are suffering. Get to this like critical point, and then I make a concerted effort to try to increase that wellbeing, and that lasts, you know, a month or two, and then I get bogged down with work again and I go through the stage where – everything is kind of low, and I guess I'm sort at a low phase.
Learning how to make sense o f this process.
Well, I feel like, even though it's still low, it's not quite as low as it was last year because I learned to identify some of the things that are causing a problem, and I've seen some of the negative consequences manifest in my life, I didn't – I'm not willing to accept that. But even though I'm still feeling the same pressures and it's difficult, I feel like I have more knowledge and I'm not gonna let it take over But – and then a year from now, hopefully, you know, I think it'll still be difficult, but, you know, that the circumstances are difficult, but my reactions to them, hopefully, are going to improve, time goes on. We'll see if that has an overall effect on my wellbeing or not *[chuckles]*.

46
No Gap Being, um, in balance, um, to allow me to have, uh, joy and peace in my life.
Sense-Making of Well-being

You know, I would say good. I would say, you know, it's, um, it's pretty well balanced. Um, I think we all have our, um, our days –

when, um, stress hits us and impacts the, um, the mental wellbeing, which can then impact the, the physical wellbeing, and, um, it all impact – you know, as I'm talking to you, I'm just like, "Oh, wow, it really is interconnected.

For me, for me, it is. Um, but, yeah, I would say mine's good. You know, comprehensively, um, doing good. Um, on occasion, have those days where I recognize, "I know something's a little out of whack here; let's get back in line."

47
Retrospection (Weick)

Um, no, I think I, I haven't really – like after, after – or before this study, I haven't really thought about, um, my wellbeing, but it's, just based on what I've been saying and, and how I've been feeling while we're talking now, I, I feel pretty good. I'm, I'm really grateful for where I am, and I think I've ___ done a really good job of trying to find the balance between positive and negative feelings and taking care of myself.

48
Culturally bound (Weick)

"…and last year, there was a lot of fear involved – fear of the unknown. And so, um, as things sort of passed on, I was able to, uh, achieve those sort of mini-goals or, you know, whatever mini-goals I set out for myself, that made me feel a little more con – uh, competent and confident in my own abilities and my own role here in the college. So, um, yeah, that's kind of what's – helped it to, to kind of grow, is that the worst-case scenario hasn't happened yet, but it still could, so that's why it's kind of still not as high as it should be.

49 **Being in the Gap**
"Um, you know, I – I think in some ways I am and in some ways I'm not, um, that there are always things that I, you know, uh, I can definitely see a lot of, uh, shoulds, um, but I don't see a lot of things that I'm doing that I'm glad that I'm doing that I

think I should be doing, um, that are important for me to do, or in some cases that's necessary for me to do."

53 **Summary of Well-being that indicates Sense-Making process**

I accept where I am and I feel like I've achieved a lot, both in terms of my mental well being, my emotional well being, my physical well being. I have worked probably – I try – but try to be very conscious of those things since I graduated from college and – you know, almost a decade and I've worked really hard to achieve the things that I want, um, in my life. And so right now I'm very happy with where I am, especially because I think I've cultivated a – awareness in my own well being, the things that I can do to – to, you know, what makes me feel the most emotionally content, what makes me feel the least stressed, the – the most physically fit, all those sorts of things. But that doesn't mean that I don't have goals for my well being for the future. So as – as much as I'm content with where I am right now, um, I think I'm also mindful of what my goals would be to improve or at least maintain my well being for the future

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Appendix 4: "Magic Wand" for Well-being Responses

When asked, "If you had a magic wand that could improve your well-being in any possible way, how would you use the magic wand?"

1 Would have a job and have PhD done.
3 I would have more time because I work a lot (work/life balance) I also want to get to gym more
4 I would like to, uh, clone myself and have one half of me focus on taking care of myself and the other half of me focus on taking care of everyone else and going to school.
5 Pressure to get A's (pre-med) Remove outside stressors
7 I really don't know because I, uh, you know, uh, I know that all of the things that are happening right now need to be the way they are right now.
8 I'd like to have more sleep. That's definitely the number one thing
9 Hmm, well like I said, I might want, um, a bit more time to exercise in the evenings or the motivation to do so at times when I have other things coming up or to do, like sleep, of course.
10 Uh, I guess the energy to do all the things that I would like to do, you know? Or maybe time. Time and energy. Um, because there's so many good opportunities…But its like it never happens because of all the other different things that are demanded of you. I think time and energy.
11 On realistic terms it would be to not need to sleep and to still maintain a well-being. That would be it, you know, if I could, successfully and healthfully have that time back I think it would be awesome. And you know, just to be able to sleep for a hobby or as a personal relaxation kind of thing versus I have to sleep, I feel like I'm going to die.
12 I would have 3 clones of myself so I could get a lot of things done.
13 I guess I would remove the nervous or anxious feeling of what the future will bring and how you'll fit into that on graduation into the real world, you know?
14 Um, it would motivate me to view getting more sleep and getting more exercise more of a priority 'cause right now it's not.
15 – um, if there's anything I could improve on, it would probably be being more financially stable 'cause I mean they say money doesn't buy happiness. Well, it doesn't, but it, it sure as hell facilitates it
16 so far I think I'm pretty content with myself..So, I think I'm, uh – I mean I'm trying to improve in, in every single way I can. But, I'm not sure– that would be appropriate to answer. You know? To, to reach that true potential.
17 Probably between more sleep and more things to do. Like with friends and things like that. And more things to benefit me mentally
18 Um, I would just take, uh, some of the anxiety.
19 And so I guess the answer is, like, I am a little bit, uh – sss, what's the word, uh, centric –
, not egocentric, but focused and – but my own world is pretty small. And so I think if I had a magic wand, what I would do to change that is expand my, um, my own world in that way, culturally.
20 It would – it would probably give me more time in my day and less schoolwork that I would have to do.
21 More time for social….I mean, I think that kind of happens especially when you get older especially
22 Um, probably physical well-being, get some more strength, you know, to, um, physically fit probably.

28 Um, I really struggle with getting up in the morning and I've always struggled with getting up in the morning… that's always been the one thing that I sort of like, "Oh well, whatever." I work really hard on other areas of my life and I can't work on that one.

29 n/a

30 Well, I think, um, the thing that would help create more well-being in my life would, um, would just be me taking more time to, um, exercise, do yoga, meditate more often than I do. And I think it would make a huge difference. Um, I know it has in the past.

31 Um, I was - I was thinking socially because, uh, that affects me emotionally and emotionally affects me - mentally and physically.

33 you know I come from a family that's always struggled financially. And it's not so much the money, but it's like the worry of do we have enough for this month, can I get by with gas and food and stuff…Because if let's say I did win like $1 million I could - with - with that money I you know live on campus, closer to campus. You know not have to drive back and forth. With that I could save some time. You know meet m - hang out with more friends and - I just feel like it would - it would help a lot in every aspect. I know I could work out more if I could cut off the commute time I use. You know what I'm saying?

35 I would stop being so hard on myself I guess.

36 Um… I would probably use it, um, to help like communication between my family and I. Um – in some way to do that. Um, so it's easier to communicate our actual feelings.

39 I would say being able to go home like each other weekend or so, as long as there no issue, just kind of get my jet pack and fly home for the weekend and come back.

40 but I also think that I'm probably, uh, not as healthy as I could be. (immunity)

41 if I had a magic wand I think it would be fun to start over the way young people do…. Because we're tied financially it would be crazy to sell the house: we'd never get anything – we'd only get a much smaller place for the same price, um, it doesn't make financial sense to move but I've outgrown the neighborhood – because it was really fun when we were raising kids — and we went to soccer games and we knew everybody, but I'm really tired of it and I wish I could move.

42 I would love to be a little less stressed. I mean, good stress and bad stress

43 So my well-being is not good when – when I think that I'm not doing – I'm not doing much to others or I should have done more to them. Um, first I really hope the environment in China is better, I mean, the physical environment 'cause my parents are getting older and, uh, I really worry about their well-being. So, uh, I mean the – the litter in my home town… and with the air conditioning not as good at the past. So my father wants to do exercise every day outside. So it is kind of toxic for him. So I'm worried when my parents doing this all the time, but this has just happened. So it is makes him feel happier. So my father seems to keep the habit, but I – I think if the – the environment is better in my home town I would be more – I would be less worried. I mean, this is, um, I think the first thing that would make me feel better.

The second is that for myself I really hope my language will hope my language skill have – have improved, I mean, a lot because while I'm international student, Sometimes I cannot, um, naturally…

I'm here with students and this is the most important part for my life and maybe for my future career if I want to do the teaching thing. Um, so I'd like to – I really want to include that I think my wish there is the – been challenging for me and, um, um, and that is part of passion for emotional well-being So I – I think my improvement of my language skill will, I mean, make me feel better.

the – the third part is that, uh, for social support, but there's not that kind of student I know in the communication department. Um, I don't have that much social support of the American student. So I think, um, I kind of worry about myself. I'm not a social

student. So I would want, conversation. So sometimes I feel like that I – I will call a friends and talk to them, uh, and, most are –but it's not conversation if you cannot feel the support. We're each other and we're totally different. So, um, if – if I can have more friends it – it will make me feel better. They can be American friend, but they can be Chinese friend because most of my friends are white and not and all international students. So they have a lot of friends, but here, I cannot, um, see my family and, um, there's nobody here that is family.

44 Um, physically, I wish that it could give me more energy 'cause fatigue is really difficult, and that impacts my quality of work and my emotions and my relationships, so fatigue is a really core issue. But you can also say I wish I could exercise more, but that's related to fatigue too. Um, then also, psychologically I would say my ability to, um, shut things down, like thought – my thoughts from going – sort of anxiety, you know, the ability to sort of have more flow and go with things moment to moment, instead of hypothesizing all the things – that going – that'll go wrong or having to make lists about all the things I need to do on a continual basis, so I guess the ability (a) you know, improve my fatigue levels or decrease my defeat – fatig – fatigue levels, and then my ability to stop thinking about the things that stress me out when I don't have to think about them.

46 Oh, wow. That I would never have to exercise again
[Laughter]
Yeah, I tell – there's a girl in my office, who's, um, who works for me, and, um, her name's Becky, and my guess is she may have signed up for this as well because, um, she and I talk about wellness all the time, and I've told her, I said, "You know, Becky, I will do what I know I need to do in order to be well and to be healthy, so – but it doesn't mean I always like doing it."

47 financial wellbeing *[chuckles]*.Um, just thinking about, um, childcare centers in this area, but then, um, my husband came into the marriage with a lot of school debt, so that's been looming over us and trying to get out of debt so we can keep moving and do more with, with our money, instead of it all just going to paying bills.

48 I would download the entire Internet into my brain.

Because that would make me feel competent –that would give, that would give me instant access to information that I need to know to do stuff, to feel – and it's basically like *The Matrix* – you know where the guy pauses and he goes, "I know kung fu"? – that's what I would wave my wand for.

49 Um, gosh. I guess I would probably do something about maybe the physical well being, because I think in some ways that – that might be the engine of – of improvement or change in some of the other areas. So, you know, if I did more in terms of taking maybe better care of myself it would give me more either energy or confidence or – or , you know, some other kinds of areas where – where it might help me do some other things better.

53 Um, uh, yes, absolutely. Um, I really struggle with getting up in the morning and I've always struggled with getting up in the morning. And I know that one thing that really contributes to people's well being is the – the amount of, you know, sleep that they get and their ability to relax.

Appendix 5: Meanings of Well-being (Narrative Descriptions)

Subject #	
1	"I would say wellbeing to me is, uh, being aware of and actively engaging in - I'm rambling now. Uh, engaging in efforts to, um, make sure that physical, mental, spiritual, emotional aspect, um, of - of a person's life are - are, uh, in balance. Um, I don't have a word other than - than healthy, uh - or well balanced. But I - I think the idea would be that, um, you are tending to your physical needs, your relational needs, your mental needs, um, your spiritual needs, um, in a way that - that maintains balance in your life. "
3	Um, I would say that for me the term wellbeing refers to the overall prime that you could be in terms of you. So there's, you know, your physical wellbeing, your emotional wellbeing, but, you know, the best version that _ uh, you're striving to be.
4	Um, so well being to me, when I think of well being I think of the World Health Organization definition of well being, which is not just the absence of disease or infirmity, but, like, a total sense of being healthy, being physical – like physically health – healthy, mentally healthy, socially healthy. It encompasses all of that.
5	Uh, well being is probably, the way I would describe it is more of a home – homeostasis, um, of like mind and body, and along the lines of not too stressed, not too lackadaisical, um, and just a – kind of finding a neutrality of those
7	Uh, to me it means are you happy with your life and, um, are you happy with your place in the world. Are you happy with your emotional, uh, uh, place, where you are financially, academically, everything else…So, being happy with the state of those different areas
8	Um, well-being, I guess to me, means taking care of yourself and, um, having a balanced life.
9	Hmm, well, well-being, generally I supposed, means that you're healthy in terms of a physical body and a phys – or, uh, mentally, I suppose means that you don't have any, um, outstanding problems that are preventing you from doing anything that you'd, um, have to do to get through life.
10	Uh, taking care of yourself, knowing what's good to do for your body, to put into your body, and taking care of your mind as well. Anything to do with relaxation and you know, decreasing stress. Balancing all the different stressors in your life.
11	It basically means physical, mental, emotional, spiritual health and how well those things are managed and if they're more in positivity or negativity range.
12	Hmm. I think of that as sort of an overall sense of balance, like thinking about your physical and your mental and your spiritual and emotional health all together…Um, thinking about balancing relationships, um, thinking about sort of where your energy is going, what you're putting yourself into and what you get back from that, um, not – yeah, and just sort of finding a nice balance that's totally sustainable, um, and that, uh, is really fulfilling.
13	Well what well being means to me is your condition of your attitude. You know, how you feel emotionally, mentally, and socially… you know if you're in a positive state or a negative state. It's a condition of every aspect I guess of who you are, whether that be internally or your physical health, whether that's intact or not intact. Just how well you are doing.
14	Um, well, exploring just, you know, the aspects of like mental illness. Um, I guess like psychological flexibility, being able to handle any situation that you find yourself in.
15	Um, *[laughter]* I, uh – a state of, um, general, I guess, you know, general mental health. Uh, physical well-being, um — uh, a positive attitude, uh, I, uh, I guess for me, um, curiosity, uh, being adventurous, um, being physically healthy probably.
16	Um, I think – there, there weren't any options, right? So, I have to answer, um, from my own words? (Yes) Um, I think well-being is, um – in general, I think it's functioning well

– based on your anatomy, your thoughts. Uh, you know, and like, uh, a health issue in between I guess would be a, um – it's kind of hard to describe. I guess, uh, functioning at its best. Uh, almost in, in no matter what circumstance, I guess. Well-being for me means that you can function no matter what, uh, what surroundings you have.

17 To me, well-being means to have a positive outlook and having a positive, uh, mindset on how well you take care of yourself and how you perceive, uh, the environment that you currently have.

18 Um, I would just say just like being happy and healthy — and like comfortable where you are living.

19 Uh, it means a lot, actually, because I take it very seriously. Um, it means physical, emotional and spiritual self or put another way, physical, emotional and, um, uh, spiritual and mental too, uh, wellbeing, um, um, the connection — so when I am – and of those – all of the above, uh, connected or grounded, then I feel healthy. And it's very important to me. I, I, I, I take it seriously on all levels.

20 Um, I think kind of – like, how, like, how you know physically and mentally

21 Um, well-being I think means happiness, healthiness. Healthiness isn't a word – healthy. Uh, I guess just overall good feeling taking care of yourself, organic. That's what it means to me.

22 Being happy and healthy.

[Do you wanna expand on that at all?]

I guess just being happy with yourself I guess.

28 Um, it's something that takes into consideration social wellness, physical wellness, mental wellness. Um, and it's an overall sense of contentment and, um, acceptance.

I associate well – well being a lot of times with satisfaction. So if you're – if you're not satisfied with how you might look, for example, your – your – or – or how you feel physically, um, it's hard to say that your, um, well being is in a good place because I think that contributes to an overall sense of, um, you know, dissatisfaction that negatively impacts your well being. So your well being is not, um, in a positive or healthy place, um, 'cause I see acceptance as, you know, living the – you feel like you are where you want to be - or at least making steps towards being where you want to be with, you know, um, yourself physically or yourself mentally, rather than, um, fighting against what you're not willing to change.

29 Um, it's a, it's a number of things. It's, um, it's a number of things and it's a kind of everything for, for what my life is. Um, but I think that as, uh, I guess three main things. You have, you know, you have, obviously, physical strength. Um, you have mental strength and then you, you kind of have that – I don't want to call it spiritual, but, um, there's just kind of that other everything is all kind of put together thing. So wellbeing for me, though, you know, to kind of define it is, uh, it's fitness and it's, and it's nutrition and it's, um, and it's a mental, uh, I guess – it's a, it's a healthy mental state of mind as well kind of being at peace with your body. Um, but, definitely, you know, I'm a competitive athlete, so I have to kind of throw a sport in there. That's how I define wellbeing that sport will always be part of that.

30 Um, I think that when I think of well-being I think of a lifestyle, um, um, more than just being well. Um, being healthy, um, being hopeful, being happy.

31 Uh, to me it means being healthy and being happy with where you are in life.

33 Okay. Wellbeing to me means, um, a general sense of peace within yourself.

Who you are, how you think, feel. Um, yeah, it's just, um, feeling like you have your life together and you're able - able to do whatever ___. Nothing holding you back. You don't have an illness, you're not, you know mentally or physically, uh, incapable of living.

35 Um, hmm. I guess it's like a combination of the mental and physical aspects of it. So, um, more or less, um - a mental state, um, that kind of exceeds the physical state, um, in terms of being comfortable - comfortable and confident in yourself and being able to accomplish the things that you, uh, as the individual need to accomplish.

36	Um, what it means is good for you or, um, makes you happy and comfortable. [*Oh, okay. So the feeling of – is it the feeling of those things or something that creates those feelings for you?]* Um, I think the feeling of those things.
39	To me it means, um, kind of a healthy body, healthy mind, healthy spirit, um, lifestyle.
40	Um, I associate it with health. I definitely think of - I think I think of more of the emotional aspect of health. just because I'm a psych major so I - I - think more of, um, someone having, um, a sound mind and a sound body, but r - really having direction in their life and knowing, um, what it is that they want to do and being cautious - and having a lot of introspection.
41	Oh, well-being? Um, I would say that it means, uh, well-balanced in a variety of ways. So that would be health but also that would include mental health, physical health, uh, you know, happiness with work-wise, um, family life; so sort of a mixture of all of those things.
42	Um, well, I'm often reminded of the, uh, the classic definition of health, the, uh, um, the plain state of emotional, physical, and spiritual well-being and not necessarily the disease or infirmity. So for me it's, uh, looking good and feeling good. Uh, so that can be physical, uh, if I'm sick, um, but also, um, mentally, um, feeling sharp and feeling awake, uh, and feeling ready to tackle the day.
43	I can do something I like. And, uh, for me there's more well-being in the foundation of other person's well-being.
44	Um, that means your health broadly can relate to your physical, psychological, social wellbeing, so multidimensional.
46	Um, I think it means, to me, having a balance, um, of the different – uh, uh, not just, um, free of disease but, um, actually have a healthy balance of, um, what I consider the dimensions of wellness, which would be social, spiritual, um, physical, intellectual, mental, um, and having those being, um, in balance, um, to allow me to have, uh, joy and peace in my life.
47	Um, ___ to me, it means finding – oh, gosh *[giggles]* – finding mental, physical, um, balance and whatever that means for you as an individual.
48	Um, finding a balance between all of your responsibilities and feeling balanced, to me, is what "wellbeing" means.
49	*[Coughs]*. Um, I think it is a combination of, uh, health, uh, and – and wellness and sickness as well as, uh, mental and emotion well being, so things like work/life balance and, uh, being able to have time, uh, to – to do things that are important, uh, for – in terms of things that one values and – and one, uh, thinks are – are necessary and important.
53	Um, it's something that takes into consideration social wellness, physical wellness, mental wellness. Um, and it's an overall sense of contentment and, um, acceptance.

Appendix 6: Well-being Meanings by Type (Qualitative Interviews)

Table 9: Qualitative Interviews: "What does the term well-being mean to you?" by type

Subject	Mental	Emo-tional	Social	Physical	Spirit	Balance in Life	Function no matter what (Resilient)	Calm and Content (No stress)	Goals	Hope	Healthy	Happy	Taking Care of Self
1	1	1	1	1	1	1			1				1
3		1		1					1				
4	1	1	1	1		1					1		
5	1	1						1					
7									1		1		
8						1							1
9								1			1		
10	1	1		1		1		1					1
11	1	1		1	1								1
12	1	1	1	1	1	1			1				
13	1	1	1						1		1		
14	1						x				1		
15	1			1							1		
16	1			1			1						
17								1		1			1
18								1			1	1	
19	1	1		1	1			1			1		
20	1			1									
21											1	1	1
22											1	1	
28	1		1	1				1	1				
29	1			1	1			1	1				
30										1	1	1	
31									1		1	1	
33								1	1	1	1		
35	1			1				1	1				
36								1				1	
39	1			1	1								1
40	1	1		1				1	1		1		
41	1			1		1					1	1	
42		1		1	1				1		1		

43									1				
44	1	1		1	1						1		
46	1	1	1	1	1	1		1				1	
47	1			1		1							
48						1							
49	1	1							1		1		
53	1		1	1				1					
Totals	N=23	N=14	N=7	N=21	N=9	N=9	n=1	n=14	N=14	N=3	N=18	N=8	N=7

Appendix 7: Instruments: Quantitative Survey

1. Do you agree to participate in this research study?
2. What does the term well-being mean to you?
3. If you had a magic wand that could improve your well-being in any possible way, how would you use the magic wand?

Part 1: Well-being (WHO-5, Bech, 2012)

Please indicate for each of the following five statements, which is closest to how you have been feeling OVER THE LAST TWO WEEKS. Notice that higher numbers mean better well-being.

4. I have felt cheerful and in good spirits.

All of the time.	Most of the time.	More than half of the time.	Less than half of the time.	Some of the time.	None of the time.

5. I have felt calm and relaxed.

All of the time.	Most of the time.	More than half of the time.	Less than half of the time.	Some of the time.	None of the time.

6. I have felt active and vigorous.

All of the time.	Most of the time.	More than half of the time.	Less than half of the time.	Some of the time.	None of the time.

7. I woke up feeling refreshed and rested.

All of the time.	Most of the time.	More than half of the time.	Less than half of the time.	Some of the time.	None of the time.

8. My daily life has been filled with things that interest me.

All of the time.	Most of the time.	More than half of the time.	Less than half of the time.	Some of the time.	None of the time.

Part 2: Happiness (Lyubomirsky & Lepper, 1999).

9. In general I consider myself

1	2	3	4	5	6	7
Not a very happy person						A very happy person

10. Compared with most of my peers, I consider myself:

1 2 3 4 5 6 7
Less happy More happy

11. Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you?

1 2 3 4 5 6 7
Not at all A great deal

12. Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describe you?

1 2 3 4 5 6 7
Not at all A great deal

Part 3: Communication Competence (Colangelo, 2011)

Answer each item honestly as it currently applies to you in typical conversations with others. Use the following scale (1) strongly disagree (2) slightly disagree (3) unsure (4) slightly agree (5) slightly disagree

13. I want to adapt my communication behavior to meet others' expectations.
(1) strongly disagree (2) slightly disagree (3) unsure (4) slightly agree (5) slightly disagree

14. I have enough knowledge and experiences to adapt to others' expectations.
(1) strongly disagree (2) slightly disagree (3) unsure (4) slightly agree (5) slightly disagree

15. I use a wide range of behaviors, including self-disclosure and wit, to adapt to others.
(1) strongly disagree (2) slightly disagree (3) unsure (4) slightly agree (5) slightly disagree

16. I want to be involved in the conversations I have with other people.
(1) strongly disagree (2) slightly disagree (3) unsure (4) slightly agree (5) slightly disagree

17. I know how to respond because I am perceptive and attentive to others' behaviors.
(1) strongly disagree (2) slightly disagree (3) unsure (4) slightly agree (5) slightly disagree

18. I show my involvement in conversation both nonverbally and verbally.
(1) strongly disagree (2) slightly disagree (3) unsure (4) slightly agree (5) slightly disagree

19. I want to make my conversations with others go smoothly.
(1) strongly disagree (2) slightly disagree (3) unsure (4) slightly agree (5) slightly disagree

20. I know how to change topics and control the tone of my conversations.
(1) strongly disagree (2) slightly disagree (3) unsure (4) slightly agree (5) slightly disagree

21. It is easy for me to manage conversations the way I want them to proceed.
(1) strongly disagree (2) slightly disagree (3) unsure (4) slightly agree (5) slightly disagree

22. I want to understand other people's viewpoints and emotions.
(1) strongly disagree (2) slightly disagree (3) unsure (4) slightly agree (5) slightly disagree

23. I know that empathy means to try to see it through their eyes and feel what they feel.
(1) strongly disagree (2) slightly disagree (3) unsure (4) slightly agree (5) slightly disagree

24. I show my understanding of others by reflecting their thoughts and feelings to them.
(1) strongly disagree (2) slightly disagree (3) unsure (4) slightly agree (5) slightly disagree

25. I am motivated to obtain the conversational goals I set for myself.
(1) strongly disagree (2) slightly disagree (3) unsure (4) slightly agree (5) slightly disagree

26. Once I set an interpersonal goal for myself, I know the steps to take to achieve it.
(1) strongly disagree (2) slightly disagree (3) unsure (4) slightly agree (5) slightly disagree

27. I successfully achieve my interpersonal goals.
(1) strongly disagree (2) slightly disagree (3) unsure (4) slightly agree (5) slightly disagree

28. I want to communicate with others in an appropriate manner.
(1) strongly disagree (2) slightly disagree (3) unsure (4) slightly agree (5) slightly disagree

29. I am aware of the rules that guide social behavior.
(1) strongly disagree (2) slightly disagree (3) unsure (4) slightly agree (5) slightly disagree

30. I act in ways that meet situational demands for appropriateness.
(1) strongly disagree (2) slightly disagree (3) unsure (4) slightly agree (5) slightly disagree

Part 4: Social Support (Sarason, et. al., 1987)

The following questions ask about people in your environment who provide you with help or support. Each question has two parts.

For the first part, list all of the people you know excluding yourself, whom you can count on for help or support in the manner described. Give the person's initials, and their relationship to you. Do not list more than one person next to each of the numbers beneath the questions.

For the second part, circle how satisfied you are with the support you have.

If you have had no support for a question, check the words "No one," but still rate your

level of satisfaction. Do not list more than six persons per question. Please answer all of the questions as best as you can. All of your responses will be kept confidential.

31. For the first part, list all of the people you know excluding yourself, whom you can count on for help or support in the manner described. Give the person's initials, and their relationship to you. Do not list more than one person next to each of the numbers beneath the questions.

Whom can you really count on to be dependable when you need help?

32. How satisfied are you with this support?

very satisfied	**fairfly satisfied**	**a little satisfied**	**a little dissatisfied**	**fairly dissatisfied**	**very dissatisfied**

33. Whom can you really count on to help you feel more relaxed when you are under pressure or tense?

very satisfied	**fairfly satisfied**	**a little satisfied**	**a little dissatisfied**	**fairly dissatisfied**	**very dissatisfied**

35. Who accepts you totally, including both your best and worst points?

36. How satisfied are you with this support?

very satisfied	**fairfly satisfied**	**a little satisfied**	**a little dissatisfied**	**fairly dissatisfied**	**very dissatisfied**

37. Whom can you really count on to care about you, regardless of what is happening to you?

38. How satisfied are you with this support?

very satisfied	**fairfly satisfied**	**a little satisfied**	**a little dissatisfied**	**fairly dissatisfied**	**very dissatisfied**

38. How satisfied are you with this support?

very satisfied	**fairfly satisfied**	**a little satisfied**	**a little dissatisfied**	**fairly dissatisfied**	**very dissatisfied**

39. Whom can you count on to help you feel better when you are feeling down in the dumps?

40. How satisfied are you with this support?

very satisfied	fairfly satisfied	a little satisfied	a little dissatisfied	fairly dissatisfied	very dissatisfied

41. Whom can you count on to console you when you are feeling very upset?

42. How satisfied are you with this support?

very satisfied	fairfly satisfied	a little satisfied	a little dissatisfied	fairly dissatisfied	very dissatisfied

RAPA: Rapid Assessment of Physical Activity (RAPA1 and RAPA2),
University of Washington Health Promotion Research Center, 2006.

The following questions ask about the amount and intensity of physical activity you usually do. The intensity of the activity is related to the amount of energy you use to do these activities.

Examples of physical activity intensity levels:

Light activities
Your heart beats slightly faster than normal.
You can talk and sing.
Examples:
Walking Leisurely, Stretching, Vacuuming or Light Yard Work

Moderate activities
Your heart beats faster than normal.
You can talk but not sing.
Examples:
Fast Walking, Aerobics Class, Strength Training, Swimming Gently

Vigorous activities
Your heart rate increases a lot you can't talk or your talking is broken up by large breaths.
Examples:
Stair Machine, Jogging or Running, Tennis, Racquetball

43. I rarely or never do any physical activities. Y N

44. I do some light or moderate physical activities, but not every week. Y N

45. I do some light physical activity every week. Y N

46. I do moderate physical activities every week, but less than 30 minutes per day or 5 days per week. Y N

47. I do vigorous physical activities every week, but less than 20 minutes per day or 3 days per week. Y N

48. I do 30 minutes or more per day of moderate physical activities, 5 or more days per week. Y N

49. I do 20 minutes or more per day of vigorous physical activities, 3 or more days per week. Y N

50. I do activities to increase muscle strength, such as lifting weights or calisthenics, once a week or more. Y N

51. I do activities to improve flexibility, such as stretching or yoga, once a week or more. Y N

52. Please list the number of hours you SIT per day while engaged in the following activity/ies.

Leisure activities
Watching television
Gaming
Occupational sitting (work-related)
Studying/research activities
Commuting
Dining
Other

53. What is your gender?

54. How would you self-identify your race?

55. What is your age?
56. What is your affiliation with George Mason University
Not affiliated with GMU
Faculty full-time

Faculty adjunct
Faculty administrative
Staff
Graduate student full time
Graduate student part time
Undergraduate student full time
Undergraduate student part time

57. What can George Mason University do to support your well-being?

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BIOGRAPHY

Suzie Carmack is an interdisciplinary and translational scholar. After earning her Bachelor of Arts degree in Communication Arts/Theatre (cum laude) from Allegheny College in 1989, she earned a Master of Fine Arts degree in Theatre from the University of Alabama's professional training program in residence at the Alabama Shakespeare Festival in 1991. She began teaching in higher education in 1992, and free-lancing in theatre and the movement and performing arts soon thereafter. She continued her education by earning professional somatic credentials in yoga, Pilates and fitness. By 2004, she was leading international teacher trainer workshops and training instructors as a CEC provider for the American Council on Exercise, the Yoga Alliance and the Pilates Method Alliance. In 2007, she founded Body Doctrine LLC, an education consulting firm that grew from a garage studio into a global provider of mind/body therapies, corporate well-being, school programming and teacher training. While growing Body Doctrine, she completed her second masters' degree: a Master of Education in Health and Kinesiology through the University of Texas at Tyler (2009). She has taught for 23 years in higher education, as an adjunct faculty member for the College of Charleston, St. Louis University, Northern Virginia Community College and currently, George Mason University. She currently divides her time between health communication research, university teaching, and well-being promotion practice, averaging 15 personal training and health coaching clients weekly as well as 12 teacher training workshops annually in her studio. She resides with her partner Bob Shircliff and her three children Chris (18), Brandon (16) and Sophia (12) in Fairfax, VA.