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Beyond Wills and Ways: Expanding the Scope of Snyder's Hope Model to Understand the Transmission of Hope Through Developmental Relationships

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**Beyond Wills and Ways: Expanding the Scope of Snyder's Hope Model to Understand the
Transmission of Hope Through Developmental Relationships**

by

Veronica M. Fruiht

*A Dissertation submitted to the Faculty of Claremont Graduate University in partial fulfillment
of the requirements for the degree of Doctor of Philosophy in Psychology*

Claremont, California 2014

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APPROVAL OF THE REVIEW COMMITTEE

This dissertation has been duly read, reviewed, and critiqued by the Committee listed below, which hereby approves the manuscript of Veronica M. Fruiht as fulfilling the scope and quality requirements for meriting the degree of Doctor of Philosophy in Psychology.

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Abstract

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Over two decades of research demonstrate that students who have the agency to achieve their goals and know how to achieve them are more successful in their academic endeavors. Less is known about how these skills develop or how mentoring might impact the way that young people learn to have hope about their goals. This dissertation 1) investigates the relationship between folk definitions of hope and Snyder's (1991) conceptualization of hope as "wills" and "ways" and 2) aims to understand the role of supportive adults in building hope among students.

Results from a longitudinal survey of 190 community college students over the course of one college semester suggest that "being hopeful" involves more than agentic and pathways thinking. Other factors including spirituality and excitement about the future accounted for some of what students considered hope. Folk hope was a better predictor of some student outcomes, including connection to a campus community and expected educational attainment, than was the combination of pathways and agency.

Longitudinal analyses demonstrate that the support students felt at the beginning of the academic term was predictive of how hopeful they felt at the end of the term. Nominated mentors were primarily parents and other relatives who provided support in four domains: emotional, academic/problem solving, goal setting/career planning, and role modeling. Among these, emotional support was the best predictor of students' folk hope and agency.

Academic/problem solving support was related to students' pathways thinking. Implications of these findings for future research and practice are discussed.

Keywords: hope, community college, agency, pathways, mentoring, developmental networks, social support

Dedication

I dedicate this to my own developmental network: the parents, siblings, grandparents, mentors, and friends who taught me to keep hoping.

Acknowledgements

I owe more gratitude than I could express here to the amazing network of people who helped me to complete this dissertation. First, I want to thank Dr. Jeanne Nakamura, a mentor in every sense of the word, who supported and challenged me through every step of this project and my graduate career. I would have given up hope long ago without you. Thank you to Dr. Mihaly Csikszentmihalyi who I could always look to for the affirmation and insight to move forward and stretch my ideas a little further. I would also like to thank Dr. Kendall Bronk who pushed me to think harder and challenge my own assumptions about this project and Dr. Gloria Crisp whose ideas helped inspire my research and whose feedback strengthened this dissertation.

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CHAPTER ONE: INTRODUCTION AND LITERATURE REVIEW

When faced with the question of whether or not to keep going, hope is often cited as that driving force that makes us endure, believing in the possibility of that which may feel impossible. Further, we think of hope as the great driver or energy that fuels our efforts. Martin Luther is credited with having captured this simply in the phrase, “Everything that is done in this world is done by hope” (Luther, trans 1903). Hope may be the reason we continue to move forward, and in that regard it is necessary for human thriving. In this study, I investigate the hope of college students and the ways that hope might be built interpersonally, through relationships with mentors and supportive adults.

The transition into college is a major life change that offers many new opportunities and challenges. While some thrive in their new circumstances, for many this transition is a time of significant upheaval (Bayram & Bilgel, 2008). In a college setting where individuals must take responsibility for their education, they may find that they lack the skills, knowledge, or motivation to accomplish their academic goals. These students may fall through the cracks in their college’s support network and wind up dropping or stopping out before graduation. Students who persist in college are those with social support, a sense of integration and commitment to their college, and commitment to their goals (Tinto, 1993). The leading psychological construct of hope focuses heavily on being motivated and able to come up with ways to reach goals (Snyder et al., 1991; Snyder, 2002) and thus may have particularly useful applications in the study of college retention.

This dissertation begins with a review of the history, definition, and measurement of hope and identifies a gap in the modern study of hope. I summarize the current literature on the benefits and correlates of hope in young adults as well as strategies for building hope. Finally, I

consider the mechanisms through which hope can be communicated through developmental relationships and the ability of this transmission to impact college student success. In the present study I seek to (1) understand the construct hope as defined by psychologists and its relation to lay conceptions of hope and (2) to understand the ways that both forms of hope can be transmitted through mentoring relationships to foster student success and retention.

The History of Hope

The origins of hope in ancient mythology and religion, and in Western culture, date back to the myth of Pandora. From Pandora's box came evil in every form and all that remained as Pandora reclosed the lid was hope. Whether the myth established hope as a gift that helps us cope with the troubles we face, or as an evil force that plagues us, remains up to debate (Smith, 1983). Roman philosopher, Marcus Tullius Cicero, is credited with coining the phrase, "Dum spiro spero," that is, "While I breathe, I hope," which suggests that to hope is a natural and undeniably human experience (Smith, 2007). Hope also has a deep meaning in spiritual contexts. Christians hold hope, one of the three theological virtues, as an expectation of the goodness of Christ. That is, hope can be defined as the manifestation of faith, which gives a certain expectation that the future will occur in accordance with God's word (Keathley, 2005; Luther, trans 1903). This parallels a modern definition of hope, outside of the field of psychology or religion, where to hope is to "want something to happen or be true and think that it could happen or be true" (Merriam-Webster, 2013), or "a feeling of expectation and desire for a certain thing to happen" (Oxford, 2013).

Prior to the late 1950's hope received very little attention from the psychological community because such constructs were considered unscientific (see Elliott, 2005). In 1959, Menninger introduced hope as a cognitive construct worthy of consideration in psychotherapy,

and over the next decades hope became increasingly useful in clinical settings (Frank, 1968; Orne, 1968). Most influentially, Stotland (1969) led a movement to study hope as a cognitive-behavioral theory in which he characterized hope as an expectation of achieving one's goals.

The study of hope came into vogue in psychology in the 1980's. Along with Snyder and colleagues' (1991) model, a number of other researchers began to develop frameworks for understanding hope stemming from qualitative (Dufault & Martocchio, 1985) and quantitative (Obayuwana et al., 1982; Herth, 1991) research. Much of this research comes from the field of medicine, in which hope has been studied as a dimension of patient resilience (Herth, 2005). Two substantial conceptualizations emerged in the psychological study of hope, both of which build from Stotland's (1969) discussion of hope's connection to goals and goal-directness (Bruininks & Malle, 2005). Averill, Catlin, and Chon (1990) describe hope as an emotion in which we hold a realistic expectation that an important and morally acceptable goal will be achieved, and we are willing to take action to achieve it. This is not entirely unlike the cognitive construct that Snyder and colleagues (1991) call hope, which is defined by personal willingness or volition to achieve a goal, paired with knowledge of the pathways or means of achieving it. However, Snyder's model inspired hundreds of empirical and theoretical works in the past two decades (cf. Reichard, Avey, Lopez & Dollwet, 2013), earning it a position as the foremost definition of hope within psychological research.

The Hope Construct

Rather than having an emotional or spiritual foundation (see Elliott, 2005), Snyder's construct of hope is a cognitive one, grounded in the way that we think about our ability to achieve our goals (Snyder, Cheavens, & Michael, 2005). In this model, hope is the combination of two dimensions: agency and pathways, often abbreviated as "wills" and "ways," respectively.

Agency is the extent to which people feel they have the volition to move towards a goal, and *pathways* are the ways in which people can envision moving towards that goal (Snyder et al., 1991).

Hope can be defined as either a trait-like construct that is stable within an individual, or a state-like construct that is more dependent on situational factors (Snyder et al., 1996). Both forms of hope are defined by the same components of pathways and agency. From a trait perspective, an individual may be particularly hopeful in all walks of life, applying his or her sense of agency and pathways thinking to any goal, regardless of the domain. A small body of literature looks at trait hope from a domain specific perspective, suggesting individuals can be very hopeful in one area of life, such as athletics, but have little agency or pathways thinking for another domain, for instance, academics (Lopez, Ciarlelli, Coffman, Stone, & Wyatt, 2000). A third, and more distinct form of hope is state hope, which looks at levels of hope on a moment-to-moment basis. State hope is dependent on situational factors and can be easily manipulated through short interventions (e.g., Berg, Snyder, & Hamilton, 2008). No clear consensus has been reached regarding the value or importance of one construct over the other but trait hope has been more extensively studied than state or domain specific hope.

Goals

In order to accept Snyder's model of hope, one must first accept the tenet that people are goal-directed individuals. Most simply, goals are described as the targets for which we aim with our actions (Snyder, 2002). An extensive literature exists surrounding goal setting, striving, and attainment outside of the study of hope. Identifying clear goals is valuable for personal achievement in academics (Covington, 2000), athletics (Locke & Latham, 1985) and variety of other domains including the workplace (cf. Latham & Locke, 2007). Goal theory defines the

types of goals that individuals set, the sources of goal motivation, and the way in which individuals respond to challenges (Dweck & Elliott, 1983). Hope research draws from this research to identify differences between high and low hope individuals' goals as well as the different ways that high and low hope individuals' perceive obstacles that they face while working toward a goal (Chang, 1998; Peterson, Gerhardt & Rode, 2006; Snyder, Shorey et al., 2002). Hope research should be thought of as a complement to this literature because it builds from these important ideas and uses the framework of agency and pathways to understand the mechanisms by which goals get achieved rather the motivations behind them.

Agency

Agency represents motivation or drive in the hope model. People with a strong sense of agency have clear goals and are highly driven to achieve them. Agency is also based on self-motivation and the sense that not only is a goal attainable, but it is attainable through the hard work and effort of the individual. Agentic thinking often involves positive self-talk including phrases like, "I can do this" (Snyder, Lapointe, Crowson, & Early, 1998).

The concept of agency extends beyond its use in the hope model. It has been defined by various disciplines in vastly different ways. For example, agency sometimes refers to a more specific ability to control motor skills and locomotion (see Kannape & Blanke, 2012) or in more philosophical contexts as a construct based in understanding the self as an enactor of moral actions, causing change in the larger social context (e.g., Moretto, Walsh, & Haggard, 2011). The thread that runs through all of these varying perspectives of agency is a personal volition to *do* something. Although each field studies this from a different perspective, all focus on the individual's sense of volition to carry out a physical or psychological action.

Pathways

Pathways thinking involves knowing of, and perceiving oneself as capable of, following multiple ways of moving toward a goal. Hopeful people have clear and well-defined pathways to get where they want to go (Snyder, 2002). An important dimension of pathways thinking is having backup plans when encountering obstacles. Hopeful people are more adept at coming up with alternative pathways to achieve their goals when they confront difficult circumstances (Irving, Snyder, & Crowson, 1998; Snyder et al., 1991).

Like agency, goal-directed thinking is studied outside the hope model. Typically within psychology, goal-directed behavior is set at the opposite end of a behavioral continuum from impulsivity (see Hogarth, Chase, & Baess, 2012) and is looked at from a cognitive or neurological perspective of executive functioning and impulse control (e.g., Lehto, 2004). Thus, there are many applications of goal-directed behavior in the domains of education and behavior modification (see O'Connell & Robertson, 2011).

New Iterations of Hope

During its first decade, the model of hope was defined and redefined in a number of ways. The most recent conceptualizations (Snyder, 2002; Snyder, Cheavens, & Michael, 2005) include an expanded model of hope that describes the relationship between hope and goal attainment (see Figure 1). Within a pre-existing emotional context of hopeful thoughts built from past experiences, a goal activates agency and pathways thinking. In turn, this informs an emotional set, and the individual establishes an outcome value for the goal, deciding on the extent to which achieving the goal matters. Levels of pathways and agentic thought for the goal are fed from the activation of this emotion set and outcome value. As unexpected events, obstacles, and stressors impede goal achievement, the individual decides whether these are

surmountable. All interactions occur within the positive or negative emotional context created by past experiences of goal attainment or failure, and outcomes feed back into this context as future goals are activated (Rand & Cheavens, 2009; Snyder, 2002). When this model is applied to conceptualizations of stable, trait hope, these mechanisms may apply across domains of life, whereas from a more variable, domain-specific perspective of hope, this model applies to hope within that given domain.

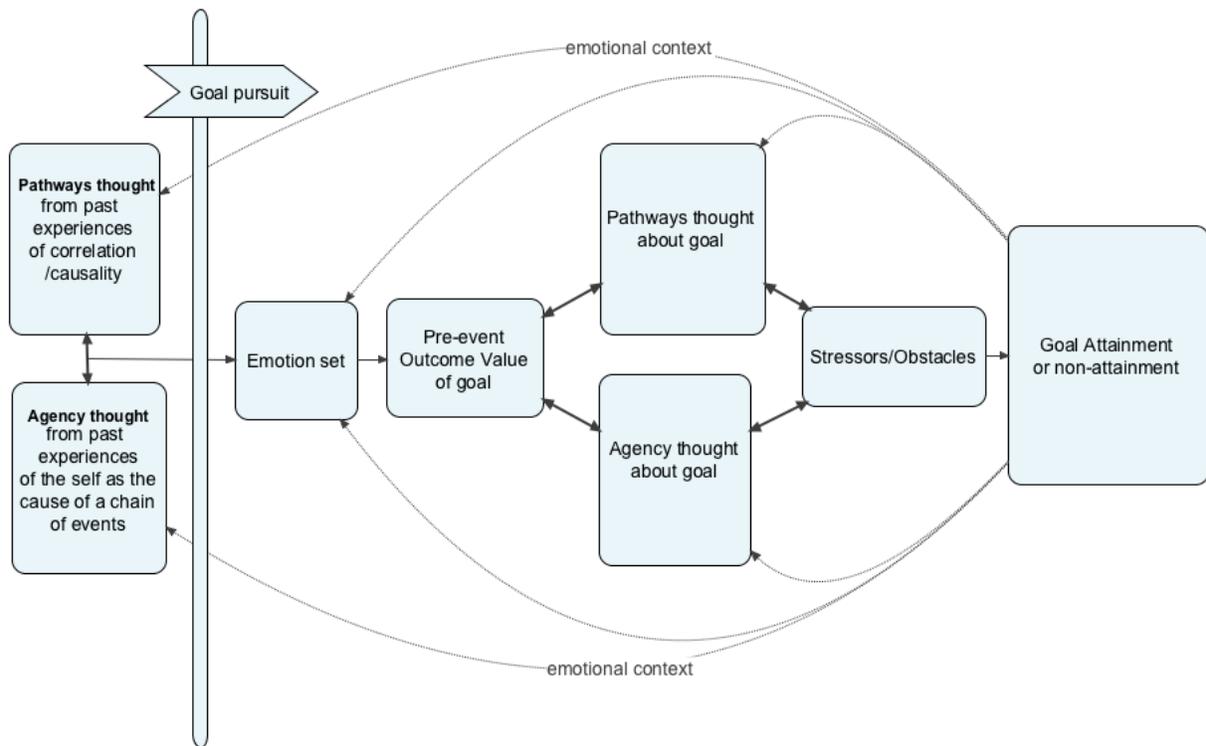


Figure 1. Adaptation of Snyder’s (2002) model of the feedback loop of agency, pathways and emotion during a goal striving sequence. This model has been adapted from Snyder’s (2002) work to explicitly include *goal pursuit* as a directional and driving factor in the process as well as to demonstrate *pathways* and *agency* more clearly as distinct, albeit interdependent forces.

In the model shown in Figure 1, each component represents values, thoughts, or emotions that individuals experience, based on their level of hope. For instance, for high hope people, goal activation leads to a positive emotion set, a sense of value for achieving the goal, and a can-do

attitude. Conversely, for low hope people, it leads to a negative emotion set, less value for the outcome of goal-attainment, and a more pessimistic attitude in which the person feels unable to achieve the goal. These attitudes affect pathways and agency for the current goal. When obstacles and stressors arise, again high hope and low hope people react differently. High hope people see these stressors as surmountable, and their belief in their ability to achieve the goal (agency), as well as their ability to develop pathways around the obstacle (pathways) are activated. Low hope people, on the other hand, doubt their ability to develop pathways, and they feel incapable of overcoming the challenge. This model of the emotional and cognitive responses of high hope and low hope people is primarily rooted in the theoretical conceptualization of hope, but it has preliminary empirical support in academic settings (Onwuegbuzie, 1998; Onwuegbuzie, & Snyder, 2000).

Folk Hope Revisited

Snyder and colleagues' (1991) model of hope developed organically from discussions with research participants and interviewees who explained that their behaviors were guided by attempts to achieve their goals. Individuals spoke of finding alternative routes to their goals and being motivated to take the next steps to get closer to them. Snyder searched for a word to describe this mindset and, with the help of colleagues and encouragement from Menninger who had lead research on hope from a cognitive perspective in the past, settled upon "hope" (Snyder, 2000b). While this definition is resonant with Stotland's (1969) conceptualization, the leap from a simple expectation that a goal will be attained, to having the personal volition and pathways to attain it, diverges from common definitions. Recent research has highlighted this, indicating that the definition of hope put forth by Snyder and his colleagues does not accurately capture lay conceptions (Bruinicks & Malle, 2005; Tong, Fredrickson, Chang & Lim, 2010). Identifying this

discrepancy between Snyder's definition and folk definitions does not call into question the importance of studying "wills and ways," but instead it questions the rationale for naming this "hope."

Folk hope, or lay conceptions of the construct, is more inclusive than pathways and agency thinking (Bruinicks & Malle, 2005) and comprises what some hope researchers actively exclude from their definition of hope: wishing. Lopez (2013) argues that we must not conflate "wishing" with "hoping," however 27% of people mentioned wishing when giving their own definition of hope (Bruinicks & Malle, 2005). This suggests that folk hope may be, at the broadest level, a wish or desire. This is reflected in the varied ways that the word "hope" is used conversationally. For instance, we may use this term to suggest a desire that something will happen (e.g., *I hope that my team wins the championship*), an expectation that it will (e.g., *There is still hope that this will turn around*), or a faith in something larger providing a desired outcome (e.g., *Even when there was nothing left for me to try, I was hopeful that I would survive*).

Snyder's hope model assumes the key condition of lay definitions of hope, that is, the expectation and desire that something will happen (Oxford, 2013), but it adds two constraints on the definition: goals/agency and pathways. Thus, this model looks not at folk hope but at a specific phenomenon that may occur in conjunction with hope, by grounding hope in goal-directed, agentic thinking, and determination. Snyder's conceptualization of hope disallows the unrealistic, impractical, and unstable by requiring the consideration of one's current circumstances through personal agency and pathways.

The first divergence from lay definitions of hope occurred when Stotland (1969) defined hope as the expectation that a *goal* would be achieved. Goals parallel the wishes, desires, or

anticipated outcomes described by folk hope but by definition include a component of personal “ambition or effort” (Oxford, 2013). Folk hope instead allows for the satisfaction of that desire or aim to come from outside of the self. For instance, one may hope for better weather, a desired outcome, without any control or sense of personal responsibility. That is, one can hope without a goal or any sense of personal agency to make something occur. Snyder’s hope model does not include this type of hope in its scope. This shift in the definition of hope made for a necessary distinction between “active” hope based in motivation and “passive” hope that is not (Miceli & Castelfranchi, 2010).

Beyond the constraints of goals and personal agency Snyder’s model also requires pathways or means of achieving a goal in order to have hope, requiring the goal to be realistic and plausible. One study which focused specifically on hope for personal goals found that laypeople conceptualize hope in terms of Snyder’s agency, or desire to achieve a goal, but not necessarily as having the pathways to get there (Tong et al., 2010). For instance, one may hope to run a marathon but lack the knowledge about how to train for one. Again, Snyder’s model would not call this hope.

Though folk conceptualizations allow for “hope” without pathways, agency, or goals, one cannot develop the agency or drive to work towards a desired outcome without first having a desire. Moreover, one cannot develop pathways to achieve that outcome, without a desired outcome to achieve. Using this rationale, I propose that individuals must have folk hope to develop the cognitions that make up Snyder’s construct of hope. Figure 2 presents the relationship between folk hope and components of Snyder’s hope model, proposing that folk hope can include having goals, agency, and pathways but that those together make up just a very small portion of what lay people call “hope.” The model presents goals, pathways and agency as

a set of distinct but partially overlapping cognitions that require folk hope to occur. This illustrates that one can have folk hope for many things that are not within the scope of agency and pathways, but desire and expectation (i.e., folk hope) underlie the development of agency and pathways.

Decades of basic and applied research verify the combination of agency and pathways, when brought together into a single construct, to be essential to success in school, the workplace, and beyond (Reichard et al., 2013; Snyder, Shorey et al., 2002). However, the use of the term “hope” to describe this construct puts this valuable framework in danger of criticism and misinterpretation and systematically excludes portions of folk hope from scientific inquiry. Therefore, for the duration of this dissertation I will refer to hope, as defined by Snyder and colleagues, as “grounded hope” to illustrate the necessity of agency, determination, and realistic pathways, in addition to desire and expectation, that comprise this construct. The qualifier “grounded” has been selected as an adjective to describe this form of stable and reasonable hope, tied more closely to practicality than to faith. In the dissertation that follows, I will use these terms (i.e., folk hope and grounded hope) to describe these two different, albeit nested, manners of understanding hope.

Discriminating Grounded Hope From Other Constructs

From its infancy, the proponents of grounded hope have worked to distinguish it from a number of other positive constructs. A critical moment in the study of grounded hope came in 2002, when a special issue of *Psychological Inquiry* placed the hope model before the research community for critique. This issue, including a rebuttal by hope researchers (Shorey, Snyder, Rand, Hockemeyer, & Feldman, 2002), helped to strengthen the theoretical understanding of

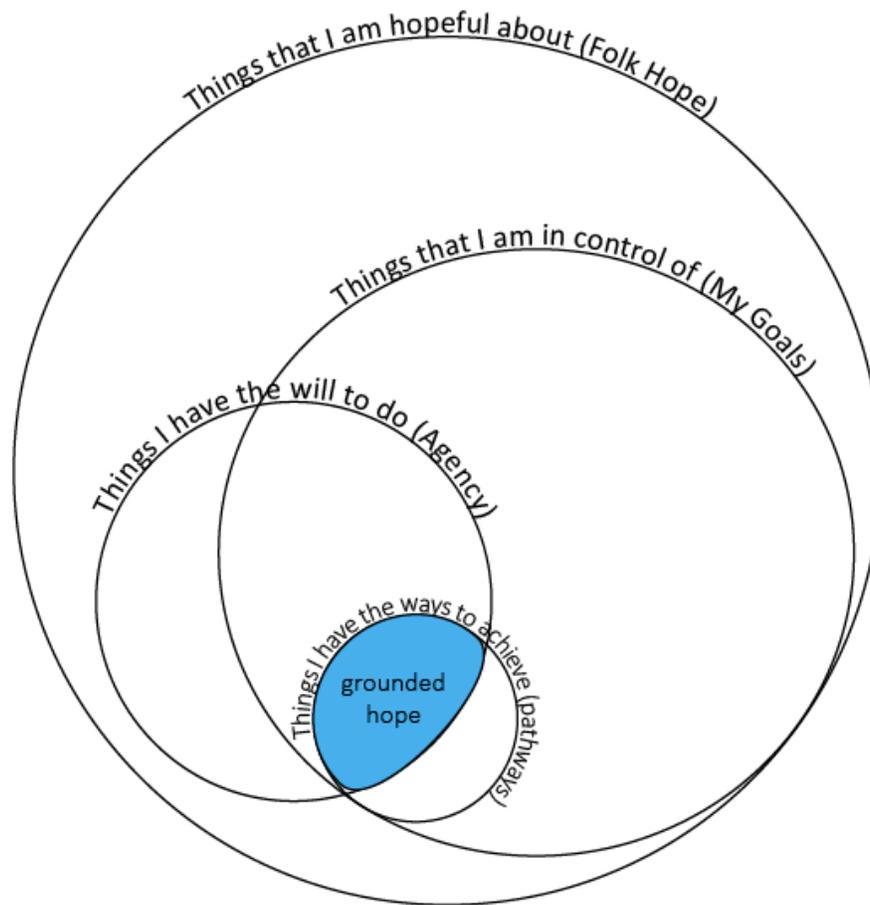


Figure 2. Model of the overlap of folk hope (i.e., everything that one might hope for) with dimensions of grounded hope (i.e., things that one hopes for, has set a goal to accomplish, has the volition to accomplish, and has the ways to accomplish).

grounded hope and to distinguish it from neighboring constructs. Dispositional optimism, for instance, is the belief that one will have good outcomes in life (Scheier & Carver, 1998). This is a broader expectancy than that of grounded hope (Bryant & Cvengros, 2004). Grounded hope requires not just expecting positive outcomes but also remaining motivated to progress towards achievable goals to attain those outcomes. Thus, the key difference between these two constructs is grounded hope's emphasis on personal agency (Alarcon, Bowling, & Khazon, 2013; Carver &

Scheier, 2002; Gallagher & Lopez, 2009). Similarly, a small body of literature looks at the beliefs associated with “wishful thinking” in which individuals desire or wish for an outcome, and thus are more likely to expect it to happen (Krizan & Windschitl, 2007). Like optimism, this captures the desire for goal attainment or a given outcome but is not rooted in agency or pathways thinking.

Self-efficacy captures individuals’ beliefs in their ability to accomplish something in a specific context (Bandura, 1994). This shares with grounded and folk hope a belief that goals are attainable. Most commonly, self-efficacy is compared to the agency dimension of grounded hope. However, agency goes beyond individuals’ belief in their *ability* to achieve goals to capture the belief that they *intend* to accomplish them. As Snyder (2002) describes, “An important difference here lies with the words can and will...” (p. 258). That is, self-efficacy is the belief that one *can* achieve a goal, whereas agency is the belief that one *will*.

Self-regulation also shares conceptual ground with grounded hope in that both involve goal-directed activity and having the means to achieve goals (Vohs & Schmeichel, 2002). Hopeful people are likely to have more self-regulatory resources, and grounded hope interventions may develop these self-regulatory resources. Hopeful individuals are also more aware of their ability to self-regulate and more able to make plans and identify realistic pathways provided those finite resources (Vohs & Schmeichel, 2002). Thus grounded hope requires an understanding of self-regulation and some ability to engage in it, but the two are distinct.

Measuring Grounded Hope in Adults

The section that follows discusses the various measures of hope. For an extensive review of all measures of Snyder’s hope construct, see Edwards, Rand, Lopez, and Snyder (2006).

Trait Hope Scale

The most commonly used measure of grounded hope is the Trait Hope Scale (Snyder et al., 1991). This scale was developed to measure hope as a stable, trait-like characteristic and is made up of subscales that measure pathways and agency. It has 12 items, four to measure agency, four to measure pathways, and four distractor items. The correlation between the two subscales is moderate ($r = .43 - .62$; $ps < .001$) suggesting that they are related but distinct (Bailey, Eng, Frisch, & Snyder, 2007; Magaletta & Oliver, 1999). The Hope Scale has been subjected to the scrutiny of various psychometric studies (Babyak, Snyder, & Yoshinobu, 1993; Cheavens, Gum, & Snyder, 2000; Snyder et al., 1991) and has been translated into a number of languages (e.g., Abdel-Khalek & Snyder, 2007; Halama, 1999). It demonstrates good internal reliability (alphas from .74-.85; Feldman & Snyder, 2005; Hellman, Pittman & Munoz, 2013; Snyder et al., 1991) and test-retest reliability (.80; Hellman et al., 2013). It has also been shown to demonstrate acceptable convergent validity with the Life Orientation Test (r s between .50 and .60, $ps < .001$), Problem Solving Inventory ($r = -.62$, $p < .001$, where lower scores represent better perceived problem solving), and Self-Esteem Scale ($r = .58$, $p < .001$) and discriminant validity with measures of negative affectivity, anxiety, Intelligence Quotient (IQ) and self-consciousness (Snyder et al., 1991; Snyder, Shorey et al., 2002).

However, various articles pose concerns about the validity of the Trait Hope Scale. The agency subscale in particular has been criticized for its focus on success, rather than perceived ability to succeed (Carver & Scheier, 2002). In response, Shorey and colleagues (2002) pointed to the numerous studies and factor analyses of these scales which suggest that items are conceptually separate from filler items as well as pathways items, rather than directly addressing this criticism. However, Carver and Scheier's (2002) argument may demonstrate a

misunderstanding of the conceptual meaning of “agency” within the hope model. That is, agency focuses on volition or *intent* to succeed, rather than *ability* to succeed, and must be measured as such. Items do not focus specifically on past or future instances of success, but rather on the more abstract idea that when individuals set goals, regardless of whether those goals were set in the past or have yet to be set, they will attain those goals.

Since, it has also been argued that agency items such as “I meet the goals that I set for myself,” and “I’ve been pretty successful in life,” do not accurately capture movement toward specific, real-life goals but rather capture something more akin to optimism, or the belief that goals can be accomplished without specifying whose efforts may be credited for accomplishing them (Tong et al., 2010). This criticism has yet to be tested empirically, but it may be rooted in the lack of distinction between folk hope and grounded hope in past literature.

Domain Specific Hope Scale

The Domain Specific Hope Scale (DSHS; Lopez et al., 2000) measures grounded hope in six specific life-domains (i.e., social, academic, family, romance, work, and leisure). These scales were adapted closely from the Trait Hope Scale, but they focus on feelings of agency and ability to develop pathways within a specific domain of life. Each scale is made up of eight items; four measure domain specific agency and four measure domain specific pathways. Scales have demonstrated adequate internal consistency (alphas range from .86 and .93) and factor into six distinct domain-based subscales, however no published studies have considered the temporal stability of these scales. Each scale has demonstrated appropriate convergent validity with other related scales (Simpson, as cited in Lopez et al., 2000). The psychometrics of these scales have not been thoroughly investigated, and the scales have rarely been used in research.

State Hope Scale

In response to criticism that grounded hope can fluctuate depending on circumstances, Snyder and colleagues (1996) developed a six-item State Hope Scale, which measures an individual's level of grounded hope on a more momentary basis. Internal reliability is adequate (alphas from .79 to .95), and the measure is distinct from the Trait Hope Scale ($r = .79, p < .001$) and shows convergent validity with the State Self-Esteem Scale and Positive Affect Scale (Snyder et al., 1996). The State Hope Scale has been used in a number of intervention studies and can be influenced by hope training (e.g., Berg et al., 2008), but it has not been as widely used as the Trait Hope Scale.

Measures of Hope from Clinical and Medical Settings

In clinical settings, grounded hope has been measured through interviews using questions directed at goals, agency, pathways, and barriers (see Lopez et al., 2000). Moreover, one unpublished study investigated the potential of measuring agency and pathways through narratives. However, researchers could not establish interrater reliability (Vance, 1996). While these measures have not been validated, they do suggest that a qualitative approach may be a fruitful way of triangulating measurements of grounded hope.

Within psychotherapy and nursing, a variety of scales measure alternative conceptualizations of hope among ill individuals. These range from objective measures such as the Miller Hope Scale (Miller & Powers, 1988) and the Herth Hope Index (Herth, 1991), to Gottschalk's Hope Scale, which comprises a verbal content analysis based on Herth's conceptualization of hope (Gottschalk, Bechtel, Buchman, & Ray, 2005). These scales are designed to capture hope for overcoming disease and illness utilizing a complex folk definition of hope that includes both the cognitive, goal-driven, agency component grounded hope, as well

as the affective, emotional, and spiritual meanings of folk hope. The Miller Hope Scale, for instance, measures the anticipation of a better future stemming from perceptions of individual competence and coping which may or may not be based in reality (Miller & Powers, 1988). Similarly, the Herth Hope Index measures the presence of goals overall positive outlook on life and expectancies for the future (Herth, 1992). In addition, these scales also include the two additional components of connection to a higher power and a sense of interconnectedness or relation to others.

More closely aligned with the Trait Hope Scale are quantitative scales based on goal striving and attainment intended to measure hope in clinical settings and research. The Hope Index (Staats, 1989) and Stoner Hope Scale (Stoner & Kaempfer, 1985) measure individuals' volition for and expectancy of achieving specific goals. These scales may be useful in parsing grounded hope from folk hope, because they measure both the "wishing" that is omitted from grounded hope and the "expectations" component that is essential to grounded hope.

Unfortunately, they have been scarcely utilized in empirical research which likely results from the divide between basic research and clinical practice.

One potentially fruitful approach to understanding the distinctions and overlap between folk hope and grounded hope lies in the psychometric integration of the Trait Hope Scale with clinical measures. One such undertaking, conducted with a general population of Austrians, developed a 23-item measure for use in psychotherapeutic settings that combines items from Snyder's Trait Hope Scale, the Herth Hope Scale, and the Miller Hope Scale (Schrank, Woppmann, Sibitz, & Lauber, 2011). Again, this scale has yet to be used in any subsequent empirical work, but it does demonstrate the possibilities for bridging the divide between folk and grounded hope.

Grounded Hope Interventions

In their discussion of hope Peterson and Seligman (2004) suggest that hope is a “Velcro construct,” meaning that it tends to correlate with nearly any positive trait or outcome. Hope predicts a number of psychosocial outcomes such as self-efficacy (Snyder et al., 1991), life satisfaction (Bailey, Eng et al., 2007), well-being (Michael & Snyder, 2005), problem solving (Chang, 1998), and coping skills (Irving et al., 1998; Onwuebuze & Snyder, 2000), as well as healthy lifestyle behaviors (Berg, Ritschel, Swan, An, & Ahluwalia, 2011; cf. Cheavens, Michael, & Snyder).

As knowledge of the potential benefits of grounded hope has increased, efforts to foster the construct have increased. A recent meta-analysis demonstrated that these interventions have been minimally effective (Weis & Speridakos, 2011), however, the meta-analysis included both grounded hope interventions seeking to increase hopefulness as measured by the Trait Hope Scale or Children’s Hope Scale, as well as interventions focused on developing hope as measured by the Herth Hope Scale. Thus, we cannot parse the effectiveness of grounded hope interventions from the effectiveness of other types of hope interventions. The effort underscores the weakness of hope research, as a whole, that grounded hope is not sufficiently distinguished from folk hope in current research. In order to avoid this conflation, the review that follows discusses only interventions aimed at building grounded hope.

Goal Setting and Goal Striving Interventions

Given that Snyder and colleagues (2003, 2002) argued that the foundation for building grounded hope lies in fostering good goal setting, it is not surprising that many grounded-hope interventions center around teaching people to set goals and develop pathways to achieve those goals. These interventions tie to hope theoretically and focus on developing agency and

pathways through individual and group exercises including discussion groups and activities that range from multi-month programs (Cheavens, Feldman, Gum, Michael, & Snyder, 2006) to 90-minute interventions (Feldman & Dreher, 2012). Participants learn how to set goals, develop pathways, and overcome obstacles and are trained to use more hopeful language (Pedrotti, Edwards, & Lopez, 2009; Snyder, Hoza et al., 1997).

Within the framework of coaching psychology, practitioners have begun to develop effective programs to foster grounded hope among clients using goal setting and goal striving training. Coaches and therapists trained in cognitive-behavioral, solution-focused life coaching strategies train the client to develop goals, develop action plans to achieve those goals, and then actively “coach oneself” toward goal attainment (Green, Grant, & Rynsaardt, 2007; Green, Oades, & Grant, 2006).

Grounded hope can also be encouraged in clinical populations through the use of pre-existing cognitive psychotherapy techniques that focus on goal setting, problem solving, and positive self talk (Cheavens et al., 2006). These assets are developed in clients through modeling, scaffolded experiences, and finally reflection on the goals, pathways, and successes that the client experienced in therapy. Group therapy sessions where goals are set and “workshopped” as a group have been successful in building hope and psychosocial resources (Cheavens et al., 2006; Klausner et al., 1998).

Strengths-Based Interventions

A second trend in grounded hope interventions has been the use of strengths-based training. These interventions have been less thoroughly studied, but they are used in the coaching community to help clients become more hopeful and satisfied with life (Biswas-Diener, 2010). One rationale for strengths based approaches is that they provide participants with experience

treating their strengths as tools to use in difficult circumstances (Linley, Nielsen, Gillett, & Biswas-Diener, 2010). Similarly, by asking participants to look for exemplars of the strengths in action and brainstorming ways to use strengths in the future, these interventions may highlight strategies for problem solving and goal achievement (Rust, Diessner, & Reade, 2009). If this is the case, applying strengths may serve as new pathways to goal achievement. That is, participants may develop new tools (or ways) to reach goals as well as feelings of agency from seeing hopeful exemplars and focusing on goal achievement. From this theoretical framework, researchers posit that strengths-based interventions may build grounded hope in addition to their previously demonstrated effect on well-being (Seligman, Steen, Park, & Peterson, 2005).

One commonality between these two types of interventions is the utilization of discussion groups and coaches. Similar to other grounded hope interventions, successful strengths-based interventions also utilize trained teachers and coaches in group coaching sessions to help people learn about and practice their strengths (Fruith, 2010; Madden, Green & Grant, 2011). Thus, interaction with others may be an essential component to the successful development of grounded hope at any age.

Developmental Considerations Concerning Grounded Hope

Grounded hope and interventions to build it have been studied across the lifespan in a variety of contexts, yet application of developmental theory to understanding how grounded hope develops organically has been minimal. Some theoretical work has considered the development of grounded hope in childhood (Snyder, 1994; Snyder, 2000a) but little research considers the developmental tasks of adolescence or adulthood as they apply to grounded hope.

The Developmental Trajectory of Grounded Hope

As a goal-based cognitive construct, grounded hope relies on developmental models of goal-focused thinking and goal-directed thought (agency) to understand how it develops. Snyder (1994) argues that goals begin to influence human behavior during infancy, when the infant develops perceptions of external stimuli and an understanding of the linkages between actions and reactions. Between 3 and 6 months, infants begin to understand that they can affect the world around them, which in turn leads to a very early understanding of goals (Snyder, 1994). Snyder (2000a) describes these developments as the earliest precursors to pathways thought, in terms of understanding how actions will set in motion a chain of events to achieve a goal.

As infants begin to develop a sense of self-concept in the second year of life (Rochat, 2001a) they begin to see the self as an instigator of action. Infants not only understand cause and effect but also the self as the cause of change and action (Snyder, Rand & Sigmon, 2002). These realizations can be considered the earliest forms of agentic thinking (Snyder, 2000a). By 3 years old, toddlers are agentic, insisting that they are capable of doing things by themselves. In these early years, the ability to develop alternate pathways to overcome barriers is already visible in the form of basic problem solving skills (see Keen, 2011).

Parents and other important adults can be valuable allies for children developing grounded hope. A secure attachment to a caregiver, in which the child feels comfortable exploring the world from a secure base may be essential in developing the ability to face and overcome barriers (Snyder, 2000a). These claims are supported by research demonstrating that securely attached toddlers have better social problem solving skills and less tendency toward a negative attributional bias in early childhood than anxious-resistant or anxious-avoidant toddlers, perhaps because of the interpersonal skills and relationship strategies acquired in early

attachment relationships (Raikes & Thompson, 2008). Children with secure attachments are likely to be able to set goals that they might accomplish together with their caregivers (“we can” goals; Snyder, 2000a). This proposition is in line with the developmental theories of social contingency that suggest that between 9 and 18 months, infants develop a sense of dependence on others to accomplish goals that they cannot manage on their own (Rochat, 2001b). In addition, to best nurture the development of grounded hope, Snyder (2000a) argues that parents should not remove barriers from the paths of their children but rather scaffold the experience of overcoming them. This might be done through role modeling and coaching so that children can become more capable of overcoming these barriers on their own in the future.

Just as the development of “I can” language marks a child’s ability to understand the self and personal agency, language in the form of scripts, narratives, and stories can help to bolster grounded hope among children (Snyder, 2000a). For instance, elementary school students who read and discussed short stories with hopeful characters scored somewhat higher on teachers’ blind observational reports on the Hope Scale by the end of eight weekly sessions (McDermott & Hastings, 2000).

As children move into adolescence and focus on peer relationships and long-term career goals, grounded hope comes into play in different ways. Just as toddlers develop “we can” goals with their parents, adolescents are able to develop goals for what they would like to accomplish socially as well as “we can” goals with their peer groups (Snyder, 2000a). Moreover, as they develop a sense of identity (Erikson, 1980), their understanding of their own personal abilities aids the development of longer-term goals for later adolescence (e.g., *I want to play on the varsity basketball team* or *I want to pass the Advanced Placement test in Spanish*).

Again, caring adults can play an important role in the development of grounded hope among adolescents by encouraging social skills and providing support for overcoming obstacles. For instance, adolescents with emotional and behavioral disorders living in a residential care facility that provided social skills training, positive problem solving training, and an environment with consistent expectations and consequences became more hopeful and demonstrated a variety of other positive outcomes (McNeal et al., 2006).

Hope and Emerging Adulthood

The period of life encapsulating the college years and beyond, from the late teens through the mid-twenties, is known as emerging adulthood (Arnett, 2000). Critics argue that this is not a unique stage, but rather is an extension of adolescence that results from societal, economic, and social forces that make it easier and more practical for some individuals in certain industrialized regions to prolong adolescence before taking on the role of adult (Bynner, 2005). However, the concept of emerging adulthood has gained popularity as a way of illuminating the new cultural phenomenon created by a period of life after individuals leave their families of origin but have not yet married or had children of their own. During this period of transition individuals experience instability and a sense of feeling “in-between.” Like adolescence, emerging adulthood is a time of identity exploration and self-focus. Individuals have a chance to focus on their own needs and self-exploration with far more autonomy than adolescents but without having to worry about the needs of a dependent child (Arnett, 2000).

Individuals emerge from adolescence with a newfound understanding of the self (Erikson, 1980) and an improved ability to think abstractly about the future (Piaget, 1983). While high school students are likely to have ambitious plans (Reynolds, Stewart, MacDonald, & Sischo, 2006), unrealistic and overly optimistic career goals fade as individuals reach early

adulthood (Rindfuss, Cooksey, & Sutterlin, 1999). College students often receive their first exposure to higher education and find, in time, that their goals may not be realistic (Rindfuss et al., 1999; Schneider & Stevenson, 1999).

This transition to more realistic career prospects highlights the distinction between the developing folk hope and grounded hope of a young person. A new college student may have the folk hope to imagine and desire long-term academic success, however those desires may not be based in reality nor the pragmatics of what it will take to achieve those outcomes. In contrast, a sense of grounded hope for those goals would mean students not only imagine and desire these outcomes, but they also know how to achieve them. Thus, recent high school graduates may lack the grounded hope to achieve lofty goals, but they may hold onto folk hope while navigating the transition into adulthood.

Recent research has aimed to understand the attributes that contribute to a thriving emerging adult (O'Connor et al., 2011). Self-regulation has been highlighted as a key factor (O'Connor et al., 2011; Shulman et al., 2009) as individuals in this stage often are, for the first time, responsible for their own academic and vocational choices. Although it has not been well explored outside of the educational context, grounded hope is likely to also be a beneficial characteristic for emerging adults given the important developmental task of developing a sense of identity and finding one's path in life during these years.

The skillset of people with grounded hope, that is, being able to set long term goals for what one wants to accomplish and subsequently map out paths to achieve those goals, may be an essential skill for navigating the process of developing identity and life meaning. Preliminary evidence for this relationship is beginning to emerge. For instance, among emerging adults, grounded hope correlates with identity development and this relationship is mediated by purpose

in life (Burrow & Hill, 2011). Furthermore, agency mediates the relationship between purpose in life and life satisfaction (Bronk, Hill, Lapsley, Tilib & Finch, 2009). These studies begin to highlight the impact of grounded hope on psychosocial development and provide a basis for future developmental research.

Grounded Hope and College Success

A common challenge of emerging adulthood is entering higher education, a transition that can be very difficult (Bayram & Bilgel, 2008). About 33% of four-year college students and 46% of two-year college students nationwide fail to persist beyond their first year (National Center for Education Statistics, 2010). Just 57.2% of students who enrolled in a four-year college in 2002 had completed their degree 6 years later, suggesting over 40% of students who start college, do not finish on time (National Center for Education Statistics, 2009). This demonstrates the need for extra supports for newly enrolled college students.

Many college students, fresh from a structured high school setting, realize that they are solely responsible for their academic decisions and make choices that hinder their academic potential. While they may fully expect and desire a degree in a folk hope sense, such choices demonstrate a lack of understanding of the pathways to achieve academic goals, or a lack of volition to achieve them. Moreover, students may reach college and face the reality that a degree is still many years away and give up, relinquishing not only their grounded hope but also their folk hope for completing college. Models of student retention suggest that institutional and goal commitment are the two key components to college persistence. To stay in college, students must set goals for themselves and be well enough connected to their schools to seek out resources to help them be successful and stay motivated (Tinto, 1993). While folk hope is necessary to desire college success, grounded hope must also be available to work towards it.

Not surprisingly, among college students grounded hope is correlated not only with GPA (Curry, Snyder, Cook, Ruby, & Rehm, 1997; Gilman, Dooley & Florell, 2006; Snyder, Shorey et al., 2002) but also with future academic performance (Ciarrochi, Heaven & Davies, 2007). Students high on grounded hope outperform less hopeful students even in longitudinal studies of achievement that stretch across multiple academic years (Day, Hanson, Maltby, Proctor, & Wood, 2010; Rand, Martin, & Shea, 2011), and they are more likely to persist in college than less hopeful students. In one study, grounded hope was predictive of persistence in a developmental writing course at a community college (Madison, 2010). Furthermore, higher hope scores in the first semester of college predicted higher GPA and college persistence six years later (Snyder, Shorey et al., 2002). However, given that grounded hope correlates with an individual's general intelligence ($r_s = .14 - .22, p_s < .05$; Day et al., 2010; Leeson, Ciarrochi & Heavens, 2008), researchers should control for IQ when looking at the relationship between grounded hope and academic success. In addition, it is likely that the relationship between grounded hope and these indices of performance are bidirectional; that is, academically successful students may feel more hopeful about their ability to achieve academic goals.

In addition to predicting better performance and persistence, grounded hope also correlates with satisfaction with academic life and positive attitudes about obstacles in academic settings (Chang, 1998). Findings such as these suggest that some of the positive correlates of grounded hope may be partially mediated by relationships between grounded hope and skills necessary for academic success. For example, students with grounded hope are less likely to procrastinate on writing term papers, reading for classes, and studying for exams (Alexander & Onwuegbuzie, 2007). These types of behaviors may provide a mechanism for the relationship between grounded hope and academic success.

Grounded hope has also been used to understand students' coping strategies in the face of academic challenges. Individuals with higher levels of grounded hope display lower levels of performance-related anxiety (Snyder, 1994) and lower levels of test anxiety for college or graduate level exams (Denizli, 2004; Onwuegbuzie, 1998), although such studies do not account for the role of IQ in this relationship. Students with more grounded hope use more effective coping strategies when studying and taking exams than their lower-hope counterparts (Onwuegbuzie & Snyder, 2000). Specifically, more hopeful students are less likely to use social withdrawal and self-criticism to cope with academic stress (Chang, 1998). Thus, they are not only less likely to be anxious about school, but they are also able to cope more effectively with anxiety.

Setting Goals and Overcoming Obstacles

Setting goals and remaining committed to those goals is a critical component of college persistence (Tinto, 1993). Even after controlling for prior academic achievement, students who start college with clearly defined academic goals have a higher GPA (Bordes-Edgar, Arredondo, Kurpius, & Rund, 2011) and are more likely to graduate from community college (Bailey, Jenkins & Leinbach, 2007) than their counterparts without clear academic goals. College students who were trained and encouraged to set goals performed better academically than a comparison group (Morisano, Hirsh, Peterson, Pihl & Shore, 2010), demonstrating that goal setting programs, even without a focus on building grounded hope, can encourage academic success.

Because goals are an essential component of the grounded hope model, there is overlap between the study of grounded hope in academic settings in the goal setting and goal commitment literature. People with more grounded hope set more ambitious goals than less

hopeful people and are more likely to achieve their goals in many domains of life from athletics to financial planning (Feldman, Rand & Kahle-Wroblewski, 2009). In the academic realm, they attempt more difficult tasks even after controlling for indicators of ability (Harris, 1988, as cited in Snyder et al., 1991), but they feel just as capable of achieving their more difficult goals as individuals with lower grounded hope and less ambitious goals (Anderson, 1988, as cited in Snyder et al., 1991). These findings suggest that people with more grounded hope perceive the barriers they encounter on the path to goal attainment as surmountable challenges, rather than immovable obstacles (Snyder, 2002).

This difference in the perception of challenge may be due to another adaptive skill correlated with grounded hope. Grounded hope is positively related to rational problem solving and negatively related to avoidant problem-solving (Chang, 1998). People with more grounded hope develop more solutions to problems at work, and these solutions are rated by managers as being of higher quality than those of less hopeful people (Peterson & Byron, 2008) suggesting grounded hope predicts problem solving performance. This may help explain why hopeful people are more capable of overcoming adversity. However, it is likely that the self-efficacy and optimism of hopeful individuals also contribute to their ability to overcome obstacles.

For obvious theoretical reasons, grounded hope has come to be thought of as very closely tied to goal orientation. Studies of college persistence have even used the Trait Hope Scale as an operational definition of global goal orientation (Savage & Smith, 2008). In addition, a recent study demonstrated a new connection between goal setting and grounded hope. Individuals who set self-concordant goals (i.e., goals that the individual identifies with and are concordant with his or her interests and values; Sheldon & Kasser, 1998) are more likely to develop pathways to goal achievement (Carraro & Gaudreau, 2011). This speaks to the importance of self-initiated

agency and personal volition to achieve a goal in creating pathways and offers new support for the role of grounded hope in predicting educational goal achievement.

An investigation of community college students' goals suggests that while ambitious goals predict persistence and graduation, students adapt and change their goals as they move through their education (Bailey et al., 2007). This idea integrates with Snyder and colleagues' (1996) discussion of the adaptive nature of "re-goaling." Successes and failures in goal pursuit lead hopeful individuals to change or replace their goals to be more realistic (Feldman et al., 2009). While re-goaling can be adaptive in changing circumstances or when initial goals are not realistic, it can also have drawbacks. These are most notable when grounded hope is low for an entire domain, such as academics, and the individual opts to set new goals in a different domain rather than setting more attainable academic goals (Snyder, Feldman, Shorey, & Rand, 2002).

Fostering Grounded Hope in Higher Education

Overall, both grounded hope (e.g., Curry et al., 1997) and goal setting (e.g., Bordes-Edgar et al., 2011) positively correlate with academic success and persistence among college students. Beyond the empirical studies of academic correlates of grounded hope and goal attainment, various theoretical and review articles have considered the implications and applications of grounded hope in educational contexts (e.g., Snyder, Lopez, Shorey, Rand, & Feldman, 2003; Williams & Butler, 2010). These articles suggest that school counselors can serve as coaches who influence the development of grounded hope among students by guiding students through the goal setting process while helping to ensure that goals are meaningful and appropriately ambitious (Pedrotti, Edwards, & Lopez, 2008; Snyder, Feldman et al., 2002). Counselors might help students develop a list of goals, to rank goals in order of personal importance, and to aid students in setting clear endpoints to these goals (Snyder, Feldman et al.,

2002). This final step is valuable in light of past research that suggests that concrete goals are achieved more quickly than abstract goals (Emmons, 1992).

Williams and Butler (2010) posit that grounded hope may be a useful construct in encouraging college persistence among first generation college students, who are at high risk for college drop out (Thayer, 2000). They provide a variety of suggestions for building grounded hope into retention programs including using a hope-based curriculum in first-year experience courses, building support groups in which college students learn about grounded hope and see the success of others, and training professors to foster goal setting and pathways thinking among their students.

Developing Grounded Hope in an Interpersonal Setting

One commonality of both grounded hope interventions and these theoretical and practical suggestions for fostering grounded hope is an interpersonal dimension of working with a parent, teacher, or coach, or in small groups to learn agency and pathways thinking. This is very much in line with the position of Elliott and Sherwin (1997) that grounded hope is developed through social interaction and development of grounded hope should be thought of as an interpersonal process embedded in the individual's cultural context. They posit that interactions with family and groups of identification are paramount in developing hopeful individuals. This stance supports Snyder's (2000a) claim that grounded hope can be fostered in children through encouragement and scaffolding from a secure attachment figure. Social supports, including positive relationships with peers and parents, are essential components of positive development in emerging adulthood (O'Connor et al., 2011). Thus, it is possible that efforts to build grounded hope using an interpersonal process benefit individuals by nurturing these relationships as well as through their impact on pathways and agency.

Furthermore, the neighboring constructs of self-regulation and goal setting both have important interpersonal components. Self-regulation, which like grounded hope involves goal-directedness, is a valuable asset in social development (Eisenberg et al., 1995). Controlling one's desires in order to achieve a larger social goal, such as fostering a relationship with a potential friend, is the hallmark of self-regulation, but it is also a necessity for grounded hope. When individuals are hopeful about their ability to achieve social goals, as described by Snyder, Cheavens, and Sympson (1997), we can expect that grounded hope will have the same substantial impact on social skills that self-regulation can. Recent expansions upon goal theory suggest that goal striving may be more effective when it is an interpersonal process. For example, when an individual is working towards a goal and seeks advice or support from someone who is interested in promoting goal attainment, that person will make the individual more motivated to attain the goal (Righetti, Finkenauer & Rusbult, 2011). Similarly, when one pursues the same independent goal as another person who is perceived as similar, both are likely to put more effort into pursuing that goal (Shteynberg & Galinsky, 2011). Thus, having the support of others while working towards a goal is beneficial.

The efficacy of grounded-hope building interventions and the relationship between hope and interpersonal relationships, suggest that having a coach is useful in building grounded hope. It is possible that these skills can be best promoted when an individual has a more experienced person to help them navigate the waters of goal setting and goal attainment.

Future Directions in Building Hope in College Students

Just as parents and caregivers can provide the support and scaffolding for developing pathways and agency to overcome challenges in toddlerhood and childhood (Snyder, 2000a), supportive adults are likely to be an essential support in helping emerging adults to overcome the

new challenges of adulthood. Parents are cautioned not to remove the challenges from their children's lives but rather to help support them to overcome these challenges to build an understanding of pathways and agency in their children (Snyder, 2000a). Perhaps this same philosophy could be adapted to develop grounded hope in college students and emerging adults in that supportive adults should not aim to remove obstacles by advocating for college students but rather to help students to advocate for themselves. These suggestions, however, stand in contrast to the philosophy that parents and counselors should be supportive of high-risk students by removing as many barriers to education as possible in the hopes of maintaining students' desire to succeed. Adults who take these measures aim to maintain the folk hope of students, keeping the desire and possibility alive, perhaps at the expense of an opportunity to teach folk hope.

The transition to college is a developmental period where students are expected to set goals and make plans to work towards them and therefore is an ideal time to scaffold experiences of goal setting and developing pathways. Also, this may be a time when individuals are ripe to learn hope building skills, as these skills will be immediately useful in their academic endeavors (Collins, Onwuegbuzie & Jiao, 2009). Some of the challenges facing a new student, such as finding campus resources, communicating with professors, and managing time are skills that a supportive adult could help a student to learn, rather than trying to remove the obstacles by doing these things for the student. This process of scaffolded skill-building may help students to create new pathways and could potentially be included in a grounded hope intervention for college students.

Building from a coaching or small group model may be the first logical step in developing ways to increase grounded hope in college students. Life coaching interventions for

high school students utilized trained teachers to serve as coaches for students (Green et al., 2007) and researchers have suggested that school counselors and teachers may be capable of filling a similar role to promote grounded hope among students (Pedrotti et al., 2008; Snyder, Feldman et al., 2002). However, it may not be realistic to expect this of counselors and teachers at the college level due to constraints on time and the nature of the student-counselor relationship at this level. The average college student has only brief interactions with an academic counselor or advisor. In fact, a recent study of community college attrition found that 74% of students who dropped out of community college did not reach out to counselors or faculty first (Pearson Foundation, 2010). Thus, while counselors may be well intentioned, it is not likely that low hope students will seek out the guidance and coaching that they need from counselors. Instead, college students may be more likely to benefit from grounded hope training supported by the mentors, coaches, or positive role models already in their lives. If this is the case, it would be essential that the individuals who play these roles in the lives of students know how best to encourage grounded hope, and that they are aware of the potential drawbacks to nurturing folk hope while leaving students ill-equipped to achieve their goals.

Building Grounded Hope Through Mentoring Relationships

Decades of research already point to the value of mentoring relationships in supporting the academic success of college students (see Crisp & Cruz, 2009 for a review). Students with mentors are more likely to persist in college and have higher grade point averages (Campbell & Campbell, 1997; Pagan & Edwards-Wilson, 2003) than their unmentored counterparts. Furthermore, research has begun to unpack the mechanisms by which college students' mentors help their protégés. The most widely-accepted model of college student mentoring suggests that mentors can benefit their students by providing: 1) emotional support, 2) career exploration and

goal setting support, 3) academic advancement and subject matter support, and 4) role modeling (Nora & Crisp, 2007). This model provides a framework in which to understand the transmission of both folk and grounded hope in developmental relationships.

Concrete academic and subject matter support may be mechanisms for the transmission of grounded hope, as these give mentors an opportunity to train the goal setting and pathways development that characterize hope-building interventions. Mentors can enhance student agency by teaching goal setting in context and, given subject-matter expertise, can help the protégé to develop pathways towards these goals. Additionally, by modeling goal setting and striving behaviors, a mentor may be able to pass along grounded hope in the same way that role models in stories help children to develop grounded hope (McDermott & Hastings, 1999).

This same role-modeling mechanism may also play a role in the transmission of folk hope in relationships. Mentoring relationships transmit not only concrete task related practices but also values and beliefs to protégés (Nakamura, Shernoff & Hooker, 2009). Thus, mindsets like the positive expectancies of folk hope may also be passed through these relationships. Finally, although it is not well-represented in the literature, some evidence suggests that college-aged protégés report feeling supported spiritually by their mentors (Chan & Dubon, 2013; Erickson & Phillips, 2012; Fruht, in press). Given the spiritual component of folk hope, it is worth consideration that mentors might even build folk hope by providing this spiritual support.

The Role of Informal and Off-Campus Mentors

College students report mentors from a spectrum of roles including relatives, coaches, neighbors, and older peers (Liang, Spencer, Brogan, & Corral, 2008). However, recent studies point to the lack of research on the role of informal mentors at the college level (Coles & Blacknail, 2011; Linnehan, 2003). Preliminary evidence shows that informal mentoring

relationships may provide the types of support Nora and Crisp (2007) ascribe to mentors (Fruht, in press), suggesting that researchers may be missing an important source of mentoring by disregarding these individuals. Conversely, it is possible that students who seek support only from an informal or off-campus mentor are missing out on key skills to success because while informal mentors may be equipped to provide emotional support, they may not have the experience to scaffold problem-solving and goal setting, or to provide beneficial academic advice. Mentors who did not attend college themselves may not have the experience to provide academic support and subject-matter expertise or role modeling hopeful academic behaviors, thus students may miss out on critical skill-building. However, because past studies have looked almost exclusively at professors, who are likely to hold a master's degree or higher, researchers have failed to consider the role of mentor's educational attainment on student outcomes.

Developmental Networks

This narrow operationalization of mentoring in past research demonstrates gap in the current college student mentoring literature. Therefore, support and role modeling from the experienced caring adults in the lives of college students, both formally and informally, on campus and off, should be investigated as forms of mentoring. A potential framework to address this gap exists in the recent shift in the career mentoring literature from looking at one-on-one developmental relationships to a view of developmental networks (Higgins & Kram, 2001). This perspective argues that individuals may seek multiple supportive, experienced individuals who provide both complementary and overlapping forms of support and guidance. For instance, a developing professional may receive concrete job related training from a supervisor, information about workplace norms from a step-ahead peer, and emotional support from a spouse.

Nearly two decades of research now support the idea that developmental network size, or the number of people in a network, predicts a set of positive subjective and objective work outcomes for developing professionals (Baugh & Scandura, 1999; Higgins, 2000; Van Emmerik, 2004). Moreover, network breadth, or the diversity of roles and organizations from which people in the network come, may be even more important in predicting the benefit of the network (Baker & Lattuca, 2010; Dobrow & Higgins, 2005). This literature highlights the benefit of garnering support through non-work relationships in order to succeed and flourish at work and in life (Murphy & Kram, 2010). Within academic settings, developmental networks have been studied among Master of Business Administration (Chandler & Kram, 2005; Higgins, Dobrow & Chandler, 2008; Murphy & Kram, 2010) and doctoral students (Baker & Lattuca, 2010). However, this perspective may be a useful direction in which to move the college student mentoring literature as it is likely that college students, too, receive support from a variety of sources including faculty, peers, family, and community members.

In terms of the development of grounded hope, being surrounded by a network of developmental relationships may provide a student with multiple role models from which to observe hopeful behavior, as well as multiple sounding boards for discussing and developing goals and pathways. Developmental networks that provide psychosocial support, over time, have been shown to produce more optimistic young professionals (Higgins, Dobrow & Roloff, 2010), suggesting that developmental relationships can impact overall expectancies about the future. Further, it should be considered that while some network members may be able to model and encourage folk hope, others may be well suited to build from that foundation to foster grounded hope. Thus, in looking at the transmission of both folk and grounded hope through developmental relationships, it may be useful to have multiple supporters simultaneously.

Mentoring of Community College Students

One specific population of college students who may be especially well positioned to receive support from a variety of sources is the community college student population. Because these students are more likely to attend school part-time and are more likely to live with their parents or relatives (National Center for Education Statistics, 2007), they may have pre-existing networks of community or familial support on which to draw. However, because they are also more likely to be first-generation college goers (National Center for Education Statistics, 2007), it is possible that those supporters may not know how to help them navigate the unique problems of the college transition. Additionally, the focus on general education and the role of guidance counselors rather than field-specific academic advisors at the community college level make it seemingly less likely that a community college student would have a formal faculty mentor. Thus, the problem created by looking exclusively at formal, on-campus relationships may be even greater in this population.

Because mentoring has been demonstrated to aid in student retention at the four-year college level and community college students are at higher risk for dropout than four-year college students (National Center for Education Statistics, 2010), it is especially critical to understand the mentoring relationships in the community college population. However, no large-scale studies have been published describing the incidence of formal and informal mentoring of community college students. Not only are community college students in need of additional support to encourage their persistence, but they also face different challenges than many four-year students. In addition to being more likely to be first-generation students and being more likely to attend school part-time, community college campuses have been argued to lack the sense of connection and community which Tinto (1993) argues is a critical contributor to student

retention (Karp, Hughes, & O’Gara, 2010; Mutter, 1992). Consequently, positive validating relationships with faculty members may be an understudied yet critical contributor to retention (Barnett, 2011) as they may help provide that sense of connection to campus.

As well as providing connection to campus, mentors at this level may be beneficial for lower achieving students because such mentors may be able to help students build the grounded hope that they did not have in place to successfully navigate the four-year college application process. This echoes the suggestions of hope researchers who argue that college counselors can use academic planning as an opportunity to discuss goal setting and pathways building (Snyder, Feldman et al., 2002) and that first generation students may be particularly benefitted by this type of training (Williams & Butler, 2010). Students who arrive at community college with the desire to be successful have the folk hope that is a critical prerequisite to success, nurtured by a parent or other supportive adult leading up to the college transition. But, they may lack the grounded hope (i.e., the goal setting skills, volition, and ability to develop pathways) that they need to truly be successful. Mentors at the college level should help scaffold the development of these skills, which again brings to light the importance of studying informal, off-campus relationships to ensure students who rely on these relationships are being adequately supported. Thus, understanding the diverse developmental networks of community college students, and the ways that they are supported, is essential. Further, understanding how grounded hope is transmitted successfully through these relationships will be a valuable step in understanding how best to promote the success and retention of students.

Goals of the Present Study

This dissertation addresses gaps in the literature concerning both hope and mentoring that have been identified herein and looks more closely at the ways that hope might be transmitted

through college students' developmental relationships. Using a longitudinal design, the study intends to shed light on both grounded hope (GH) and folk hope (FH) as separate but interdependent characteristics that may be influenced by a mentor or supportive adult as well as the academic outcomes of community college students who are supported in different ways. This comprises five essential questions:

1. Are Folk Hope and Grounded Hope distinct constructs?

Hypothesis 1a. *Components of GH (agency, pathways), global FH (i.e., “being hopeful”), and the specific components of FH (positive future orientation, connection to a higher power) will comprise five distinct factors within the multi-dimensional measure of hope used in this study.* This exploratory hypothesis aims to better understand the relationship between different dimensions of hope measured by Snyder and colleagues (1991; agency and pathways), Herth (1991; connection to a higher power), and Lopez (2013; positive future orientation), as well as previously unmeasured dimensions.

Hypothesis 1b. *Both components of GH (agency, pathways) will be significantly correlated with global FH (i.e., “being hopeful”) and specific facets of FH (positive future orientation, connection with a higher power).* The model of the relationship between FH and GH proposed by this dissertation (Figure 2) would suggest that these variables are overlapping and thus should all be correlated. Therefore, items from Herth and Lopez's scales capturing dimensions of folk hope (not agency or pathways) should correlate with Snyder's Trait Hope Scale.

Hypothesis 1c. *GH (agency, pathways) and specific facets of FH (positive future orientation, connection with a higher power) will each account for unique variance in global FH.* This hypothesis is exploratory in nature, but it begins to test the proposed model of FH as a

superordinate construct that includes both Snyder's wills and ways, as well as other dimensions of hope.

2. Do network and mentor characteristics predict Folk Hope and Grounded Hope?

Hypothesis 2a. *Controlling for demographic characteristics, GH and FH at the start of the semester will be associated with size of developmental network at the start of the semester.*

Just as having more network members promotes positive professional development (Baugh & Scandura, 1999; Higgins, 2000; Van Emmerik, 2004), it may also provide more opportunities for the development and transmission of hope.

Hypothesis 2b. *Controlling for demographic characteristics and network size, GH and FH at the start of the semester will be associated with breadth of developmental network at the start of the semester.* A broad network is predictive of positive professional outcomes (Baker & Lattuca, 2010; Dobrow & Higgins, 2005) and a broad network may provide multiple points of view when discussing goal setting and problem solving, as well as multiple models of folk hope.

Hypothesis 2c. *There will be a significant positive relationship between student and mentor GH, as well as student and mentor FH at the start of the semester.* Grounded hope can be transmitted through role modeling (McDermott & Hastings, 1999) as well as intentional training on the part of academic counselors (Pedrotti et al., 2008; Snyder, Feldman et al., 2002). Thus, it is predicted that in mentoring relationships, mentors share their hope with their protégés.

3. Are Folk Hope and Grounded Hope transmitted through the support provided by a mentor?

Hypothesis 3a. *The 12 support types assessed will be inter-correlated and will show an underlying factor structure representing distinct types of support.* Support items were selected to capture the dimensions proposed by Nora and Crisp's (2007) model (i.e., emotional support,

career exploration and goal setting support, academic advancement and subject matter support, and role modeling), so it is possible that the same factors will emerge as in Crisp's (2009) scale development. Although it was measured as a type of support, financial support is not expected to fall into any of these factors, as it is not a social resource and does not fit into the framework of mentoring.

Hypothesis 3b. *Students who received more "Career and Goal Setting Support" at the start of semester will report more agency (GH) at the end of semester.* Many grounded hope building interventions focus on teaching goal setting by working with an individual to set goals for his or her life, and as suggested by Snyder, Feldman et al. (2002), academic planning may be an ideal opportunity to transmit goal setting skills to students.

Hypothesis 3c. *The relationship between "Career and Goal Setting Support" at the start of semester and agency (GH) at the end of the semester will be moderated by the level of education of the mentor.* Mentors with higher levels of education are expected to provide more effective support for these skills in an academic context given their experiences as college students and understanding of the types of goals that will be most beneficial to college students.

Hypothesis 3d. *Students who received more "Academic and Problem Solving Support" at the start of semester will report higher pathways scores (GH) at the end of the semester.* When mentors provide support for academic progress and problem solving, they have the opportunity to model problem solving skills and help their students become better at developing pathways, just as theoretical papers have suggested that teachers and counselors should aim to do (e.g., Williams & Butler, 2010),

Hypothesis 3e. *The relationship between “Academic and Problem Solving Support” at the start of semester and pathways (GH) at the end of the semester will be moderated by the level of education of the mentor. Mentors with higher levels of education are expected to provide more effective problem solving strategies in the academic context, given their experiences as college students.*

Hypothesis 3f. *Students who received more spiritual support at the start of semester will report more FH at the end of semester. Given the spiritual dimension (Elliot, 2005) and faith-based definitions of FH (Keathley, 2005), it is expected that individuals who are guided by their mentors to connect with a higher power will report more folk hope as a result of that connection.*

Hypothesis 3g. *The relationship between spiritual support at the start of semester and FH at the end of the semester will not be moderated by the level of education of the mentor. Academic skills and college experience should not be necessary for developing or passing FH through spiritual beliefs.*

4. Do Folk Hope and Grounded Hope predict distinct student outcomes?

Hypothesis 4a. *Student FH at the start of the semester will predict academic success at the end of the semester and GH at the start of the semester will mediate this relationship. The relationship between GH and academic success has been well demonstrated by past research (Curry et al., 1997; Day et al., 2010; Gilman et al., 2006; Snyder, Shorey et al., 2002) and should replicate in this dataset. If FH is required in order to have GH, then it would be expected that FH would correlate with academic outcomes as well. However, the skills of GH, not FH beliefs, are expected to be the characteristics driving academic success. This is supported by the well-demonstrated effect of GH on academic outcomes (Snyder, Shorey et al., 2002).*

Hypothesis 4b. *Student GH and FH at the start of the semester will each uniquely predict expected educational attainment at the end of the semester.* The components of GH (agency, pathways) consistently predict academic attainment (Snyder, Shorey et al., 2002). Additionally, FH expectations of a better future should be reflected in expectations of academic attainment.

Hypothesis 4c. *Student GH and FH at the start of the semester will each uniquely predict connection to campus at the end of the semester.* Components of GH (wills, ways) are thought to encourage interpersonal connection (Snyder, Cheavens & Sympson, 1997) and FH beliefs, although not well studied, may both encourage connection to others and be nurtured by connection with others.

5. Do network characteristics and mentor support effect student outcomes? Do Folk Hope and Grounded Hope mediate these relationships?

Hypothesis 5a. *Network breadth and supports provided by a mentor at the start of the semester will each uniquely predict student connection to campus at the end of the semester.* Students with supporters on campus, in addition to off-campus supporters, should feel more connected to their campus community as a result of those connections, as was suggested by Barnett (2011). In addition, psychosocial support from an effective mentor should promote the interpersonal skills necessary for connecting with a campus community, and more pragmatic support from a mentor should lead the student to understand how essential connection is to success.

Hypothesis 5b. *Network breadth at the start of the semester will predict academic success at the end of the semester and student GH will partially mediate this relationship.*

Past studies of developmental networks have demonstrated the benefit of developmental networks in predicting student success at the graduate level (Chandler & Kram, 2005; Higgins et al., 2008; Murphy & Kram, 2010) and these findings are expected to replicate in this sample. If network breadth is found in prior analyses to predict better transmission of GH (Hypothesis 2b), then it is possible that through their support, mentors help students build grounded hope which in turn promotes academic success (Curry et al., 1997; Day et al., 2010; Gilman et al., 2006; Snyder, Shorey et al., 2002).

Hypothesis 5c. *Mean overall support provided by a mentor at the start of the semester will predict academic success at the end of the semester and student GH will partially mediate this relationship.* More support in all domains of mentoring should be more beneficial to the student (cf. Crisp & Cruz, 2009), which should translate to academic success. If support is found in prior analyses to predict better transmission of GH as stated in hypotheses 3b and 3d, the academic benefit of mentor support may be partly explained by the effect of GH on academic success (Curry et al., 1997; Day et al., 2010; Gilman et al., 2006; Snyder, Shorey et al., 2002).

CHAPTER TWO: METHODOLOGY AND MEASURES

This longitudinal study followed two groups of community college students across the course of a college semester. In the first weeks of the term, students completed a brief paper and pencil survey, and one of the two groups was asked to pass along a survey to a mentor they nominated. At the end of the term, students responded to a similar survey so that their results could be compared across the semester.

Participants

Participants were 190 California community college students, recruited from mathematics, statistics, and music courses during the first weeks of the semester. The majority of the sample ($n = 122$) was recruited at the start of the spring semester, and a smaller subsample ($n = 68$) was recruited at the start of the fall semester. Students ranged from 18 to 43 years old ($M = 21.12$, $SD = 4.77$); 83.7% were 23 years old or younger. The sample included 113 females (59.5%). Participants identified as Hispanic (46.8%), Caucasian (28.5%), Asian (5.8%), African-American (2.1%), or of mixed race or another ethnicity (16.8%). This is representative of the diversity of the community college population in the region. Both samples of students were also surveyed at the end of the semester during which they were recruited. The fall and spring samples suffered 48% and 35% attrition, respectively, over the semester. Responses from the end of the fall semester totaled 62, and responses from the end of the spring semester totaled 45. Students who had dropped the course where data was collected could not be surveyed in the classroom. These students were contacted for follow-up by phone and text message but just 3 responded. Thus, sample attrition in part represents the high course drop/withdrawal rate at community colleges.

To recruit a sample of mentors, students in the fall sample were asked to share a survey with the person they nominated as a primary supporter. Just 26 supporters (21.5%) completed and returned these surveys. These individuals ranged in age from 36 to 63 ($M = 48.67$, $SD = 7.45$). The mentor sample was made up of 20 females and five males and one individual who declined to report gender; 48% were Caucasian, 36% were Hispanic, and 16% identified as being of mixed or another race. Nominated mentors consisted primarily of students' parents (24 or 92.3%).

Measures

Students completed surveys at the beginning and end of the academic term. The first survey included questions about developmental relationships, hope, connection to campus, and basic demographic information. The second survey repeated measures about developmental relationships, hope, and connection and also included measures of academic success. The key differences between the surveys in the spring and fall semester samples were that the fall sample responded to a measure about their developmental networks as well as completing an additional series of questions about folk hope, which the spring sample did not complete. Nominated mentors completed one brief survey in the beginning of the semester that included measures of hope, support provided to the student, and basic demographic information. For complete measures see Appendices A through E.

Developmental Network Nominations

Utilizing the nomination procedure common to developmental network research developed by Higgins (2000), students were asked to think of the people who had most influenced them and helped them to be successful in college and list these individuals. After this

process, students circled the name of the one more-experienced individual from the list who had the most significant impact. Only students in the fall sample completed this procedure.

In order to understand the primary supporters of the spring sample, students instead were asked to think of “...*an individual in your life who has more experience than you and supports you and guides you as an adult and college student. This person is someone you look up to, you trust, and you feel like he/she cares about you.*” Students selected the individual who best fit that description from among 21 closed-ended options including: father, mother, step-parent, sibling, cousin, aunt/uncle, grandparent, godparent, neighbor, family friend, friend’s parent, friend, significant other/spouse, high school teacher, athletic coach, religious leader, professor, academic advisor, personal counselor/therapist, or other. Options were presented in this fixed order, which may have biased responses towards earlier options on the list. This item was adapted from past studies of high school students’ natural mentoring relationships (Rhodes, Contreras, & Mangelsdorf, 1994; Sanchez et al., 2008), and resembles language used to identify members of the developmental networks of graduate students (i.e., individuals who “*take an active interest in and concerted action to advance your career...they may be people with whom you work or have worked, friends, or family members...and they may assist you with personal as well as professional development*”; Higgins et al., 2008, p. 212).

Open-ended responses from the fall sample were coded into these 21 categories and the circled individual was treated as the “primary supporter” of students in this sample. Network size was calculated by counting the number of valid responses entered on the lines provided or listed in extra space. Invalid responses, which were not counted towards the total network size included: myself, God, and my pet. All other responses provided were counted towards network size. Plural responses (e.g., my parents) were counted as two network members.

Network density measures the number of unique categories of supporters in a student's network. Each of the following categories of connections was counted separately: parents, other relatives, friends/spouses/roommates, parents of friends/significant others, college professors/teachers, K-12 teachers, athletic coaches, music/art teachers, connections through church/religious leaders, neighbors, friends of family/parents, coworkers/bosses. Network density was then calculated by counting the number of different categories represented in each group. Two independent coders coded for network density and established inter-rater reliability in the first iteration of coding ($r = .96, p < .001$).

Parents made up 58.5% of nominated "primary supporters" at the start of the semester. Other family members including siblings, aunts, uncles, cousins and grandparents made up an additional 14.6%. Friends, parent's friends, significant others, in-laws, and friend's families comprised 17.7% of the sample. Just 4.3% of mentors were from the community (e.g., bosses, clergy, clinicians, coaches) and 4.9% were academic mentors (e.g., former teachers, professors, advisors). Students were asked to identify if the nominated individual worked or studied on the same college campus that they attended. Just 6.4% worked on campus and 6.9% studied on campus. Nomination rates were comparable at the end of the semester and comprised 53.8% parents, 18.7% other relatives, 17.8% friends/significant others, 6.5% community members, and 3.7% academic mentors. Categories of responses regarding primary supporter were nearly identical in the fall and spring samples, suggesting a minimal effect of the method of primary supporter nomination. The difference in primary nomination type varied by no more than 3% for any type (e.g., the spring sample nominated 56% parents, the fall sample nominated 59% parents).

Support Received and Provided

Students reported the level of support they felt the nominated individual provided in each of 12 ways, including: (a) *is always there for me*; (b) *supports me financially*; (c) *is someone I can talk to openly about personal issues*; (d) *supports my goal-setting*; (e) *gives me good suggestions on how to be a better student*; (f) *helps me come up with ways to solve a problem*; (g) *supports me in figuring out what I value*; (h) *supports my career exploration*; (i) *helps me examine my degree options*; (j) *supports me spiritually*; (k) *recognizes my accomplishments*; and (l) *is a role model to me*. These items were rated on a 5-point scale from 1 (*not at all*) to 5 (*very much*). Mentors also completed this inventory, reporting the extent to which they provide support in each of these 12 ways.

Academic Success

At the beginning of the semester students reported their level of academic achievement in high school, perceived academic progress in relation to their peers, and planned educational attainment. At the end of the term students were asked more specifically about their academic success in the semester coming to a close. These items measured expected overall grades for the semester as well as expectations of successfully completing an English and/or math course. These measures were selected because completion of initial college-level English and math courses is often cited as an indicator of student progress at the community college level (Bailey, Calcagno, Jenkins, Leinbach, & Kienzl, 2006; Goldrick-Rab, 2010).

Multidimensional Measure of Hope

Students in the fall sample completed a 20-item measure of hope at both time points. This measure included the 12-item Trait Hope Scale (Snyder et al., 1991), two items from the Herth Hope Scale (Herth, 1991) intended to capture a dimension of hope surrounding a connection to a

higher power, three items from the Hope Scale adapted by Lopez (2013) intended to capture excitement about the future, and three additional, face-valid items introduced to capture global folk hope (i.e., *I'm pretty hopeful; People say I'm hopeful; Even in bad times I'm hopeful*). In analyses, “folk hope” is operationalized as a composite of these three items measuring global folk hope. Participating mentors also completed this measure. Students in the spring sample completed only the 12-item Trait Hope Scale.

The Trait Hope Scale is made up of two subscales. Four items measure agency, four measure pathways, and four serve as distracters. This scale has demonstrated good internal reliability (alphas from .74 to .85; Feldman & Snyder, 2005; Hellman et al., 2013; Snyder et al., 1991) and good test-retest reliability (mean of .80 across 17 studies; Hellman et al., 2013). Response options for all 20 items were presented on a 5-point Likert-type scale ranging from 1 (*not at all like me*) to 5 (*very much like me*).

Student Connection to Campus

Integration and connection to campus, a critical dimension of student retention (Tinto, 1993), was measured by the 8-item Social Connectedness Scale (Lee & Robbins, 1995) which assesses student belongingness on campus and has demonstrated high internal consistency (Cronbach's $\alpha = .91$) and 2-week test-retest reliability ($r = .96, p < .001$; Lee & Robbins, 1995). It also shows appropriate divergent validity with measures of Social Assurance (Lee & Robbins, 1995), the UCLA Loneliness Scale and the Social Provisions Scale (Lee & Robbins, 2000). Response options for the eight items were presented on a 5-point Likert-type scale ranging from 1 (*not at all like me*) to 5 (*very much like me*).

CHAPTER THREE: ANALYSIS AND RESULTS

The chapter that follows describes the series of analyses conducted to understand the relationship between folk and grounded hope. Exploratory factor analyses are utilized to understand the structure of the relationships between items measuring folk and grounded hope as well as the structure of the relationships between items that assess support from mentors. A series of hierarchical linear regressions aim to highlight the different mentor and developmental network characteristics that predict grounded and folk hope. Further hierarchical linear regressions investigate the extent to which students' hope scores can predict outcome variables, such as connection to campus and academic aspirations, and the distinct effects of folk and grounded hope in predicting these outcomes. These analyses, in sum, highlight the differences between grounded and folk hope.

In order to maximize the power of analyses given small sample size, missing data were handled using expectation-maximization estimation. Responses were not imputed for items that participants did not have the opportunity to respond to (e.g., folk hope scores were not imputed for the spring sample and end of the semester data was not imputed for non-responders). Thus, sample sizes vary depending on the analyses being conducted¹. See Table 1 for a summary of sample sizes and descriptive statistics and Table 2 for a correlation matrix of key variables used in hypothesis testing. Given the limited sample size, simple models were tested that look at outcome variables independently, rather than more complex latent variable models. This was done to maximize the probability of detecting effects with this small sample.

¹ None of the African American students in the fall sample persisted in the study to the second data collection. Thus, analyses using only the longitudinal fall sample do not have a comparison category for African Americans included in statistical models.

Table 1.

Sample Sizes for Various Analyses

Sample	<i>N</i>	<i>M_{age}</i>	<i>% female</i>
Grounded hope (Start of semester)	190	21.12	59.47
Folk hope and grounded hope (Start of Semester)	122	19.35	61.67
Grounded hope (Longitudinal)	109	21.85	51.40
Folk hope and grounded hope (Longitudinal)	64	20.05	46.77

1. Are Folk Hope and Grounded Hope distinct constructs?

Hypothesis 1a. *Components of GH (agency, pathways), global FH (i.e., “being hopeful”), and the specific components of FH (positive future orientation, connection to a higher power) will comprise five distinct factors within the multi-dimensional measure of hope used in this study.*

Principal axis factoring with direct oblimin rotation with Kaiser normalization was utilized to assess the underlying structure of a 16-item measure of hope. All but six items showed acceptable skewness and kurtosis, and given the relative robustness of the principal axis factoring technique (Gorsuch, 1983), analyses were conducted without transformation. Table 3 provides descriptive statistics for each item. Kaiser-Meyer-Olkin Measure of Sampling Adequacy was .851, and Bartlett’s Test of Sphericity was satisfied ($p < .001$) suggesting that factor analysis was appropriate with these data. The item “*Even in bad times, I’m hopeful*” failed to show communality greater than .30 and thus was omitted from the final analysis.

Table 2.

Correlations Between Key Variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Agency	-	.558***	.578***	.254***	.581***	.424***	.495***	.304**	.212**	.305***	.292***	.249**
2. Pathways		-	.486***	.119	.411***	.594***	.390**	.112	.093	.113	.196**	.135
3. Folk Hope			-	.337***	.365**	.351**	.553***	.412**	.193*	.294**	.269**	.188*
4. Connection				-	.161	.022	.162	.497***	.145*	.148*	.185*	.041
5. Agency [†]					-	.621***	.741***	.176	.146	.296**	.257**	.033
6. Pathways [†]						-	.732***	.129	-.030	.243*	.234*	.066
7. Folk Hope [†]							-	.227	.007	.418**	.285*	.104
8. Connection [†]								-	.037	.228*	.235*	.105
9. Goal Setting									-	.481***	.548***	.429***
10. Emotional										-	.485***	.489***
11. Academic											-	.373***
12. Role Modeling												-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. [†]Measured at end of the semester; variables 9-12 represent student reports of support provided by primary supporter.

Table 3.

Descriptive Statistics for 16 Hope Items and Composites

	<i>N</i>	<i>M</i>	<i>SD</i>	Skew	Kurtosis
Agency	190	3.98	.634	-.327	-.414
I energetically pursue my goals.	190	4.12	.811	-.767	.556
My past experiences have prepared me well for my future.	190	4.18	.967	-1.053	.418
I've been pretty successful in life.	190	3.81	.894	-.245	-.553
I meet the goals that I set for myself.	190	3.82	.854	-.265	-.348
Pathways	190	3.99	.604	-.156	-.342
I can think of many ways to get out of a jam.	190	4.02	.826	-.599	.199
There are lots of ways around any problem.	190	3.87	.932	-.416	-.366
I can think of many ways to get the things in life that are important to me.	190	4.18	.776	-.597	-.292
Even when others get discouraged, I know I can find a way to solve the problem.	190	3.88	.867	-.303	-.670
Positive Future	122	4.61	.510	-1.238	.687
My future will be better than the present.	122	4.55	.728	-1.413	.887
I have the power to make my future better.	122	4.61	.663	-1.441	.766
I'm excited about at least one thing in my future.	122	4.65	.642	-1.619	1.332
Connection to a Higher Power	121	4.06	.798	-.538	-.834
I have a deep inner strength.	122	4.02	.953	-.557	-.746
I have a faith that gives me comfort.	122	4.10	1.094	-.968	.010
Global Hope	122	4.22	.671	-.589	-.449
People say I'm hopeful.	122	4.18	.900	-.781	-.382
Even in bad times, I'm hopeful.	122	4.12	1.033	-1.028	.260
I'm pretty hopeful.	122	4.37	.763	-.966	.171

On the basis of scree plot and interpretability, a three-factor solution was generated which accounted for 53.32% of the total variance in responses. The first factor accounted for 36.98% of the variance, which was much greater than the percent accounted for by the second and third factors (9.08% and 7.26%, respectively). Overall, the model was difficult to interpret as a result of low factor loadings and many cross loadings. The first factor largely encapsulated goal pursuit and success, or Snyder's agency. The second was characterized by problem solving in challenging situations, or Snyder's pathways. Finally the third factor captured 'being hopeful' and positive expectations about the future. Four items cross-loaded between two factors. Correlations between the three factors were moderate ($r_s = .385 - .438$). Table 4 shows the loadings for this model. This analysis provided partial support for the first hypothesis that agency, pathways, global hope, positive future orientation, and connection with a higher power are distinct factors. That is, global hope did not appear to factor with Snyder's wills and ways items. However, Lopez's items about future orientation appeared to be more closely associated with global folk hope than hypothesized. Also, the connection with a higher power items provided by the Herth scale did not form factor, but rather they shared some variance with the agency dimension of hope.

Although the underlying structure did not map precisely onto the sources of these items, we must consider that this analysis was conducted with a small sample and may not be generalizable or replicate with a larger sample. Thus, as a first attempt to better understand the distinction between folk and grounded hope without the possibility of introducing error from this factor analysis, items were organized on their theoretical basis rather than their factor loading for the remaining analyses. Given Snyder's well-validated scale, I continued to use its

Table 4.

Principal Axis Three-Factor Solution Pattern Matrix, N = 122

Item	Factor 1	Factor 2	Factor 3
I have a faith that gives me comfort.	.604		
I meet the goals that I set for myself.	.547		
I've been pretty successful in life	.541		
I energetically pursue my goals.	.443		
My past experiences have prepared me well for my future.	.416		-.328
I have the power to make my future better.	.336		
There are lots of ways around any problem.		.637	
I can think of many ways to get out of a jam.		.507	
Even when others get discouraged, I know I can find a way to solve the problem.		.443	
I have a deep inner strength.		.409	
I can think of many ways to get the things in life that are important to me.	.334	.407	
I'm excited about at least one thing in my future.			-.703
I'm pretty hopeful.	.435		-.502
My future will be better than the present.		.416	-.433
People say I'm hopeful.			-.372

Note. Loadings of < .300 are not shown.

structure to measure grounded hope, and items including the term “hopeful” continued to be used to measure a face valid, global hopefulness.

Hypothesis 1b. *Both components of GH (agency, pathways) will be significantly correlated with global FH (i.e., “being hopeful”) and specific facets of FH (positive future orientation, connection with a higher power).*

Composite scores were created for each of the five dimensions of hope measured (i.e., agency, pathways, global hope, connection to a higher power, and positive future orientation). Composites created of three to four items had low Cronbach’s alphas ranging from .591 to .687. The two “connection with a higher power” items correlated at just .348. Pearson correlations of the five composites are presented in Table 5 ($r = .412 - .584, ps < .001$).

Hypothesis 1c. *The combination of GH (agency, pathways) and specific facets of FH (positive future orientation, connection with a higher power) will each account for unique variance in global FH.*

To test this hypothesis a series of hierarchical regression models examined the variance in global folk hope predicted by different measures of hope (Table 6). In the initial model, mean agency and pathways scores (grounded hope) were entered alone into the model to predict global folk hope. Grounded hope was a significant predictor of folk hope, $R^2 = .364, F(2, 119) = 34.010, p < .001$.

In the second model grounded hope scores were entered on the first step, and one of Lopez’s items about positive future orientation (*My future will be better than the present*) was entered on a second step. This item significantly improved the model, $R^2 = .388, \Delta R^2 = .024$,

Table 5.

Correlations Between Various Measured Dimensions of Hope

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Global Folk Hope	-	.547***	.528***	.578***	.486***	.407	.226	.177	-.026	.105
2. Positive Future		-	.412***	.521***	.546***	.161	.570**	.381	.205	.339
3. Higher Power			-	.584***	.424***	.297	.107	.315	-.074	.028
4. Agency				-	.558***	.153	.062	.050	-.043	.066
5. Pathways					-	.351	.459*	.169	.262	.495*
6. Mentor Global Folk Hope						-	.549**	.509*	.334	.392
7. Mentor Positive Future							-	.331	.569**	.697***
8. Mentor Higher Power								-	.001	.155
9. Mentor Agency									-	.610**
10. Mentor Pathways										-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. $N_{student} = 122$, $N_{mentor} = 22$.

Global folk hope Cronbach's $\alpha = .591$, Positive future $\alpha = .615$, Higher power $\alpha = .348$, Agency $\alpha = .669$, Pathways $\alpha = .687$

“Global Folk Hope” is a composite of the items “I'm pretty hopeful,” “People say I'm hopeful” and “Even in bad times I'm hopeful.”

Table 6.

Hierarchical Regression Predicting Global Hope from Hope Measures, N = 122

Step	Predictor	ΔR^2	ΔF	<i>B</i>	β
1		.364	34.010***	1.384	
	Agency			.473	.447***
	Pathways			.241	.217*
2		.024	4.715*	1.036	
	Agency			.462	.437***
	Pathways			.147	.132
	My future will be better than the present.			.167	.181*
3		.034	6.916**	.537	
	Agency			.406	.384***
	Pathways			.130	.117
	My future will be better than the present.			.116	.126
	I'm excited about at least one thing in my future.			.219	.210**
4		.006	1.212	.375	
	Agency			.374	.354***
	Pathways			.126	.113
	My future will be better than the present.			.104	.113
	I'm excited about at least one thing in my future.			.207	.198*
	I have the power to make my future better.			.091	.090
5		.028	5.909*	.486	
	Agency			.319	.302**
	Pathways			.069	.062
	My future will be better than the present.			.062	.068
	I'm excited about at least one thing in my future.			.223	.213**
	I have the power to make my future better.			.058	.057
	I have a deep inner strength.			.151	.214**
6		.015	3.184	.350	
	Agency			.255	.241*
	Pathways			.087	.078
	My future will be better than the present.			.074	.081
	I'm excited about at least one thing in my future.			.223	.214**
	I have the power to make my future better.			.046	.046
	I have a deep inner strength.			.145	.206*
	I have a faith that gives me comfort.			.083	.135

Note. Cumulative $R^2 = .471$; Adjusted $R^2 = .439$

* $p < .05$, ** $p < .01$, *** $p < .001$.

“Folk hope” is a composite of the items “I’m pretty hopeful,” “People say I’m hopeful” and “Even in bad times I’m hopeful.”

$\Delta F(1, 118) = 4.715, p = .032$. In a third step, another of Lopez's items was added (*I'm excited about at least one thing in my future*). This item significantly improved the model, $R^2 = .422$, $\Delta R^2 = .034$, $\Delta F(1, 117) = 6.916, p = .010$. Finally, a third item from Lopez's scale was entered on a fourth step (*I have the power to make my future better*), and failed to significantly improve the model, $R^2 = .428$, $\Delta R^2 = .006$, $\Delta F(1, 116) = 1.212, p = .273$. Together, these results indicated that Lopez's items capture variance in folk hope beyond agency and pathways.

In the third model, grounded hope scores were again entered on the first step, Lopez's three items about positive future orientation were entered on a second step, and one of Herth's items capturing a connection with a higher power (*I have a deep inner strength*) was entered on a third step to predict folk hope. This item significantly improved the model $R^2 = .456$, $\Delta R^2 = .028$, $\Delta F(1, 115) = 5.909, p = .017$. When a final item from Herth's scale (*I have a faith that gives me comfort*) was added on a fourth step, it failed to significantly improve the model, $R^2 = .471$, $\Delta R^2 = .015$, $\Delta F(1, 114) = 3.184, p = .077$. In total, these results showed a substantial improvement (total $\Delta R^2 = .107$) in our ability to predict respondents' sense of folk hope by including the dimension of positive future orientation as well as the component of connection with a higher power (measured by the item *I have a deep inner strength*). Given that these items came from pre-existing scales and had been shown to load together in factor analyses some items were expected to share variance with one another. Tolerance for items in the first five steps of this model were between .50 and .80. In the final step, tolerance for the agency subscale dropped to .464, which is still in the acceptable range (Field, 2009).

Support of Hypothesis 1c suggested that while agency and pathways are dimensions of folk hope, they do not adequately capture the entirety of folk hope. Furthermore, agency appeared to be a much more robust predictor of folk hope than pathways thinking. For the

duration of these analyses, folk hope was measured using the three-item, face-valid measure of global folk hope.

2. Do network and mentor characteristics predict Folk Hope and Grounded Hope?

The second set of hypotheses concerned the characteristics of the developmental networks and mentors of college students and the relevance of these characteristics to grounded and folk hope. Overall, network size ranged from one to twelve people, with a median size of five members. Network breadth ranged from one to six types of members, with a median breadth of three categories from which support was drawn.

Network composition varied by student. A parent was included in 81.4% of networks and at least one non-parent family member was included in 72.5% of networks. Siblings and grandparents were the most commonly nominated relatives. Just 5 students (4.2%) did not include parents or family members. Friends, including significant others, roommates, family friends, and friends' parents, were nominated as network members by 59.2% of students. Academic supporters including former teachers, professors, and academic/guidance counselors were nominated by 42.5% of students. Finally, just 30.0% of students nominated a community member as a mentor. The most common nominees in this category included coaches and religious leaders.

Hypothesis 2a. *Controlling for demographic characteristics, GH and FH at the start of the semester will be associated with size of developmental network at the start of the semester.*

Hypothesis 2b. *Controlling for demographic characteristics and network size, GH and FH at the start of the semester will be associated with breadth of developmental network at the start of the semester.*

Three hierarchical linear regressions were calculated to look at the ability of network size and breadth to predict agency, pathways, and folk hope. In the first step, demographic variables were entered. To be most comparable with past studies in this, and all other analyses including race as a demographic variable, Caucasian was used as the reference category. In the second, network size was entered. The third and final step included network breadth. No model was significant for agency $F(8, 113) = .926, p = .498$, pathways $F(8, 113) = .837, p = .572$, or folk hope, $F(8, 113) = .832, p = .577$. Thus, hypotheses 2a and 2b were not supported by the data. See Table 7 for a summary of these findings.

Hypothesis 2c. *There will be a significant positive relationship between student and mentor GH, as well as student and mentor FH, at the start of the semester.*

Hypothesis 2c was tested using Pearson correlations to look at the relationship between mentor and student agency, pathways, and folk hope at the start of the semester. In order to maximize sample size in these analyses, cases were excluded pairwise. As expected agency, pathways, and folk hope were intercorrelated; see Table 5 for complete correlations. In partial support of Hypothesis 2c, student pathways scores were significantly related to mentor pathways scores ($r = .495, p = .019, n = 22$) and student folk hope scores were marginally related to mentor folk hope scores ($r = .407, p = .060, n = 22$). However, there was no significant relationship between student and mentor agency ($r = -.043, p = .849, n = 22$).

3. Are Folk Hope and Grounded Hope transmitted through the support provided by a mentor?

Hypothesis 3a. *The 12 support types assessed will be inter-correlated and will show an underlying factor structure representing distinct types of support.*

Table 7.

Hierarchical Linear Regressions Predicting Hope from Network Characteristics, N = 122

Step		Agency			Pathways			Folk hope			
		ΔR^2	<i>B</i>	β	ΔR^2	<i>B</i>	β	ΔR^2	<i>B</i>	β	
1	(Constant)	.059	3.830		.050	4.109		.043	3.835		
	Gender		-.070	-.055		-.139	-.115		.062	.046	
	Age		.007	.045		-.004	-.028		.008	.048	
	Asian		-.025	-.008		.253	.083		.091	.027	
	African American		.350	.050		-.640	-.096		.613	.083	
	Hispanic		.334	.252		.184	.146		.292	.209*	
	Other Ethnicity		.128	.078		.224	.143		.107	.061	
	2	(Constant)	.001	3.811		.006	4.165		.012	3.746	
	Gender		-.075	-.059		-.124	-.103		.039	.029	
	Age		.007	.044		-.004	-.024		.007	.044	
	Asian		-.020	-.006		.239	.079		.113	.034	
	African American		.327	.047		-.575	-.086		.510	.069	
	Hispanic		.332	.251*		.190	.151		.282	.202*	
	Other Ethnicity		.129	.079		.219	.140		.115	.066	
	Network Size		.006	.026		-.018	-.077		.029	.111	
3	(Constant)	.001	3.824		<.001	4.164		.001	3.754		
		Gender		-.073	-.057		-.124	-.103		.040	.030
		Age		.008	.050		-.004	-.024		.008	.047
		Asian		-.032	-.010		.239	.079		.105	.031
		African American		.286	.041		-.574	-.086		.484	.065
		Hispanic		.328	.248*		.190	.151		.280	.200*
		Other Ethnicity		.140	.085		.219	.140		.121	.070
		Network Size		.020	.081		-.019	-.080		.037	.144
		Network Breadth		-.034	-.070		.002	.003		-.022	-.042

Note. Agency: Cumulative $R^2 = .061$; Adjusted $R^2 = -.005$

Pathways: Cumulative $R^2 = .056$; Adjusted $R^2 = -.011$

Folk: Cumulative $R^2 = .056$; Adjusted $R^2 = -.011$

“Folk hope” is a composite of the items “I’m pretty hopeful,” “People say I’m hopeful” and “Even in bad times I’m hopeful.”

* $p < .05$.

To assess the underlying structure of the 12-item measure of mentor support completed by students, principal axis factoring with direct oblimin rotation with Kaiser normalization was utilized. Although the majority of items violated the assumption of normalcy as a result of negative skew, analyses were conducted without transformation. Kaiser-Meyer-Olkin Measure of Sampling Adequacy was .860, and Bartlett's Test of Sphericity was satisfied ($p < .001$) suggesting that factor analysis was appropriate with this sample. Financial support was not expected to fall into any of these factors, as it is not a social resource and does not fit into the framework of mentoring. As expected, the item "*supports me financially*" did not share adequate variance with the other items, with a communality of .199, and thus was excluded from the analysis. The final analysis included just the 11 items measuring dimensions of mentoring and non-financial support.

A four-factor solution was created on the basis of the scree plot and interpretability. This solution accounted for 71.48% of the total variance in responses. The first factor, which accounted for 41.84% of the variance, centered on problem solving and academic advice. The second factor comprised the items "*is a role model for me*" and "*recognizes my accomplishments,*" and accounted for 12.89%. The third factor, which was made up of dimensions of psychosocial support, accounted for 9.31% of the variance. Finally, the fourth factor included the dimensions of goal setting and career exploration and accounted for 7.44% of the variance. The item "*is always there for me*" cross-loaded on the psychosocial and role modeling factors. Correlations between the four factors were small to moderate ($r = .197 - .504$). Table 8 shows loadings for this factor analysis.

Given the small sample size in this analysis, findings should be considered with caution. However, this factor structure does provide some preliminary evidence for future analyses with a

Table 8.

Principal Axis Four-Factor Solution Pattern Matrix for Support, N = 122

Item	Factor 1	Factor 2	Factor 3	Factor 4
Helps me come up with ways to solve a problem	.771		-.321	
Gives me good suggestions on how to be a better student	.566			
Helps me examine my degree options	.561			
Recognizes my accomplishments		.687		
Is a role model to me		.683		
Supports me spiritually			-.712	
Is someone I can talk to about personal issues			-.612	
Supports me in figuring out what I value			-.541	
Is always there for me		.310	-.440	
Supports my career exploration				.645
Supports my goal setting				.558

Note. Loadings of < .300 are not shown.

Table 9.

Descriptive Statistics for 12 Support Items And Composites, N = 190

	Original				Transformed			
	<i>M</i>	<i>SD</i>	Skew	Kurtosis	<i>M</i>	<i>SD</i>	Skew	Kurtosis
Psychosocial Support	4.35	.752	-1.475	2.101	.638	.372	-.945	.156
Supports me spiritually	4.19	1.198	-1.436	1.040	.578	.553	-.859	-.721
Is someone I can talk to about personal issues	4.24	1.031	-1.350	1.074	.577	.509	-.710	-.866
Supports me in figuring out what I value	4.29	.980	-1.440	1.599	.600	.494	-.750	-.783
Is always there for me	4.67	.643	-1.980	3.433	.796	.373	-1.500	.835
Academic and Problem Solving Support	4.21	.862	-1.240	1.398	.566	.425	-.710	-.454
Helps me come up with ways to solve a problem	4.37	.880	-1.420	1.693	.633	.467	-.771	-.796
Gives me good suggestions on how to be a better student	4.37	.933	-1.484	1.728	.643	.483	-.880	-.679
Helps me examine my degree options	3.88	1.277	-.818	-.564	.422	.586	-.321	-1.445
Role Modeling	4.53	.745	-1.935	3.923	.730	.385	-1.301	.743
Is a role model to me	4.47	.941	-2.002	3.571	.707	.467	-1.308	.442
Recognizes my accomplishments	4.59	.756	-2.277	5.979	.754	.406	-1.385	.838
Goal Setting and Career Support	4.67	.573	-2.116	4.771	.799	.321	-1.534	1.544
Supports my goal setting	4.68	.647	-2.434	7.107	.806	.366	-1.637	1.524
Supports my career exploration	4.65	.702	-2.461	6.791	.791	.383	-1.617	1.567
Supports me financially	3.51	1.645	-.571	-1.344	.312	.679	-.231	-1.634

larger sample. The factor structure established by this exploratory factor analysis was utilized to create composite scores for four different dimensions of support provided, which are used in further analyses. Descriptive statistics for these composites can be found in Table 9. Student reports of support from mentors were heavily negatively skewed, thus prior to the remaining analyses, an inverse natural logarithmic transformation was performed on reflected support variables, then data was again reflected to regain its original directionality. All regression analyses were performed with transformed support scores.

Hypothesis 3b. *Students who received more “Career and Goal Setting Support” at the start of the semester will report more agency (GH) at the end of the semester.*

Hypothesis 3c. *The relationship between “Career and Goal Setting Support” at the start of the semester and agency (GH) at the end of the semester will be moderated by the level of education of the mentor.*

In order to test Hypotheses 3b and c, data from students who responded both at the beginning and end of the semester in either fall or spring were included in the analyses ($n = 109$). These hypotheses were tested using a hierarchical linear regression of longitudinal data to predict student agency at the end of the semester. The first step of the model contained only demographic variables, the second step of the model included start of semester student reports of support for career exploration and goal setting, as well as education level of the mentor. No steps of this model were significant suggesting a main effect of neither this type of support nor mentor’s level of education. The interaction term was not significant. Thus, hypotheses 3b and c were not supported. Table 10 reports these findings.

Hypothesis 3d. *Students who received more “Academic and Problem Solving Support” at the start of the semester will report higher pathways scores (GH) at the end of the semester.*

Hypothesis 3e. *The relationship between “Academic and Problem Solving Support” at the start of the semester and pathways (GH) at the end of the semester will be moderated by the level of education of the mentor.*

Hypotheses 3d and e were tested using a similar hierarchical linear regression to predict student pathways at the end of the semester. Again students with data from both the start and end of the semester were included. The first step of the model contained only demographic variables, the second step of the model included start of semester student reports of support for problem solving and academic advice, as well as education level of the mentor. As shown in Table 11, no steps of this model were significant suggesting a main effect of neither support nor mentor’s level of education. The interaction term was not significant. Therefore, no support was found for hypotheses 3d and e.

Hypothesis 3f. *Students who received more spiritual support at the start of the semester will report more FH at the end of the semester.*

Hypothesis 3g. *The relationship between spiritual support at the start of the semester and FH at the end of the semester will not be moderated by the level of education of the mentor.*

Finally, hypotheses 3f and g were tested using hierarchical linear regression to predict student folk hope at the end of the semester. These analyses could only include students from the fall sample who responded to the folk hope scale and participated at both the beginning and end of the semester ($n = 64$). The first step of the model contained only demographic variables and was non-significant, $F(5, 58) = .644, p = .667$. In the second step when spiritual support (i.e., an individual support score, not a composite) was entered in the model was marginally significant in predicting folk hope, $F(6, 57) = 2.100, p = .067$. Spiritual support was a significant predictor of folk hope ($\beta = .376, t = 2.989, p = .004$), and the variable representing other/mixed ethnicity was

also marginally significant ($\beta = -.261, t = -1.937, p = .058$). This suggests that students who identify as being of multiple ethnic backgrounds, or whose ethnicity fell outside of the categories used, are overall lower in folk hope than others, however given the very small sample size in these analyses, this should be considered cautiously. In the final step, education level of the mentor was added. The overall model was no longer significant, $F(7, 56) = 1.784, p = .109$. Similarly, when the interaction term was included to assess moderation, the model remained non-significant, $F(8, 55) = 1.534, p = .167$, and the interaction term did not contribute to the model. Results provided support for hypotheses 3f and g in that spiritual support was a significant predictor, whereas education was not. See Table 12 for complete results.

4. Do Folk Hope and Grounded Hope predict distinct student outcomes?

Hypothesis 4a. *Student FH at the start of the semester will predict academic success at the end of the semester and GH at the start of the semester will mediate this relationship.*

The proposed mediation was tested using Preacher and Hayes' (2004) bootstrapping method. The SPSS "PROCESS" macro developed by Preacher and Hayes (2008) utilizes a bootstrapping technique to test mediation with fewer assumptions about sampling distribution than a traditional Sobel test approach. To test Hypothesis 4a, this macro conducted 10,000 bootstraps to create a 95% confidence interval ($n = 64$) for the indirect effect of grounded hope through folk hope and academic success.

Due to the lack of variability in response to the item about expected grades in the present semester as measured at the end of the term, expected grades was recoded into a dichotomous variable. Overall, 29.9% of students expected to earn mostly A's, 61.7% expected to earn mostly B's, 7.5% expected to earn mostly C's and just .9% (one case) expected mostly F's. Thus, this variable was dichotomized into students who expected mostly A's (coded as 1) and students who

Table 10.

Hierarchical Linear Regression Predicting Agency Scores from Support, N = 109

Step		ΔR^2	ΔF	<i>B</i>	β
1	(Constant)	.044	.773	4.540	
	Gender			-.144	-.115
	Age			-.021	-.172
	Asian			.186	.082
	African American			.155	.024
	Hispanic			.095	.076
	Other Ethnicity			.070	.044
2	(Constant)	.017	.931	4.130	
	Gender			-.141	-.113
	Age			-.021	-.175
	Asian			.124	.055
	African American			.149	.023
	Hispanic			.045	.036
	Other Ethnicity			.045	.028
	Goal Setting & Career Support			.261	.136
	Mentor Education Level			-.007	-.016
3	(Constant)	.001	.136	4.403	
	Gender			-.144	-.116
	Age			-.022	-.180
	Asian			.112	.050
	African American			.135	.021
	Hispanic			.030	.024
	Other Ethnicity			.032	.020
	Goal Setting & Career Support			.127	.066
	Mentor Education Level			-.042	-.102
	Support X Education			.044	.115

Note. Cumulative $R^2 = .062$; Adjusted $R^2 = -.023$.

Table 11.

Hierarchical Linear Regression Predicting Pathways Scores from Support, N = 109

Step		ΔR^2	ΔF	B	β
1	(Constant)	.030	.525	4.416	
	Gender			-.075	-.058
	Age			-.012	-.094
	Asian			-.101	-.043
	African American			-.148	-.022
	Hispanic			-.004	-.003
	Other Ethnicity			.204	.123
2	(Constant)	.061	3.329*	3.761	
	Gender			-.077	-.060
	Age			-.005	-.038
	Asian			-.177	-.076
	African American			-.060	-.009
	Hispanic			-.037	-.029
	Other Ethnicity			.187	.113
	Academic & Problem Support			.407	.261*
Mentor Education Level			-.037	-.086	
3	(Constant)	< .001	.001	3.748	
	Gender			-.077	-.060
	Age			-.005	-.038
	Asian			-.177	-.076
	African American			-.059	-.009
	Hispanic			-.037	-.029
	Other Ethnicity			.188	.113
	Academic & Problem Support			.415	.266
	Mentor Education Level			-.035	-.082
	Support X Education			-.003	-.008

Note. Cumulative $R^2 = .090$ Adjusted $R^2 = .008$; * $p < .05$.

Table 12.

Hierarchical Linear Regression Predicting Folk Hope Scores from Support, N = 64

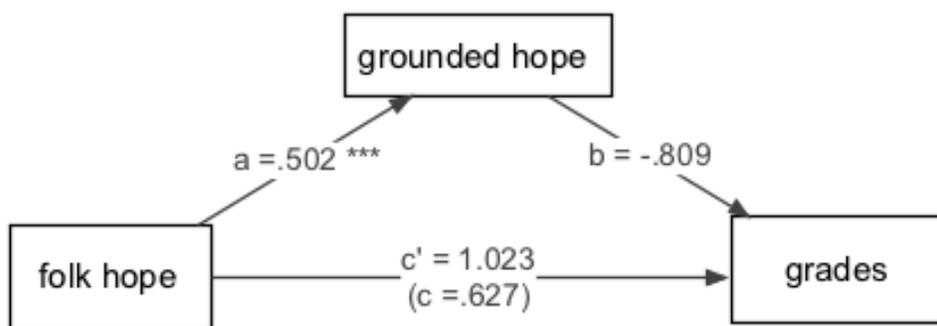
Step		ΔR^2	ΔF	<i>B</i>	β
1	(Constant)	.053	.644	4.172	
	Gender			-.152	-.098
	Age			.003	.019
	Asian			.152	.048
	Hispanic			.073	.045
	Other Ethnicity			-.361	-.183
2	(Constant)	.128	8.935**	3.939	
	Gender			-.168	-.109
	Age			.001	.004
	Asian			-.062	-.020
	Hispanic			.109	.066
	Other Ethnicity			-.515	-.261
	Spiritual Support			.529	.376**
3	(Constant)	.001	.093	3.031	
	Gender			-.171	-.110
	Age			< .001	< .001
	Asian			-.094	-.029
	Hispanic			.089	.055
	Other Ethnicity			-.538	-.273
	Spiritual Support			.528	.375**
	Mentor Education Level			-.021	-.040
4	(Constant)	< .001	.003	4.043	
	Gender			-.170	-.110
	Age			< .001	< .001
	Asian			-.090	-.028
	Hispanic			.090	.055
	Other Ethnicity			-.537	-.272
	Spiritual Support			.509	.361
	Mentor Education Level			-.025	-.047
	Support x Education			.006	.016

Note. Cumulative $R^2 = .182$; Adjusted $R^2 = .080$; ** $p < .01$.

See footnote 1 regarding African American comparison group.

expected B's, C's or F's (coded as 0, comprising 70.6% of the sample). To measure grounded hope, a composite of both agency and pathways scores was utilized. Age, sex, and ethnicity variables were entered as covariates in these models.

The first model to assess mediation looked at the relationship between folk hope and grounded hope (*a*), which was significant ($B = .502, t = 5.887, p < .001$). The logistic regression model that followed, however, indicated that there was no significant relationship between grounded hope and expected student grades (1 = *mostly A's*; 0 = *mostly B's or lower*) when folk hope was included in the model (*b*) or significant indirect effect ($effect = -.406, 95\% LLCI = -1.768, ULCI = .798$). Bootstrapped confidence intervals including zero suggested no significant effect. There was no significant total effect of folk hope on student grades (*c*; $effect = .627, 95\% LLCI = -.386, ULCI = 1.639$). The direct effect controlling for grounded hope as a mediator (*c'*; $effect = 1.023, 95\% LLCI = -.211, ULCI = 2.258$) was larger than the total effect, but remained non-significant suggesting a non-significant suppression effect of grounded hope. Figure 3 provides unstandardized coefficients for this mediation model.



*** $p = .001$

Figure 3. Unstandardized coefficients for grounded hope as a mediator of folk hope and student grades.

Hypothesis 4b. *Student GH and FH at the start of the semester will each uniquely predict expected educational attainment at the end of the semester.*

A binary logistic regression model was utilized to consider the ability of grounded and folk hope to predict expected educational attainment. Again, a binary model was necessary as a result of lack of variability in responses. While 23.9% of the sample expected to earn a Ph.D., 28.4% expected to earn a master's degree, and 42.2% expected to earn a bachelor's degree, just 4.6% expected to earn only an associate's degree, and .9% (one student) did not expect to earn a degree. Therefore outcomes were dichotomized to maximize the potential of detecting an effect of the contribution of hope in this sample. Outcomes were recoded into bachelor's degree or less (coded as 0), and master's or doctoral degree (coded as 1).

Demographic variables were entered in the first step of the model, folk hope was entered in the second, and grounded hope was entered in the third. The first step of the model with control variables was non-significant. The second step including folk hope was significant ($\chi^2 (6) = 21.609, p = .001, Nagelkerke R^2 = .382$), and folk hope was the only significant contributor to this model ($Wald (1) = 10.716, p = .001, odds ratio = 6.627$). The final model including agency and pathways was significant ($\chi^2 (8) = 23.020, p = .003, Nagelkerke R^2 = .402$). Neither agency ($Wald (1) = 1.119, p = .290, odds ratio = 2.085$), nor pathways ($Wald (1) = .004, p = .949, odds ratio = 1.040$) was significant. Folk hope was the key predictor in the final model ($Wald (1) = 5.129, p = .024, odds ratio = 4.428$). This suggests that for every one point increase in folk hope, students were about 4 times more likely to expect a graduate degree. These results provided partial support for Hypothesis 4b. Notably, ethnicity variables for both other/mixed ethnicity and Asian were marginally significant in this model. See Table 13 for more complete information.

Table 13.

Binary Logistic Regression Predicting Educational Attainment from Hope, N = 64

Model	Predictor	<i>B</i>	<i>S.E.</i>	<i>Wald</i>	<i>OD</i>
1	Gender	.299	.539	.308	1.349
	Age	-.083	.069	1.480	.920
	Asian	1.880	1.267	2.203	6.556
	Hispanic	.785	.615	1.631	2.193
	Other Ethnicity	1.110	.755	2.158	3.033
2	Gender	0.686	0.631	1.183	1.986
	Age	-0.090	0.085	1.11	0.914
	Asian	2.279	1.362	2.801	9.77
	Hispanic	0.314	0.710	0.195	1.369
	Other Ethnicity	1.624	0.914	3.158	5.075
	Folk Hope	1.891	0.578	10.716**	6.627
3	Gender	0.895	0.678	1.741	2.446
	Age	-0.100	0.084	1.434	0.905
	Asian	2.282	1.363	2.803	9.793
	Hispanic	0.336	0.718	0.219	1.399
	Other Ethnicity	1.823	0.977	3.483	6.189
	Folk Hope	1.488	0.657	5.129*	4.428
	Agency	0.735	0.695	1.119	2.085
	Pathways	0.039	0.613	0.004	1.040

Note. Nagelkerke $R^2 = .403$; * $p < .05$, ** $p < .01$.

“Folk Hope” is a composite of the items “I’m pretty hopeful,” “People say I’m hopeful” and “Even in bad times I’m hopeful.”

Hypothesis 4c. *Student GH and FH at the start of the semester will each uniquely predict connection to campus at the end of the semester.*

To test the final hypothesis about the effect of grounded and folk hope in predicting factors related to college retention, a hierarchical linear regression was conducted to predict students' perceived connection to campus at the end of the semester. Demographic variables were entered in the first step, start of semester folk hope in the second, and start of semester grounded hope in the third. The first step of the model was non-significant. The second step, including folk hope, was significant ($F(6, 57) = 2.998, p = .013$) and demonstrated the effect of folk hope in predicting connection ($\beta = .379, t = 3.156, p = .003$). As shown in Table 14, the final model accounted for about 25% of the variance in connection to campus ($F(8, 55) = 2.286, p = .034$), but did not significantly improve from the second step. Again, agency ($\beta = .120, t = .705, p = .484$) and pathways ($\beta = .021, t = .138, p = .891$) did not make a significant contribution to the model, but folk hope was a marginally significant predictor of student connection ($\beta = .298, t = 1.912, p = .061$). Again, the variable representing other or multiple ethnicities was marginally significant in the final model such that students who identified outside of the largest ethnic groups, or who identified as multi-ethnic, felt slightly less connected to their campus than other students ($\beta = -.230, t = -1.769, p = .082$) in this small sample. This analysis provided only partial support for Hypothesis 4c.

5. Do network characteristics and mentor support predict student outcomes? Do Grounded Hope and Folk Hope mediate these relationships?

Hypothesis 5a. *Network breadth and supports provided by a mentor at the start of the semester will each uniquely predict student connection to campus at the end of the semester.*

In a hierarchical linear regression predicting end of semester connection to campus,

Table 14.

Hierarchical Linear Regression Predicting Connection to Campus from Hope, N = 64

Step	Predictor	ΔR^2	ΔF	<i>B</i>	β
1	(Constant)	.107	1.390	3.656	
	Gender			-.110	-.081
	Age			-.008	-.054
	Asian			.213	.076
	Hispanic			.133	.092
	Other Ethnicity			-.428	-.246
2	(Constant)	.113	9.963**	2.051	
	Gender			-.055	-.040
	Age			-.006	-.041
	Asian			.212	.076
	Hispanic			.016	.011
	Other Ethnicity			-.404	-.232
	Folk Hope			.370	.379**
3	(Constant)	.010	.355	1.755	
	Gender			-.016	-.012
	Age			-.007	-.046
	Asian			.219	.078
	Hispanic			.013	.009
	Other Ethnicity			-.401	-.230
	Folk Hope			.291	.298
	Agency			.124	.120
	Pathways			.022	.021

Note. Cumulative $R^2 = .250$ Adjusted $R^2 = .140$; ** $p < .01$.

“Folk Hope” is a composite of the items “I’m pretty hopeful,” “People say I’m hopeful” and “Even in bad times I’m hopeful.”

Table 15.

Hierarchical Linear Regression Predicting Connection to Campus from Support, N = 64

Step	Predictor	ΔR^2	ΔF	B	β
1	(Constant)	.107	1.390	3.656	
	Gender			-0.11	-0.081
	Age			-0.008	-0.054
	Asian			0.213	0.076
	Hispanic			0.133	0.092
	Other Ethnicity			-0.428	-0.246
2	(Constant)	.187	2.801*	2.974	
	Gender			-0.111	-0.082
	Age			-0.007	-0.043
	Asian			0.334	0.119
	Hispanic			0.246	0.170
	Other Ethnicity			-0.358	-0.206
	Network Breadth			0.085	0.161
	Emotional Support			0.083	0.046
	Academic & Problem Support			0.733	0.444**
	Goal Setting & Career Support			-0.681	-0.352*
	Role Modeling			0.127	0.080

Note. Cumulative $R^2 = .294$ Adjusted $R^2 = .160$; * $p < .05$, ** $p < .01$.

demographic variables were entered at the first step, and network breadth as well as the four support type that emerged in a factor analyses of the support items were entered at the second step. The model was significant, $F(10, 53) = 2.203$, $p = .032$, $R^2 = .294$. Of the four support types entered (i.e., emotional, academic/problem solving, goal setting/career, and role modeling) the only significant predictors of connection were support for problem solving and giving academic advice ($\beta = .444$, $t = 2.757$, $p = .008$) and support for goal setting and career planning

($\beta = -.352, t = -2.254, p = .028$). Network breadth was not a significant predictor of connection in the final model ($\beta = .161, t = 1.341, p = .186$). See Table 15 for complete model summaries providing partial support for Hypothesis 5a.

Hypothesis 5b. *Network breadth at the start of the semester will predict academic success at the end of the semester and student GH will partially mediate this relationship.*

To test the proposed mediation, again Preacher and Hayes' (2008; model 4) PROCESS macro for SPSS generated 10,000 bootstraps to create a 95% confidence interval. Demographic variables were entered as covariates. Grounded hope was entered as a composite of both agency and pathways items, and the outcome variable was binary (coded as *mostly A's* = 1, *mostly B's or lower* = 0), and

First, analyses considered the relationship between network breadth and grounded hope (a), which is non-significant ($B = -.012, t = -.208, p = .826, R^2 = .105$). Furthermore, the logistic regression model that followed indicated that there was no significant relationship between grounded hope and expected student grades when network breadth was included in the model (b), nor was there a significant indirect effect ($effect = .001, 95\% LLCI = -.105, ULCI = .1445$). There was no total (c; $effect = .454, 95\% LLCI = -.059, ULCI = .9581$) or direct effect after controlling for the effect of grounded hope as a mediator (c'; $effect = .454, 95\% LLCI = -.050, ULCI = .957$) of network breadth on student grades. Therefore, results did not support Hypothesis 5b. Figure 4 provides unstandardized coefficients for this mediation model.

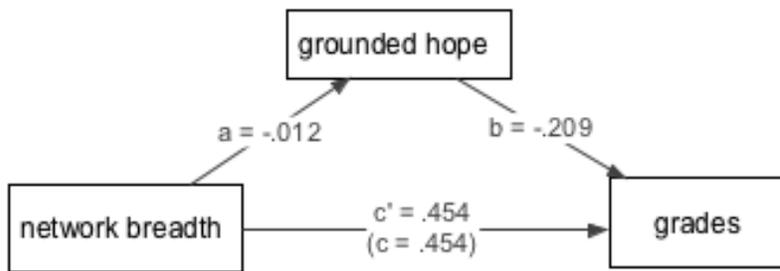
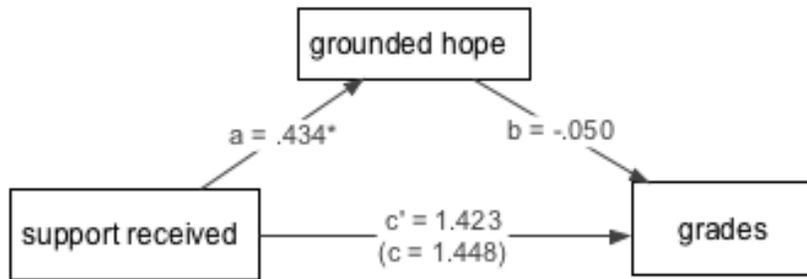


Figure 4. Unstandardized coefficients for grounded hope as a mediator of network breadth and student grades.

Hypothesis 5c. *Mean overall support provided by a mentor at the start of the semester will predict academic success at the end of the semester and student GH will partially mediate this relationship.*

The same technique used to test Hypothesis 5b was utilized to test this proposed mediation. In these analyses, mentor support was created from a composite of the 11 transformed support types (excluding financial support) and tested as the proposed predictor variable in this model ($n = 109$). The relationship between grounded hope and support was significant ($B = .434$, $t = 2.479$, $p = .015$, $R^2 = .130$). However, grounded hope did not predict student grades, and there was no significant indirect effect ($effect = .022$, $95\% LLCI = -.554$, $ULCI = .568$). There was also no significant total (c ; $effect = 1.448$, $95\% LLCI = -.259$, $ULCI = 3.155$) or direct effect after controlling for the effect of grounded hope as a mediator (c' ; $effect = 1.423$, $95\% LLCI = -.333$, $ULCI = 3.179$) of support on student grades. Figure 5 presents this model.



* $p < .05$

Figure 5. Unstandardized coefficients for grounded hope as a mediator of support from primary supporter and grades.

Supplemental Analyses

Perhaps as a result of sample size, regression analyses testing hypotheses 3b-g did not detect notable effects of support provided on student hope as tested using a priori analyses. Thus, in order to begin to answer the third research question, that is, “*Are GH and FH transmitted through the support provided by a mentor?*” an exploratory supplemental analysis investigated the associations between support provided and student hope. Three hierarchical regressions highlighted the unique impact of each of four types of support in predicting agency, pathways, and folk hope (Table 16). In each model, gender, age, and ethnicity were entered in a first step, and mean scores for each of the four support types (i.e., emotional, academic/problem solving, goal setting/career, and role modeling) were entered in a second step. In predicting end of semester agency, the first step of the model was non-significant, $F(6, 102) = .773, p = .593$. When support was entered, the model was marginally significant, $F(10, 98) = 1.803, p = .070$, $R^2 = .155$. Rather than career planning and goal setting support driving this effect however, emotional support emerged as the most important support type in predicting agency ($\beta = .309, t = 2.627, p = .010$).

Table 16.

Hierarchical Linear Regressions Predicting Hope by Support Types, N = 122, 122, 64

Step		<u>Agency</u>			<u>Pathways</u>			<u>Folk Hope</u>		
		ΔR^2	B	β	ΔR^2	B	β	ΔR^2	B	β
1	(Constant)	.044	4.540		.030	4.416		.053	4.172	
	Gender		-0.144	-0.115		-0.075	-0.058		-0.152	-0.098
	Age		-0.021	-0.172		-0.012	-0.094		0.003	0.019
	Asian		0.186	0.082		-0.101	-0.043		0.152	0.048
	African American		0.155	0.024		-0.148	-0.022		-	-
	Hispanic		0.095	0.076		-0.004	-0.003		0.073	0.045
	Other Ethnicity		0.070	0.044		0.204	0.123		-0.361	-0.183
2	(Constant)	.112	3.602		.125	3.811		.256	3.23	
	Gender		-0.079	-0.063		-0.045	-0.035		-0.037	-0.024
	Age		-0.017	-0.140		-0.005	-0.041		0.001	0.003
	Asian		0.094	0.041		-0.087	-0.037		0.161	0.051
	African American		0.441	0.067		0.143	0.021		-	-
	Hispanic		0.129	0.103		0.105	0.082		0.198	0.121
	Other Ethnicity		0.093	0.058		0.273	0.165		-0.313	-0.159
	Emotional Support		0.512	0.309*		0.421	0.247*		0.945	0.468**
	Academic & Problem Support		0.220	0.145		0.422	0.271*		0.493	0.263
	Goal Setting & Career Support		-0.004	-0.002		-0.532	-0.269*		-0.764	-0.349*
	Role Modeling		-0.245	-0.150		-0.027	-0.016		-0.136	-0.076

Note. Agency: Cumulative $R^2 = .115$; Adjusted $R^2 = .069$

Pathways: Cumulative $R^2 = .155$; Adjusted $R^2 = .069$

Folk: Cumulative $R^2 = .309$; Adjusted $R^2 = .194$

“Folk hope” is a composite of the items “I’m pretty hopeful,” “People say I’m hopeful” and “Even in bad times I’m hopeful.”

* $p < .05$, ** $p < .01$.

Similarly, the first step of the model predicting end of semester pathways scores was non-significant, $F(6, 102) = .525, p = .789$. However, the second step was marginally significant, $F(10, 98) = 1.798, p = .071, R^2 = .155$. This effect was driven in part by the hypothesized support type of academic and problem solving support ($\beta = .271, t = 2.287, p = .031$), emotional support ($\beta = .247, t = 2.097, p = .039$), and also in part by goal setting and career support ($\beta = -.269, t = -2.179, p = .032$).

Finally, the initial model for end of semester folk hope ($N = 64$) was not significant whereas the second step of the model was significant, $F(9, 54) = 2.684, p = .012, R^2 = .309$. This effect was driven by emotional ($\beta = .468, t = 3.161, p = .003$) and goal setting support ($\beta = -.349, t = -2.284, p = .026$). Table 16 provides complete model statistics.

Hypothesis 3 also aimed to understand the effect of mentor education level. The latter did not significantly predict any form of hope in the hypothesized model. Given the limited scope of past research on community college student's informal mentors, it is worthwhile to capitalize on this data set to understand more about the nature of these relationships and the characteristics that predict effective mentoring. Thus, a series of regression models were calculated to better understand the relationship between mentor education level and support provided. These two-step models, described in Table 17, each controlled for mentor type in the first step. Educational attainment was entered in the second. Regression models for role modeling and for goal setting/career support were non-significant. The final model in predicting academic and problem solving support was only marginally significant, $F(5, 184) = 1.895, p = .097$, but suggested that mentors with higher educational attainment were more likely to help with problem solving and providing academic suggestions ($\beta = .162, t = 2.110, p = .036$). Both steps of the model predicting emotional support were significant, but the effect was driven by

Table 17.

Hierarchical Regression Models Predicting Support by Mentor Characteristics, N = 190

		<u>Emotional</u>			<u>Role Modeling</u>			<u>Academic & Problem</u>			<u>Goal & Career</u>		
		ΔR^2	<i>B</i>	β	ΔR^2	<i>B</i>	β	ΔR^2	<i>B</i>	β	ΔR^2	<i>B</i>	β
1	(Constant)	.152	.666		.036	.760		.026	.558		.021	.789	
	Other Relative Mentor		-.130	-.117	.019	.016		.109	.085		.044	.046	
	Friend Mentor		.135	.131	-.089	-.084		-.006	-.005		.078	.087	
	Community Mentor		-.219	-.112	-.136	-.066		-.264	-.118		-.164	-.097	
	Academic Mentor		-.596	-.323***	-.315	-.165*		.125	.059		-.045	-.028	
2	(Constant)	.005	.716		.008	.699		.023	.441		< .001	.800	
	Other Relative Mentor		-.121	-.109	.008	.007		.088	.069		.046	.048	
	Friend Mentor		.125	.121	-.076	-.071		.020	.017		.075	.085	
	Community Mentor		-.205	-.104	-.153	-.075		-.299	-.133		-.161	-.095	
	Academic Mentor		-.556	-.301***	-.365	-.191*		.030	.014		-.036	-.023	
	Mentor Education		-.018	-.079	.022	.094		.042	.162*		-.004	-.020	

Note. Emotional: Cumulative $R^2 = .157$; Adjusted $R^2 = .134$

Role Modeling: Cumulative $R^2 = .043$; Adjusted $R^2 = .017$

Academic & Problem: Cumulative $R^2 = .049$; Adjusted $R^2 = .023$

Goal & Career: Cumulative $R^2 = .021$; Adjusted $R^2 = -.005$

“Folk” is a composite of the items “I’m pretty hopeful,” “People say I’m hopeful” and “Even in bad times I’m hopeful.”

* $p < .05$, *** $p < .001$.

mentor-type not educational attainment. In the final model, $F(5, 184) = 6.870, p < .001$, academic mentors were shown to provide less emotional support than the reference group (parent-mentors; $\beta = -.301, t = -4.230, p < .001$).

As noted in Table 7, Hispanic students reported higher levels of folk hope than Caucasian students. Given this finding, supplementary analyses considered the orientations to hope of the Hispanic students in this sample. A series of two-tailed independent-samples t-tests with Bonferroni adjustment ($\alpha = .01$ for 5 tests) was conducted comparing the hope scores of Hispanic to non-Hispanic students in this sample. Overall, Hispanic students were marginally higher in all measured forms of hope (i.e., agency, pathways, folk hope, excitement about the future, and connection with a higher power), but none of these differences were significant at the $\alpha = .01$ level. See Table 18.

Table 18.

T-tests Comparing Hope of Hispanics and Caucasians

	<u>Hispanic</u>			<u>Caucasian</u>			<i>t</i>	<i>p</i>
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>		
Agency	89	4.067	.630	54	3.856	.640	1.929	.056
Pathways	89	4.018	.551	54	3.801	.605	2.202	.029
Folk Hope	89	4.380	.625	54	4.092	.657	2.126	.036
Higher Power	43	4.221	.811	51	3.863	.775	2.185	.031
Positive Future	43	4.729	.400	51	3.000	.582	2.471	.015

CHAPTER FOUR: DISCUSSION

The key goals of this study were to (1) understand the relationship between Snyder's model of hope (grounded hope) and lay understandings of hope and (2) to understand the ways that hope can be transmitted to community college students through mentoring relationships. Analyses demonstrated that folk and grounded hope are associated but that there is more to "being hopeful" than agency and pathways alone. The latter is evidenced by the differential outcomes associated with the two types of hope as well as by the somewhat different mechanisms through which they are transmitted through mentoring relationships. The conclusion is that folk hope may be a precursor to grounded hope, that is, a necessary mindset that allows one to build in the direction of having agency and pathways to achieve a goal.

Distinguishing Grounded Hope from Folk Hope

Recent criticisms of Snyder's hope model argue that the dimensions of agency and pathways do not accurately capture what laypeople call "hope" (Bruinicks & Malle, 2005; Tong et al., 2010). While a large body of research speaks to the value of this construct as well as successes in measurement of agency and pathways, a disconnect exists between grounded hope and folk hope. In order to address this issue in terminology, I conducted a series of analyses using both the Trait Hope Scale as well as items capturing other dimensions of hope from other scales. These analyses demonstrate that there is more to a respondent's sense of "being hopeful" than is captured by measures of agency and pathways.

Given the well-demonstrated factor structure of the Trait Hope Scale (Hellman et al., 2013), it is not surprising that when these items were entered into an exploratory factor analysis with alternative hope items from other measures, the factors largely maintained their integrity. The structure included many items with low factor loadings, suggesting a relatively poor model,

overall. However, in the three-factor solution that emerged from this analysis the two subscales of agency and pathways formed separate factors with relevant items from other measures. Agency items about perceptions of one's success loaded with the items "*I have the power to make my future better*" and "*I have a faith that gives me comfort.*" One possible interpretation of these findings is that the spiritual component of folk hope can fuel what Snyder called agency. That is, the connection with a higher power feeds one's sense of volition or drive to achieve a goal. Though, the items from Herth's (1991) scale measuring connection with a higher power tap the strength or volition provided by faith, rather than faith alone, which may drive the connection between faith and agency.

A second factor emerged that was comprised of three of the Trait Hope Scale pathways items as well as the item "*I have a deep inner strength.*" This factor captures the specific ability to solve problems and overcome obstacles. Again, the connection to a higher power item taps the "inner strength" that faith may provide, which makes it more clearly fit with a sense of having the ways to achieve one's goals. Finally, a third factor captures a sense of primarily non-agentic global hope, perhaps more akin to optimism. That is, these items give the sense that the future will be better but that this may not necessarily be of one's own doing which more closely aligns with the lay definition of both hope and optimism. This provides preliminary evidence that folk hope and grounded hope are psychometrically distinct.

Factor analysis was conducted with a relatively small sample and thus must be considered cautiously. More data are necessary to confirm these results and understand the likely complex relationships between the variables being measured. To provide additional evidence concerning the distinction between folk and grounded hope, analyses were conducted to understand how the additional hope items from Lopez (2013) and Herth (1991) fit into one's

sense of being hopeful. A series of hierarchical linear regressions demonstrated that while the Trait Hope Scale measures of agency and pathways accounted for about 36% of the variance in the “hopefulness” of this sample, items about positive future expectations accounted for an additional 6.4%, and items about connection with a higher power accounted for an additional 4.3%. In particular, the two items “*I am excited about at least one thing in my future*” and “*I have a deep inner strength*” made the most substantial impact on the model. In support of Tong and colleagues’ (2010) finding that laypeople report that when they hope to achieve a goal, they have a sense of agency but not necessarily a sense of pathways, items measuring agency accounted for more of an individual’s sense of “being hopeful” than did pathways items.

While positive future expectations and connection with a higher power help better explain what folk hope means, there is still more to understand about how it is conceptualized. For instance, just as “inner strength” may capture spirituality as a source of strength rather than spirituality alone, “excitement about the future” may diverge from other positive future expectations items in that it captures positive affect. Relative predictive strength of this item suggests that there may be an affective component to folk hope as well. Given these preliminary findings, I propose that folk hope may be a complex construct made up of multiple interacting constructs and beliefs including excitement about the future, a faith in something larger than the self, a sense of optimism about the future, positive affect, and a sense of connection to others as suggested by Herth (1991) as well as Miller and Powers (1988).

These findings support the initial hypothesis of this study, which suggests that there is more to folk hope than what we capture in measuring grounded hope, and moves further to suggest that folk hope and grounded hope are distinct, rather than overlapping as was initially proposed. This has potentially important implications for the future measurement and

operationalization of folk hope and grounded hope and provides an avenue for future research to better understand not only the components of these constructs but also their relationships with neighboring constructs. Further evidence for the distinction between folk and grounded hope comes from analysis of the outcomes associated with each and the mechanisms by which each may be transmitted through developmental relationships.

Outcomes Associated with Folk and Grounded Hope

While there is a moderate positive correlation between grounded hope and folk hope, analyses of student retention outcomes demonstrate that folk hope may be a better predictor of some outcomes than grounded hope. Folk hope predicts both expected educational attainment and student connection to campus better than grounded hope. While it was hypothesized that both grounded and folk hope would provide unique variance in predicting these outcomes, the ability of folk hope to explain variance above and beyond the variance explained by grounded hope provides evidence for the distinction between these two constructs. This demonstrates that some outcomes we associate with grounded hope may actually be the result of a sense of overall folk hope, not the specific skills and cognitions of grounded hope and gives rise to the conclusion that folk hope is a construct of its own, which may influence grounded hope, but not subsume it.

Grounded hope at the beginning of the semester was hypothesized to predict student connection to campus at the end of the semester because hopeful students would be more likely to seek out the on-campus resources that they need to be successful, therefore building connections. Also, it was expected that hopeful students are less likely to socially isolate themselves when coping with academic stress (Chang, 1998), which would give hopeful students more opportunities to connect with the campus community. Results demonstrated instead that

folk hope was better than grounded hope in predicting connection to campus. This may result from the self-report nature of the student connection to campus measure used. The scale measures student perceptions of belongingness, friendship, and brotherhood on campus. It is possible that individuals with more folk hope have a more positive outlook in general and therefore saw campus throughout the semester as a warmer and more inviting place. It is also possible that people who are high on folk hope and have more positive expectancies are more likely to share the warm interpersonal style of optimists (Smith, Ruiz, Cundiff, Barron, & Nealey-Moore, 2013). Given that folk hope has not been studied in relation to explanatory style, outlook, or student retention, more research is needed to understand these results.

In addition to connection to campus, analyses considered the relationship between hope and students' expected educational attainment. Despite added barriers to success such as lack of academic preparedness and financial hardship (cf. Goldrick-Rab, 2010) the community college students in this sample had very high expectations for their future education that did not reflect the reality of typical student performance at their institutions. This finding replicates past studies of the expected educational attainment of community college students (Bailey & Morest, 2006; Hoachlander, Sikora, Horn, & Carroll, 2003). Some researchers suggest that these pervasive high expectations among low achieving students make students less motivated to take the actions necessary to be successful in college. That is, they allow lower performing students to believe that even without significant academic effort and preparation they can still expect a college degree (Jerrim, 2014; Rosenbaum, 1998). While high educational aspirations do not predict academic performance as strongly as it did in past generations of students, those with higher aspirations do still work somewhat harder and take high school more seriously than those with lower aspirations (Domina, Conely & Farkas, 2011; Reynolds et al., 2006). According to one

analysis of high school student success, grounded hope mediates the relationship between effort and expected grades (Levi, Einav, Ziv, Raskind & Margalit, 2013).

However, like connection to campus, folk hope tells us more about a student's expected educational attainment at the end of the semester than does grounded hope. While this may seem counterintuitive, given the numerous studies about the role of grounded hope in predicting educational success (Day et al., 2010; Gilman et al., 2006; Rand et al., 2011; Snyder, Shorey et al., 2002), it is likely that by measuring *expected* educational attainment we capture "hope" of obtaining a degree, rather than the agency or pathways for doing so. Having folk hope, but lacking grounded hope, to achieve an academic aspiration may account for some of what Clark (1960) refers to as "cooling out." This term was coined to describe the process by which students who enter community college with the intent of transferring to a four-year institution come to see that college is not a good fit for them and leave higher education before transferring. Although this term originated in the 1960's when the academic climate was different than today's, more students than ever "cool out" of community college upon learning that they are academically underprepared (Reynolds et al., 2006). While of course students must first believe it possible that they can earn a degree, they must also have the grounded hope to work towards that goal, know what is required to earn it, and develop alternate pathways around the obstacles to their success.

Student's unrealistically high expectations of educational attainment may instead be an example of what some clinical psychologists refer to as "false hope." That is, when hope is built on unrealistic expectations and strategies for inappropriate goals, it can be maladaptive (Polivy & Herman, 2002; Snyder, Rand, King, Feldman, & Woodward, 2002). Unrealistic beliefs about the likelihood of a positive outcome can cause overly optimistic individuals to fail to take action to better their situation or prevent negative outcomes. This phenomenon, called unrealistic

optimism (Weinstein, 1980), is one reason that optimism does not consistently predict positive academic (Rand et al., 2011) or health (Jansen et al., 2011) outcomes. Further, this supports the argument that inflated educational expectations will not necessarily lead students to take the steps necessary to earn the degrees they expect (Jerrim, 2013; Rosenbaum, 1998).

The detriment of unrealistic optimism is mentioned by grounded hope researchers as evidence of the distinction between grounded hope and optimism. If goal attainment is no longer plausible, people high on grounded hope develop pathways around obstacles and reset goals based on the steps they might take to be successful (Snyder, Feldman, Taylor, Schroeder, & Adams, 2000). Conversely, unrealistic optimism leads to maintaining the belief that the goal can still be achieved, even when it is no longer plausible (Weinstein, 1980). Because of grounded hope's basis in realistic problem solving rather than positive thinking one cannot have "false hope" in a grounded hope framework (Shorey et al., 2002; Snyder, Rand, King et al., 2002). Folk hope, which focuses only on desire and expectation of a positive outcome, may be more closely related to the construct of optimism. In their work on signature strengths, for instance, Peterson and Seligman (2004) group hope and optimism together into a single strength and do not distinguish between their characteristics in the *Character Strengths and Virtues* handbook. This relationship will need to be better investigated theoretically and empirically in order to understand the relationship between folk hope and optimism.

The relationship between folk hope and expected attainment provides some evidence that folk hope is based more in the expectation of positive outcomes than the pathways and agency to achieve a goal. However, folk hope may provide a foundation for the development of pathways and agency thinking, as is evidenced by the modest relationship between expectations and academic effort (Domina et al., 2011) and the role of grounded hope as a mediator of this

relationship (Levi et al., 2013). Determining the extent to which this foundation for the development of grounded hope is unique to folk hope, that is, distinguishes it from optimism or unrealistic optimism, requires further study. From a theoretical perspective, inclusion of the components excitement about the future, positive affect, faith, and connection to others may give folk hope a stronger basis for building grounded hope than optimism. Rather than simply an expectation of the best, folk hope may be more dynamic, providing additional supports and connections that make it a stronger foundation for building agency and pathways. The extent to which optimism is also conceptualized as including these additional components, and the ability of these components to support grounded hope, are next steps in understanding the relationship between folk hope, grounded hope, and optimism.

The main conclusion from this set of analyses is that folk hope and grounded hope are likely distinct constructs that play different psychological roles in the process of achieving one's desires. Given the present finding that folk hope predicts academic aspirations, whereas grounded hope has been demonstrated in past studies to predict academic success (Snyder, Shorey et al., 2002), and building on Miceli and Castelfranchi's (2010) conceptualization of active versus passive hope, I propose folk hope may be a separate construct that serves as a precursor to developing grounded hope. That is, folk hope, which may be a result of a number of different beliefs, values, and attitudes, is a required context for building grounded hope and maintaining grounded hope in any given goal pursuit. Thus, figure 6 provides a further adapted version of Snyder's (2002) model of grounded hope to demonstrate the role of folk hope in this model. The figure depicts folk hope as providing a precursor for emotional set as well as one's beliefs about agency and pathways thought. The model suggests that the positive or negative emotional set surrounding a goal comes not from pathways and agency but rather from folk

hope, or that sense of positive expectancy, faith, and excitement about the future. These emotions then impact one’s ability to bring forth the agency and pathways to achieve a goal. Finally, the outcome of the goal pursuit, in attainment or non-attainment, feed back into one’s sense of folk hope as well as the pathways and agency thinking that one has in future goal pursuits.

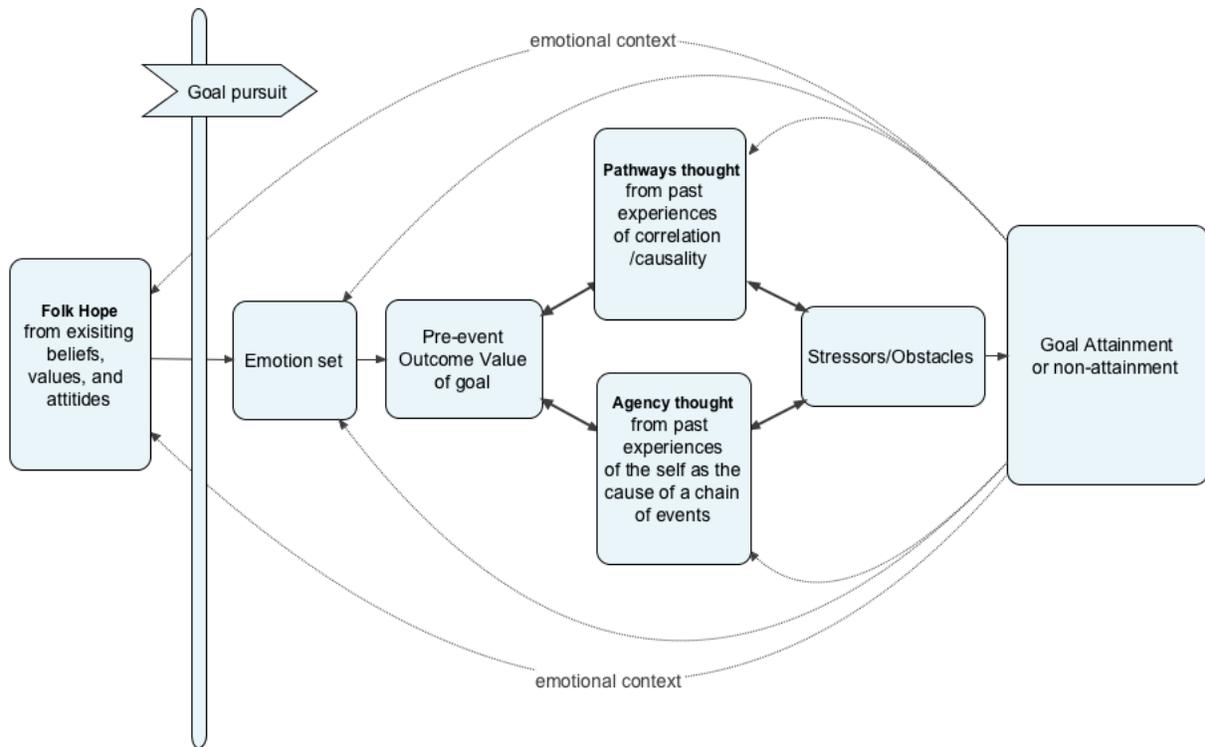


Figure 6. Adaptation of Snyder’s (2002) model of the feedback loop of agency, pathways, and emotion during a goal striving sequence. This model has been further adapted to demonstrate the role of *folk hope* as a precursor to the emotional set surrounding goal pursuit and a distinct contributor to the process of building agency and pathways thinking.

This model provides a foundation for understanding the relationship between folk hope and grounded hope for academic success and how these can be disconnected when students lack past experiences of goal attainment or past experiences of correlation/causality. This disconnect between some students’ educational expectations and their agency and pathways to achieve

educational goals highlights another emphasis of the present study: to learn more about the ways in which mentors can provide support for student success and effect the development of hope.

Transmitting Hope Through Developmental Relationships

The second goal of this study was to identify the mechanisms through which grounded hope and folk hope might be transmitted through mentoring relationships. A number of hypotheses were presented about the ways that developmental network characteristics, mentor's levels of hope, and support provided by that mentor might predict student hopefulness. The overarching finding from these analyses is that there is a relationship between students' perceived support from their mentors and their levels of both grounded and folk hope.

Because community college students often live with their parents or guardians and may have a pre-existing network of support in the community or neighborhoods where they attend school, they may also be well positioned to receive support from a variety of sources during their college years. Therefore, in addition to looking at the specific ways in which a primary supporter may contribute to hope, analyses also considered the characteristics of the networks of individuals that students nominated as supporters.

The hypothesized relationships between the developmental network characteristics of size and breadth were not supported by the analyses. It was hypothesized that larger and more diverse developmental networks would afford students more opportunities to learn grounded hope skills from supportive adults. While network characteristics did not predict hope, there were significant relationships between student and mentor self-reports of both folk hope and pathways thinking. This is only a correlational finding and comes from a very small sample of students and mentors ($n = 22$), but does suggest that hopeful students may have more hopeful mentors. This correlation only held true for pathways thinking and folk hope, but not for agency

thinking. While this may have been a result of the small sample, it is also possible that a sense of personal volition to achieve goals is less easily transmittable through relationships, as is supported by additional findings about the role of support in predicting hope. While McDermott and Hasting's (1999) work suggests that hope can be transmitted from mentor to protégé through role modeling, Snyder (2000a) might argue that it is transferred through deliberate scaffolding and training. In order to understand the mechanisms of support through which mentors can pass their hope on to their students, students reported on the ways that they were supported.

Forms of Perceived Support

In order to best describe the support received by students from their primary mentors an exploratory factor analysis was conducted with the 12 forms of support assessed. Items in this support measure were selected to capture skills involved in agency and pathways thinking, emotional support and role modeling suggested by Nora and Crisp's (2007) model, and support for spirituality and identity development that stemmed from qualitative pilot data. In order to build a sense of the way in which these items hung together, an exploratory analysis was utilized.

The factor analysis showed a four-factor solution that was somewhat reflective of Nora and Crisp's (2007) model of college student mentoring. One factor captured Emotional Support, including items like, "*is always there for me,*" "*is someone I can talk to about personal issues*" and, "*supports me spiritually.*" A second factor comprised something akin to what Nora and Crisp (2007) called Degree and Career Support and was made up of the two items "*supports my goal setting*" and "*supports my career exploration.*" In the present dissertation, this support is referred to as "Goal Setting and Career Support." A third factor included items most closely related to Nora and Crisp's Academic Subject Knowledge including "*helps me come up with ways to solve a problem*" "*gives me good suggestions on how to be a better student*" and, "*helps*

me examine my degree options.” Because of its components, this type of support is discussed in the present dissertation as “Academic and Problem Solving Support”. In Crisp’s (2009) scale development, items about degree options fell into the category of Degree and Career Support, but in this sample factored with other items about academic progress. Finally, a fourth factor mapped most closely to Nora and Crisp’s Role Modeling, but also included the item “*recognizes my accomplishments,*” which is more traditionally thought to be a form of psychosocial mentoring. The item “*supports me financially*” did not have sufficient communality with other support items to fit into the factor structure, suggesting that this type of support is somewhat different from the other ways in which students benefit from mentoring relationships.

This factor analysis was conducted with a relatively small sample, and would need to be replicated with a larger group of students to be reliable, but does provide some preliminary categories to conceptualize these support items. The factors that emerged from this factor analysis then comprised composites for further analyses about the effects of support on student hope and outcomes.

The Effects of Support on Hope Scores

First, a series of hypotheses about the differential effects of support on grounded and folk hope were tested to look at the relationship between support provided at the start of the semester, and hope reported at the end of the semester. I hypothesized that goal setting support would predict agency, that academic/problem solving support would predict pathways thinking, and that spiritual support would predict folk hope, given the theological and spiritual component of folk definitions of hope. Results did not support the first hypothesis about the support that should feed agency, however academic and problem solving support did predict pathways thinking. Moreover, spiritual support emerged as an important contributor to students’ folk hope. This

finding provides yet another important insight about the need for differentiation between folk and grounded hope. While grounded hope is not affected by theology or religious involvement (Coe, 2012), these findings support a connection between spirituality and folk hope.

Given the non-significant findings regarding support predicting agency, a set of exploratory supplemental analyses were conducted to understand the role of support received in predicting student hope. I utilized the longitudinal sample for these analyses to look at the differential effects of various types of perceived support at the beginning of the semester in predicting student hope at the end of the semester. In general, a positive relationship between perceived support and all dimensions of hope emerged. The four composite support scores predicted about 15% of the variance in student agency and pathways, and 30% of the variance in folk hope. All of these findings are correlational and cannot provide causal evidence for the transmission of hope, but they do illustrate that some forms of support predict student hope better than others. In addition, the longitudinal nature of this data means that we can look at support received at the beginning of the semester and link that support to feelings of hope in the final weeks of the semester.

Agency. Grounded hope interventions often claim to build agency by helping students learn to set clear, specific, self-concordant goals that matter to them (Cheavens et al., 2006; Pedrotti et al., 2009), thus it was hypothesized that help with goal setting would make students more agentic. Contrary to this expectation, the only significant predictor of student agency scores was emotional support.

Pathways. Pathways thinking involves knowing how to work towards a goal and to overcome problems and obstacles when they arise. Thus, I hypothesized that support for academic problem solving would be the best predictor of pathways thinking. While this support

alone did not predict enough variance to build a significant model in a priori analyses, when all four support types were entered into the model, academic problem solving support clearly drove the effect of support in predicting pathways thinking. This finding replicates past findings that feeling like a mentor or supporter is there to help solve problems is a good predictor of pathways thinking (Fruht, in press). Surprisingly, the other significant contributor to pathways thinking in this model was career/goal setting support. When entered alongside the other forms of support, however, career/goal setting support actually had a negative effect on pathways thinking. Given the critical role of goal setting in building grounded hope, this is somewhat counter-intuitive, however the data suggest that with demographics and other forms of support held constant, support for perceived goal setting and career exploration predicts less pathways thinking in this sample.

Folk hope. To build on the finding that spiritual support predicts students' folk hope, an exploratory analysis using all four forms of support to predict folk hope was conducted. The results were similar to those regarding pathways thinking. In line with Higgins, Dobrow, and Roloff's (2010) findings regarding developmental relationships and optimism, emotional support was the most substantial predictor of folk hope. Again, goal setting and career exploration negatively predicted folk hope in this model, and academic subject matter support was marginally significant. Given the overlap between pathways thinking and folk hope, it is not surprising that the two are predicted by similar constellation of support, but it is important to note that while emotional support is clearly the key factor in predicting folk hope, problem solving support appears to be the key factor in predicting pathways thinking. Essentially, pathways thinking requires all of the supports necessary for folk hope as well as problem solving

support. This provides evidence for the distinction between the two constructs, but also for the role of folk hope as a prerequisite for pathways thinking.

Different types of support. Overall, emotional support appears to be paramount in predicting hope. Just as students with more folk and grounded hope feel more connected to their campuses, they also feel like their primary supporters provide more psychosocial support, in general. Snyder (2000a) suggests that, in young children, the attachment to a secure base is essential to build hope, as a child must be able to explore the world and build a sense of agency knowing that there is a trusted adult there to provide support and safety. This may help to explain the integral role of emotional support and a sense that there is someone who is “always there” in developing both grounded and folk hope. Furthermore, it supports the proposition that the development of grounded hope is an interpersonal and culturally embedded process (Elliott & Sherwin, 1997). Prior to this study, there was little empirical support for this claim or to suggest that building grounded hope requires interpersonal support. Past arguments regarding the interpersonal nature of grounded hope have been largely theoretical in nature. The finding that emotional support is paramount in predicting hope provides a foundation for future research about the interpersonal aspect of hope and hope-building.

Support for problem solving was also an important predictor of hope, in particular for pathways thinking. This may speak to Snyder’s (2000a) argument that to build hope in children, parents should aim to support children’s autonomous problem solving, rather than just eliminating problems. Mentors who support problem solving, provide suggestions on how to be a better student and help students examine their options may be providing just the type of scaffolded problem solving that Snyder (2000a) anticipated would be necessary to develop pathways thinking.

These analyses also isolated role modeling support as a potential predictor of student hope. Past studies demonstrate that grounded hope can be transmitted through role modeling (McDermott & Hastings, 1999), and Lopez (2013) suggests that one way to become more hopeful is to “borrow” the hope of others by seeking out and emulating hopeful people. These data did not support the idea that role modeling was a significant predictor of grounded or folk hope perhaps suggesting that the role models that students in this study looked to were not models of hope. Role modeling alone would not be expected to make students more hopeful, instead they would need hopeful models to look to.

Most surprisingly, support for goal setting and career exploration may have had a negative impact on pathways thinking and folk hope over the course of the semester. Given that goal setting is among the most common forms of training involved in grounded hope interventions (Cheavens et al., 2006; Pedrotti et al., 2009) this was an unexpected finding. Grounded hope interventions, however, rely on skilled and well-trained coaches who work to guide students through the process of setting realistic, specific, and meaningful goals. It is possible that goal setting was not beneficial in this population because the nominated mentors, a group primarily comprised of parents and other family members, may not have the skills to help set these effective goals. Instead, these students may experience goal setting or career exploration support as parents pushing them towards careers or goals that they would rather not pursue. While learning how to set effective goals should build hope, being pushed in the direction of a goal that the student is not interested in may be detrimental to feelings of agency and pathways. This finding has potentially important implications for developing mentoring and hope-building programs for young people. Students should be encouraged to seek out mentors

who are experienced in setting goals and helping others to set goals, and programs that pair students with mentors should provide training and experience for future mentors in these skills.

Mentor education. In order to better understand the way that mentor's experience and training might impact the effectiveness of their support, a set of analyses considered mentor education level as a moderator of the effect of support on building grounded hope. The rationale was that mentors with more experience in higher education would be more able to provide useful suggestions for problems solving and effective goal setting support. However, mentor education level did not significantly contribute to student agency or pathways scores and was not a significant moderator in the models tested. Therefore, mentor education level does not appear to account for the benefit of support provided.

To better understand the role of mentor education level, supplemental analyses used mentor type (i.e., parent, relative, academic, etc.) and education level to predict support provided. The only form of support contingent upon education level was support for academics and problem solving. Given the necessity of experience as a student in providing good academic suggestions, this is not surprising. But, it does highlight the potential importance of a mentor with college experience to provide certain forms of support to a college student.

The Role of Off-Campus and Informal Mentors

One goal of this study was to shed light on the role of informal and off-campus mentors as supporters of college students given how little research has been conducted on these types of relationships (Coles & Blacknail, 2011; Linnehan, 2003). However, very few (6.9%) of students nominated a primary mentor who worked on campus. Instead the substantial majority of students nominated a parent (58.5%) or other family member (14.6%) as a primary supporter. On-campus mentors were so rare that reliable analyses could not be conducted to compare these two groups,

so conclusions cannot be drawn about the differences between these two types of mentoring relationships in this sample.

Interestingly, 42.5% of students surveyed about their developmental networks did nominate an academic mentor (i.e., a past or present teacher or academic advisor) as at least one member of that network. This brings to light an interesting challenge in studying the mentoring relationships of college students. Without using a sample from an existing mentoring program, the traditional technique of identifying college student's mentors has been through nomination. Students are asked to nominate an individual who is not a parent, or in some cases, not a family member (e.g., Harris & Udry, 1994-2008), who serves as a mentor. This, unfortunately, excludes the parents, aunts, uncles, grandparents, and other adult relatives who students in the present study nominated as mentors. The support provided by these individuals may, for some students, surpass the traditional "social support" that researchers ascribe to this relationship (e.g., Napoli & Wortman, 1998), and family members may be sources of academic guidance as well as emotional support. Especially in situations where parents, siblings, or other family have experience with higher education themselves, these mentors who can provide both emotional and academic support may be crucial assets for student success. To truly understand the differences between mentored and un-mentored students, we need to account for these familial mentoring relationships and should allow them in the nomination process in future research.

However, the technique of excluding family members is, as evidenced by our results, in place for a reason. When given the opportunity to nominate the person who provides support and guidance, students are likely to nominate a parent even if that parent does not provide the types of support and guidance that we know to be beneficial to academic success. We can therefore fail to detect the influence of formal or on-campus mentors because they do not show up in the

nominations. This problem makes a case for using the developmental network nomination technique to gain a broader understanding of the multiple forms of support in students' lives. Beyond asking about the existence of these individuals, however, it would be beneficial in future research to survey students about the degree and type of support that they receive from each member of the network. This would allow for distinction between parents who provide only emotional support, professors who are only available in the classroom, and the familial and academic mentors who provide both emotional and academic support.

Student Outcomes

A final set of analyses aimed to understand the different outcomes associated with support received from a mentor and developmental network characteristics. It was hypothesized that grounded hope might mediate the relationship between these support characteristics and student's grades. While there was some support for the hypothesis that mentor support predicts student connection to campus, network breadth does not. Furthermore, neither network breadth nor mentor support predicted self-reported student grades. There were also no significant mediating relationships between these variables.

Mentor Support

It was hypothesized that perceived support would predict how connected students felt to their campus. Findings paralleled those regarding support and pathways thinking. Support for academics and problem solving positively predicted connection, and support for goal setting and career exploration negatively predicted connection. It is possible that students feel their mentors are not assisting in goal setting, but forcing goals upon them, which may subsequently make them feel less connected to their campus community and less motivated to become a part of that community. Support, overall, did not predict student grades. This may have been a product of the

somewhat unreliable measure of student grades. It is expected, based on the very high proportion of A's and B's reported by participants that reported grades not only lacked adequate variability to be used in analyses but were also subject to social desirability or unrealistic expectations and were not reflective of students' true academic performance.

Network Breadth

Given past findings which suggest that people with larger and more diverse developmental networks have more positive outcomes at work (Dobrow & Higgins, 2005) and school (Baker & Lattuca, 2010) it was hypothesized that students with broad networks made up of individuals from multiple domains of life would be more successful academically. However, network breadth did not predict student grades or connection to campus at the end of the semester. Grades were likely not a significant predictor because of the lack of variation and over reporting of high grades in student's responses; a more objective measure of academic success may be necessary to detect an effect.

It is plausible that network breadth did not predict connection to campus because students with broad networks are connected to many different communities and thus have less time and resources to link up with their on-campus communities. Many students with broad networks nominated an immediate family member, an extended family member, someone from work, and someone from an extracurricular or community organization. These students may already be well-connected outside of school and have a good deal of social support from other domains so they do not seek out connections on campus, or they may simply be too busy balancing family, work, and outside social events to find time to connect to the campus community.

This may be an issue of particular relevance among community college students and deserves further exploration. Because community colleges are designed to provide educational

opportunities to individuals who live in the surrounding community, rather than a residential university experience, connection to campus can be a challenge to foster in this setting (Karp, Hughes, & O’Gara, 2010; Mutter, 1992). While broad developmental networks may be useful in providing support to developing professionals or graduate students, broad networks may not be as valuable to community college students who are more likely to lack the campus connection that is known to be important for retention. Students with a good deal of off-campus support may benefit from the knowledge and experience of the community, but not feel the necessity to build close connections on campus that would afford them the expertise of faculty members or the social support of their peers.

Limitations

The most critical limitations to this study include a small sample, potential confounds, poor measures of objective academic outcomes, and the short timespan of the longitudinal component. As is often the case with longitudinal research, it was difficult to maintain a large enough sample of participants across the semester to conduct reliable analyses. Furthermore, it is likely that the students who did not complete the survey at the end of the semester were different from those who did. Because data were collected in college classrooms, students who were still in attendance at the end of the semester were more likely to have completed the survey at the end of the term, and those who dropped the class did not complete it. Also, students in the most demanding courses surveyed (college level Calculus) were not provided time in class at the end of the semester to complete the survey and were asked to fill it out at home. Thus these students, who made up approximately 30% of the fall sample, were under sampled at the end of the semester. Given their academic success, these students may have been better connected to campus and higher on grounded than the rest of the sample.

Because the sample was heavily Hispanic, caution should be used in considering the generalizability of these results to students of different ethnic or racial backgrounds. Cultural differences may have played a role in the nomination of mentors as well as perceived supports on campus. It would be beneficial to investigate the role of cultural differences in future research. Furthermore, Hispanic students in this sample did report marginally higher hope scores than Caucasian students on all measured dimensions of hope. This, of course, may be a result of sampling error, and this trend does not match past findings that demonstrate no differences between different ethnic groups on the Trait Hope Scale (Chang & Hudson, 2007; Hirsch, Visser, Chang, & Jeglic, 2012). Given, however, that this trend appeared in the understudied population of community college students, it warrants future consideration.

A second limitation of this study was the lack of reliable, objective academic achievement measures. Students were asked to self-report their expected grades and passing rates for their gateway courses. They overwhelmingly endorsed that they would pass both a math and English course and that they would receive mostly A's in their courses in the semester they participated in the study. This is not consistent with the reality of community college student performance. While analyses were attempted with students' self-reported grades, there were no significant relationships between these outcomes and any of the other variables measured. Ideally, student academic records and tangible retention outcomes would be accessed to assess academic performance, as self-report data showed no detectable differences between students' performance.

Additionally, with the very diverse nature of the community college student population in this sample, controls for student success characteristics would have been beneficial in reducing potential confounds. Participants ranged from first semester freshmen in developmental math

courses to more experienced and higher achieving students. However, students did not reliably report their past academic performance or number of units completed at the college level, thus variables such as academic preparation, academic trajectory, and college experience could not be controlled for in analyses. Given the vast variation in California community college students, ranging from students who lack a high school diploma building vocational skills to those preparing to transfer to top-tier universities, it is possible that confounding variables such as academic preparation or socio-economic status may have affected the validity of these analyses. Again, collecting institutional data regarding student academic preparation and experience would strengthen future studies.

To understand the relationship between the variables assessed by this study and student retention, it would be necessary to track students across their academic trajectory and look at persistence and matriculation rates in the sample. This would require not only more objective measures of academic success, but also a much longer study. Generally, at least three phases of data collection are required to accurately assess longitudinal outcomes, and the present study, as a result of the short timeline of this project, assessed only two time points. Given the standard 16-week semester at California community colleges and the difficulty in retaining participants across multiple semesters in this population, a third phase of data collection was not practical. However, future research should consider following students across multiple academic terms and utilizing multiple waves of data collection to build a clearer picture of the effect mentoring on hope and academic outcomes.

Finally, data about the support provided by mentors were limited to student report. Students were overwhelmingly positive in their reports of support received and negative skew on support items paired with a ceiling effect in the data may have made it more difficult to capture

the relationships between support and student outcomes. Ideally, mentors would report the types of support that they provided in order to triangulate on the experience of support. Although mentors were surveyed, non-response made it difficult to draw any useful conclusions from these data. Furthermore, mentor demographics also suggest response bias in the sample of mentors. While parents made up about 60% of primary supporters nominated, they were overrepresented in the sample of mentors who responded (92%). In addition, mentor respondents were more heavily Caucasian than student respondents (48% versus 28.5%) suggesting these respondents are not likely representative of the sample of parents nominated.

Future Research

This dissertation provides many avenues for future research. First, it provides a foundation for the exploration of a psychological construct of folk hope in parallel to continued study of Snyder's hope model. Second, by studying the informal mentoring relationships of community college students it demonstrates the need for future research that looks at the formal and informal relationships that support student development, and the characteristics that make mentoring relationships successful in this population. Finally, it begins to develop an empirical literature to strengthen the recommendations that grounded hope can be built in students through the pre-existing support structures in place in the college setting (Pedrotti et al., 2008; Snyder, Feldman et al., 2002; Williams & Butler, 2010).

By developing a new language around Snyder's model of hope, this dissertation provides a space for psychologists to better understand folk hope and what it comprises. Grounded hope has been thoroughly demonstrated to be a useful and effective construct, but this dissertation sheds light on the understudied gap between grounded hope and lay definitions. Future research should continue to distinguish folk hope from grounded hope as well as from neighboring

constructs such as spirituality (Sawatzky, Ratner, & Chiu, 2005), optimism (Gerhard, 1996) and wishful thinking (Krizan & Windschitl, 2007). For instance folk hope must demonstrate divergent validity from optimism (Life Orientation Test), explanatory style (Attributional Style Questionnaire), and self-efficacy (General Self-Efficacy Scale). Furthermore, research should aim to understand the various components of folk hope that past researchers have proposed. Better psychometric investigation of the relationship between folk hope and excitement about the future (per Lopez, 2013) and a sense of connection with others (per Herth, 1991; Miller & Powers, 1988) should be considered among other possible dimensions of folk hope.

Beyond contribution to hope research, this study aimed to fill a gap in the college student mentoring literature by looking at community college students, as well as informal mentorship. However, community college students overwhelmingly nominated parents and other family members as their mentors. While these analyses were useful in beginning to assess the role of these informal mentoring relationships, there is obviously a good deal left to learn. Future research should aim to understand the formal and informal mentoring relationships of both community and four-year college students. With the foundation provided by this study as well as Crisp's (2009, 2010) research about mentoring at the community college level, comparison studies that include all types of mentors should be conducted that look at the on-campus and off-campus mentoring relationships that support these students. Given the present finding that community college students glean support from numerous sources outside of their parents and relatives, a network nomination technique should be utilized to allow students to indicate the types of support that they receive from familial, community, and on-campus mentors.

The use of the developmental network framework for understanding mentoring may be a useful place to begin this endeavor, but it will be necessary to carefully consider not only the

prevalence of positive supportive developmental relationships with parents, relatives, community members, and academics, but also the effectiveness of these relationships. The present study demonstrates that there are differences among types of support in predicting positive outcomes, but was unable to assess the characteristics of effective mentors. For instance, mentor education level was not found to significantly predict student hope, but it did play a role in predicting the types of support that students perceived receiving, even after controlling for the type of mentor. In order to ensure that students are provided with the support they need to succeed, future research should look at outcomes associated with mentor characteristics.

Finally, this study was the first to look at the role of naturally occurring mentoring relationships in developing grounded hope. Building from the suggestions of past authors (e.g., Pedrotti et al., 2008; Snyder, Feldman et al., 2002; Williams & Butler, 2010) that hope should be fostered through relationships with the counselors and educators who are in place to support students, the present study demonstrated that the support mentors provide to college students can play a role in students' hope. Few students nominated educators or counselors as their mentors in this sample, but future studies would benefit from comparing the support and hope-building potential of parents, family, friends, and academics. This study provides preliminary evidence that the pairing of emotional support with support for academics and problem solving may be a useful combination for building grounded hope but future studies should look more closely at the specific behaviors and relationship characteristics that build hope in college students. Emotional support, which is not typically mentioned as a component of hope building interventions was a key predictor of both grounded and folk hope in this data, whereas goal-setting support, which is typically the key component in a grounded hope curriculum, did not positively influence hope

scores in our sample. Thus, the present study demonstrates the necessity to understand what types of support can be provided by supportive others to best nurture hope.

Conclusions and Implications

This dissertation presents three key findings that speak to the broader scope of research and practice. Two decades of research support grounded hope as an indicator of thriving and success, but most efforts to build hope have been through formal intervention programs that are labor intensive and unsustainable. This study is unique in that it begins to investigate how hope is developed in natural contexts. The preliminary finding that support from a mentor predicts student hope begins to build a case for the utilization of naturally occurring mentoring and supportive relationships to build hope. First generation college students provide an interesting case study of a population in clear need of the agency and pathways to achieve their goals. As Williams and Butler (2010) suggest, there may be a number of opportunities to teach grounded hope skills to these populations using the frameworks already in place in these students' lives. This study opens the door beyond the academic realm, however, to look at the ways that off-campus mentors and family members can also intervene to make students more hopeful.

This study highlights the role of these off campus and informal mentors in the development of community college students. Given the clear benefit of mentoring relationships demonstrated by past studies, every effort should be made to provide these supports to every college student. If parents, relatives, friends, and community members can fill these positions, or supplement the support provided by faculty and advisors, it could have a substantial effect on student success. However, current methodologies for understanding college student mentoring relationships are lacking in their ability to detect the impact of mentors in students' lives. So we

cannot know the extent to which these informal mentors help students succeed or are already supplementing the support of formal mentors.

Finally, findings demonstrate a need for a shift in the language or conceptualization of hope. Agency and pathways create a robust construct that should certainly continue to be studied and applied in academic, professional, and personal contexts, but the findings present a case for studying folk hope as a psychological construct as well. Given religious and cultural ideals about hope and the adoption of this term by political candidates, medical institutions, and social services, there is an obvious human interest in hope. Behavioral scientists should take this opportunity to understand not only the version of hope that has been studied for the past two decades, but to begin to understand folk hope and how it affects behavior as well.

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APPENDIX A
Fall Student Survey Time 1

1. Think about the people who have influenced you and helped you to be successful as a college student. List as many of these people as come to mind on the lines below. **Please DO NOT provide their names, instead note how you know each person.** If you need extra space, you can continue to list people on the back of the last page, or the margin of this sheet.

Thinking about this list of people, select one person in particular who you feel supports you and guides you as a college student. This person is someone who has more experience than you, who you look up to, you trust, and you feel like he/she cares about you. **Please select just *one* person who you would say best fits this description and CIRCLE his or her name on the list above.**

2. How often do you talk to this person?

- Daily Weekly Monthly
 Every other month Less than every other month

3. How do you **most often** communicate with this person

- In person On the phone Via text message
 Via email or instant message In another way (how? _____)

4. Would you most consider this person to be a (**choose ONE**)

- Mentor
 Coach
 Friend
 Counselor
 Parent
 Something else
 What? _____

5. To what extent does this person support you in the following ways? This person...

	not at all	a little	some	quite a bit	very much
is always there for me.	<input type="checkbox"/>				
supports me financially.	<input type="checkbox"/>				
is someone I can talk to openly about personal issues.	<input type="checkbox"/>				
supports my goal-setting.	<input type="checkbox"/>				
gives me good suggestions on how to be a better student.	<input type="checkbox"/>				
helps me come up with ways to solve a problem.	<input type="checkbox"/>				
supports me in figuring out what I value.	<input type="checkbox"/>				
supports my career exploration.	<input type="checkbox"/>				
helps me examine my degree options.	<input type="checkbox"/>				
supports me spiritually.	<input type="checkbox"/>				
recognizes my accomplishments	<input type="checkbox"/>				
is a role model to me.	<input type="checkbox"/>				

Does this person support you in any other ways not listed above?

If so, how?

What do you consider the most significant way that this person supports you?

7. Does the person who you circled currently work or study on your college campus?

- Works on campus
 Studies on campus
 Neither

8. What is the highest level of education this person has achieved?

- less than high school graduate
 high school graduate
 some college (no degree)
 Technical school or 2-year college degree/Associates degree
 4-year college degree/ Bachelor's degree
 Master's degree
 Ph.D. or professional degree

Now you will answer some questions about yourself and your college experience.

9. Read each item carefully and respond in the way that best describes YOU.

	not at all	a little	some	quite a bit	very much
I can think of many ways to get out of a jam.	<input type="checkbox"/>				
I energetically pursue my goals.	<input type="checkbox"/>				
I feel tired most of the time.	<input type="checkbox"/>				
There are lots of ways around any problem.	<input type="checkbox"/>				
I am easily downed in an argument.	<input type="checkbox"/>				
I have a deep inner strength.	<input type="checkbox"/>				
My future will be better than the present.	<input type="checkbox"/>				
People who know me would say I'm a hopeful person.	<input type="checkbox"/>				
I can think of many ways to get the things in life that are important to me.	<input type="checkbox"/>				
I worry about my health.	<input type="checkbox"/>				
Even when others get discouraged, I know I can find a way to solve the problem.	<input type="checkbox"/>				
My past experiences have prepared me well for my future.	<input type="checkbox"/>				
I'm excited about at least one thing in my future.	<input type="checkbox"/>				
Even in bad situations, I'm hopeful.	<input type="checkbox"/>				
I usually find myself worrying about something.	<input type="checkbox"/>				
I meet the goals that I set for myself.	<input type="checkbox"/>				
I feel pretty hopeful about the future.	<input type="checkbox"/>				
I have a faith that gives me comfort.	<input type="checkbox"/>				
I have the power to make my future better.	<input type="checkbox"/>				
I've been pretty successful in life.	<input type="checkbox"/>				

10. In terms of academic success, do you feel that you are:

- Ahead of your peers
- About even with your peers
- Behind your peers

11. Overall, in high school, what were your grades like?

- Mostly A's
- Mostly B's
- Mostly C's
- Mostly D's
- Mostly F's
- I don't remember

12. Do you plan to attend college:

- Part-time.
- Full-time.

13. Do you plan to work while attending college?

- No.
- Yes, part time (less than 30 hours a week)
- Yes, full time (more than 30 hours a week)

14. In your experience so far at your college, to what extent do you agree or disagree with these items?

	strongly disagree	disagree	neutral	agree	strongly agree
I can relate to my fellow classmates	<input type="checkbox"/>				
I catch myself losing all connectedness with college life	<input type="checkbox"/>				
Other people make me feel at home on campus	<input type="checkbox"/>				
I have friends on this campus that I feel I can tell anything.	<input type="checkbox"/>				
I don't feel related to anyone on campus	<input type="checkbox"/>				
I feel connected to campus life.	<input type="checkbox"/>				
I feel that I fit right in on campus.	<input type="checkbox"/>				
There is no sense of brotherhood/sisterhood with my college friends.	<input type="checkbox"/>				
I don't feel I participate with anyone or any groups on campus.	<input type="checkbox"/>				
I know a lot of people on this campus.	<input type="checkbox"/>				

15. What is the highest level of education you plan to attain?

- some college (no degree or certificate)
- Locally or state recognized certification or training program
- Associates degree
- 4-year college degree/Bachelors degree
- Masters degree
- Ph.D. or professional degree

16. Have you selected a major or course of study?

- No
 - Yes, it is:
-

17. With whom will you primarily live during the academic year (check all that apply)?

- Alone.
- With the person I answered questions about above.
- With parents, grandparents, or former guardians
- With friends, classmates, roommates
- With a spouse/partner/significant other
- With my children or minors in my care.

18. How old are you (in years): _____

19. With what ethnicity do you identify (select all that apply)?

- Asian or Pacific Islander
- Black or African American
- Caucasian or White
- Hispanic/Latino
- Hispanic/Non-Latino
- Middle Eastern
- Other
- Decline to answer

20. What is your gender?

- Male
- Female
- Decline to answer

APPENDIX B
Fall Student Survey Time 2

1. Think about the people who have influenced you and helped you to be successful as a college student. List as many of these people as come to mind on the lines below. You **DO NOT** need to provide their names, instead note **how you know each person**. If you need extra space, you can continue to list people on the back or margin of this sheet.

Thinking about this list of people, select one person in particular who you feel and supports you and guides you as a college student? This person is someone who has more experience than you, who you look up to, you trust, and you feel like he/she cares about you. **Please select just *one* person who you would say best fits this description and CIRCLE his or her name on the list above.**

2. How often do you talk to this person?

- Daily Weekly Monthly
 Every other month Less than every other month

3. How do you **most often** communicate with this person

- In person On the phone Via text message
 Via email or instant message In another way (how? _____)

4. Would you most consider this person to be a (**choose ONE**)

- Mentor
 Coach
 Friend
 Counselor
 Parent
 Something else
 What? _____

5. To what extent does this person support you in the following ways? This person...

	not at all	a little	some	quite a bit	very much
is always there for me.	<input type="checkbox"/>				
supports me financially.	<input type="checkbox"/>				
is someone I can talk to openly about personal issues.	<input type="checkbox"/>				
supports my goal-setting.	<input type="checkbox"/>				
gives me good suggestions on how to be a better student.	<input type="checkbox"/>				
helps me come up with ways to solve a problem.	<input type="checkbox"/>				
supports me in figuring out what I value.	<input type="checkbox"/>				
supports my career exploration.	<input type="checkbox"/>				
helps me examine my degree options.	<input type="checkbox"/>				
supports me spiritually.	<input type="checkbox"/>				
recognizes my accomplishments	<input type="checkbox"/>				
is a role model to me.	<input type="checkbox"/>				

Does this person support you in any other ways not listed above?

If so, how?

What do you consider the most significant way that this person supports you?

6. Does the person who you circled currently work or study on your college campus?

- Works on campus Studies on campus Neither

7. What is the highest level of education this person has achieved?

- less than high school graduate
 high school graduate
 some college (no degree)
 Technical school or 2-year college degree/Associates degree
 4-year college degree/ Bachelor's degree
 Master's degree
 Ph.D. or professional degree

Now you will answer some questions about yourself and your college experience.

8. Read each item carefully and respond in the way that best describes YOU.

	not at all	a little	some	quite a bit	very much
I can think of many ways to get out of a jam.	<input type="checkbox"/>				
I energetically pursue my goals.	<input type="checkbox"/>				
I feel tired most of the time.	<input type="checkbox"/>				
There are lots of ways around any problem.	<input type="checkbox"/>				
I am easily downed in an argument.	<input type="checkbox"/>				
I have a deep inner strength.	<input type="checkbox"/>				
My future will be better than the present.	<input type="checkbox"/>				
People who know me would say I'm a hopeful person.	<input type="checkbox"/>				
I can think of many ways to get the things in life that are important to me.	<input type="checkbox"/>				
I worry about my health.	<input type="checkbox"/>				
Even when others get discouraged, I know I can find a way to solve the problem.	<input type="checkbox"/>				
My past experiences have prepared me well for my future.	<input type="checkbox"/>				
I'm excited about at least one thing in my future.	<input type="checkbox"/>				
Even in bad situations, I'm hopeful.	<input type="checkbox"/>				
I usually find myself worrying about something.	<input type="checkbox"/>				
I meet the goals that I set for myself.	<input type="checkbox"/>				
I feel pretty hopeful about the future.	<input type="checkbox"/>				
I have a faith that gives me comfort.	<input type="checkbox"/>				
I have the power to make my future better.	<input type="checkbox"/>				
I've been pretty successful in life.	<input type="checkbox"/>				

9. In terms of academic success, do you feel that you are:

- Ahead of your peers
- About even with your peers
- Behind your peers

10. Before this semester, about how many degree applicable units have you completed at the college level? If you are unsure, please estimate.

_____ units

11. Before this semester, how many semesters have you attended this community college?

- None, this is my first semester
- 1 2 3 4 5
- 6 7 8 9 10 +

12. Is this your last semester before transferring or graduating?

Yes No I'm unsure

13. Have you selected a major or course of study?

No Yes, it is: _____

14. What is the highest level of education you plan to attain?

- some college (no degree or certificate)
- Locally or state recognized certification or training program
- Associates degree
- 4-year college degree/Bachelors degree
- Masters degree
- Ph.D. or professional degree

15. In your experience so far at your college, to what extent do you agree or disagree with these items?

	strongly disagree	disagree	neutral	agree	strongly agree
I can relate to my fellow classmates	<input type="checkbox"/>				
I catch myself losing all connectedness with college life	<input type="checkbox"/>				
Other people make me feel at home on campus	<input type="checkbox"/>				
I have friends on this campus that I feel I can tell anything.	<input type="checkbox"/>				
I don't feel related to anyone on campus	<input type="checkbox"/>				
I feel connected to campus life.	<input type="checkbox"/>				
I feel that I fit right in on campus.	<input type="checkbox"/>				
There is no sense of brotherhood/sisterhood with my college friends.	<input type="checkbox"/>				
I don't feel I participate with anyone or any groups on campus.	<input type="checkbox"/>				
I know a lot of people on this campus.	<input type="checkbox"/>				

Now you'll answer some questions that are more specifically about your experiences during the semester that will end soon, that is Fall 2013.

16. What do you, realistically, expect your grades to be?

- Mostly A's
- Mostly B's
- Mostly C's
- Mostly D's
- Mostly F's

17. How many units did you enroll in/sign up for? _____ units

18. How many units did you complete with a D or better? _____ units

19. Did you take a math class?

- Yes, and I will pass it with a C or better
- Yes, but I withdrew or will not pass it.
- No.

20. Did you take an English or writing class?

- Yes, and I will pass it with a C or better
- Yes, but I withdrew or will not pass it.
- No.

21. Did you work during the semester?

- Yes, more than 30 hours a week
- Yes, less than 30 hours a week
- No.

22. With whom will you primarily live during the academic year (check all that apply)?

- Alone.
- With the person I answered questions about above.
- With parents, grandparents, or former guardians
- With friends, classmates, roommates
- With a spouse/partner/significant other
- With my children or minors in my care.

23. How old are you (in years): _____

24. With what ethnicity do you identify (select all that apply)?

- Asian or Pacific Islander
- Black or African American
- Caucasian or White
- Hispanic/Latino
- Hispanic/Non-Latino
- Middle Eastern
- Other
- Decline to answer

25. What is your gender?

- Male
- Female
- Decline to answer

APPENDIX C
Spring Student Survey Time 1

1. Is there an individual in your life who has more experience than you, and supports you and guides you as an adult and college student? This person is someone you look up to, you trust, and you feel like he/she cares about you (**please select just *one* person who you would say best fits this description**).

Yes, he/she is:

- | | |
|--|--|
| <input type="checkbox"/> My father | <input type="checkbox"/> My friend |
| <input type="checkbox"/> My mother | <input type="checkbox"/> My friend's parent |
| <input type="checkbox"/> My sibling | <input type="checkbox"/> My boyfriend/girlfriend |
| <input type="checkbox"/> My step-parent | <input type="checkbox"/> My husband/wife/significant other |
| <input type="checkbox"/> My aunt/uncle | <input type="checkbox"/> My high school teacher |
| <input type="checkbox"/> My cousin | <input type="checkbox"/> My religious leader |
| <input type="checkbox"/> My grandparent | <input type="checkbox"/> My professor |
| <input type="checkbox"/> My godparent | <input type="checkbox"/> My academic counselor/advisor |
| <input type="checkbox"/> My neighbor | <input type="checkbox"/> My non-academic counselor/therapist |
| <input type="checkbox"/> A family friend | <input type="checkbox"/> My athletic coach |
| <input type="checkbox"/> Someone else | |

Who? _____

No. (**If no, please skip to page 4**)

2. How often do you talk to this person?

- Daily Weekly Monthly
 Every other month Less than every other month

3. How do you **most often** communicate with this person

- In person On the phone Via text message
 Via email or instant message In another way, what? _____

4. Does this person currently work or study on your college campus?

- Works on campus Studies on campus Neither

5. What is the highest level of education this person has achieved?

- less than high school graduate
- high school graduate
- some college (no degree)
- Technical school or 2-year college degree/Associates degree
- 4-year college degree/ Bachelor's degree
- Master's degree
- Ph.D. or professional degree

6. To what extent does this person support you in the following ways? This person...

	not at all	a little	some	quite a bit	very much
is always there for me.	<input type="checkbox"/>				
supports me financially.	<input type="checkbox"/>				
is someone I can talk to openly about personal issues.	<input type="checkbox"/>				
supports my goal-setting.	<input type="checkbox"/>				
gives me good suggestions on how to be a better student.	<input type="checkbox"/>				
helps me come up with ways to solve a problem.	<input type="checkbox"/>				
supports me in figuring out what I value.	<input type="checkbox"/>				
supports my career exploration.	<input type="checkbox"/>				
helps me examine my degree options.	<input type="checkbox"/>				
supports me spiritually.	<input type="checkbox"/>				
recognizes my accomplishments	<input type="checkbox"/>				
is a role model to me.	<input type="checkbox"/>				

Does this person support you in any other ways not listed above?
If so, how?

What do you consider the most significant way that this person supports you?

7. Are there any ways that you wish this person could support you that he or she cannot or does not know how to do?

- No
 - Yes, I wish this person could:
 - always be there for me.
 - support me financially.
 - support me academically.
 - support my career exploration.
 - support my goal-setting
 - support me when I run into a problem until I solve it.
 - support me in figuring out what I value.
 - support me spiritually.
 - support me in another way.
- How? _____

8. Would you most consider this person to be a

- Mentor
- Coach
- Friend
- Counselor
- Parent
- Something else, what? _____

9. Read each item carefully and respond in the way that best describes you.

	not at all	a little	some	quite a bit	very much
I can think of many ways to get out of a jam.	<input type="checkbox"/>				
I energetically pursue my goals.	<input type="checkbox"/>				
I feel tired most of the time.	<input type="checkbox"/>				
There are lots of ways around any problem.	<input type="checkbox"/>				
I am easily downed in an argument.	<input type="checkbox"/>				
I can think of many ways to get the things in life that are important to me.	<input type="checkbox"/>				
I worry about my health.	<input type="checkbox"/>				
Even when others get discouraged, I know I can find a way to solve the problem	<input type="checkbox"/>				
My past experiences have prepared me well for my future.	<input type="checkbox"/>				
I've been pretty successful in life.	<input type="checkbox"/>				
I usually find myself worrying about something.	<input type="checkbox"/>				
I meet the goals that I set for myself.	<input type="checkbox"/>				

10. In terms of academic success, do you feel that you are:

- Ahead of your peers
- About even with your peers
- Behind your peers

11. Overall, in high school, what were your grades like?

- Mostly A's
- Mostly B's
- Mostly C's
- Mostly D's
- Mostly F's
- I don't remember

12. Do you plan to attend college:

- Part-time.
- Full-time.

13. Do you plan to work while attending college?

- No.
- Yes, part time (less than 30 hours a week)
- Yes, full time (more than 30 hours a week)

14. In your experience so far at your college, to what extent do you agree or disagree with these items?

	strongly disagree	disagree	neutral	agree	strongly agree
I can relate to my fellow classmates	<input type="checkbox"/>				
I catch myself losing all connectedness with college life	<input type="checkbox"/>				
Other people make me feel at home on campus	<input type="checkbox"/>				
I have friends on this campus that I feel I can tell anything.	<input type="checkbox"/>				
I don't feel related to anyone on campus	<input type="checkbox"/>				
I feel connected to campus life.	<input type="checkbox"/>				
I feel that I fit right in on campus.	<input type="checkbox"/>				
There is no sense of brotherhood/sisterhood with my college friends.	<input type="checkbox"/>				
I don't feel I participate with anyone or any groups on campus.	<input type="checkbox"/>				
I know a lot of people on this campus.	<input type="checkbox"/>				

15. What is the highest level of education you plan to attain?

- some college (no degree or certificate)
- Locally or state recognized certification or training program
- Associates degree
- 4-year college degree/Bachelors degree
- Masters degree
- Ph.D. or professional degree

16. Have you selected a major or course of study?

- No
 - Yes, it is:
-

17. With whom will you primarily live during the academic year (check all that apply)?

- Alone.
- With parents, grandparents, or former guardians
- With friends, classmates, roommates
- With a spouse/partner/significant other
- With my children or minors in my care.

18. How old are you (in years): _____

19. With what ethnicity do you identify (select all that apply)?

- Asian or Pacific Islander
- Black or African American
- Caucasian or White
- Hispanic/Latino
- Hispanic/Non-Latino
- Middle Eastern
- Other
- Decline to answer

20. What is your gender?

- Male
- Female

APPENDIX D
Spring Student Survey Time 2

1. At the beginning of this semester, we asked you about an individual in your life who has more experience than you, and supports you and guides you as an adult and college student? This person is someone you look up to, you trust, and you feel like he/she cares about you. Looking back on THIS SEMESTER, would you say there is a person in your life who fits this description? (please select just *one* person who you would say best fits this description. This DOES NOT NEED TO BE THE SAME PERSON YOU SELECTED IN THE FALL).

Yes, he/she is:

- | | |
|--|--|
| <input type="checkbox"/> My father | <input type="checkbox"/> My friend |
| <input type="checkbox"/> My mother | <input type="checkbox"/> My friend's parent |
| <input type="checkbox"/> My sibling | <input type="checkbox"/> My boyfriend/girlfriend |
| <input type="checkbox"/> My step-parent | <input type="checkbox"/> My husband/wife/significant other |
| <input type="checkbox"/> My aunt/uncle | <input type="checkbox"/> My high school teacher |
| <input type="checkbox"/> My cousin | <input type="checkbox"/> My religious leader |
| <input type="checkbox"/> My grandparent | <input type="checkbox"/> My professor |
| <input type="checkbox"/> My godparent | <input type="checkbox"/> My academic counselor/advisor |
| <input type="checkbox"/> My neighbor | <input type="checkbox"/> My non-academic counselor/therapist |
| <input type="checkbox"/> A family friend | <input type="checkbox"/> My athletic coach |
| <input type="checkbox"/> Someone else | |

Who? _____

No. (If no, please skip to page 3)

2. How often did you talk to this person this semester?

- Daily
- Weekly
- Monthly
- Every other month
- Less than every other month

3. How did you **most often** communicate with this person this semester?

- In person
- On the phone
- Via text message
- Via email or instant message
- In another way
what? _____

4. To what extent did this person support you in the following ways this semester? This person...

	not at all	a little	some	quite a bit	very much
is always there for me.	<input type="checkbox"/>				
supports me financially.	<input type="checkbox"/>				
is someone I can talk to openly about personal issues.	<input type="checkbox"/>				
supports my goal-setting.	<input type="checkbox"/>				
gives me good suggestions on how to be a better student.	<input type="checkbox"/>				
helps me come up with ways to solve a problem.	<input type="checkbox"/>				
supports me in figuring out what I value.	<input type="checkbox"/>				
supports my career exploration.	<input type="checkbox"/>				
helps me examine my degree options.	<input type="checkbox"/>				
supports me spiritually.	<input type="checkbox"/>				
recognizes my accomplishments	<input type="checkbox"/>				
is a role model to me.	<input type="checkbox"/>				

What do you consider the most significant way that this person supported you?

5. Would you most consider this person to be a

- Mentor
- Coach
- Friend
- Counselor
- Parent
- Something else

What? _____

6. Read each item carefully and respond in the way that best describes you.

	not at all	a little	some	quite a bit	very much
I can think of many ways to get out of a jam.	<input type="checkbox"/>				
I energetically pursue my goals.	<input type="checkbox"/>				
I feel tired most of the time.	<input type="checkbox"/>				
There are lots of ways around any problem.	<input type="checkbox"/>				
I am easily downed in an argument.	<input type="checkbox"/>				
I can think of many ways to get the things in life that are important to me.	<input type="checkbox"/>				
I worry about my health.	<input type="checkbox"/>				
Even when others get discouraged, I know I can find a way to solve the problem	<input type="checkbox"/>				
My past experiences have prepared me well for my future.	<input type="checkbox"/>				
I've been pretty successful in life.	<input type="checkbox"/>				
I usually find myself worrying about something.	<input type="checkbox"/>				
I meet the goals that I set for myself.	<input type="checkbox"/>				

7. In terms of academic success, do you feel that you are:

- Ahead of your peers
- About even with your peers
- Behind your peers

8. Overall, this semester, what do you expect your grades to be like?

- Mostly A's
- Mostly B's
- Mostly C's
- Mostly D's
- Mostly F's

9. How many college units will you complete this semester? _____ units

10. Did you take an English or writing course this semester?

- Yes, and I will pass with a C or better.
- Yes, but I dropped it or will not pass.
- No.

11. Did you take a math course this semester?

- Yes, and I will pass with a C or better.
- Yes, but I dropped it or will not pass.
- No.

12. Did you work this semester?

- No.
- Yes, part time (less than 30 hours a week)
- Yes, full time (more than 30 hours a week)

13. In your experience so far at your college, to what extent do you agree or disagree with these items?

	strongly disagree	disagree	neutral	agree	strongly agree
I can relate to my fellow classmates	<input type="checkbox"/>				
I catch myself losing all connectedness with college life	<input type="checkbox"/>				
Other people make me feel at home on campus	<input type="checkbox"/>				
I have friends on this campus that I feel I can tell anything.	<input type="checkbox"/>				
I don't feel related to anyone on campus	<input type="checkbox"/>				
I feel connected to campus life.	<input type="checkbox"/>				
I feel that I fit right in on campus.	<input type="checkbox"/>				
There is no sense of brotherhood/sisterhood with my college friends.	<input type="checkbox"/>				
I don't feel I participate with anyone or any groups on campus.	<input type="checkbox"/>				
I know a lot of people on this campus.	<input type="checkbox"/>				

14. What is the highest level of education you plan to attain?

- some college (no degree or certificate)
- Locally or state recognized certification or training program
- Associates degree
- 4-year college degree/Bachelors degree
- Masters degree
- Ph.D. or professional degree

15. Have you selected a major or course of study?

- No
 - Yes, it is:
-

16. With whom will you primarily live during the academic year (check all that apply)?

- Alone.
- With parents, grandparents, or former guardians
- With friends, classmates, roommates
- With a spouse/partner/significant other
- With my children or minors in my care.

17. How old are you (in years): _____

18. With what ethnicity do you identify (select all that apply)?

- Asian or Pacific Islander
- Black or African American
- Caucasian or White
- Hispanic/Latino
- Hispanic/Non-Latino
- Middle Eastern
- Other
- Decline to answer

19. What is your gender?

- Male
- Female

APPENDIX E
Fall Mentor Survey

You were nominated by a college student from whom you received this survey, as someone who has made a positive impact in his or her development. In this study, we are interested in learning a little more about you and the ways that you support this student.

1. What would you most consider yourself to be to this student (**choose ONE**)?

- Mentor
- Coach
- Friend
- Counselor
- Parent
- Something else

What? _____

2. To what extent do you support this student in the following ways?

	not at all	a little	some	quite a bit	very much
I am always there for him/her.	<input type="checkbox"/>				
I support him/her financially.	<input type="checkbox"/>				
I am someone s/he can talk to openly about personal issues.	<input type="checkbox"/>				
I support his/her goal-setting.	<input type="checkbox"/>				
I give him/her good suggestions on how to be a better student.	<input type="checkbox"/>				
I help him/her come up with ways to solve a problem.	<input type="checkbox"/>				
I support him/her in figuring out what s/he values.	<input type="checkbox"/>				
I support his/her career exploration.	<input type="checkbox"/>				
I help him/her examine his/her degree options.	<input type="checkbox"/>				
I support him/her spiritually.	<input type="checkbox"/>				
I recognize his/her accomplishments	<input type="checkbox"/>				
I am a role model to him/her.	<input type="checkbox"/>				

3. What is the most important thing that you do to support this student?

4. Read each item carefully and respond in the way that best describes YOU.

	not at all	a little	some	quite a bit	very much
I can think of many ways to get out of a jam.	<input type="checkbox"/>				
I energetically pursue my goals.	<input type="checkbox"/>				
I feel tired most of the time.	<input type="checkbox"/>				
There are lots of ways around any problem.	<input type="checkbox"/>				
I am easily downed in an argument.	<input type="checkbox"/>				
I have a deep inner strength.	<input type="checkbox"/>				
My future will be better than the present.	<input type="checkbox"/>				
People who know me would say I'm a hopeful person.	<input type="checkbox"/>				
I can think of many ways to get the things in life that are important to me.	<input type="checkbox"/>				
I worry about my health.	<input type="checkbox"/>				
Even when others get discouraged, I know I can find a way to solve the problem.	<input type="checkbox"/>				
My past experiences have prepared me well for my future.	<input type="checkbox"/>				
I'm excited about at least one thing in my future.	<input type="checkbox"/>				
Even in bad situations, I'm hopeful.	<input type="checkbox"/>				
I usually find myself worrying about something.	<input type="checkbox"/>				
I meet the goals that I set for myself.	<input type="checkbox"/>				
I feel pretty hopeful about the future.	<input type="checkbox"/>				
I have a faith that gives me comfort.	<input type="checkbox"/>				
I have the power to make my future better.	<input type="checkbox"/>				
I've been pretty successful in life.	<input type="checkbox"/>				

5. How old are you (in years): _____

6. With what ethnicity do you identify (select all that apply)?

- Asian or Pacific Islander Black or African American Caucasian or White
- Hispanic/Latino Hispanic/Non-Latino Middle Eastern
- Other Decline to answer

7. What is your gender?

- Male Female Decline to answer