

SUMMER YOUTH WORK PROGRAMS: AN EVALUATION AND EXAMINATION OF
VARIABLES CONTRIBUTING TO ADOLESCENT CAREER DEVELOPMENT

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ABSTRACT

Adolescence is crucial for career development, as youth begin to engage in activities to prepare for their careers. However, at-risk and rural youth may face barriers to developing useful career traits like career adaptability and work hope. One barrier is insufficient parental support. Parental support is associated with the development of skills and characteristics that promote career success (Keller & Whiston, 2008). However, certain personal and social variables, including grit and mentoring relationships, may help youth succeed despite inadequate parental support. Additionally, programs that engage at-risk youth in work-related tasks and experiences may help youth develop positive career trajectories. Therefore, youth work programs must be evaluated, given their potential to impact career development. The research involved 106 youth ages 14-23 who participated in summer work-training programs. Participants took a pretest, posttest, and 3-month follow-up to examine change in program goals over time, and identify relationships and personal characteristics that can help youth develop career adaptability and work hope.

Study one examined outcomes consistent with program goals to assess program effectiveness. Linear regression analyses showed that worksite performance only increased for those who had previously worked, such that those with more previous work experience had greater improvement in worksite performance. Multilevel models showed a significant or marginally significant increase in understanding the value of school and career adaptability over time. No significant increase was found for leadership and work hope. T-tests showed worksite supervisors scored the quality of their mentoring relationship with participants significantly higher than participants, and regression analyses showed participant perceptions of the mentoring relationship did not predict the continuity of the relationship three months later.

The second study focused on personal characteristics and social relationships that are related to career adaptability and work hope. Multilevel models showed parental support and grit significantly positively predicted career adaptability and work hope. Grit moderated the relation between parent support and career adaptability, but not parent support and work hope. No findings were significant regarding perceived mentoring relationship or changes over time. The discussion focuses on program effectiveness, future directions, ways to improve programming, and ways to promote career traits.

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DEDICATION

I would like to dedicate this dissertation to my parents and my partner, without whom I could not have made it this far.

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CHAPTER 1. INTRODUCTION

Adolescence is a critical time for career development. Youth develop career interests and engage in career-related tasks to prepare for the future (Super, 1990). Both work experience and career exploration are linked to career success (Creed & Patton, 2003); without these opportunities, youth may not understand how to be successful in the work place, or even what their career options are. However, many barriers can exist to developing positive career development trajectories for certain youth. For example, rural youth may experience geographic isolation, live in less wealthy areas, and live in areas where school-to-work programs are less available or not available at all (Rojewski, 1994). At-risk youth experience barriers to work place success due to their at-risk status. At-risk is defined here as youth who are pregnant or parenting; have limited English speaking ability; have dropped out of school or are identified as a potential dropout; are a juvenile offender; receive public assistance; have disabilities, including learning disabilities; are homeless or a runaway; are chemically dependent or have chemically dependent parents; have basic skills deficiencies in math or reading; have lower educational attainment; are a foster child. Barriers for at-risk youth may include lack of access to transportation and inadequate clothing. These barriers inhibit rural and/or at-risk youth's ability to engage in work experience and career exploration, and may pose difficulties for youth to do well or stay in school. Programs that teach youth about work and allow them to engage in the workplace may help break down these barriers and provide the skills necessary for youth to be successful in their future careers. Therefore, it is crucial to examine youth work programs' effectiveness because they have great potential to impact youth career development.

Career Theories

Career theories can help understand youth career development. Three that are particularly salient when considering career development for at-risk youth include Career Construction Theory, Hope Theory, and the Mentoring Sociomotivational Model.

Career Construction Theory

Career construction theory addresses how careers are personally and socially constructed (Savickas, 2005). Savickas (2005) asserts that individuals construct their careers by placing meaning on their work behaviors and experiences. The three elements of career theory are vocational personality types, career adaptability, and life themes (the what, how, and why of vocational behavior, respectively).

Vocational personality. One segment of career construction is vocational personality. Vocational personality is made up of an individual's abilities, needs, values, and interests as they relate to careers (Savickas, 2005). Though they are career traits, they begin to develop long before a person starts working. These characteristics are rehearsed in a variety of settings, such as doing household chores, before they are ever used in employment settings. Vocational personality is the "what" of career construction, meaning it addresses what career an individual will construct based on his/her career-related characteristics (e.g. career-related abilities, needs, etc.); it focuses on the content of a career. For example, different personality traits may predispose individuals for different career trajectories. Dilchert (2007) found that those who are high in extraversion (i.e. being outgoing, sociable) are more likely to seek managerial or leadership positions, and that high agreeableness (i.e. being tolerant, trusting, sensitive) is low in individuals in these types of positions.

Career adaptability. The second segment of career construction is career adaptability. Career adaptability focuses on the “how” of career construction, addressing how an individual constructs a career. In particular, career adaptability stresses the coping processes people use to construct their careers. Career adaptability helps individuals transition through the different stages of their career and addresses an individual’s readiness for adjusting to the tasks, transitions, and personal traumas that a person may encounter during career transitions. For example, having adaptability resources is associated with general and professional well-being (Maggiori, Johnston, Krings, Massoudi, & Rossie, 2013), life satisfaction (Santilli, Nota, Ginerva, & Soersi, 2014), career satisfaction (Zacher, 2014), communication skills, problem solving skills, and team work skills (Guzman & Choi, 2013). According to CCT, adaptation allows an individual to implement his/her self-concept into a work role and create and build his/her work life and career (Savickas, 2005).

Career adaptability is comprised of four dimensions of career readiness and coping resources that signify an adaptive individual. The first of these is career concern, which is considered the most important dimension of career adaptability (Savickas, 2005). Career concern is having a planful attitude and an understanding that what is done now or has been done in the past will impact the future, inclining individuals to prioritize activities that will contribute to their future (Savickas, 2005). A lack of career concern involves pessimism about the future and a lack of a plan.

A second dimension of career adaptability is career control. This is a sense that the individual is responsible for constructing his/her own career (Savickas, 2005); while he/she may consult others, he/she is in charge of his/her own career. This sense of responsibility inclines individuals to engage in activities that will help them make competent career decisions. Without

career control, individuals may have career indecision and not know what to do to help advance their careers.

The third dimension of career adaptability is career curiosity, which refers to curiosity about, and exploration of, the way a person fits into the working world (Savickas, 2005). It can help individuals make choices that help them best fit into a situation. Exploration gives people more knowledge about their abilities, interests, and values as well as knowledge about different jobs and careers and how to be successful in them (Savickas, 2005). Without career curiosity, individuals may not have an accurate understanding about the work world and how they would fit best in it.

The final dimension of career adaptability is career confidence, which includes feelings of self-efficacy (i.e. feeling capable) about one's own ability to make and obtain the necessary educational and vocational decisions (Savickas, 2005). Without career confidence, individuals may have career inhibition which could deter achieving career goals because they do not feel confident in their ability to make the right choice.

The dimensions of career adaptability may progress at different rates. It is possible that individuals may get fixated or regress at times. However, each dimension should be present throughout career development. The presence of each dimension of career adaptability is necessary for career success (Savickas, 2005).

Life themes. The final segment of CCT is life themes, which addresses work life and the themes individuals use to make choices and adjustments concerning work roles. Life themes address the "why" of career construction, explaining why an individual made the choices he/she made and what guides these choices (Savickas, 2005). These identify and address the motivation and meaning behind career construction. Life themes focus on solving a critical problem or

problems, and the ways the individual finds to do that. It is important to note that a “problem” can be positive or negative; it is simply something the individual is preoccupied with (Savickas, 2005). Understanding an individual’s life themes can help identify why they were in a career they were in previously, are in currently, and will be in the future.

CCT outlines what career people choose, how they go about choosing it, and why they choose it. It may be particularly salient for adolescents because of the career adaptability feature, as it focuses on transitions. Adolescents are likely experiencing career transitions, and so career adaptability may be particularly indicative of their career readiness and whether or not they possess the resources to be successful and adapt to the requirements of their transition.

Hope Theory – Work Hope

Hope is defined as a type of goal-directed thinking where individuals believe they are able to design pathways and have the motivation to follow those pathways to achieve desired goals. Hope is comprised of three components: goals, pathways, and agency. Goals can be considered the anchors of hope theory (Snyder, 2000), as they allow individuals to direct their thinking toward specific outcomes. Without goals, there is no need for hope, as there is nothing to hope for. Pathways are also necessary in the acquisition of hope. These are routes an individual designs as a way to reach a goal (Snyder, 2000). People often think of multiple pathways to achieve their goals, allowing individuals to bypass barriers that may be problematic for goal achievement. Developing hope involves not only the creation of the routes, but the perceived ability to design a route to achieve a goal. If an individual believes they can create a pathway to achieve a goal, they develop hope that the goal can be achieved. Agency is the other component necessary in hopeful thinking. Agency is the motivational component of hope. It motivates people to travel along their designed pathways (Snyder, 2000), including alternate

pathways should barriers arise, providing them the drive to pursue a goal. The extent to which all three components are present, and their strength, determines how hopeful an individual will feel.

As indicated above, a great amount of mental energy is needed to complete goals for which people are hopeful. Therefore, outcomes must be fairly important for people to engage in the necessary mental activities needed to complete goals where hope is involved (Snyder, 2000). However, without hope, many goals may not be attainable. Individuals may not be able to design paths that will allow them to achieve their goals, may not believe they are capable of achieving their goals, and/or may not have the motivation to come up with, or follow, the paths necessary for goal achievement.

Hope may be particularly relevant for understanding work-related goals, especially for individuals who have little access to economic resources (Juntunen & Wettersten, 2006). Work hope specifically applies hope theory to the vocational realm. Juntunen and Wettersten (2006) define work hope as motivation related to work and work-related goals. Work-related goals, development of pathways to achieve those goals, and the belief that one has the ability to achieve the goal are also key components of work hope (Juntunen & Wettersten, 2006). The presence of work hope may be essential for those from disadvantaged backgrounds, as without it, these individuals may not believe they are capable of achieving work goals, or even identifying them (Juntunen & Wettersten, 2006). The presence of work hope suggests individuals have these goals, believe they can achieve them, have a pathway or pathways to achievement, and have the motivation to follow the path. Work hope is associated with less skepticism about importance of school, higher interest and task orientation as motivation for engaging academically, and greater feelings of academic ability (Kenny, Walsh-Blair, Blustein, Bempechat, & Seltzer, 2010). Additionally, involvement in work programs may make work hope more important in changing

youth's beliefs about their abilities to achieve (Kenny et al., 2010), suggesting that work programs may influence the development of work hope in adolescent participants. Work hope may provide youth direction and motivation to achieve in the workplace.

Mentoring Sociomotivational Model

According to Levinson, Darrow, Klein, Levinson, & McKee (1979), mentors are generally a teacher, advisor, or sponsor. Mentors may develop in formal or informal relationships; however, a mentoring relationship is not defined in terms of roles, but in terms of the nature of the relationship and its functions. Mentors serve a variety of functions, including enhancing skills and intellectual development, facilitating job advancement, guiding mentees through challenges, serving as a role model, and providing moral support and counseling when necessary. Kram (1986) indicates that mentors serve two primary functions: career functions and psychosocial functions. Career functions serve to enhance learning how a workplace functions and where the mentee fits, as well as provide knowledge pertaining to how to advance and prepare the mentee for advancement. This includes things like sponsorship, coaching, support, opportunities to develop competence, and opportunities to build knowledge and skills (Kram, 1986). Psychosocial functions serve to enhance a mentee's competence and effectiveness in his/her role. This includes things like role modeling, counseling and listening, acceptance and confirmation, and friendship (Kram, 1986). Mentors serve a variety of functions, and can be crucial for the development of appropriate and necessary skills, including work skills. They may be especially helpful for those who come from disadvantaged backgrounds and who may not have had appropriate models for, or exposure to, appropriate work behavior.

More recently, a mentoring theory has emerged specifically concerning youth who are academically at-risk. Academically at-risk adolescents are those who may have poor study skills,

come from poverty, have unstable family circumstances, and other such similar circumstances (Larose & Tarabulsy, 2014). For work with these youth, Larose and Tarabulsy (2005) proposed the Mentoring Sociomotivational Model (MSM). This model places importance on mentors and their behavior, suggesting that there are four critical behaviors to employ to most effectively help academically at-risk youth develop successfully. These include structure, engagement, autonomy support, and competence support (Larose & Tarabulsy, 2005). Structure includes the mentor's and mentee's creation of clear objectives, activities, and functions to make the relationship productive (Larose & Tarabulsy, 2005). Engagement includes open and respectful discussions of any issues the mentee may pose (Larose & Tarabulsy, 2005). Autonomy support reflects acceptance and validation of the mentee's choices with no control or pressure from the mentor (Larose & Tarabulsy, 2005). Finally, competence support addresses the need for the mentor to support the mentee's feelings of competence even, and especially, following negative experiences (Larose & Tarabulsy, 2005). This model provides the support and fosters an environment that may promote the academic adjustment necessary for academically at-risk youth to prosper.

Much of what makes youth academically at-risk makes them at-risk for other problems, so utilization of the MSM model of mentoring may help at-risk youth in general. Though it is limited, research supports the use of this model for academically at-risk youth. One such program that promoted these characteristics in mentors had mentees with higher intrinsic motivation, greater decisiveness about their career choices, better understanding of their interests and skills, and greater knowledge of program and career options (Larose et al., 2011). Another program utilizing elements of MSM demonstrated further benefits of this mentoring model, with 9th and 10th graders who were mentored reporting increases in emotion control, school

functioning, appropriate affect expression, and career development, whereas the control group experienced declines in these measures (Komosa-Hawkins, 2012). Mentors who use the MSM may provide knowledge and skills to prepare at-risk youth to be successful in the workplace.

Work Experience – When is it Beneficial?

Work experience can be valuable for youth. Indeed paid work experience actually promotes characteristics that promote later career success. For example, paid work experience is associated with greater thoughtfulness in career planning and exploration in high school students (Creed & Patton, 2003), both traits associated with later career success. Further, recent research does suggest that there are no negative adult outcomes associated with adolescent work experience (Iousa et al., 2014). However, considerable research suggests that working too much is detrimental for adolescent success. While there is some disagreement as to how much work is too much, most research suggests that working more than 20 hours per week during school can be problematic. For example, more intense work schedules during the school year are associated with lower school engagement, higher substance use, and higher deviance than those who were not employed (Monahan, Lee, & Steinberg, 2011), lower educational attainment compared to those who worked 15 hours or less (Bachman, Staff, O'Malley, Schulenberg, & Freedman-Doan, 2011), and lower GPAs, less school effort, lower college expectations, and more misbehavior compared to those who worked 20 hours or less (Staff, Schulenberg, & Bachman, 2010). Having a more intense work schedule is associated with placing higher value on having a good job (Nagenast, Marsh, Chiorri, & Hau, 2014); however, this appears to be the only positive outcome, and research suggests that the value placed on good jobs may be overshadowed or made less attainable by the other detrimental outcomes that accompany long working hours during adolescence (Nagenast et al., 2014).

It is important to note that not all employment during adolescence is detrimental. Youth who worked moderate (20 hours or less) schedules generally had similar outcomes to those who were not employed (Bachman et al., 2011; Monahan et al., 2011; Staff et al., 2010). Youth from disadvantaged backgrounds may actually benefit from moderate work rather than abstaining from employment. For example, youth from disadvantaged backgrounds working a moderate amount had higher educational attainment and school engagement than youth from similar backgrounds who worked at high intensities or were not employed (Staff & Mortimer, 2008). Vuolo, Mortimer, and Staff (2013) also found that high school students from disadvantaged backgrounds with steady work histories during high school had smoother transitions from school to work. Clearly, the number of hours youth should work needs to be considered, but moderate work may be beneficial, especially for those who are from disadvantaged backgrounds.

While work intensity is important to consider, recent research suggests the type of job is also an important consideration in understanding the benefits of youth work experience. Different types of jobs provide opportunities to learn and develop different skills. For example, adolescent employees report that fast food restaurant jobs interfere the most with school, family, and friend involvement and have the highest levels of job stress (Staff & Schulenberg, 2010). Additionally, retail and sales jobs, which are the most common jobs for adolescent employees, also have high levels of stress and interference, as well as provide the least opportunity for youth to gain or practice skills and have little career potential (Staff & Schulenberg, 2010). Office and clerical positions, on the other hand, appear to be the highest quality positions for youth. These jobs tend to be low in stress, low in interference, and give youth many opportunities to gain and practice skills (Staff & Schulenberg, 2010). While it is not clear how job type impacts immediate

outcomes, it is clear that certain jobs offer youth more opportunities for skill development than others, and should be considered when youth choose employment.

Clearly, evidence exists supporting moderate paid work experience for youth. However, the evidence presented above represents work experience during the school year. Though the research is limited, work experience during the summer is also beneficial. For example, high school girls in Sweden had higher wages 7 years after graduation if they had a summer job, even though their work involved relatively unskilled labor (Alam, Carling, & Naas, 2015). Summer work programs seem to benefit youth involved in the short term, though long term gains are not clear. One program serving low-income high school youth in New York places low-income youth in a variety of jobs from day-care centers to government agencies, provides training for work readiness, career exploration, postsecondary education options, and aims to introduce and prepare youth for the world of work (Leos-Urbel, 2014). Involvement with this program increased school attendance and the number of attempts and passes of Regents English and math examinations (exams for youth to obtain a more prestigious diploma; Leos-Urbel, 2014). Another program for youth ages 14 and 15 that involved youth in classes and work during the summer achieved short term gains in reading and math, though there were no effects on high school graduation, grades, or employment (Heckman, 2000). Summer youth work programs also appear to reduce violence and crime among disadvantaged youth. In two separate programs, one based in Chicago and one in Boston, youth involved in summer work programs were less likely to be involved in violent crimes when compared to a control group (Heller, 2014; Sum, Trubskyy, & McHugh, 2013). Additionally, those in the Boston program experienced a significant decrease in violent, risky, and adverse social behaviors, relative to the comparison group (Sum et al., 2013). Given these effects, it appears summer work programs have a positive

impact on youth participants. However, more research is needed to better understand effects of summer work and summer work programs.

Work experience in the right amount and appropriate type promote positive career development for adolescents and could help youth be successful in their future careers. Given that research concerning summer employment is limited, and that youth may have more opportunities to be involved with employment in the summer, it is crucial to understand the role summer employment may play in preparing youth for work success. Additionally, programs that help youth not only get experience, but help them build important skills throughout the process may be particularly beneficial, as they can help expose youth to the proper job opportunities and relationships, such as mentoring relationships with supervisors, for example, that will advance their careers and prepare them for the future. Evaluating a summer work program may help with understanding links between summer work experience and youth work programs in helping youth develop successful career trajectories.

The Program

The Rural Minnesota Concentrated Employment Program (CEP) summer youth work programs help youth gain work skills and experience through on-site work training. Programs at CEP that include a summer component are the Workforce Innovation and Opportunity Act (WIOA) and the Minnesota Youth Employment Program (MYP) participants. WIOA generally involves a 9-month employment period and training options with an optional summer component, while MYP is generally a summer employment and training program, with an optional year-round component. To be involved in these programs, youth must be of low-income status or at-risk (at-risk includes individuals who are pregnant/parenting, dropouts or potential dropouts, juvenile offenders, those receiving public assistance, those with disabilities, those who

are homeless or runaways, those who are chemically dependent or are the children of chemically dependent individuals, those who are deficient in basic skills, those who have been held back in school, and foster children; Rural Minnesota CEP, 2016a).

At the start of each program, recruited youth are briefly assessed on their abilities and career interests and go through a “world of work” orientation to get them prepared for their work experience. Youth develop a plan with a youth worker from CEP, and are connected with a business that aligns with their interests to give them valuable work experience. Youth involved in WIOA are involved with several services including a structured needs assessment, an individual employment plan, preparation for postsecondary educational opportunities, links between academic and vocational learning, preparation for employment including worksite training, connections to the job market and employers, and leadership and decision-making skills (Rural Minnesota CEP, 2016b; Rural Minnesota CEP, 2016c). MYP offers similar services, with some exceptions. In MYP, youth go through an orientation and complete an assessment, are placed at a worksite that is aware of program goals, can explore postsecondary and/or career opportunities, engage in career planning, can be involved with leadership opportunities, receive classroom training, and engage in career readiness training (Rural Minnesota CEP, 2016a). Both programs have the potential for the development of mentoring relationships with worksite supervisors. However, worksite supervisors only receive training about becoming a worksite supervisor, not a mentor. As evidenced here, both programs are largely similar with similar offerings to adolescent participants. MYP may be more limited, in part, because not all components are necessarily included to the same extent as they are in WIOA.

The major objective for these CEP programs is to prepare youth to be successful in the working world. Youth get to apply their knowledge to the real world in a structured setting in

which they can practice and enhance their skills. The classroom has not been very effective for many of these youth, and the hands-on nature of this program may help to engage youth in the learning process. The programs also focus on linking education to employment and helping youth understand the importance of their education. They also help youth develop leadership skills and basic work skills; and they provide nurturing mentors to support youth and help them be successful in this process and later in life. This programming has the potential to influence youth's success in gaining the skills necessary to achieve in the workplace. Therefore, an evaluation of the program, as well as contextual influences on program success, is crucial to best understand how youth are impacted by the program.

CHAPTER 2. EVALUATION OF A SUMMER YOUTH WORK PROGRAM

Adolescence is a critical time for career development. Youth explore different career options, develop skills, and try to understand where they could fit in the working world. However, at-risk youth and rural youth may not have the same opportunities as other youth, and may not receive adequate preparation to make them work ready. Programs exist to combat these inequities, but it is critical to assess whether these programs have a positive impact and prepare youth for work to ensure the best programming is available to those who need it.

Two such programs are housed within Rural MN CEP, and are focused on providing youth with the work skills necessary for workplace success. The programs take place during the summer months and involve youth in work training within a worksite, providing youth hands-on work experience in a variety of jobs. Work experience has been shown to be an important resource in helping youth develop the skills to succeed at work (Creed & Patton, 2003). While working too much (more than 20 hours per week) can be detrimental (Monahan et al., 2011), research suggests that working a moderate amount (less than 20 hours per week) can promote higher educational attainment and school engagement, especially for those from disadvantaged backgrounds (Staff & Mortimer, 2008). While it is clear that part-time work can have its benefits, the impact of summer work and work training programs is unclear. Some research suggests that summer work promotes higher future wages (Alam et al., 2015) and that summer work programs have some immediate benefits for youth (Leos-Urbel, 2014). However, little previous research has examined the impacts that summer work, let alone summer work programs, has on future career outcomes. More research is needed to understand the impact these types of programs have on participants and their potential for work success. The purpose of the

present study is to better understand the how this type of programming impacts participants' work-readiness.

Career Traits for Success

Work experience and training can help youth be successful in the workplace. However, there are several skills and relationships that can also help youth succeed, and that could be beneficial if encouraged and developed in summer work programs. These include career adaptability, work hope, and the development of a mentoring relationship.

Career Adaptability

Career adaptability, as outlined by the Career Construction Theory, is a person's readiness for dealing with various obstacles or issues he/she may encounter during career transitions, preparing him/her to deal successfully with careers (Savickas, 2005). There are actually three components of CCT, including vocational personality, career adaptability, and life themes (the "what", "how", and "why" of career construction, respectively; Savickas, 2005). However, career adaptability and its four dimensions applies to transitional career periods (e.g. transitioning from school to a job), and therefore will be the focus here. The four dimensions of career adaptability include career concern (planful and future oriented), career control (feeling that one's career is under his/her control), career curiosity (exploring the workplace), and career confidence (making decisions necessary for educational and work-related success; Savickas, 2005). Greater career adaptability, and higher levels of each individual dimension, is linked with better communication skills, problem solving skills, and team work skills (Guzman & Choi, 2013). Therefore, promoting career adaptability in work-training programming may benefit program participants.

Work Hope

Work hope is based in hope theory, and helps youth, particularly those who are disadvantaged, to be successful in the workplace. Work hope, based in the concept of hope and hope theory (Juntunen & Wettersten, 2006), focuses on work-related motivation and goals. Work hope includes the presence of work-related goals, the perceived ability and motivation to achieve those goals, and the identification of the steps to achieve those goals (Juntunen & Wettersten, 2006). Disadvantaged youth may especially benefit from a sense of work hope, as they are more likely to struggle with the creation and pursuit of work goals. Work hope signifies not only the presence of work goals, but also that the individual feels they are capable of achieving those goals. Work hope may help youth be successful in the work place as it is associated with less skepticism about school's importance and greater feelings of academic ability (Kenny et al., 2010), helping youth see the importance of education and help them feel more capable. While little is known about work hope's actual impact on future career success, hope has been shown to be associated with positive career attitudes and proactive behaviors aimed at career advancement (Hirschi, 2014).

Mentoring and the MSM

Developing a mentoring relationship is a characteristic that can encourage work success. Mentors can help youth become successful in the workplace because they help youth develop a positive attitude toward work (Baranik, Roling, & Eby, 2010), can provide a positive model of work behavior, provide support, and guide skill development, among other things (Kram, 1986; Levinson et al., 1979;). Particularly for youth from disadvantaged backgrounds, following the Mentoring Sociomotivation Model (MSM) may help mentors develop the strongest relationship with mentees (Larose & Tarabulsy, 2005). According to this model, mentors should provide

structure (clear objectives), engagement (discussions that are open and respectful), autonomy support (relinquishing control while accepting choices), and competence support (supporting competence even when the mentee fails) (Larose & Tarabulsky, 2005). This mentoring model is especially supportive for at-risk youth, as research shows mentors who followed this model had mentees who were more decisive about their careers, had a better understanding of their interests and skills and had a better knowledge of career options (Larose et al., 2011).

The structure of the MSM seems to be most appropriate for a formal mentoring setting, wherein a mentorship is specifically assigned. However, it would still be beneficial in less formal mentorships, such as those formed in the work program in this study, which can cover many of the formal mentor functions. Strict mentoring guidelines were not established for the current programming, but worksite supervisors were generally expected to fill that mentor role in some capacity. Worksite supervisors were trained to be supervisors, but did not receive training on how to mentor. However, evidence does suggest supervisor support is just as important as, if not more important than, formal mentorships in predicting career satisfaction (Ng, Eby, Sorenson, & Feldman, 2005; Raabe & Beehr, 2003). Additionally, youth who report informal mentoring relationships report less stress, are less likely to have been arrested (Munson & McMillen, 2009), and are more likely to be employed after high school than those who do not have mentors (McDonald, Erickson, Kirkpatrick, Johnson, & Elder, 2007), suggesting use of the MSM in an informal setting could still be beneficial.

In addition to the type of mentoring relationship, quality also must be considered. Individuals who reported high satisfaction with the mentor had more positive work attitudes than those without mentors. However, those who were dissatisfied, or marginally satisfied, with their mentoring relationships had work attitudes similar to, or more negative than, those who did not

have a mentor (Ragins, Cotton, & Miller, 2000). Clearly, quality of the mentoring relationship is also crucial for the impact of that relationship on work success.

Mentoring relationships can certainly have a positive impact on the mentee and help youth be successful in the work place. Although the MSM may be most appropriate for a formal mentor setting, applying similar principles in all mentorships may help the relationship to be most effective, especially for those mentees who are at-risk. Encouraging mentoring relationships as part of programming could help encourage work success and help youth be successful.

Rural Minnesota Concentrated Employment Program

Rural MN CEP utilizes programs that are focused on helping at-risk youth overcome potential obstacles to get prepared for the working world. The programs promote youth work success by providing on-site work skills training to help youth who may struggle gain work skills and experience. Programs with a summer component include Workforce Innovation and Opportunity Act (WIOA) and Minnesota Youth Employment Program (MYP). WIOA is generally a 9-month program with an optional summer component, whereas MYP is generally a summer program with an optional year-round component. The programs are for youth who are of low-income status or at-risk (defined by the program as youth/young adults who are: pregnant/parenting, dropouts or potential dropouts, juvenile offenders, receiving public assistance, disabled, homeless or runaways, chemically dependent or have chemically dependent parents, struggling with basic skills, held back in school, and foster children). At intake, youth are briefly assessed on their abilities and career interests, and then develop a plan and are connected with a business that aligns with their interests to make their work experience as valuable as possible. WIOA and MYP are largely similar and offer access to several areas of

development, including career planning, leadership opportunities, career readiness training, and mentoring relationships, among others (Rural Minnesota CEP, 2016a).

Guideposts for Success – Giving Youth the Tools to Succeed

The current research will assess summer programming designed by the Rural Minnesota Concentrated Employment Program (CEP) with the intent to get youth ready for the world of work. In order to ensure the best possible programming, program activities and objectives were developed based the on Guideposts for Success outlined by the National Collaborative on Workforce and Disability for Youth (NCWDY, 2015). There are five guideposts that are consistent with the career theories. Each guidepost outlines the resources youth need to successfully transition to adulthood and the working world. They are also consistent with many elements of the career traits that have been examined by previous research, including career adaptability (Savickas, 2005), mentoring sociomotivational model (MSM, Levinson et al., 1979), and work hope (Juntunen & Wettersten, 2006), demonstrating the possibility for success of the programming.

Guideposts 1 and 2 – Preparation

The first two guideposts are consistent with literature on career adaptability, as they focus on preparations for successful transitions to the workplace.

School preparation. The first guidepost focuses on school-based preparation experiences. It posits that youth need to participate in educational programs based on standards, need clear performance expectations, and need graduation options based on relevant and meaningful indicators of skill and learning (NCWDY, 2015). Academic programs should be based on clear standards and work programs should be based on professional and industry standards. Additionally, youth need small and safe learning environments and supports from, and

by, highly qualified staff. Youth also need to be assessed in a variety of ways that are relevant to what they are learning (NCWDY, 2015).

Career preparation. The second guidepost posits that youth need career preparation and work-based learning experiences to help them form and develop aspirations and make informed decisions. This may be particularly salient for this program, as youth in rural areas may not have knowledge about all of their career options (Rojewski, 1994) and may have limited opportunities for career exploration (Hutchins & Akos, 2013). According to this guidepost, career assessments, exposure to postsecondary education opportunities, exposure to career opportunities and the requirements and benefits of various careers, and training to improve job-seeking and workplace skills are necessary for youth to successfully transition to the working world (NCWDY, 2015). This is consistent with previous research, which suggests that youth from disadvantaged backgrounds may particularly benefit from moderate work experience. For example, working moderately (20 or less hours of work) and having a history of consistent moderate work have been found to be associated with higher educational attainment, school engagement, and smoother school-to-work transitions for youth from disadvantaged backgrounds (Staff & Mortimer, 2008; Vuolo et al., 2013).

These first two guideposts are consistent with literature on career adaptability and its 4 aspects. Career curiosity suggests youth will choose a career that best fits their interests; career concern asserts a need for career planning; career confidence suggests that individuals need confidence in their ability to make decisions for themselves; and career control indicates youth need to feel responsible for their own careers (Savickas, 2005). The first guidepost is largely consistent with career confidence, so teaching youth skills based on professional standards and by highly qualified staff will help them learn the necessary skills to be successful and gain

confidence in their abilities to perform those skills. CEP's programs focus on getting students relevant work skills, using small groups or one-on-one meetings with their supervisor and youth coordinator, giving youth participants extra attention and preparation from the youth coordinator, and utilizing CEP youth coordinators who work with youth to place them in jobs and provide training to get them "work ready".

The second guidepost, career preparation, is consistent with each aspect of career adaptability. These aspects are addressed in the program by assessing and identifying youth skills and interests, discussing workplace opportunities, making efforts to place youth in work settings their interests align with, providing opportunities for work exploration, providing on the job training experiences, providing opportunities to learn and practice basic work skills, and providing opportunities to learn first-hand about specific skills related to certain careers. Each activity allows youth to explore careers, plan their career based on what they learn, become well informed, and obtain a sense of responsibility regarding their decisions.

Providing youth with basic work skills and good work habits helps them to have higher educational attainment, complete more education after high school, and have higher earnings (Lleras, 2008). Clearly, career adaptability has the potential to influence an individual's career trajectory. Given its consistency with these guideposts, career adaptability should be examined as an outcome of this programming.

Guideposts 3, 4, and 5 – Skills and Resources

The third, fourth, and fifth guideposts are consistent with literature on mentoring and MSM, as well as work hope, as they focus on relationships and acquisition of resources.

Youth development and leadership. The third guidepost suggests that youth need to be prepared for the challenges of adolescence and adulthood by obtaining necessary skills and

competencies, which include the development of leadership skills to be successful (NCWDY, 2015). Leadership skills become more essential as individuals reach higher on the corporate ladder, so may help individuals to advance within an organization and be successful at work (Mumford, Campion, & Morgeson, 2007).

Connecting activities. The fourth guidepost posits that youth must be connected to the appropriate programs, services, activities, and supports to help them access their post-school options. This includes any needed health services, transportation, housing, financial planning, tutoring, structured arrangements, and connection to any other services and opportunities (NCWDY, 2015). This would also include helping youth understand the importance of school, as school is a valuable resource in career success.

Family involvement. The final guidepost, though named specifically for family, indicates that involvement of parents, family members, and/or other caring adults promotes well-being and better post-school outcomes. It suggests that youth thrive when they have caring adults who have high expectations, who allow the young person to build on his/her strengths, and foster the young person's ability to achieve independence (NCWDY, 2015). Youth need caring adults who remain involved and continue to assist them to successfully transition toward adulthood (NCWDY, 2015). These adults should provide access to information about employment, more education, and community resources. Indeed, parental support is linked with more career engagement (Hirschi, Niles, & Akos, 2011), career development (Keller & Whiston, 2008), and career adaptability (Hirschi, 2009). Further, mentor support is linked with a better understanding of career interests and career options (Larose et al., 2011).

As noted above, the 3rd, 4th, and 5th guideposts are consistent with literature on MSM and work hope. Mentors can help youth develop skills to be successful in the workplace (Levinson,

1979) and provide support for youth to make decisions and feel they are capable (Larose & Tarabusy, 2005). As noted in the MSM, mentors also support youth autonomy and competence, supporting youth development and leadership, as laid out in the 3rd guidepost. Additionally, though the mentoring exposure may be somewhat limited during a summer program, there is evidence that even minimal interactions with mentors can be beneficial, especially for at-risk youth (Kolar & McBride, 2011). CEP recognizes that youth in these programs may vary in their access to a support network that would help them to be successful according to the tenets of the fifth guidepost. CEP therefore aims to provide positive adult relationships through worksite supervisors and youth coordinators who may fill that mentor role and who will support these youth and their transition into adulthood and the working world.

Concerning work hope, instilling a sense of work hope may help at-risk youth overcome obstacles to career success. Youth lacking resources or competencies often struggle with career-related goals (Juntunen & Wettersten, 2006). Therefore, promoting competency and providing access to services and information may make youth feel more capable. To address the “youth development” guidepost, CEP provides training on the job, and provides opportunities for leadership and youth development through work training and on-the-job responsibilities and interactions. To address the “connecting activities” guidepost, CEP provides information about services to youth as appropriate to give additional resources they may need to prepare for their futures. Providing the necessary resources may help youth understand how to design pathways to achieve career-related goals and give them the ability to follow those pathways, creating a sense of work hope for these youth.

These guideposts are consistent with previous research, as well as relevant career theories, indicating that compliance with this framework may benefit at-risk youth participants.

Recognizing the benefits of these guideposts, CEP has designed work programs to address these needs and adequately prepare youth for the world of work.

Hypotheses/Research Questions

The goal of this evaluation was to examine program effectiveness. To do this, the extent to which program goals were achieved was assessed. Based on the five guideposts, the programs posit that participants will develop basic work skills and leadership skills; that youth will better understand the connection between school and work; and that mentoring relationships will develop. Therefore, changes in each of these facets over time will be assessed. Because mentor behavior and perception of mentor behavior is important, mentor behavior will be assessed from both the mentor and mentee perspective, and consistency of answers will be assessed. Additionally, mentoring relationships are important for continued youth success, so the persistence of the mentoring relationship will also be assessed, as well as whether the quality of the relationship is related to the persistence of the relationship. Finally developing enhanced career adaptability and work hope may help youth be successful. These traits were consistent with the Guideposts for Success, and therefore the CEP summer programming environment, so changes in both of these measures over time will be also assessed. The following hypotheses and research questions will be examined:

1. Youth will gain basic work skills over time.
2. Youth will gain leadership skills over time.
3. Youth will gain understanding of the school/work connection and the value of school over time.
4. Youth work hope scores will increase over time.
5. Youth career adaptability scores will increase over time.

6. Do mentees and mentors assess their relationship in the same way?
7. Does mentoring relationship quality at the end of the summer program predict continued existence of the mentoring relationship three months later?

Given these questions, several control variables also must be considered. Age, gender, previous CEP experience, and previous years worked will be tested with each outcome. Previous research on age suggests it is not related to leadership (Moely, Mercer, Ilustre, Miron, & McFalrand, 2002), work hope (Juntunen & Wettersten, 2006), or mentoring relationship (Rhodes, Reddy, Roffman, & Grossman, 2005), but research is mixed as to the relation with career adaptability (Hirschi, 2009; Zacher, 2014) and school value (Martin, 2009). Literature on gender suggests it is not associated with leadership (Moley et al., 2002). However, research is mixed on gender's relation with school value (Voelkl, 1996), mentoring relationship quality (Darling, Bogat, Cavell, Murphy, & Sanchez, 2006; Rhodes et al., 2005), work hope (Juntunen & Wettersten, 2006; Mester, 2012) and career adaptability (Hirschi, 2009; Zacher, 2014). Previous CEP experience will be tested because involvement in the programming in previous years could impact these outcomes. Additionally, because these are work-related outcomes, work experience could have an influence on scores, so previous years worked will also be assessed.

Method

Participants

In the summer of 2016, approximately 150 14-24 year olds from the 19 county region in Northwest Minnesota that CEP serves were recruited by Rural Minnesota CEP for involvement in one of their summer youth programs, and these youth were given the option to be involved in the evaluation. A total of 106 (33% female, 67% male) youth aged 14-23 ($M = 16.89$) participated in the evaluation. The majority of participants (67%) were attending high school or

middle school, 27.4% had completed high school, 3.8% were attending post-secondary, 0.9% were attending an Area Learning Center high school (alternative education option), 0.9% were completing a GED, and none had dropped out of school. Additionally, 6.6% of participants identified as African American, 10.4% as Hispanic, 11.3% as Native American, and 83% as white. These values exceed 100% because youth could select more than one racial identity. Finally, 78.3% of participants indicated that they had worked in the past.

Youth from both the WIOA and MYP programs were included in all analyses, as there were not enough from each program to look at separate program effects (WIOA $n = 24$; MYP $n = 77$; program data was missing for 5 participants). Independent t-tests showed that participants in WIOA, as compared to participants in MYP, were significantly older, $t = 6.76, p < .001$, and had significantly more previous work experience, $t = 2.62, p = .01$. Chi-square tests revealed the program participants did not significantly differ in race or gender. However, program was related to school status, $\chi^2 = 22.33; p < .001$. A greater percentage of MYP participants (80.5%) were still in high school, as compared to WIOA participants (33.3%), and a greater percentage of WIOA participants (54.2%) had graduated high school, as compared to MYP participants (16.9%).

There was substantial attrition between the pretest and posttest, such that of the 106 participants who took the pretest survey, only 67 took the posttest and 36 took the 3-month follow-up. From the pretest to the posttest, 40% of participants were lost. A large portion of this attrition was due to a lack of program funds. Many participants were unable to complete their work experience because program funding unexpectedly ran out. Because these participants were no longer working, it was difficult to contact them to complete the posttest survey. Surveys were mailed to participants who were forced to end their experience early; however, not many mailed

surveys were returned. After assessing differential characteristics of those participating at the pretest and those at posttest, the author determined that the posttest sample characteristics were largely consistent with the characteristics of the pretest sample. An independent samples t-test revealed that those who did not take the posttest survey were significantly older than those who did, $t = 2.12$; $p = .04$, but that there were no statistical differences in the number of years previously worked. Additionally, chi-square tests indicated that there were no differences in gender, school status, race, or previous work experience between those who took the posttest survey and those who did not. From the pretest to the 3-month follow-up, 66% of participants were lost. However, the characteristics of the final sample remained consistent with the characteristics of the original sample despite this decrease in sample size. T-tests showed no statistical differences in age or number of years previously worked between those who took the 3-month follow-up survey and those who did not. Chi-square tests also showed no statistical differences in gender, school status, or race between those who took the 3-month follow-up and those who did not.

Procedure

The evaluation used pretest, posttest, and 3-month follow-up surveys. Three time points allowed for program effects to be assessed both directly after program completion, and after some time had passed to see if effects remained. Before the pretest, youth signed up for the program with CEP youth workers. During sign up, consent forms were distributed and collected by an IRB-trained individual. Parental consent was obtained for those under 18. For those participants who had already signed up for the program, parents were contacted by phone and a verbal consent process was utilized. Because of the nature of these programs, it was possible that some parents would not be able to speak English. If this was the case, a translator was used for

the consent process. All youth participants were fluent in English. All forms were kept at CEP offices in a locked and secure location until they could be picked up by the first author.

Time 1 – pretest. Pretests were intended to be given during the “world of work” orientation before youth work experiences begin. However, this was not possible for all youth. Research materials were not approved in time for youth coordinators to administer the pretest before all youth started their work experience. Therefore, youth were given the survey as soon as possible after their work experience began. Adjustments were made during analyses to reflect this difference in baseline scores, and are explained in more detail in the results section. Participant assent was collected for those who were under 18. Youth also provided contact information at this time so that they could be contacted about, and sent, the 3-month follow-up survey. Work site supervisors filled out surveys after participants’ first week of work to provide a pretest measure of their job skills.

Time 2 – posttest. During their last week of work, youth completed the posttest survey. Some youth ended their work experience abruptly, so were mailed the posttest survey if necessary. Year round program participants who were continuing their work experience into the academic year completed the posttest in late August or early September. Youth contact information was collected during the posttests so that they could be contacted about, and sent, the 3-month follow-up survey. Collecting contact information at pre and posttests ensured the most up-to-date information was obtained. Youth who completed the pre and posttest surveys were given a small incentive worth about \$1. Work site supervisors also filled out a survey at the completion of youth work experiences.

Time 3 – follow-up. At the end of November, the three-month follow-up was sent to youth participants. Participants had the option to take the survey via paper or online. About 1

month prior to sending out the third survey, participants were sent a reminder via text or email reminding them that the third survey was coming up. Participants who chose to take the survey via paper mailed surveys to NDSU using a provided stamped and addressed envelope. Those who opted to take the survey online were emailed the survey link and took the survey via Qualtrics. Reminders were sent once a week for a month after surveys were sent out to get the best response rate possible. Those youth who completed the three month follow-up were entered in a drawing to win 1 of 3 \$100 Amazon gift cards.

Measures

Gender. Participants were asked about their preferred gender label. Gender was coded as *male* = 0, *female* = 1.

Previous CEP Experience. Participants were asked “Have you been involved with a CEP work program before?” Answers were coded as *no* = 0, *yes* = 1.

Previous Years Worked. Participants were asked “How long have you been working?” Responses were given in years and ranged from 0 - 8 years.

Worksite Performance. Worksite performance was evaluated with a measure used by CEP. The measure assessed eight basic work skills (i.e. reliability, interpersonal skills, work site appropriateness, etc) on a 1 to 4 scale with each number being associated with a qualitative descriptor specific to that item. Higher scores indicated better performance at that skill ($\alpha = .83$). Work site supervisors completed the form to provide an objective measure of participant worksite performance. An average of the items was used for the final score (See Appendix A).

Mentor Relationship – Supervisor Perspective. Mentoring was assessed using a 13 item scale adapted from Brodeur, Larose, Tarabulsy, Feng, & Forget-Dubois (2015) and Voelkl (1996). The original scale from Brodeur et al. (2015) was 15 items, and was validated with

mentees with an average age of 17. Eight items from that scale were adapted for clarity and included in this measure. Additionally, 5 items from the school belonging scale by Voelkl (1996), validated using eighth graders, were adapted and included in this measure to assess the closeness of the mentor/supervisor relationship. This measure of mentor relationship assessed the mentoring relationship from the mentor's perspective ($\alpha = .84$). Items were rated on a 1 (*strongly disagree*) to 4 (*strongly agree*) scale, with higher scores indicating a higher quality mentoring relationship. An average of the items was used for the final score (See Appendix I).

Mentor Relationship – Participant Perspective. Mentoring was assessed using a 13 item scale adapted from Brodeur et al. (2015) and Voelkl (1996). The original measure from Brodeur et al. (2015) had 15 items, and was validated with mentees averaging 17 years of age. This measure included 8 items from the Brodeur et al., (2015) scale. Additionally, 5 items were adapted and included from the Voelkl (1996) scale, validated with eighth graders, to assess the closeness of the mentor/supervisor relationship. For this research, this measure assessed the mentoring relationship from the mentee's perspective ($\alpha = .87$). Items were parallel to the 13 supervisor items mentioned above. The items asked about the participant's relationship with their work site supervisor. Items were rated on a 1 (*strongly disagree*) to 4 (*strongly agree*) scale, with higher scores indicating a higher quality mentoring relationship. An average of the items was used for the final score (See Appendix H).

Continued Mentoring Relationship. The continued mentoring relationship three months after the program ended was assessed using 3 items designed for this survey. Items included: Have you stayed in contact with your worksite supervisor?; Do you think they would give you a positive reference?; Do you think you could contact them if you needed something? ($\alpha = .55$).

Participants answered “no” (*coded as 0*) or “yes” (*coded as 1*). A sum of the items was used for the final score.

Leadership. Leadership was assessed using the 17-item leadership skills subscale from the Civic Attitudes and Skills Questionnaire, validated testing college students with a mean age of 20.1 years (CASQ; Moely et al., 2002). Items were rated using a 4 point Likert type scale with scores ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) ($\alpha = .79$). Higher scores indicated greater leadership ability. An average of all items was used for the composite score (See Appendix B).

Understanding of the Value of School. The understanding of the value of school was assessed using 7 items from the Identification with School Questionnaire (Voelkl, 1996). One subscale assessing youth’s feelings about the importance of school was used ($\alpha = .74$). The complete scale and subscale were validated using eighth graders. Youth who were not in school were instructed to answer about the last school they attended. Items were rated on a 1 (*strongly disagree*) to 4 (*strongly agree*) Likert type scale, with higher scores indicating a better understanding that school is important for one’s future. An average of the items was used for the final score (See Appendix C).

Career Adaptability. Career adaptability was measured using the 10 item Career Maturity Inventory – Screening Form S from Savickas and Porfeli (2011). The scale was validated with 9th-12th graders. Items were rated on a 1 (*strongly disagree*) to 4 (*strongly agree*) Likert type scale, with higher scores indicating more career maturity ($\alpha = .85$). An average of all items was used for the final composite score (See Appendix E).

Work Hope. Work hope was assessed using the 24 item work hope scale from Juntunen & Wettersten (2006). This scale was validated with participants with a mean age of 23.58 years.

Items were rated on a 1 (*strongly disagree*) to 4 (*strongly agree*) Likert type scale, with higher scores indicating more work hope ($\alpha = .88$). An average of the items was used for the final score (See Appendix D).

Results

Data Analysis Plan

All analyses were conducted using SPSS 22.0. A paired t-test was used to assess changes in basic work skills, as this was only assessed at the pretest and the posttest. Additionally, aspects of the mentoring relationship were measured only at the posttest. Therefore, scores from mentors and mentees were compared using a paired samples t-test to see if work site supervisors perceived the mentoring relationship in the same ways mentees perceived the relationship. The continuity of the mentoring relationship, from the mentee's perspective, was assessed at the three-month follow-up. Regression analyses were used to identify if quality of the mentoring relationship predicted the continuity of the relationship three months later.

Multi-level modeling was used to assess changes in career adaptability, work hope, leadership skills, and understanding of the school/work connection. Four separate multi-level models were built to answer these research questions. Though there was a large amount of attrition, all participants were included in these models. It was determined that missing data was missing at random, as it is unlikely that any missing data is specifically related to any study variables, so uncorrected multi-level modeling was used. Additionally, reciprocal causation was considered. Because the multilevel models do not include any contextual controls, there is no possibility of reciprocal causation for this data. Only objective measures were utilized as predictors for these analyses. Finally, data were tested for a non-linear component. A quadratic component was deemed appropriate for leadership, school value, career adaptability, and work

hope. However, because of the small number of time points, transformations due to non-linearity were not possible, so the analyses remained linear.

Correlations were run to assess the need for any control variables. Age, gender, previous CEP experience, and previous years worked were tested. The preliminary analyses indicated that no controls were needed for the mentor analyses. Previous years worked was associated with worksite performance, so, in addition to the t-test, a lagged regression was performed to determine how it contributed to worksite performance. For the multilevel models, gender was included in the work hope model, and previous years of work experience was included in the leadership skills model.

Descriptives

Means and standard deviations for study variables are reported in Table 1. Frequencies for those who said “yes” for a variable were included when appropriate.

Correlations

Correlations for study outcomes and potential confounding variables are reported in Table 2. Age, gender, whether or not participants had previously worked for CEP, and number of years worked were all tested, as they could potentially impact study outcomes, as mentioned above. Correlations revealed that age was positively significantly associated with previously working for CEP and working longer. Additionally, the study outcomes were all significantly positively associated with one another, except leadership and school belonging. Worksite performance was associated only with leadership and work hope. Work hope was also significantly positively associated with gender, such that women had higher work hope scores than men. Leadership was significantly positively associated with having worked more years.

Finally, worksite performance was also significantly positively associated with previous years worked.

Table 1
Descriptives for Study 1 Variables

| Variable | Score Range | Mean (SD) | Percentage “Yes” |
|--|-------------|-------------|---------------------|
| Previous CEP Experience | | | 34% |
| Previous Years Worked | 0-8 years | 1.79 (1.85) | |
| Leadership Scale | 0-3 points | 1.72 (.53) | |
| School Belonging Scale | 0-3 points | 1.90 (.47) | |
| Career Adaptability Scale | 0-3 points | 1.71 (.44) | |
| Work Hope Scale | 0-3 points | 1.97 (.34) | |
| Participant Perception of Mentor Relationship (T2) | 0-3 points | 2.00 (.37) | |
| Participant Perception of Mentor Relationship (T3) | 0-3 points | 2.71 (.62) | |
| Worksite Supervisor Perception of Mentor Relationship (T2) | 0-3 points | 2.23 (.30) | |
| Worksite Performance | 0-3 points | 2.32 (.38) | |

Note. Scales were measured at time 1 unless otherwise specified. Previous CEP Experience coded 0 = no, 1 = yes. Previous Work Experience coded 0 = no, 1 = yes.

Work Site Performance and Mentoring Relationship Quality

Work-site performance. Because work-site supervisors completed measures of work-site performance, only those participants for whom work-site supervisors completed the pre and posttest measures of work-site performance were included in these analyses. To determine a change in worksite performance from baseline to posttest, a paired samples t-test was performed.

There was no significant difference in the scores from baseline to posttest (see Table 3). However, preliminary analyses did reveal that previous years worked was associated with change in worksite performance. A lagged regression revealed that, when controlling for pretest worksite performance, $\beta=.22$, $p=.15$, to assess change over time, previous years worked was significantly associated with a positive change in worksite performance, $\beta=.08$, $F(2,61)=5.67$, $p=.03$. This demonstrates that for each year a participant had previously worked, they experienced a 0.08 increase in worksite performance from pretest to posttest.

Comparing perceived mentor relationship quality. These measures took place at the posttest, so only those participants who completed surveys at the posttest, and who had work-site supervisors who completed their posttest surveys are included in these analyses. To determine whether work site supervisors and participants perceived the quality of their mentoring relationship to be the same, a paired samples t-test was performed. According to the analyses, there was a significant difference in the scores, such that supervisors reported a significantly higher quality relationship than participants (see Table 3).

Mentor relationship follow-up. Because the continuation of mentor relationships was measured at the 3-month follow-up, only those who completed a 3-month follow-up survey were included in these analyses. A linear regression analysis was conducted to determine whether the participants' perception of the mentor relationship quality predicted whether the relationship still existed at the follow-up for those participants who completed the follow-up survey. The results of the regression analyses showed that perceived mentor relationship quality did not significantly predict whether the relationship still existed at follow-up, $\beta=.06$, $F(1,23)=.02$, $p=.90$.

Table 2
Correlations between Program Outcomes and Potential Control Variables

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------------------|---|-----|--------|-------|-------|------|------|-------|--------|
| 1. Age | - | .08 | .33*** | .47** | .05 | -.13 | .09 | -.15 | .04 |
| 2. Gender | | - | .01 | .14 | .12 | .00 | .08 | .06 | .32** |
| 3. Previous CEP Experience | | | - | .21 | -.08 | -.11 | .08 | .00 | .00 |
| 4. Previous Years Worked | | | | - | .34** | .23* | -.08 | .03 | .16 |
| 5. Worksite Performance | | | | | - | .21* | .03 | .12 | .21* |
| 6. Leadership | | | | | | - | .16 | .30** | .45** |
| 7. School Value | | | | | | | - | .28** | .52*** |
| 8. Career Adaptability | | | | | | | | - | .63*** |
| 9. Work Hope | | | | | | | | | - |

Notes. Previous CEP Experience coded 0 = no, 1 = yes. Previous Work Experience coded 0 = no, 1 = yes. Gender is coded 0 = male, 1 = female.
 $p < .05^*$, $p < .01^{**}$, $p < .001^{***}$

Table 3
Paired Samples t-tests for Worksite Performance and Mentoring Relationships

| | | Paired Difference (Mean) | <i>t</i> | df |
|--------|---|--------------------------|----------|----|
| Pair 1 | Worksite performance T1 – Worksite performance T2 | .02 | 0.31 | 66 |
| Pair 2 | Participant perceptions of mentor relationship - Mentor perceptions of mentor relationship | -.24 | -4.61*** | 54 |

$p < .05^*$, $p < .01^{**}$, $p < .001^{***}$

Multi-Level Modeling

Because data were not collected uniformly, time points were adjusted for these analyses to more accurately reflect when data were collected. Baseline was determined by an average work start date for participants. Then, rather than time indicating pretest, posttest, and follow-up, time points were calculated as months from baseline, giving a range of 0-7 for time. This adjustment makes the 0 value more meaningful, and allows for reduced error and better fit (Hoffman, 2015).

For each unconditional model, an autoregressive heterogeneous covariance structure was tested. However, none of the models converged using this covariance structure, so scaled identity was used in all unconditional models. A scaled identity covariance structure was appropriate for all analyses, as the variances at all time points were homogeneous in each model. For all models, maximum likelihood estimation, rather than restricted maximum likelihood estimation, was used throughout analyses to allow for model comparisons. Finally, the Intraclass Correlation (ICC) for each model was over 0.05, indicating that multilevel modeling was warranted for each.

Leadership ability. In the first model, or unconditional model, the ICC was calculated as 0.68, which indicated that 68% of the variance was between individuals and 32% of the variance was within individuals across time points. The intercept also varied significantly, $p < .001$, indicating that individuals varied in their baseline levels of leadership ability. Ninety-five percent of the estimated means for leadership ability fell between 0.90 and 2.52.

In the second model, or base model, time was added as a covariate. The model did not converge when time was added as a random component, so it was only included as a fixed component in the remaining analyses. Time was not a significant predictor of leadership ability, meaning leadership did not change over time (see Table 4). Pseudo R^2 was 0.012, meaning that,

Table 4

Multilevel Models Examining Change in Leadership, School Value, Career Adaptability, and Work Hope Over Time

| | <u>Leadership</u> | | | <u>School Value</u> | | <u>Career Adaptability</u> | | <u>Work Hope</u> | | |
|-----------------------|-------------------|-------------------|-------------------|---------------------|-------------------|----------------------------|-------------------|-------------------|-------------------|-------------------|
| | Model 1 β (SE) | Model 2 β (SE) | Model 3 β (SE) | Model 1 β (SE) | Model 2 β (SE) | Model 1 β (SE) | Model 2 β (SE) | Model 1 β (SE) | Model 2 β (SE) | Model 3 β (SE) |
| Fixed Coefficients | | | | | | | | | | |
| Intercept | 1.71 (.04)*** | 1.70 (.05)*** | 1.52 (.09)*** | 1.95 (.04)*** | 1.89 (.05)*** | 1.75 (.04)*** | 1.70 (.05)*** | 1.99 (.03)*** | 1.97 (.03)*** | 1.90 (.04)*** |
| Time | | .01 (.01) | .01 (.01) | | .03 (.01)** | | .02 (.01)+ | | .01 (.01) | .01 (.01) |
| Previous years worked | | | .08 (.03)** | | | | | | | |
| Gender | | | | | | | | | | .21 (.06)** |
| Pseudo R ² | | | | | | | | | | |
| Level 1 | - | .012 | - | - | .052 | - | .027 | - | 0 | - |
| Level 2 | - | - | .018 | - | - | - | - | - | - | .117 |

Notes. Gender is coded 0 = male, 1 = female. $p < .10$, $p < .05^*$, $p < .01^{**}$, $p < .001^{***}$

compared to the unconditional model, time explained an additional 1.2% of the variance within individuals in leadership ability.

For the third and final model, previous years of work experience was added as a covariate, as preliminary analyses indicated it was associated with leadership ability (see Table 2). No additional covariates were deemed appropriate. The model did not converge when previous years of work experience was included as a random component, so it was only included as a fixed component for the analyses. Previous years of work experience was a significant predictor of leadership ability, indicating that with each additional year of work experience, youth experienced a 0.08 point increase in perceived leadership ability at baseline (see Table 4). At level 2, pseudo R^2 was 0.018, indicating that an additional 1.8% of the variance between individuals was explained by this model, as compared to the base model.

The final model included previous years of work experience and time as covariates. Model fit analyses revealed that the final model fit the data significantly better than the base model, $\chi^2 = 72.45$, $df = 1$, $p < .001$.

School value. Based on the first model, or unconditional model, the ICC was found to be 0.64, indicating that 64% of the variance in school value was between individuals and 36% of the variance was within individuals across time points. The intercept also varied significantly, $p < .001$, indicating that participants varied in how strongly they valued school at baseline. Ninety-five percent of estimated school value means were between 1.23 and 2.69.

In the second and final model, time was included as a covariate. Preliminary analyses revealed no additional covariates were appropriate (see Table 2). When time was added as a random component, the model did not converge, and so it was only included as a fixed component for the remainder of the analyses. Time was a significant predictor of school value,

such that participants' scores concerning feelings about the value of school increased by 0.03 points for each month (see Table 4). Pseudo R^2 was 0.052, indicating that time explained an additional 5.2% of the variance within individuals for school value, as compared to the unconditional model.

The final model included only time as a covariate. Model fit was also tested, comparing the final model to the base model. The final model fit the data significantly better than the base model, $\chi^2 = 7.58$, $df = 1$, $p < .01$.

Career adaptability. For the first model, or unconditional model, ICC was found to be 0.67, indicating that 67% of the variance was between individuals and 33% of the variance was within individuals across time points. Additionally, the intercept varied significantly, $p < .001$, demonstrating that individuals varied in their levels of career adaptability at baseline. Ninety-five percent of estimated career adaptability means fell between 1.02 and 2.48.

In the second and final model, time was included as a covariate. No additional covariates were added, as preliminary analyses suggested none were appropriate (see Table 2). The model did not converge when the time was included as a random component, so it was included only as a fixed component in the model. Time was a marginally significant predictor, indicating that individuals' career adaptability scores increased by 0.02 points at each time point (see Table 4). Pseudo R^2 was 0.027, meaning that time explained an additional 2.7% of the variance within individuals for career adaptability, as compared to the unconditional model.

The final model included time as the only covariate. Model fit was tested, comparing the final model to the unconditional model. The final model fit the data marginally better than the unconditional model, $\chi^2 = 3.39$, $df = 1$, $p < .07$.

Work hope. The ICC, as per the first, or unconditional, model, was 0.72, indicating that 72% of the variance was accounted for by individuals and 28% of the variance was left to be explained. The intercept varied significantly, $p < .001$, indicating that individuals varied in their levels of work hope. Ninety-five percent of the means for work hope scores fell between 1.44 and 2.54.

Time was included as a covariate for the second model, or base model. When time was included as a random component, the model did not converge, so it was only included as a fixed component in further analyses. Time was not a significant predictor of work hope (see Table 4). Pseudo R^2 was 0, indicating that the base model did not account for any additional level 1 variance in work hope, as compared to the unconditional model.

For the third and final model, gender was added as a covariate. Preliminary analyses revealed a significant correlation between work hope and gender (see Table 2), so it was included in the model. No additional covariates were shown to be appropriate. Gender was dummy coded such that male was coded as 0 and female was coded as 1, and was a significant predictor of work hope (see Table 4). Girls had work hope scores that were 0.21 points higher than boys' scores at baseline. At level 2, pseudo R^2 was 0.117, indicating that the final model accounted for an additional 11.7% of the variance between individuals for work hope, as compared to the previous model.

The final model included time and gender as covariates. Model fit was also tested to compare the fit of the final model to the fit of the base model. The final model fit the data significantly better than the base model, $\chi^2 = 11.39$, $df = 1$, $p < .001$.

Discussion

This study assessed program effectiveness of the summer youth work programming from Rural MN CEP. Results were mixed, such that while some hypotheses were supported, others were not. Statistically significant or marginally significant improvements were found for understanding the value of school and career adaptability. Worksite performance increased significantly in those with greater previous work experience. Leadership and work hope did not increase significantly, though each did increase slightly over time. Despite these mixed findings, it is clear that summer youth work programming has the potential to help youth develop the skills to succeed in the workplace. Improvements were found in most of the outcomes, suggesting the programming may be having some impact, despite the fact the change was not significant for all program constructs.

Worksite Performance

Contrary to the hypothesis, worksite performance was not improved for all participants following program involvement. Paired t-tests revealed that worksite performance actually decreased slightly following participation in the programming. However, lagged regression analyses indicated that previous years worked and improvement in worksite performance at the posttest were associated, such that those with more previous years of work experience had greater improvement in worksite performance from the pretest to the posttest. This is interesting, as it suggests the program may be effective for those who had previous work experience, but not for those without this experience. Correlations also showed that more previous work experience is associated with better worksite performance at pretest, suggesting that youth with more previous work experience start with higher worksite performance as well. Participants with previous work experience may have a foundation for these work skills to develop, and may

therefore start at a higher ability to perform work skills, but also see a greater gain between the start and end of their work experience. Additionally, youth with previous work experience may have had a stronger understanding of what was expected in a work environment, so, once they knew what was expected of them, were better able to comply with work skill standards, as compared to those without previous work experience.

Regarding findings for the total sample, because the first assessment of worksite performance happened after only one week of work, it is possible that participants were on their best behavior when programming started, and then slightly decreased in performance as they became more comfortable at the worksite. Additionally, worksite supervisors may have rated participants more highly at the start, believing that they are doing well for having worked such a short time, and then rated them more harshly when behaviors did not change or improve. Scores for worksite performance started high, so there was not much room for improvement from pretest to posttest. The program also posits that youth will be aligned with a worksite that matches their interests. Research suggests that youth who are engaged in an activity they enjoy learn more from it (Carini, Kuh, & Klein, 2006), and that the type of work experience influences the type of skills that youth develop (Staff & Schulenberg, 2010). Therefore, if youth did not enjoy their worksite or were not involved in work that provided adequate opportunities for skill development, they may not have had the chance to develop their skills further.

Comparing Mentor Relationship Quality

The results of this research indicate that worksite supervisors rated mentor relationship quality significantly higher than youth participants. This discrepancy is problematic, because if mentors believe they are providing support and services that, in reality, they are not, mentees may not actually be receiving the necessary supports to be successful. CEP provides training for

its worksite supervisors about being supervisors, but there are no guidelines or training regarding mentorship. It may be in participants' best interest to provide some guidelines or expectations about the mentoring relationship. Mentors have the potential to provide support and additional resources to help youth to be successful (Kram, 1986). Additionally, within the guideposts, the necessity of caring adult involvement is emphasized (NCWDY, 2015). Therefore, if youth do not have a supportive home environment, which is a possibility with participants in these programs, a mentor may be crucial to provide necessary support. While some research suggests a forced mentoring relationship is not necessarily conducive to mentee growth (Raabe & Beehr, 2003), the MSM suggests that providing structure, engagement, autonomy support, and competence support helps disadvantaged youth gain resources that could lead to success (Larose et al., 2001). Providing mentor guidelines for worksite supervisors based on this theory may help youth succeed through a more successful mentoring relationship.

Continuity of Mentoring Relationship

Results indicated that participant perceptions of the mentoring relationship did not predict their perceptions of the relationship three months later. The continued mentoring relationship was difficult to assess, as youth were unlikely to have continued regular contact with their worksite supervisor once their work experience had ended. Therefore, it is possible the questions asked at the three month follow-up did not reflect a mentoring relationship and, as such, were not related. Further, the short time frame of this program may not allow for strong relationships to form, despite quality, and may therefore not contribute to the continuation of the relationship once work experience ended.

Leadership

Contrary to the hypothesis, leadership skills did not increase after participants were involved in the program. Though the necessity of leadership skills is outlined in the guideposts for work success (NCWDY, 2015), the CEP program structure does not necessarily integrate leadership activities into the summer work experience, as these are outlined as potential additives or additional options for program participants (Rural Minnesota CEP, 2016a; Rural Minnesota CEP, 2016b; Rural Minnesota CEP, 2016c). Therefore, it is possible that not all participants engaged in activities that would promote leadership during their work experience, and as a result, did not gain additional leadership abilities. Additionally, previous work experience was a significant predictor of leadership skills. Previous research suggests that work experiences, so long as they are not overly challenging, help individuals develop leadership abilities (DeRue & Wellman, 2009). It is likely that those with previous work experience had been exposed to leadership opportunities, and therefore had greater leadership abilities.

School Value

As expected, understanding the value of school increased with program involvement. Time was a significant predictor of school value, such that understanding the value of school increased at each month after baseline. Consistent with the suggestions of guideposts, the program laid out opportunities for participants to better understand the importance of school. For example, the “connecting activities” guidepost indicates that youth need to understand the importance of school as an important resource for career success (NCWDY, 2015). Given the consistencies between program elements and guideposts, it comes as no surprise that participants’ understanding of the value of school increased following involvement in the CEP summer programming.

Career Adaptability

Consistent with the hypothesis, career adaptability increased after program involvement. Time was a significant predictor of career adaptability, such that participants' career adaptability increased with each month following baseline. Consistent with the five guideposts for success and the program goals laid out by CEP, these results indicate that activities and experiences from involvement in the program are consistent with experiences that may increase career adaptability. The program guidelines indicated youth would be provided with opportunities to have experiences consistent with each element of career adaptability, including exploring careers, planning careers based on new knowledge, becoming well informed, and gaining a sense of responsibility regarding their decisions (Savickas, 2005). Given the results, it appears that programming allowed participants to explore and develop these skills that may promote career success.

Work Hope

Contrary to the hypothesis, time was not a significant predictor of work hope, meaning work hope did not increase significantly after participants were involved in the program. It is possible that participants were not engaged in the programming, and therefore did not develop additional capacity for work hope. Recent qualitative research with disadvantaged youth suggests that youth need to: 1) be engaged in meaningful experiences that allow them to explore possibilities, 2) have supportive relationships, and 3) develop independence and to see they are maturing, in order to be engaged or get re-engaged if they had been disengaged with learning (Taylor et al., 2015). It is possible many of the youth involved in the programming were disengaged with learning in general, and if the program did not introduce the elements outlined above, they may not have re-engaged in the learning process that would help them develop work

hope. Additionally, gender was a significant predictor, such that women reported higher levels of work hope. This finding is consistent with some previous literature, though the literature surrounding this relation is mixed. While Juntunen & Wettersten (2006) did not find a relation between gender and work hope, other research has shown that college women believe they were more likely to achieve their work goals than men (Mester, 2012). It is possible that women are better at developing and believing in their ability to achieve goals, giving them a higher level of work hope.

The Programs – Bringing it all Together

Given the findings presented above, it is clear that summer youth work programming has the potential to help youth gain skills that can help them succeed in the workplace. Results showed that youth had significant or marginally significant improvements in understanding the value of school and career adaptability, consistent with the first two guideposts for success, which posit that, to be successful, youth need school preparation and career preparation (NCWDY, 2015). Understanding the value of school suggests youth are prepared for school, and career adaptability focuses on preparation as a means for youth to successfully complete career transitions. Additionally, the “connecting activities” guidepost indicates that youth need to be connected to appropriate services and resources. School is a valuable resource in helping youth succeed, so it appears programming is at least somewhat consistent with this guidepost as well.

Whereas some hypotheses were supported, several were not, and results regarding the mentoring relationship research questions raise additional uncertainties. Findings indicated that, despite expectations, worksite performance changed significantly only for those with greater work experience, leadership skills did not significantly increase over time, and work hope did not significantly increase over time. These findings suggest that some aspects of the guideposts are

not being addressed adequately to make for only some youth, and a lack of significant improvement in leadership skills, suggests that youth are not gaining the skills that the third guidepost (youth development and leadership) suggests are necessary for success. Additionally, no significant increase in work hope suggests that youth may not be gaining feelings of competency or adequate access to services that can help them feel capable, which would be consistent with the “youth development and leadership” guidepost and the “connecting activities” guidepost. Further, results showed that worksite supervisors scored the mentor relationship quality significantly higher than participants, and participant perception of mentor relationship quality was not predictive of the continued existence of the mentoring relationship three months after work experience ended. The fifth guidepost posits that youth need consistent involvement from caring adults who will remain involved and foster strength and independence. If worksite supervisors score the mentoring relationship quality significantly higher, it is possible they may not be providing the support they believe they are, or youth are misperceiving the support they are receiving, which could be detrimental to youth success. The fact that the participant perception of the mentoring relationship was not predictive of the mentoring relationship three months later also suggests that there may be something missing in the programming that would allow a strong mentoring relationship to develop.

Given these results, the programming appears to be meeting the guideposts and program guidelines to some extent. While skills were not significantly improved in all outcomes, each skill did show improvement, at least for some participants. Additionally, the programming appears to impact skills that can help youth succeed beyond those outlined by the program, indicated by the increase in career adaptability scores. Despite the positives, programming may be more beneficial to youth if components from the 3rd, 4th, and 5th guideposts are better

incorporated into the experience. Particularly, mentoring relationships have great potential to assist youth's development of skills that will promote positive career development, so a clearer mentor component may benefit youth's program success. The programming has great potential to impact youth career success, though adjustments may be necessary to make it most effective.

Limitations

This research has several notable limitations. First, there was considerable attrition from the pretest to the 3-month follow-up, resulting in a small sample, which may have contributed to a lack of significant findings regarding change over time. Second, there was no comparison group. Therefore, when making conclusions about program contributions to changes in skills and outcomes, it is not possible to be sure that any gains in outcomes were due to program involvement. Third, the sample was not very diverse. This limits the generalizability of the findings. Fourth, the specific reason youth were "at-risk" was not identified. It is possible that different risk factors, or a combination of risk factors, could impact how well the program worked for participants. Finally, sampling was difficult given time constraints with this project. While adjustments were made to analyses to address these issues, the project could benefit from more homogenous data collection to better assess changes in these outcomes over time.

Conclusions and Future Directions

Work experience and career exploration are related to career success (Creed & Patton, 2003). Specifically, summer work programs can help youth develop skills to succeed (Heckman, 2000), as well as reduce problem behaviors (Heller, 2014). Consistent with this research, this study demonstrated the value of summer work programming in helping youth develop skills, traits, and attitudes that will help them succeed in their future careers. Youth experienced significant improvements in understanding the value of school and career adaptability. They also

experienced increases in leadership ability and work hope, though these changes were not significant. Further, only some participants experienced significant increases in basic work skills, such that those with greater previous years worked had greater gains from the pretest to posttest. It is possible a foundation from previous work allows individuals to gain more basic work skills. Given the mixed results, some guideposts may need to be better incorporated into the programming to improve these areas. Finally, the mentoring relationship was scored significantly higher by worksite supervisors than participants, and participant perceptions of the mentoring relationship did not predict the continued relationship. These findings were concerning, and further exploration of the mentoring relationship is merited to better understand how it can help youth succeed in the programming and their future careers.

While this research demonstrates the potential of summer youth work programs, further research is needed to better understand the programming and how beneficial it can be. First, future research would benefit from an evaluation of program implementation. This will allow for an examination of whether specific program elements that are included lead to the improvement of work-related skills and if all program elements are beneficial, or if modifications are necessary. This will ensure that the program curriculum is aligned with the desired outcomes. Future research would also benefit from a comparison of the WIOA and MYP programs. While these programs are largely similar, a comparison between the two could help identify further elements that are useful for the development of desired skills as a result of program involvement. Similarly, research should also examine the impact of risk factors, including multiple risk factors, on participant performance. Additionally, analyses concerning program differences revealed age, work experience, and school status differences between groups, so a large scale examination of these programs and their differences would be beneficial. It would also be

beneficial to examine types of work youth are engaged in, including whether it is differentially related to outcomes, as research suggests that different types of work help youth develop different sets of skills (Staff & Schulenberg, 2010). Finally, research should continue to examine the mentoring relationship. Previous literature has established the potential impact of mentors, so it is crucial to understand more about how to establish positive mentor relationships, as well as what contributes to the continuation of these relationships. This research adds to the limited literature on summer work programs.

As evidenced here, programming has the potential to improve youth abilities to succeed in the workplace. Continuing to focus the programming on basic work skills, leadership skills, understanding the value of school, career adaptability, work hope, and mentoring relationships may help youth succeed in the work place and make the program as beneficial as possible.. However, the findings demonstrate the need for additional research to make this programming as beneficial to participants as possible, and better address the development of each of these skills and relationships. Understanding ways to improve programming will ensure youth are given the best opportunity to succeed.

CHAPTER 3. SOCIAL AND PERSONAL VARIABLES ASSOCIATED WITH WORK SUCCESS

Many barriers exist to the development of successful career trajectories for rural and at-risk youth. For example, rural youth may experience geographic isolation, live in less wealthy areas, and live in areas where school-to-work programs are less available or not available at all (Rojewski, 1994). At-risk youth (e.g., school drop outs) may face barriers such as having a disability, lack of permanent housing, lack of family support, and/or being behind in school. These barriers inhibit rural and/or at-risk youth's ability to develop career traits and characteristics that can help them succeed, such as career adaptability and work hope. Career adaptability helps people successfully transition throughout their careers (Savickas, 2005) and work hope may be especially helpful for disadvantaged or at-risk youth because it may help them develop and pursue work-related goals (Jutunen & Wettersten, 2006). Parental support may help youth develop these traits. However, disadvantaged youth may not have the necessary support networks to properly develop these characteristics. Other social relationships, such as mentoring relationships, and personality characteristics, like grit, may help youth overcome obstacles, such as lack of parental support, and develop these helpful career characteristics. Mentoring may provide support that at-risk youth may not get from their parents, and grit may help youth persevere despite challenges at home. This study may help identify characteristics and relationships that can help at-risk youth succeed despite challenges.

Career Traits Promoting Youth Career Success

Career Adaptability

There are several career readiness traits that help youth to be successful. One such trait is career adaptability. Career adaptability encompasses the coping processes used when

constructing careers, which helps individuals transition through career stages. Career adaptability focuses on readiness for tasks, transitions, and personal experiences a person may have to deal with during career transitions (Savickas, 2005). According to Career Construction Theory (CCT), career adaptability deals with the “how” of career construction (Savickas, 2005). While there are three main components of CCT, including vocational personality, career adaptability, and life themes (the “what”, “how”, and “why” of career construction, respectively; Savickas, 2005), career adaptability will be the focus here, as it applies specifically to transitional career periods. Career adaptability consists of four dimensions. These include career concern (planful and future oriented attitude), career control (feeling of being in charge of one’s own career), career curiosity (exploration of the working world), and career confidence (ability to make the necessary educational and work-related decisions) (Savickas, 2005). Career adaptability as a whole, as well as each of its dimensions individually, is linked with communication skills, problem solving skills, team work skills (Guzman & Choi, 2013), general and professional well-being (Maggiori et al., 2013), career satisfaction (Zacher, 2014), and overall life satisfaction (Santilli et al., 2014). Therefore, it is crucial to understand what contributes to the development of career adaptability to help individuals develop successful and positive career trajectories.

Work Hope

Work hope is another career readiness trait that helps youth to be successful. The concept of work hope is based on the concept of hope and hope theory. Work hope applies hope more specifically to an individual’s motivations regarding work and work-related goals. It involves actually having work-related goals, the ability to achieve those goals, and identifying the steps to achieve those goals (Juntunen & Wettersten, 2006). Work hope is associated with less skepticism about school importance, increases in interest and task orientation as motivation for academic

engagement, and greater feelings of academic ability (Kenny et al., 2010), suggesting that work hope may support adolescents' development of a more positive career trajectory by helping them see the value of academics and helping them feel more capable. Because of these benefits, work hope may be especially helpful for disenfranchised youth to be successful, as they may struggle with identifying and pursuing work goals. The presence of work hope would signify the existence of these goals and indicate that youth feel they are capable of achieving these goals. While work hope may help youth succeed, they may not have had opportunities to develop this trait, and may need assistance to do so. Additionally, work hope is a relatively new construct, so no research exists demonstrating its link to career success. However, hope, the construct on which work hope is based, is associated with more positive career attitudes as well as proactive career behaviors such as working to advance one's career and managing career advancement (Hirschi, 2014), demonstrating the connection between hope and work success.

Personal and Social Variables Associated with Work Success

There are a variety of personal and social variables that are associated with work success. These include family support (Hirschi et al., 2011), personality characteristics, and mentoring (Baranik et al., 2010). Each supports the development of characteristics and/or feelings that help youth to be successful in their career paths and trajectories.

Parental Support

Family involvement and social support are linked with work success. In particular, parental support may impact youth involvement in activities that promote career success. Hirschi et al. (2011) found that social support, including parental support, predicted more career engagement. Research suggests that it is actually general parental support, rather than parents guiding youth toward a specific career, that is the most impactful for youth work outcomes.

Keller and Whiston (2008) note that perceived general parental support and interest in adolescents, belief in an adolescent's abilities, trust to make good decisions, and pride in them facilitates career development. Parental support is also predictive of career adaptability in 12-16 year olds (Hirschi, 2009). Career supports (including parental support) are associated with greater career exploration (Rogers & Creed, 2011). While there is no established link between work hope and parental support, it is likely that parental support would facilitate greater work hope, given its connections to these other career development constructs and that parental support may foster a sense of ability and hope when pursuing a career. Without this support, youth may struggle to be engaged with work-related activities, and may need additional guidance or motivation to develop positive career trajectories.

Mentoring

Mentoring, likely by a supervisor, is another relationship that encourages adolescent work success. Mentoring relationships can help youth develop positive attitudes toward the work environment (Baranik et al., 2010) and may provide positive models of work behavior, thereby allowing youth to be successful in the workplace. Mentors can serve a variety of important functions for youth, including being a role model, providing support, and guiding skill enhancement, among others (Kram, 1986; Levinson et al., 1979). Additionally, particularly for youth from disadvantaged backgrounds, the Mentoring Sociomotivational Model (MSM) may be most appropriate and provide a way for mentors to make the most of their relationships with mentees (Larose & Tarabulsky, 2005). This model posits that mentors must provide structure (clear objectives and functions), engagement (open and respectful discussions), autonomy support (acceptance of choices without control), and competence support (support feelings of competence despite failure; Larose & Tarabulsky, 2005). When applied to mentoring

relationships, this model helps mentors facilitate productive mentor-mentee interactions, especially for at-risk youth. Research shows that mentors who followed this model had mentees who had higher intrinsic motivation, were more decisive about their career choices, had a better understanding of their interests and skills, and had a better knowledge of program and career options (Larose et al., 2011).

The MSM appears to lend itself to use in a formal setting, and formal mentorships are often assigned in workplace settings to address mentoring functions; however, less formal mentorships, such as those formed in the work program used in this research, can be important as well, and can cover many of the needed functions formal mentors undertake. For the current research, worksite supervisors serve mentoring functions, though strict behavioral expectations as they pertain to mentoring are not established by CEP, so relationships are less formal. Worksite supervisors receive training to be a supervisor, but not on how to be a mentor. Indeed, evidence suggests supervisor support is just as important as, if not more important than, formal mentorships in predicting career satisfaction (Ng et al., 2005; Raabe & Beehr, 2003) and that supervisor relationships are more influential for organizational commitment and turnover intent than formal mentoring relationships. Additionally, youth who report that they have informal mentors report less stress, are less likely to have been arrested (Munson & McMillen, 2009), and are more likely to be employed after high school when compared to those without mentors (McDonald et al., 2007). Informal mentors from work settings during late adolescence positively impact employment after high school (McDonald, et al., 2007). Additionally, individuals who report they are highly satisfied with their mentoring relationship report more positive work attitudes than non-mentored individuals. However, work attitudes of those who were in dissatisfying or marginally satisfying mentoring relationships were the same as those who were

not mentored, or in some cases more negative (Ragins et al., 2000), demonstrating the importance of the quality of the relationship, rather than the type.

Clearly, mentoring relationships can have very positive impacts on the development of career traits and characteristics that will help youth be successful in the workplace. Though no current research has established direct links between mentoring and career adaptability or mentoring and work hope, it can be expected that, as with other aspects of positive career development, mentoring would foster the development of these traits. Further, although the MSM seems most appropriate for formal mentoring relationships, it could be beneficial to apply similar principles in less formal and informal mentorships. Mentees could benefit if mentors utilize MSM behaviors in any mentoring setting, especially when mentees are at-risk youth. Indeed, mentoring relationships have the capacity to positively impact youth career trajectories.

Personality Characteristics – Grit

Grit, defined as perseverance in striving for long term goals despite adversity, challenges, and failure (Duckworth, Peterson, Matthews, & Kelly, 2007), may influence work success. Grit is linked with several school success measures, including higher GPA, higher academic achievement (Duckworth et al., 2007), and graduation from high school (Eskreis-Winkler, Shulman, Beal & Duckworth, 2014). School success is linked with greater career planning, career exploration (Creed, Patton, & Prideaux, 2007), and better transitions from school to work (Vuolo et al., 2013), so the connection between grit and school success bodes well for adolescents' future workplace success.

Clearly, grit is associated with success and achievement. While limited, research also suggests that grit influences success in the working world. For example, teachers who report higher levels of grit are more effective (Robertson-Kraft & Duckworth, 2014), and sales people

who report higher levels of grit are more likely to keep their jobs (Eskreis-Winkler et al., 2014). However, grit's usefulness for adolescents in workplace success is unclear. Despite this, grit's links with school success in adolescents, and workplace success in slightly older populations, suggests that grittier adolescents may have higher scores on career adaptability and work hope, as these traits help youth to be more successful in the workplace.

Mentoring and Grit as Moderators

As indicated above, parental support is crucial for adolescent success in the workplace and in developing skills and characteristics that will make youth successful. However, at-risk and disadvantaged youth may not have the parental support needed to develop these skills. Mentoring relationships and grit may moderate the relation between parental support and the development of these skills and characteristics, such as work hope and career adaptability. Both mentoring relationships and grit may help youth develop characteristics that will allow them to be successful in the work environment, even if parental support is not present.

Mentoring as a moderator. Mentors may provide relationships that would expose at-risk youth to some of the behaviors and supports that parents may not provide. As mentioned, mentors provide support and can model appropriate behaviors for youth (Levinson, et al., 1976). Additionally, if the MSM model is followed, mentoring relationships may help at-risk youth develop the necessary skills to be successful in the workplace. MSM provides a framework to help at-risk youth be successful. If these behaviors are integrated into the mentoring relationship, youth low in parent support may be exposed to resources and benefits that would allow them to develop useful work characteristics like work hope and career adaptability despite a lack of parental support. Therefore, mentoring relationships may help those low in parental support overcome the lack of support and achieve at the same level as those high in parental support.

Those high in parent support, however, may not need the support mentors provide, as their parents already provide this support, so these individuals may not experience as many benefits from mentor relationships as those with low parent support.

Grit as a moderator. Because grit helps people achieve, it is possible that grit may provide a drive for youth to be successful in the workplace despite challenges they may face at home. As mentioned above, grit is associated with school and work success, so it follows that grit would also contribute to the development of traits and characteristics that will promote work success, such as work hope and career adaptability. Parent support is associated with career development, including the development of career adaptability, and so lack of parental support may inhibit the development of these career traits that promote success. Therefore, because grit provides motivation for youth to be successful despite obstacles or challenges, it may promote the development of these traits despite a lack of parental support, helping them achieve at the same level as those high in parental support. On the other hand, those with high parental support may not face the same obstacles, and therefore grit may not be as helpful in the development of useful career traits for those high in parental support.

Hypotheses/Research Questions

The current research examined changes in work hope and career adaptability due to individual and social factors. The contributions of mentoring relationships and grit to the relation between parental support and work hope and parental support and career adaptability were examined. The hypotheses and research questions were as follows:

1. Parental support is associated with career adaptability.
2. Is parental support associated with change in career adaptability over time?
3. Grit is associated with career adaptability.

4. Is grittiness associated with a change in career adaptability over time?
5. Does grittiness moderate the relation between parental support and career adaptability?
6. Does grittiness influence the relation between parental support and career adaptability over time?
7. Mentoring relationship quality is associated with career adaptability.
8. Is mentoring relationship quality associated with change in career adaptability over time?
9. Does mentoring relationship quality moderate the relation between parental support and career adaptability?
10. Does mentoring relationship quality influence the relation between parental support and career adaptability over time?
11. Parental support is associated with work hope.
12. Is parental support associated with change in work hope over time?
13. Grit is associated with work hope.
14. Is grittiness associated with a change in work hope over time?
15. Does grittiness moderate the relation between parental support and work hope?
16. Does grittiness influence the relation between parental support and work hope over time?
17. Is mentoring relationship quality associated with change in work hope over time?
18. Does mentoring relationship quality moderate the relation between parental support and work hope?
19. Does mentoring relationship quality influence the relation between parental support and work hope over time?

Several control variables also must be considered when examining these questions and hypotheses. Therefore, age, gender, previous CEP experience, and previous years worked were

tested with each outcome. Age has not been previously linked with leadership (Moely et al., 2002), work hope (Juntunen & Wettersten, 2006), or mentoring relationship (Rhodes et al., 2005). However, the relations between age and career adaptability (Hirschi, 2009; Zacher, 2014) and age and school value (Martin, 2009) are unclear. Previous research indicates gender is not associated with leadership (Moley et al., 2002), but the research on gender's relation with school value (Voelkl, 1996), mentoring relationship quality (Darling et al., 2006; Rhodes et al., 2005), work hope (Juntunen & Wettersten, 2006; Mester, 2012) and career adaptability (Hirschi, 2009; Zacher, 2014) is mixed. Because previous program involvement could impact program outcomes, previous CEP experience will be tested. Finally, work experience could impact scores on these work-related outcomes, so previous work experience and previous years worked will also be tested.

Method

Participants

During the summer of 2016, approximately 150 14-24 year olds from the 19 county region that the Rural Minnesota Concentrated Employment Program (CEP) serves in Northwest Minnesota were recruited for involvement in their summer youth programs by Rural MN CEP. These youth were given the option to be involved in the evaluation. There were 106 (33% women, 67% men) youth participants aged 14-23 ($M = 16.89$) involved with the evaluation. Most participants were attending high school or middle school (67%), 27.4% had completed high school, 3.8% were attending post-secondary, 0.9% were attending an Area Learning Center high school (an alternative education option), 0.9% were completing a GED, and none had dropped out of school. Participants were mostly white (83%), 6.6% identified as African American, 10.4% as Hispanic, 11.3% as Native American. Because youth could identify multiple racial

identities, the values exceed 100%. Finally, most participants reported having worked in the past (78.3%).

Because there were not enough youth from the WIOA and MYP programs to look at separate program effects (WIOA $n = 24$; MYP $n = 77$; program data was missing for 5 participants), data from both programs was used for all analyses. Independent t-tests revealed that participants in WIOA were significantly older, $t = 6.76, p < .001$, and had significantly more previous work experience, $t = 2.62, p = .01$, than participants in MYP. Chi-square tests revealed that there were no significant differences between programs in race or gender, but that program was related to school status ($\chi^2 = 22.33; p < .001$). A much higher percentage of participants in MYP (80.5%) were still in high school, as compared to those in WIOA (33.3%), and a much higher percentage of participants in WIOA (54.2%) had graduated high school, as compared to those in MYP (16.9%).

Across the course of the study, such that of the 106 participants at the pretest, 67 participants completed the posttest and 36 completed the 3-month follow-up. From the pretest to the posttest, 40% of participants were lost. Much of this attrition can be accounted for by program funding problems. Many participants were difficult to contact to complete the posttest, as they were forced to end their work experience early when program funding ran out. An attempt was made to mail the posttest to these youth, though not many were returned. Attrition analyses revealed that the characteristics of the samples remained consistent, despite the large attrition rate. Independent samples t-tests showed that those who did not take the posttest were significantly older than those who took the posttest, $t = 2.12; p = .04$; however, there were no statistical differences in previous years worked. Further, there were no significant differences in gender, school status, or race between those who did and did not take the posttest, as evidenced

by chi-square tests. Additionally, 66% of participants were lost from the pretest to the 3-month follow-up. However, despite the decrease in sample size, the characteristics of the samples appeared to remain consistent, as demonstrated by independent samples t-tests and chi-square tests. These tests revealed no statistical differences in those who took the follow-up survey vs. those who did not in age, previous years worked, gender, school status, or race in those who took the third survey as compared to those who did not.

Procedure

The data for this study were collected as part of an evaluation and used pretest, posttest, and follow-up surveys. Youth signed up for the program with CEP youth workers before the pretest. During sign up, IRB trained CEP staff distributed and collected consent forms. Parental consent was obtained for those under 18. Some participants were already signed up. In this case, parents were contacted by phone and a verbal consent process was used. If parents were unable to speak English, a translator was used for the consent process. All participants were able to speak English. Assent was collected from youth under 18. All forms were kept at CEP offices in a locked and secure location until they were picked up by the first author.

Time 1 – pretest. Pretests were intended to be given before youth summer work experiences began (around June). However, given time constraints of the program, this was not possible in all cases. Not all materials were approved or available for participants with the earliest start dates, so youth coordinators were not always able to administer the pretest before youth began their work experience. If participants could not complete the pretest before they started work, they were given the survey as soon after they started as possible. To reflect this difference in baseline scores, adjustments were made during analyses and are explained in more

detail in the results section. Contact information for participants was also collected at this time so that they could be contacted about, and sent, the final survey.

Time 2 – posttest. Participants completed the posttest in late August. To contact youth about, and to send, the final survey, contact information was also collected during the posttest. Youth who were forced to end their experience early were mailed the posttest, though many surveys were not returned. All participants who completed the pre and posttest surveys were given a small incentive worth about \$1. Work site supervisors filled out a survey in August about their mentoring relationship.

Time 3 – follow-up. Youth participants received the follow-up survey in mid-November. Participants were able to complete the follow-up survey on paper or online, depending on their choice. If participants chose to complete the survey on paper, they mailed their survey back to NDSU using a provided stamped and addressed envelope. Participants who took the survey online were emailed a link to take it via Qualtrics. Reminders were sent approximately one month before and once a week for one month after the surveys were sent out to remind participants to take the surveys. Participants who completed the three month follow-up were entered in a drawing to win 1 of 3 \$100 Amazon gift cards.

Measures

Gender. Participants reported their preferred gender label. Gender was coded as *male* = 0, *female* = 1.

Previous CEP Experience. Participants were asked “Have you been involved with a CEP work program before?” Responses were coded as *no* = 0, *yes* = 1.

Previous Years Worked. Participants were asked “How long have you been working?” Answers were reported in years and ranged from 0 – 8 years.

Parent support. Parent support was assessed using an adapted 10 item scale from Malecki & Demaray (2002). The scale measures general parental support. The original scale was validated with participants in 3rd-12th grade. Three items were added to include items about parental closeness. These items included: I feel close to my parent(s)/guardians(s); I can count on my parent(s)/guardians(s) to be there if I need them; I feel like my parent(s)/guardians(s) have hope for my future. The final scale included 13 total items ($\alpha = .93$). Items were measured using a 4 point Likert type scale with scores ranging from 1 (*strongly disagree*) to 4 (*strongly agree*), with higher scores indicating more parental support. An average of the items was used for the final score (See Appendix F).

Grit. Grit was assessed using an 8 item scale from Duckworth & Quinn (2009). The short version of the scale was validated with a sample of participants averaging 19.05 years, as well as a sample of participants in 7th-12th grade. Items were rated on a 1 (*strongly disagree*) to 4 (*strongly agree*) Likert-type response scale ($\alpha = .66$). An average of the items were used for the final score with higher scores indicating more grittiness (See Appendix G).

Mentor Relationship – Participant Perspective. Mentoring was assessed using a 13 item scale adapted from Brodeur et al. (2015) and Voelkel (1996). The original measure from Brodeur et al. (2015) had 15 items and was validated with participants averaging 17 years of age. Five items were also included from the Voelkl (1996) scale measuring school belonging, and validated with eighth graders. These items were included to assess the closeness of the mentoring relationship. The measure used in this research assessed the mentoring relationship from the mentee's perspective. The items asked about the participant's relationship with their work site supervisor. Items were rated on a 1 (*strongly disagree*) to 4 (*strongly agree*) scale, with higher

scores indicating a higher quality mentoring relationship ($\alpha = .87$). An average of the items was used for the final score (See Appendix H).

Career Adaptability. Career adaptability was measured using the Savickas and Porfeli (2011) 10 item Career Maturity Inventory – Screening Form S, validated originally with 9th-12th graders. Items were rated on a 1 (*strongly disagree*) to 4 (*strongly agree*) Likert type scale, with higher scores indicating more career maturity ($\alpha = .85$). An average of all items was used for the final composite score (See Appendix E).

Work Hope. Work hope was assessed using the 24 item work hope scale from Juntunen & Wettersten (2006). Items were rated on a 1 (*strongly disagree*) to 4 (*strongly agree*) Likert type scale. Higher scores indicating more work hope ($\alpha = .88$). This measure was validated with a sample averaging 23.58 years old. An average of the items was used for the final score (See Appendix D).

Results

Data Analysis Plan

Multi-level modeling was used in SPSS 22.0 to examine the contribution of parental support, mentoring, and grit in predicting work hope and career adaptability. Correlation analyses identified whether gender, age, previous job experience, and previous CEP experience should be included in models as control variables, as they may influence career adaptability and work hope (see Table 6). Two separate multi-level models were built to answer the research questions. Despite the large amount of attrition, all participants were included in these models. It was determined that missing data was missing at random. Any missing data is not likely due specifically to any study variables, so no corrections were made to run the multilevel models. Reciprocal causation was also considered. Because participants self-reported all measures used

in these analyses, issues with reciprocal causation may exist. It is possible that participants did not accurately perceive their parents' level of support or the mentor relationship quality. It is also possible that youth overestimate or underestimate their grit, career adaptability, and/or work hope. A misrepresentation of one of these constructs could reflect a misinterpretation of participants' perception of other abilities. No transformations were made to the data, but reciprocal causation should be considered. Finally, data were tested for a non-linear component, which appeared appropriate for career adaptability and work hope. However, this data utilized a small number of time points, making any non-linearity transformations impossible, so the analyses remained linear. For these analyses, time was the only level 1 variable. All other variables were level two variables. Pretest values for parental involvement and grit were used, as there was no expectation that these would change over time. Additionally, mentoring relationship quality from the participants' perspective from the posttest was used, as mentoring quality was only assessed at the posttest. Cross-level interactions were included in each multi-level model to examine changes over time. Finally, parent support, grit, and mentoring relationship were included in interaction terms, and were therefore mean centered before being entered in the models (Singer & Willett, 2003).

Descriptives

Means and standard deviations for study variables are reported in Table 5. Frequencies for participants who reported "yes" for a variable were included as well, if appropriate.

Correlations

Correlations for study outcomes and potential control variables are reported in Table 6. Age, gender, whether or not participants had previously worked for CEP, and number of years worked were tested because these variables had the potential to confound results. Correlations

revealed that age was positively significantly associated with previously working for CEP, and working for more years. Additionally, career adaptability and work hope were significantly positively associated with each other. Results also showed that work hope was significantly positively associated with gender, with women reporting greater work hope scores than men.

Table 5.
Descriptives for Study 2 Variables

| Variable | Score Range | Mean (SD) | Percentage “Yes” |
|--|-------------|-------------|---------------------|
| Previous CEP Experience | | | 34% |
| Previous Years Worked | 0-8 years | 1.79 (1.85) | |
| Parent Support Scale | 0-3 points | 2.11 (.48) | |
| Grit Scale | 0-3 points | 1.73 (.37) | |
| Career Adaptability Scale | 0-3 points | 1.71 (.44) | |
| Work Hope Scale | 0-3 points | 1.97 (.34) | |
| Participant Perception of Mentor Relationship (T2) | 0-3 points | 2.00 (.37) | |

Note. Scales were measured at time 1 unless otherwise specified. Previous CEP Experience coded 0 = no, 1 = yes. Previous Work Experience coded 0 = no, 1 = yes.

Multilevel Models

Time points were adjusted for these analyses to more accurately reflect when data were collected, as data were not collected uniformly. An average work start date was used to determine baseline. Then, time points were calculated as months from baseline, rather than time indicating pretest, posttest, and 3-month follow-up. This resulted in a range of 0-7 months for

time. This adjustment makes the 0 value more meaningful, and allows for reduced error and better fit (Hoffman, 2015).

An autoregressive heterogeneous covariance structure was tested for each unconditional model. When using this covariance structure, neither of the models converged, so scaled identity was used in all unconditional models. Additionally, scaled identity was found to be the appropriate covariance structure for all analyses, as the variances at all time points were homogeneous in each model. Further, to allow for model comparisons, maximum likelihood estimation, rather than restricted maximum likelihood estimation, was used throughout analyses. Finally, multilevel modeling was found to be warranted for each model, as the ICC for each model was over 0.05.

Table 6
Correlations between Study Outcomes and Potential Control Variables

| Variable | 1 | 2 | 3 | 4 | 5 | 6 |
|----------------------------|---|-----|--------|-------|------|--------|
| 1. Age | - | .08 | .33*** | .47** | -.15 | .04 |
| 2. Gender | | - | .01 | .14 | .06 | .32** |
| 3. Previous CEP Experience | | | - | .21 | .00 | .00 |
| 4. Previous Years Worked | | | | - | .03 | .16 |
| 5. Career Adaptability | | | | | - | .63*** |
| 6. Work Hope | | | | | | - |

Notes. Previous CEP Experience coded 0 = no, 1 = yes. Previous Work Experience coded 0 = no, 1 = yes. Gender is coded 0 = male, 1 = female. $p < .05^*$, $p < .01^{**}$, $p < .001^{***}$

Career adaptability. For model 1, or the unconditional model, ICC was found to be 0.67, indicating that 67% of the variance was between individuals and 33% of the variance was

within individuals across time points. The intercept varied significantly, $p < .001$, which indicated that individuals varied in their baseline career adaptability scores. Ninety-five percent of estimated means for career adaptability fell between 1.02 and 2.48.

In the second model, or base model, time was included as a covariate. Preliminary correlations indicated no additional individual or contextual factors needed to be controlled for, so only those relational and individual variables included in research questions were deemed appropriate to include in the model (see Table 6). When time was added as a random component, the model did not converge, so time was kept only as a fixed component. Time was a marginally significant predictor, such that individuals' career adaptability scores increased by 0.02 points at each month (see Table 7). Pseudo R^2 was 0.027, meaning that time explained an additional 2.7% of the variance in career adaptability within individuals, as compared to the unconditional model.

In the third model, parent support was added. Parent support did not vary significantly among individuals, $p = .26$, so it was kept only as a fixed component in the model. Parent support was a significant predictor of career adaptability such that with each point increase in perceived parent support, career adaptability scores increased by 0.23 points (see Table 7). An interaction between parental support and time was tested, but was not significant, $p = .27$, and was therefore removed from the model. Pseudo R^2 was 0.069 at level 2, indicating that there was an additional 6.9% of the variance between individuals accounted for by this model, as compared to the previous model.

In the fourth model, grit was added. Grit did not significantly vary among individuals, $p = .30$, so it was kept only as a fixed component. Grit was a significant predictor of career adaptability, such that with each point increase in grit, career adaptability scores were 0.48 points higher (see Table 7). Parent support was only a marginally significant predictor of career

adaptability in this model (see Table 7). Pseudo R² was 0.208 at level 2, indicating that there was an additional 20.8% of the variance that was accounted for by this model, as compared to the previous model.

Table 7
Multilevel Models for Parent Support and Grit on Career Adaptability.

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|-----------------------|---------------|---------------|---------------|---------------|---------------|
| | β (SE) | β (SE) | β (SE) | β (SE) | β (SE) |
| Fixed Coefficients | | | | | |
| Intercept | 1.75 (.04)*** | 1.70 (.05)*** | 1.71 (.05)*** | 1.70 (.04)*** | 1.69 (.04)*** |
| Time | | 0.02 (.01)+ | 0.02 (.01)+ | .02 (.01)+ | 0.02 (.01)+ |
| Parent Support | | | 0.23 (.08)** | .14 (.08)+ | 0.12 (.08) |
| Grit | | | | .48 (.10)*** | 0.44 (.10)*** |
| Parent Support x Grit | | | | | 0.37 (.21)+ |
| Pseudo R ² | | | | | |
| Level 1 | - | 0.027 | - | - | - |
| Level 2 | - | - | 0.069 | .208 | .038 |

Notes. Pseudo R² values were calculated compared to the previous model.

$p < .10+$, $p < .05*$, $p < .01**$, $p < .001***$

In the fifth model, interactions of grit and time, parent support and grit, and parent support, grit, and time, were all tested and only the interaction between parent support and grit was marginally significant (see Table 7). These interactions were tested in a separate model to identify variance specifically due to the interactions. Parent support was no longer a significant predictor of career adaptability in this model (see Table 7). The parent support by grit interaction indicates that for youth low in grit, career adaptability scores do not differ for those low or high in parental support. However, youth high in grit have greater career adaptability scores when parental support is high than those low in parental support (see Figure 1). Because the interactions between grit and time, $p = .33$, and grit, parent support, and time, $p = .44$, were not

significant, they were removed from the model. At level 2, pseudo R^2 was 0.038, indicating that this model accounted for an additional 3.8% of the variance between individuals when compared to the previous model.

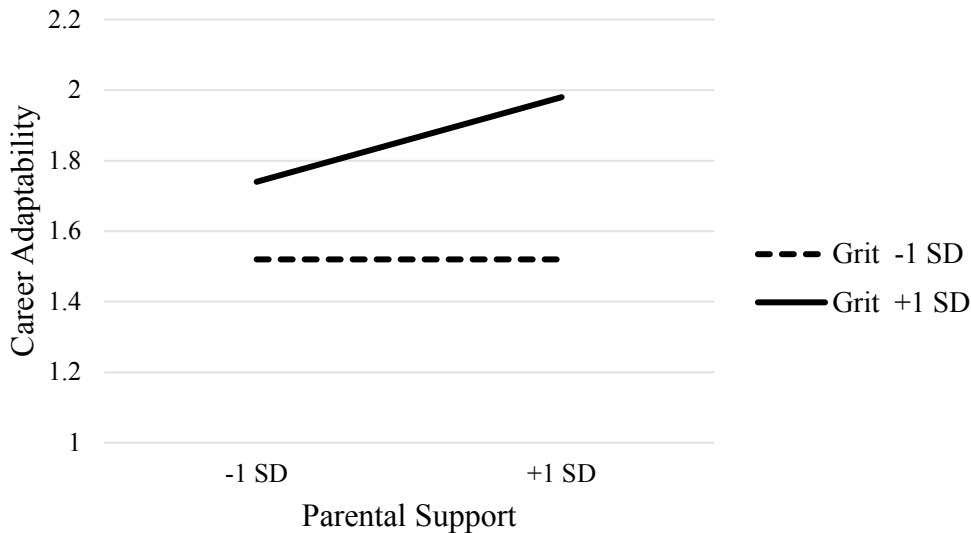


Figure 1. Differential effects of parental support on career adaptability by levels of grit.

For the sixth model, participant perception of the mentoring relationship was added. The model did not converge when mentor relationship was added as random, so it was kept fixed. Perception of the mentor relationship was not a significant predictor, $p = .35$. Mentor relationship by time, $p = .39$, parent support by mentor relationship, $p = .53$, and time by parent support by mentor relationship, $p = .67$, interactions were all tested, and all were not significant. Because they were not significant, participant perception of the mentor relationship and interaction terms that included it were not included in the model. Therefore, the fifth model was deemed the final model.

The final model included time, parent support, grit, and a parent support by grit interaction as covariates. Model fit was also tested, comparing the final model to the base model.

Model fit analyses revealed that the final model fit the data significantly better than the base model, $\chi^2 = 37.04$, $df = 3$, $p < .01$.

Work hope. For the first model, or unconditional model, the ICC, was 0.72, indicating that 72% of the variance was between individuals and 28% of the variance within individuals across time points. The intercept varied significantly, $p < .001$, indicating that individuals varied in their baseline work hope scores. Ninety-five percent of the estimated work hope mean scores fell between 1.44 and 2.54.

In the second model, or base model, time was included as a covariate. The model did not converge when time was included as a random component, so it was included only as a fixed component in further analyses. Time was not a significant predictor of work hope (see Table 8). At level 1, pseudo R^2 was 0, indicating that, as compared to the unconditional model, the base model did not account for any additional variance within individuals in work hope.

For the third model, gender was added as a covariate. Preliminary analyses revealed a significant correlation between work hope and gender (see Table 6), so it was included in the model. Gender was dummy coded such that male was coded as 0 and female was coded as 1. Gender was a significant predictor of work hope, such that girls had work hope scores that were 0.21 points higher than boys' scores at baseline (see Table 8). At level 2, pseudo R^2 was 0.117, indicating that the final model accounted for an additional 11.7% of the variance between individuals in work hope, as compared to the previous model.

In the fourth model, parent support was added as a covariate. Parent support did not vary significantly among individuals, $p = .09$, so it was included only as a fixed component. Parent support was a significant predictor of work hope, such that with each point increase of parent support, work hope increased by 0.26 points (see Table 8). An interaction between time and

parent support was tested, but it was not significant, $p = .95$, so it was not included in any further analyses. At level 2, pseudo R^2 was 0.221, so this model, when compared to the previous model, accounted for an additional 22.1% of the variance between individuals.

Table 8.
Multilevel Models for Parent Support and Grit on Work Hope

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|--------------------|---------------|---------------|---------------|---------------|---------------|
| | β (SE) | β (SE) | β (SE) | β (SE) | β (SE) |
| Fixed Coefficients | | | | | |
| Intercept | 1.99 (.03)*** | 1.97 (.03)*** | 1.90 (.04)*** | 1.92 (.04)*** | 1.91 (.03)*** |
| Time | | 0.01 (.01) | 0.01 (.01) | 0.00 (.01) | 0.01 (.01) |
| Gender | | | 0.21 (.06)** | 0.16 (.06)** | 0.17 (.05)** |
| Parent Support | | | | 0.26 (.05)*** | 0.19 (.05)*** |
| Grit | | | | | 0.39 (.06)*** |
| Pseudo R^2 | | | | | |
| Level 1 | - | 0 | - | - | - |
| Level 2 | - | - | 0.117 | .221 | .321 |

Notes. Pseudo R^2 values were calculated compared to the previous model.

Gender is coded 0 = male, 1 = female. $p < .05^*$, $p < .01^{**}$, $p < .001^{***}$

Grit was added as a covariate in the fifth model. When grit was included as a random component, the model did not converge, so it was included only as a fixed component in further analyses. Grit was a significant predictor of work hope, such that with each point increase in grit, work hope increased by 0.39 points (see Table 8). Interactions between grit and time, $p = .51$, parent support and grit, $p = .95$ (see figure 2), and parent support, grit, and time, $p = .68$, were all tested, but none were significant, and so were not included in the model. Pseudo R^2 was 0.321 at level 2, meaning that this model explained an additional 32.1% of the variance between individuals as compared to the previous model.

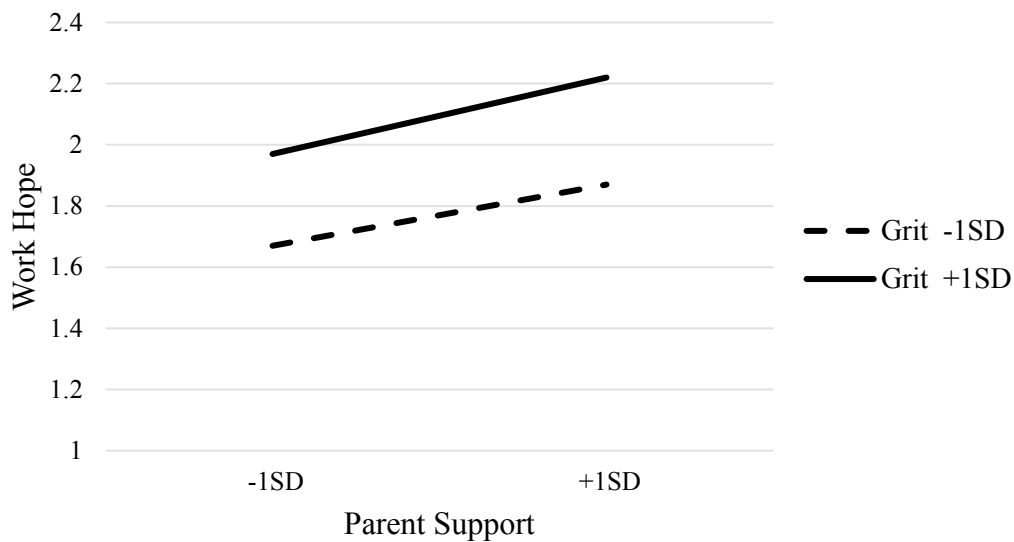


Figure 2. Effects of parent support on work hope by levels of grit (no interaction).

For the sixth model, participant perception of the mentoring relationship was added. When added as a random component, the mentoring relationship did not significantly vary among individuals, $p = .45$, so it was kept as only a fixed component in further analyses. Participant perception of the mentoring relationship was not a significant predictor of work hope, $p = .36$. Interactions between time and mentoring relationship, $p = .72$, parent supporting and mentoring relationship, $p = .68$, and time, parent support, and mentoring relationship, $p = .79$ were tested, but none were significant. Because participant perception of the mentoring relationship and its interaction terms were not significant, they were not included in the final model. Therefore, the fifth model was deemed most parsimonious and was used as the final model.

The final model included time, gender, parent support, and grit as covariates. Model fit was tested, comparing the final model to the base model. The final model fit the data significantly better than the base model, $\chi^2 = 64.45$, $df = 3$, $p < .01$.

Discussion

The goal of this research was to examine the impact of social and individual factors on career adaptability and work hope, as well as changes in these traits over time. The moderating effect of grit and the perceived mentoring relationship were also assessed. Parent support and grit were associated with both career adaptability and work hope, suggesting that the presence of each may provide youth an ability or desire to succeed at work. Additionally, an interaction between parent support and grit was significant, such that career adaptability was linked to parental support only for those high in grit. Grit may provide a drive to engage with career activities providing a protective effect for those low in parental support, and an additive effect for those high in parental support.

Career Adaptability, Parental Support, and Grit

Several hypotheses about the relations between career adaptability, parental support, and grit were supported, and several were not. First, as was expected, greater parental support was associated with greater career adaptability, consistent with previous research (Hirschi, 2009). Second, consistent with hypotheses, higher levels of grit were associated with greater career adaptability. While there is no prior research examining the link between grit and career adaptability, this finding is consistent with related research. Grit is associated with school success (Duckworth et al., 2007), which has been linked with better school-to-work transitions (Vuolo et al., 2013). Additionally, grit is associated with work success (Eskreis-Winkler et al., 2014). Clearly, grit is linked with success, so it is no surprise that grit is associated with this trait that can promote workplace success. Third, the findings demonstrated that grit moderated the relation between parental support and career adaptability, such that for those low in grit, parental support was not associated with career adaptability (see Figure 1). However, for those with high

grit, more parental support was associated with higher career adaptability scores (see Figure 1). Grit appears to have a protective as well as additive effect on the relation between parental support and career adaptability. It is related to greater career adaptability in those lacking parental support, and is associated with even greater career adaptability in those with parental support. This is consistent with previous research, as grit is related to success despite obstacles (Duckworth et al., 2009). Lack of parental support is a potential obstacle to the development of useful career traits, like career adaptability, so it follows that grit would be associated with career adaptability in the context of low parental support.

While several hypotheses were supported, all hypotheses regarding change over time were not confirmed. Time was a marginally significant predictor of career adaptability, such that participants' levels of career adaptability increased over time; however, parental support, grit, and the interaction between the two did not predict a change in career adaptability over time. It is not clear why these hypotheses were not supported. It is possible that parental support and grit do not promote better performance in the program, and therefore parent support and grit do not contribute to additional development of career adaptability over this short period of time; or given that parent support and grit are related to career adaptability at baseline, perhaps parent support and grit provide youth the tools to gain this knowledge by the age they enter programming, but do not provide any additional support in developing career adaptability after a certain age. A more advanced understanding of the relation between parent support, grit, and career adaptability is needed to better interpret these complex findings.

Work Hope, Parental Support, and Grit

As with career adaptability, several hypotheses concerning work hope were supported, and several were not. Gender was a significant predictor of work hope, as was expected, such

that women had higher levels of work hope than men. Previous research is mixed as to the relation between gender and work hope. However, some research has suggested that women believe their work goals are more attainable than men (Mester, 2012). It is possible that women are better at developing and believing in their ability to achieve goals, giving them a higher level of work hope.

Parent support and grit were both associated with higher levels of work hope. This is consistent with previous research, which suggests that grit helps individuals achieve long term goals (Duckworth et al., 2007) and succeed in the workplace (Eskreis-Winkler et al., 2014). Work hope would help individuals to succeed, so it follows that grit would promote work hope. Additionally, previous research links parental support to a variety of career development constructs, including career exploration (Rogers & Creed, 2011), general career development (Keller & Whiston, 2008) and career adaptability (Hirschi, 2009). Despite the main effects, the interaction between these terms was not significant. This indicates that higher grit was related to higher work hope for participants who were both low and high in parent support. Grit helps individuals overcome obstacles to achieve goals (Duckworth et al., 2007), and work hope helps individuals create and achieve work-related goals (Juntunen & Wettersten, 2006). Because grit and work hope both involve the development and achievement of goals, grit may be linked with work hope independent of parent support.

Hypotheses regarding change over time were also not supported. Time was not a significant predictor of work hope, as were none of the interactions involving time and parental support and/or time and grit. This finding, or lack thereof, is surprising. As with career adaptability, parental support and grit may not help participants perform better throughout the program, and may not contribute to gains in work hope. Also, given that parent support and grit

are directly related to work hope at baseline, they may give youth the ability to develop work hope by the time they start programming, but are not helpful beyond a certain age and do not provide further help in improving this skill. Without a better understanding of the connection between parent support, grit, and work hope, this pattern of findings is difficult to understand.

Perceived Mentoring Relationship Quality

Contrary to expectations, none of the hypotheses regarding perceived mentor relationship quality and career adaptability or work hope were supported. Perceived mentor relationship quality, the parent support and mentor relationship quality interaction, and the parent support, mentor relationship quality, and time interaction were not significant predictors of either career adaptability or work hope. Because CEP does not provide mentor guidelines, or any training about being a mentor, it is possible that the mentoring relationships developed in the program do not include aspects of a mentoring environment that would stimulate the development of these career traits. Larose & Tarabulsky (2005) suggest that following the MSM can help mentor and mentees develop a strong relationship that will be most beneficial to disadvantaged youth. However, if the aspects of the MSM are not included in programming, the mentoring relationship may not be as beneficial as would be expected. Additionally, no previous research has actually linked mentoring relationships and career adaptability or work hope, so it is possible that mentoring relationships promote tangible differences in career outcomes, like positive work attitudes (Baranik et al., 2010) and employment after high school (McDonald et al., 2007), rather than traits like career adaptability or work hope that focus on successful transitions and setting goals, not direct work success.

Limitations

This study has several limitations. First, there was a large attrition rate, which limited the sample at the final time point and may have contributed to the lack of significant findings over time. Additionally, there were several issues while collecting data given project time constraints. To account for these difficulties, adjustments were made to the analyses. However, changes in project outcomes over time could be better assessed if data collection was more uniform. Finally, the sample was not very diverse, limiting the generalizability of the findings.

Conclusions and Future Directions

At-risk youth face many barriers in their development of successful career trajectories. However, the development of positive career traits like career adaptability and work hope can help youth succeed in the workplace (Juntunen & Wettersten, 2006; Savickas, 2005), so it is important that researchers attempt to understand what contributes to the development of these traits. Parental support, grit, and mentoring relationship quality are just a few personal and social aspects that may help youth overcome obstacles to become successful in the workplace. As this study demonstrates, stronger parental support and more grit make the presence of these positive work traits more likely, suggesting their importance in youth's abilities to succeed at work. However, this research also demonstrates the need for additional research, not only to better understand the predictive nature of parental support and grit, but also to better clarify the relation of career adaptability and work hope with mentoring relationship quality and change over time.

This research provides evidence suggesting that parent support and grit are important in establishing career adaptability and work hope. However, further research should examine relations between parent support, grit, and career adaptability and work hope to determine how they could help youth develop these positive career traits. It is clear parent support and grit are

connected to career adaptability and work hope, but the lack of a relation over time raises additional questions about how grit and parental support influence the development of career adaptability and work hope. The mentoring relationship should also be further assessed. Perhaps relationship quality and relationship satisfaction are not as similar as was thought, and satisfaction with the relationship, rather than quality, is most helpful to youth. Research suggests that individuals with higher satisfaction with their mentoring relationship had more positive work attitudes as compared to those without mentors, while those who were neutral or dissatisfied had similar attitudes to those without a mentor (McDonald et al., 2007). Additional aspects of the mentoring relationship should be tested to determine what is most beneficial to youth.

This study adds to the limited research on the relations between parental support, grit, mentoring relationship quality, career adaptability, and work hope. Literature suggests these constructs could influence youth's ability to succeed in the workplace, so further research is needed to better understand what else may contribute to the development of career adaptability and work hope. Because these positive career traits have the potential to assist youth with their ability to succeed at work, understanding better what contributes to their development and applying that knowledge can prepare youth for workplace success.

CHAPTER 4. GENERAL CONCLUSIONS

This research was conducted to examine the effectiveness of summer youth work programs in preparing youth for the world of work and to determine relationships and individual characteristics that contribute to career traits that promote success in the work place.

Adolescence is a critical time for career development. Without opportunities to be involved with work experience and career exploration, youth may not understand how to be successful in the workplace. At-risk youth encounter a variety of barriers to involvement in these types of career activities that can promote success. Therefore, programming that engages youth in these experiences may help them develop the skills needed to be successful. Because it is also crucial that these types of programs are evaluated to ensure youth are exposed to the most effective and beneficial programming possible, one goal of this research was to examine program effectiveness. While it is beneficial to know whether programming works, it is also important to understand what contributes to the development of positive career traits that help youth succeed in the work place. Career adaptability helps people to successfully complete career transitions (Savickas, 2005). Work hope assists individuals with the development and pursuit of work-related goals, and may therefore be a particularly useful tool to help disadvantaged youth be successful in the work place. Research is limited as to what contributes to career adaptability and work hope, so another goal of this study was to add to the literature surrounding these positive career constructs.

Two studies were conducted to examine the effectiveness of the programming and identify relationships and personal characteristics that can promote workplace success. In the first study, the WIOA and MYP summer youth programs from Rural MN CEP were evaluated to determine the effectiveness of the programming for youth involved. Previous research has

suggested that summer youth work experience and programming helps youth develop skills and prepares them for success (Alam et al., 2015). Therefore, programming was evaluated to assess whether program goals were met, as well as whether positive career traits including work hope and career adaptability were influenced by program involvement, as they can help youth succeed and are consistent with the five guideposts for success on which the programming is based. Results indicated that programming was effective in some domains, but not others. Significant or marginally significant gains were found for the understanding of the value of school and career adaptability. However, no significant changes over time were found for worksite performance, leadership skills, or work hope. This suggests some programming elements are effective, but some may not be as effective as would be expected. Additionally, the mentor relationship quality was rated significantly higher by worksite supervisors than by participants, indicating supervisors may overestimate the mentoring services they provide their mentees. While some program outcomes did not see significant improvements, analyses did indicate that participants experienced a gain in each outcome with each month (see Table 4). This suggests that the program has the potential to positively influence participants in all program outcomes. Future research should further examine the components of the programming that are most and least effective in promoting skill development in participants to identify which elements could use adjustments so the program can promote the development of each skill outlined.

In the second study, personal and relational variables that contribute to career adaptability and work hope were examined. Previous research shows that parent support is linked with greater career adaptability (Hirschi, 2009) and suggests a link may exist between parent support and work hope because work hope is associated with other career development constructs (Kenny et al., 2010). Additionally, grit has been linked to work success (Eskreis-Winkler et al.,

2014; Robertson-Kraft & Duckworth, 2014), suggesting that it could enhance career adaptability and work hope. Results revealed that parent support and grit are significantly associated with both career adaptability and work hope, such that higher levels of parental support and grit are related to higher levels of career adaptability and work hope. Grit also moderated the relation between parent support and career adaptability. Those with both low and high parental support had the same levels of career adaptability if they were low in grit; however, high grit appears to be protective for those low in parent support, and additive for those high in parental support, as those with high grit and high in parent support had higher career adaptability than those high in grit and low in parent support. This is not a surprise, given that grit helps individuals persevere. Grit is associated with success despite obstacles, so it is no surprise it is linked with greater career adaptability in those low in parent support, or that it's presence is related to even greater career adaptability in those high in parent support. Grit may help youth develop skills in the face of challenges, like lack of parental support, and help youth develop skills even further when challenges are not present, like when parent support is high. However, grit did not moderate the relation between parental support and work hope; rather more grit was related to greater work hope, despite a participant's level of parental support. It is possible that because grit and work hope both involve the development and achievement of goals, grit is associated with work hope independent of levels of parental support.

Results also showed that none of the hypotheses regarding perceived mentoring relationship and change over time were supported. This suggests that program guidelines may not promote the development of strong mentoring relationships, or allow enough time for them to develop. Additionally, parent support and grit may not help individuals do better in the program, or may not support development of career adaptability and work hope past a certain

age. The results of this study do add to existing literature, suggesting that a parental relationship and the existence of personal drive characteristics promotes career adaptability and work hope. However, further research is needed to identify mechanisms that promote change in career adaptability and work hope over time, how parent support and grit promote the development of these traits, and other variables that may contribute to the continued development of these valuable career constructs.

This research expands the literature on work program evaluation, as well as factors contributing to the development of positive career traits. Results provide direction for new research focusing on program effectiveness and influences on career adaptability and work hope.

Strengths

There are several strengths to this study. First was the longitudinal design of the study. By collecting data at multiple time points, change in outcomes over time could be assessed. The pretest-posttest design allowed the researcher to draw conclusions about potential program impacts on the outcomes measured. Additionally, the use of a follow-up allowed the research to examine retention of program gains, rather than only assessing immediate gains in program outcomes.

A second strength of the research is the use of worksite supervisors to measure worksite performance. Using supervisors to assess worksite performance, rather than relying on self-report, allows for a more objective measure of worksite performance, as well as any change in that performance over time.

The final notable strength of this research is the use of a disadvantaged youth sample in a real world programming setting. This allows for the addition of novel findings to the research based on a population that actually utilizes and benefits from this type of programming. The use

of this population in this setting makes the research fairly generalizable to similar populations and programming, as WIOA is a nationwide program.

Limitations

This research also has several notable limitations. First, and probably the most limiting, is the lack of a comparison group. Without a comparison group, any conclusions about program effects are suspect, as there can be no certainty about whether change in program outcomes was due to the programming, chance, or some other unknown variable.

A second limitation is the high attrition rate. Though attrition analyses indicated that the final sample remained largely consistent with the original sample, the high attrition rate resulted in a very low sample size. This small sample size may have resulted in reduced power and limited the findings.

A lack of uniformity in data collection was a third limitation. While adjustments were made for analyses to account for discrepancies, uniform data collection could allow for a better examination of change from time point to time point.

A fourth limitation is that the study did not identify what made a participant “at-risk”. It is possible that participant performance in the program could differ based on their risk factors. Some risk factors may be more severe than others, or the presence of more than one risk factor could impact program performance differently. For example, previous research on childhood risk factors suggests different risk factors influence alcohol abuse differently, and that more risk factors make individuals more likely to abuse alcohol as adults (Dube, Anda, Felitti, Edwards, & Croft, 2002). Examination of the impact of risk factors could help better identify what works for which participants.

Finally, the sample was not very racially diverse. This is common in the 19 county region where the study was conducted, and the sample is actually somewhat more diverse than the region. Of the 19 counties, 14 of them have a population in which 90% or more of the citizens are white (United States Census Bureau, 2016), in contrast to the 83% for this sample. However, the lack of diversity limits the generalizability of this research.

Implications for Future Research

The findings presented here provide some evidence for the usefulness of summer youth work programming, their potential to benefit youth, and contributes to existing literature about what helps youth develop traits that can help them succeed in the workplace. Future research should delve deeper into what specific program elements are most effective, and what adjustments need to be made to make the programs as effective as possible. Additionally, differences in the two programs (MYP and WIOA) should be examined. Though they appear largely similar, they do differ in slight ways, so benefits of each should also be assessed to determine which elements from each are most effective. Preliminary analyses also revealed differences in age, previous work experience, and school status between WIOA and MYP, indicating a need for a large scale analysis of program differences to better understand how each program works for those involved. Furthermore, the type of work youth engaged in should also be considered. While CEP does make an attempt to connect youth with work that interests them, previous research suggests that the type of work youth engage in makes a difference as to the skills they develop and are exposed to (Staff & Schulenberg, 2010). Therefore, examining the types of skills youth develop as a result of engaging in different types of work could help identify the work experiences that would be most beneficial.

Additional research should further examine risk factors and how these may influence youth performance in the program. Previous research suggests that youth are differentially impacted by exposure to multiple risk factors (Dube et al., 2002) Therefore, future research should identify how each risk factor and the presence of multiple risk factors impacts youth program experiences, as well as resources, or supports that may help participants overcome barriers they face due to their combination of risk factors. Better understanding how risk factors impact performance could allow for the program to be better tailored to each participant, and help ensure they benefit as much as possible from program participation.

Future research should also continue to examine the mentoring relationship and its influence on youths' development of skills that prepare them for the workplace. The fact that the findings concerning mentor relationship quality were non-significant was surprising, given the theoretical links and existing evidence that suggests the benefits of the mentoring relationship (e.g. Baranik et al., 2010; Kram, 1986). Mentor relationship quality, which was measured here, may not be enough to make a difference for these youth. They may need exposure to the specific elements of the MSM. Research should measure if these components are present in the mentoring relationship to be sure these youth are exposed to the relationship they need.

Finally, future research should also continue to examine what contributes to the development of career adaptability and work hope. These characteristics have the potential to provide youth the ability to succeed in the workplace, so better understanding what contributes to their development could enhance youth chances of success. Research should continue to identify relationships and personal characteristics that contribute to the development of career adaptability and work hope, as well as how those relationships and characteristics influence the development of work hope and career adaptability over time. The current study provides

evidence that parent support and grit may promote the development of career adaptability and work hope at some earlier point in the lifespan. Therefore, future research should also examine how career adaptability and work hope develop earlier in life, as that could help promote the existence of these traits in adolescence, when they become most useful. The current research expands on the existing knowledge surrounding these constructs, but it is clear that more needs to be done to fully understand these constructs and how they develop over time.

Conclusions

This research examined the effectiveness of a summer youth work program, as well as personal and social relationships that contribute to the development of career traits that can help youth be successful in the workplace, including career adaptability and work hope. Clearly, summer youth work programs have the potential to positively impact the development of important workplace skills and youth career development trajectories. Additionally, this research adds to the limited literature surrounding the development of career adaptability and work hope. Despite these positive findings about the programs and relationships and characteristics that can contribute to career success, additional research is necessary to improve programming and better understand the development of positive career traits. Achieving a greater understanding of program structure and dynamics, as well as career adaptability and work hope, will provide better opportunities for youth to enhance their ability to achieve in the workplace.

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APPENDIX A. WORKSITE PERFORMANCE

Directions: Select which answer most closely describes the trainee's performance for each skill area. (Rated 1 – 4)

- Reliability:*
- 4 - Consistently on time. No absences.
 - 3 - On time. Acceptable attendance. No absence without notifying supervisor.
 - 2 - Occasionally late. Attendance below business standards.
 - 1 - Frequently late. Absent without notifying supervisor.
- Interpersonal Relations:*
- 4 - Deals with co- workers professionally, gets along well with others.
 - 3 - Usually gets along with others, is cooperative.
 - 2 - Has trouble relating to co-workers, occasionally is uncooperative.
 - 1 - Uncooperative, inflexible with co- workers.
- Work Site Appropriateness:*
- 4 - Consistently exhibits appropriate appearance and hygiene.
 - 3 - Usually exhibits appropriate appearance and hygiene.
 - 2 - Frequently has difficulty with appropriate appearance and hygiene.
 - 1 - Does not exhibit appropriate appearance or hygiene.
- Problem Solving:*
- 4 - Consistently exhibits good problem solving skills.
 - 3 - Usually exhibits good problem solving skills.
 - 2 - Has some difficulty using problem solving skills.
 - 1 - Has considerable difficulty with problem solving skills.
- Communication Skills:*
- 4 - Uses language to convey/clarify complex messages. Solicits listener feedback.
 - 3 - Communication is appropriate to listeners/situations. Asks questions as necessary.
 - 2 - Occasionally has problems communicating with customers or co-workers.
 - 1 - Considerable difficulty communicating with customers or co-workers.
- Productivity:*
- 4 - Consistent effort goes beyond expectations. Demonstrates initiative.
 - 3 - Consistently completes assigned tasks on time.
 - 2 - Inconsistent effort, sometimes does not complete assigned tasks or meet deadlines.
 - 1 - Frequently does not follow through with assigned tasks or meet deadlines.

Accuracy:

- 4 - Work exceeds minimum business standards.
- 3 - Work meets business standards.
- 2 - Work does not consistently meet business standards.
- 1 - Frequently does not follow through with assigned tasks or meet deadlines.

Safety:

- 4 - Demonstrates safety consciousness.
- 3 - No safety violations.
- 2 - Minor safety infractions.
- 1 - Frequent minor or a major safety infraction.

APPENDIX B. LEADERSHIP SKILLS

Choose the answer that best describes you: (1 = Strongly Disagree; 4 = Strongly Agree)

1. I am a better follower than a leader. (R)
2. I am a good leader.
3. I have the ability to lead a group of people.
4. I would rather have somebody else take the lead in formulating a solution. (R)
5. I feel that I can make a difference in the world

APPENDIX C. SCHOOL VALUE

When answering the following questions, think about the school you most recently attended.
(1= Strongly Disagree; 4= Strongly Agree)

1. I can get a good job even if my grades are bad. (R)
2. School is one of the most important things in my life.
3. Many of the things we learn in class are useless. (R)
4. Most of what I learn in school will be useful when I get a job.
5. School is often a waste of time. (R)
6. Dropping out of school would be a huge mistake for me.
7. School is more important than most people think

APPENDIX D. WORK HOPE

Choose the answer that best describes you. (1 – Strongly Disagree; 4 – Strongly Agree)

1. I have a plan for getting or maintaining a good job or career.
2. I don't believe I will be able to find a job I enjoy. (R)
3. There are many ways to succeed at work.
4. I expect to do what I really want to do at work.
5. I doubt my ability to succeed at the things that are most important to me. (R)
6. I can identify many ways to find a job that I would enjoy.
7. When I look into the future, I have a clear picture of what my work life will be like.
8. I am confident that things will work out for me in the future.
9. It is difficult to figure out how to find a good job. (R)
10. My desire to stay in the community in which I live (or ultimately hope to live) makes it difficult for me to find work that I would enjoy. (R)
11. I have the skills and attitude needed to find and keep a meaningful job.
12. I do not have the ability to go about getting what I want out of working life. (R)
13. I do not expect to find work that is personally satisfying. (R)
14. I can do what it takes to get the specific work I choose.
15. My education did or will prepare me to get a good job.
16. I believe that I am capable of meeting the work-related goals I have set for myself.
17. I am capable of getting the training I need to do the job I want.
18. I doubt I will be successful at finding (or keeping) a meaningful job. (R)
19. I know how to prepare for the kind of work I want to do.
20. I have goals related to work that are meaningful to me.
21. I am uncertain about my ability to reach my life goals. (R)
22. I have a clear understanding of what it takes to be successful at work.
23. I have a difficult time identifying my own goals for the next five years. (R)
24. I think I will end up doing what I really want to do at work.

APPENDIX E. CAREER ADAPTABILITY

Choose the option that best describes you. (1 = Strongly Disagree; 4 = Strongly Agree)

1. I know very little about the requirements of jobs. (R)
2. I don't know how to go about getting into the kind of work I want to do. (R)
3. Everyone seems to tell me something different; as a result I don't know what kind of work to choose. (R)
4. I am having difficulty in preparing myself for the work that I want to do. (R)
5. I keep changing my occupational choice. (R)
6. I don't know what courses I should take in school. (R)
7. I often daydream about what I want to be, but I really have not chosen an occupation yet.(R)
8. There are so many things to consider in choosing an occupation, it is hard to make a decision. (R)
9. I really can't find any work that has much appeal to me. (R)
10. I can't understand how some people can be so certain about what they want to do. (R)

APPENDIX F. PARENT SUPPORT

When answering, please think about the parent(s)/guardian(s) you are closest to. (1 = strongly disagree; 4 = strongly agree)

1. My parent(s)/guardians express pride in me
2. My parent(s)/guardians help me practice things
3. My parent(s)/guardians make suggestions when I am uncertain
4. My parent(s)/guardians help me make decisions
5. My parent(s)/guardians(s) give me good advice
6. My parent(s)/guardians(s) help me make up my mind
7. My parent(s)/guardians(s) help me find answers to my problems
8. My parent(s)/guardians(s) praise me when I do a good job
9. My parent(s)/guardians(s) politely point out my mistakes
10. My parent(s)/guardians(s) tell me how well I do on tasks
11. I feel close to my parent(s)/guardians(s)
12. I can count on my parent(s)/guardians(s) to be there if I need them
13. I feel like my parent(s)/guardians(s) have hope for my future

APPENDIX G. GRIT

Choose the option that best describes you. (1 = Strongly Disagree; 5= Strongly Agree)

1. I often set a goal but later choose to pursue a different one. (R)
2. New ideas and projects sometimes distract me from previous ones. (R)
3. I have been obsessed with a certain idea or project for a short time but later lost interest. (R)
4. I have difficulty maintaining my focus on projects that take more than a few months to complete. (R)
5. I finish whatever I begin.
6. Setbacks don't discourage me.
7. I am a hard worker.
8. I am diligent.

APPENDIX H. MENTORING – PARTICIPANT PERSPECTIVE

The following questions ask about your relationship with your work site supervisor. If you had more than one work site supervisor, please answer about the one you worked for most recently. (1 – strongly disagree; 4 - strongly agree)

1. I can talk to my work supervisor about problems outside of work.
2. My work supervisor helps me set work goals.
3. My work supervisor listens attentively to me.
4. My work supervisor helps me see areas where I can improve.
5. Often, my work supervisor makes decisions for me. (R)
6. My work supervisor often tells me what I do well.
7. My work supervisor congratulates me when I do something right.
8. I can talk to my work supervisor about goals in my life.
9. I trust my work supervisor.
10. My work supervisor cares about me as a person.
11. My work supervisor treats me with respect.
12. The only time my work supervisor pays attention to me is when I'm in trouble. (R)
13. My work supervisor cares about what I have to say.

APPENDIX I. MENTORING - SUPERVISOR PERSPECTIVE

The following questions ask about your relationship with the indicated trainee. (1-strongly disagree; 4 – strongly agree)

1. This trainee can talk to me about problems outside of work.
2. I help this trainee set work goals.
3. I listen attentively to this trainee.
4. I point out areas where this trainee can improve.
5. I often make decisions for this trainee. (R)
6. I often tell this trainee what he/she does well.
7. I congratulate this trainee when he/she does something right.
8. This trainee can talk to me about goals in his/her life.
9. This trainee trusts me.
10. I care about this trainee as a person.
11. I treat this trainee with respect.
12. The only time I pay attention to this trainee is when he/she is in trouble.
(R)
13. I care about what this trainee has to say.