

Parents' Predispositions For Four-Year
Universities as Discerned By Their Children

By

Kyle Schwarm

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Abstract

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Kyle Schwarm

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Inordinate numbers of high school graduates in the U.S. are attending four-year universities, according to economists, employers and academics. Meanwhile, too few high school graduates are learning occupational skills typically acquired at two-year community and technical colleges. This is resulting in a mismatch of the job skills in the employment market, with employers looking for skilled workers and many bachelor's degree holders finding themselves underemployed. Parental predispositions for higher education may preclude significant populations of children from exploring all higher education options, therefore, contributing to the skills imbalance. A survey of current four-year college students was conducted at a mid-sized, regional, comprehensive university in the Midwest to analyze perceptions regarding the extent to which parents' have predispositions about four-year universities and whether high school students are dissuaded by parents from exploring or attending community and technical colleges. As hypothesized, the research showed a high number of students reported that their parents expected them to attend four-year postsecondary education institutions (PEI's). A

positive correlation between parents' predispositions for children attending a four-year university and parents discouraging children from attending a two-year community or technical college was also found. It also revealed a correlation between parents' level of involvement and their expectations and predispositions for their children attending a four-year university.

A growing number of economists, employers and academics are arguing that the postsecondary education system in the U.S. is producing a disproportionately high number of four-year graduates (Barshay, 2014; Carnevale & Smith, 2013, Lubin, 2013; Rubenstein, 1998). Many four-year graduates are underemployed, failing to exceed the average wage for four-year degree earners. These graduates are finding that their degrees do not closely align with the jobs available in the employment market (Barshay, 2014), and it is affecting wages (Berrett, 2014). The value of a college degree has increased over the years, but not for all students, as nearly half of all four-year college graduates are employed in occupations that require less than a baccalaureate degree (Vedder, Denhart & Robe, 2013). This skills mismatch phenomenon is expected to get worse over the next decade (Lubin, 2013). Meanwhile, student loan debt is at an all time high at \$1 trillion and growing (Berrett, 2014) and most graduates are surprised by how much debt they have accumulated (Fidelity, 2013).

Parents' Expectations

Parents' expectations for their children play a significant role in their predispositions for continuing education beyond high school (Hossler & Stage, 1992). Several studies have examined many of the factors that influence whether high school graduates will go on to postsecondary education, including socioeconomic status, student ability, parental education level and parental expectations and encouragement (Hossler & Stage, 1992). Hossler & Stage (1992) argued that the biggest influencer is a combination of the level of parental education and their aspirations for their children.

Statement of the Problem

Arum and Roksa (2014, as cited in Barrett, 2014) found many university graduates, who did what was expected of them in their higher education experiences, struggling to find jobs in this apparent paradox. Their research discovered that 53 percent of recent graduates earned less than \$30,000 per year or had no job. There are more bank tellers and waiters with four-year degrees than ever before (Gray & Herr, 2006). Meanwhile, recent research from the Community College Research Center (2014) showed that two-year colleges are providing increasingly higher economic returns for graduates over the last three decades.

Gray and Herr (2006) claimed these graduates are caught up in the *one way to win paradigm*. The authors define it as, "...The belief that the only hope for future economic security for today's youth is to earn at least a four-year college degree because it will lead to a good-paying job in the professions," (Gray & Herr, 2006, p. 7). The *one way to win paradigm* message is pushed by adults (mostly parents) who are unwilling to accept alternative education and choices. University graduates, he argues, are not able to take jobs away from the graduates of this alternative (technical) education because they lack the skills necessary to perform these occupations (Gray & Herr, 2006).

Universities oversold themselves as economic-development vehicles, which led to persons believing the best way to employment and financial success is through the four-year university (Berrett, 2014). However, as the cost of education rises, more universities are being scrutinized for return on investment and value. According to the National Career Technical Education Foundation (2010), U.S. workers will need different skills

than workers of past years; the types of skills provided by two-year technical and community colleges. Goyette (2008) warned of rising expectations of bachelor's degrees, given changing labor market conditions.

Absent from existing research is the parent/child dialogue that influences the type of postsecondary education institution (PEI) a child pursues. Specifically, relatively little is known about the role parents serve in determining the type of college chosen by traditionally-aged college students, as discerned from the students' perspective.

Most research on career development includes the investigation of high school students and their parents and is heavily focused on four-year considerations. Absent from existing research, however, is the adolescent's perspective of the parent/child dialogue that influences the type of postsecondary education institution (PEI) a child pursues, either a four-year college or university or a community or technical college, commonly referred to as a two-year college. Relatively little is known about the role parents play in determining the type of college chosen by traditionally aged college students, which are defined as exiting high school and enrolling in postsecondary education within two years of high school completion (Plank and Jordan, 2001).

This research explores the association between parents' attitudes about two-year community and technical colleges and their children's choices for education after high school. This study attempts to uncover the extent to which parents encourage the exploration of all PEI options in light of the existing job market. More specifically, it seeks to uncover perceptions four-year university students have regarding the extent to which parents encouraged consideration of two-year technical or community colleges as

a PEI choice and how parents' predispositions for four-year universities affect the decision. The study could have practical implications for two-year technical and community colleges looking to gain knowledge and insight for marketing and promotional strategies and tactics.

Definitions of colleges. A postsecondary education institution (PEI), also known as *college*, can consist of a two-year or four-year higher education facility (Plank & Jordan, 2001). In many instances, the term *college* is used as the term to describe *university*, failing to recognize that two-year institutions are also colleges. For purposes of this study, *college* refers to either a two- or four-year institution unless specifically noted as two- or four-year college. Two-year colleges include both community and technical colleges. In many states, community colleges offer both technical certificates and associate degrees that commonly transfer credits of learning to universities and technical colleges. These certificates and degrees are often viewed as terminal, which means they are unable to ladder to a higher degree or transfer to a four-year university. For purposes of this research, the *two-year college* term refers to both community and technical colleges while community college and technical colleges may be used interchangeably.

Review of the Literature

Historical Perspective

The term *vocational* was traditionally conceived as entry into disciplines such as medicine and law, but more recently refers to occupations in a craft, trade or service (Lumby, 2007). Vocational education, sometimes referred to as career and technical

education (CTE) can be traced back to 1642, when the Massachusetts Bay School of Law required teachers to have masters' degrees to teach reading and writing to apprentices (Gray & Herr, 1998). Brewer (2009) characterized vocational education as teaching students the skills that will be useful in the workplace.

In the early 20th century, supporters of liberal education were fearful of the vocational education momentum and debated whether it was too specialized to meet the needs of society as technology changed (Labaree, 2005). Snedden (1910) defended the need for vocational education and argued, "...Vocational education is not in conflict with liberal education, but is a supplemental form and may be expected to reinforce it," (Paraskeva, 2011, pp. 81-82).

The scope of vocational education has gone through many changes to meet the needs of the U.S. By the early 1900's, lawmakers realized a need for expanding secondary and postsecondary education to address the exploding industrial economy (Calhoun & Finch, 1976). However, these educational programs were not mandatory and postsecondary programs were reserved more for the academic elite and did not offer much in the way of vocational programs (Barlow, 1976).

The Vocational Act of 1963 was designed to provide students with access to vocational education while addressing workforce needs. It was amended in 1968 and 1976, specifying that federal funding could be used for both secondary and postsecondary students in need of training (Brewer, 2009).

In 1990, the U.S. Congress reframed vocational education as intended for individuals not interested in pursuing a four-year degree or higher. Known as the Carl D.

Perkins Act II, it expanded vocational programs beyond high school to meet the needs of a technologically advancing workforce and stipulated that vocational education provide academic education in addition to specific work skills (Brewer, et al., 2000).

Today, career and technical education is most commonly found in two-year community and technical colleges, which make up roughly half of all colleges in the U.S. (Stumpf, 2013). Often, the term *college* is reserved for four-year universities, but Gibbons and Shoffner (2004) defined *college* as any formal postsecondary education beyond high school. Many two-year community and technical colleges offer collegiate transfer, developmental or remedial education and community education in addition to vocational education (Stumpf, 2013).

Handel (2011) noted the popularity of two-year colleges is due to several factors. The first is that two-year colleges are considered open admission, which allows access for just about anyone with a high school diploma or equivalent degree. Second, the cost to attend can be as low as one-third the cost of a public, four-year institution. The third is geography, as two-year colleges are within driving distance of 90-percent of the U.S. population (College Board, 2008, as cited in Handel, 2011).

Today, two-year colleges also serve as a viable pathway to a four-year degree (Handel, 2011) that leads to employment (Vlaardingerbrock & El-Masri, 2008). Pascarella and Terenzin (2005) examined 20 years of research regarding college effects. They concluded that two-year college students who transfer to four-year colleges are just as likely to earn a four-year degree as the students who begin at a four-year institution.

Theoretical Framework for Career Selection

There are two broad areas of study related to the postsecondary education decision: the factors that influence the decision and the decision process. The constructs are interestingly unique, yet have similar foundations. This section reviews several of these inter-related theories.

Trait oriented approaches to career selection. Trait and factor theories place emphasis on characteristics of the individual (Gray & Herr, 1998). The concept is based on matching education and occupation to an individual's fundamental qualities to perform a specific occupation (Gray & Herr, 2006).

Parsons (1909) was one of the early academics to study career development. His work on vocational guidance provided the framework for career development theory. He ascertained that the selection of an occupation requires one to look inward to understand one's abilities and limitations. Prior to the 1950s, psychologists showed interest in occupation matches by studying how individuals from one occupation differed from those in another (Devine, 1975). Erikson (1957) recognized an individual's occupational identity as a major component of a person's general identity. Focusing on a trait-oriented approach, he saw the development of identity paired with ego and most prominently in the adolescent stage when key vocational development decisions are made (Erikson, 1963). The scholar suggested that adolescents are disturbed when they are unable to establish an occupational identity (Erikson, 1957).

Holland's (1966) vocational, personality and work environment theory is based on the assumption that individuals have traits, behaviors and interests that are organized

into a combination of six personality types. The six personality types include realistic, investigating, artistic, social, enterprising and convention. Holland asserted that individuals systematically express their personality by gravitating toward occupations that they perceive employ persons similar to themselves or that employ persons with similar personality types (Holland, 1985). Similarly, Rogers, Creed and Glendon (2008) probed how personality of high school students affects career planning and exploration. They discovered that personality might be related to career planning and exploration both directly and indirectly. Specifically, students who are open to new experiences and are conscientious are more likely to engage in career planning. The researchers also found that social supports, such as financial support and interest in career plans and performance by others are likely to result in career planning activity (Rogers, et al., 2008).

Astin (1984) also focused on career selection but on different variables. He combined social variables with psychological ones to develop a slightly different career choice model. It is based on our primacy needs of survival (psychological), pleasure (work-related) and contribution (to society). The chosen occupation, according to this model, needs to have the potential to satisfy these needs but also be an occupation the individual believes he or she can perform (Astin, 1984).

Stage development and learning approaches to career development. Most literature on career decision is focused less on traits and more on career development as a cognitive process based on environmental and social learning situations (Bandura, 1986; Holland, 1959; Lent & Hackett, 1987). Psychologists began to study vocational choice as

a developmental process in the 1950s with a focus on the variables that determine vocational progress (Devine, 1975). Ginzberg, Ginsburg, Axelrad and Herman (1951) introduced the first detailed semblance of a career development theory. They recognized that vocational choice is a developmental process beginning in early childhood and extending into adulthood. The scholars theorized there are four variables that influence occupational choice, including: 1) reality factors (environmental influences, including parents), 2) the educational process (type and extent of education already received), 3) emotional factors, and 4) individual values. Ginzberg and his colleagues proposed that career development occurs throughout three stages, including: 1) the early childhood fantasy period, 2) the tentative stage when he/she begins to consider intrinsic enjoyment of occupations, abilities and values, and 3) the realistic period, which includes exploration, crystallization and specification (Ginzberg, et al., 1951).

Two years later, Super (1953) introduced development theory as a sequence of stages that develop a person's self-concept over a lifetime. The premise was that an individual's abilities would be paired with available occupations that can be juxtaposed over the years. He suggested that the process of career development uses experimentation of various genetically provided aptitudes and interests for the ultimate discovery of a satisfying occupation.

Bandura's (1977) social cognitive theory was influential in the development of career development theory. Central to Bandura's social cognitive theory is his self-efficacy theory (Bandura, 1977). It pertains to one's own cognition and how he or she processes expectations and emotions toward the ability to perform a specific occupation.

Essentially, when individuals feel strongly they can perform an activity (high self-efficacy), they are more motivated to participate in the activity. Individuals with low self-efficacy in a given activity are likely to avoid the activity (Bandura, 1978). Self-efficacy levels have been shown to make a difference in the way individuals perceive their world. Persons with high self-efficacy will have a stronger sense of control over their own abilities, while individuals with low self-efficacy are more likely to feel they have less control over their own fate (Bandura, 1978).

Social cognitive career theory (SCCT) uses Bandura's (1978) theory as its foundation, along with Hackett and Betz's (1981) career self-efficacy theory, which is the application of self-efficacy to career-related behaviors. Lent and Brown (1996) gave birth to SCCT, a socio-cognitive behavioral framework suggesting how individuals navigate the process of career development (Lent & Brown, 1996). SCCT posits that an individual's characteristics influence learning and career-relevant activities compatible with goals, expected outcomes and ultimately, self-efficacy (Lent, Brown, & Hackett, 1996). However, there are barriers, such as gender, ethnicity and socioeconomic status (SES) that might preclude an individual from having positive outcome expectations (Gibbons & Shoffner, 2004).

Gottfredson's (1981) theory of occupational aspirations focuses on how an individual's perception of occupational choices changes over time along with the development of self-concept. The first stage is from three to five years of age when children realize adults have roles in the world and they, too, will have a role some day. At ages six through eight, children begin to recognize job roles and begin to attach gender

identity to occupations. By ages nine through thirteen, children see social status in jobs and begin to rule themselves out of jobs they see as too difficult or having high risk of failure. At ages 14 and beyond, individuals view roles more consciously and begin to consider or compromise occupations based on their traits, characteristics and aptitudes (Gottfredson, 1996). Several elements are considered to determine suitability for an occupation, including gender, social class, intelligence, interests, values and abilities. This theory of circumscription and compromise posits that perceived career barriers prompt adolescents to cognitively eliminate unacceptable occupations and begin vetting career aspirations for relevancy (Gottfredson, 2005). These elements are used as a reality check to eliminate occupations that may not be suitable or compatible (Bimrose, 2012).

Super's (1990) viewpoint was that personal and environmental variables influence career development. It suggests that a firm self-concept leads to a sound occupational choice. Super's life span, life space theory of career development recognizes the family as a source of influence. According to Super and his colleagues, the career choice task is not a point-in-time decision, but a process that evolves over time (Patton & McMahon, 2006). It is based on a long-term process of life stages, vocational tasks and self-concept, including growth, exploration, establishment, maintenance and disengagement (end of a career). Essentially, an individual *vocationalizes* self-concept by matching likes and dislikes with skills, which leads to the exploration and narrowing of choices (Patton & McMahon, 2006),

Bandura, Barbaranelli, Caprara and Pastorelli (2001) examined how levels of academic performance influenced the types of career pursuits by adolescents. The

research team revealed that an adolescent's perceived occupational self-efficacy is more directly associated with occupational career choice than is academic performance. Using social cognitive theory as a foundation, the researchers established a career self-efficacy model in which parents' perceived efficacy and academic aspirations are reflected in the child's self-efficacy, academic aspirations and achievement (Bandura, et al., 2001). The researchers believed the intensity of these core elements affects the range of occupational options in the child's consideration set. This work established a correlation between academic efficacy and occupational efficacy, which includes the level of occupational pursuit. For example, they found high academic achievers have strong aspirations and self-efficacy for careers in science, education literature and medicine. As a result, the researchers posit that adolescents' self-efficacy dictates the navigation to or from specific occupational areas (Bandura, et al., 2001).

Coleman's (1998) social capital theory focuses on strong social ties within a strongly connected network (family), which assumes parents will provide children with the critical information and values they would not otherwise have (Schneider & Stevenson, 1999). *Social capital* is the networks of individuals and information available to individuals who need facilitation in making a PEI decision (Plank & Jordan, 2001). Essentially, social capital is resource behavior and higher education and financial resources are economically beneficial (Bers, 2005). On a related note, Burt's (1998) hierarchical network is a form of social capital whereby adolescents first rely on parents for information to enhance their life chances in an adult society.

The likelihood for pursuing or engaging in a particular activity has been shown to increase as affinity, efficacy and positive expected outcomes increase (Lent & Brown, 1996). An adolescent's environment determines the extent and variety of occupationally relevant activities for which he or she is exposed. Exposure to various activities allows opportunities for their own performance in these areas relative to his or her expectations for outcomes. In time, these experiences provide opportunities for practice and feedback to eventually realize whether the activity is one they like (affinity) and feel they do well (positive outcomes). Thus, success or failure in a given occupational-related task is closely associated with self-efficacy beliefs and career passion (Lent, Brown & Hackett, 1994). Sometimes self-efficacy is limited by a lack of exposure to a particular practice, or individuals might develop inaccurate perceptions of occupational self-efficacy. This can shorten the potential list of potential occupations for that individual (Lent & Brown, 1996).

A career preparation study by Skorikov (2007) assessed adolescent career preparation and the adjustments made by students. He asserted that career preparation is a long-term, continuous process requiring most individuals to make adjustments throughout high school and beyond to reach high levels of career confidence. The subjects in this research slowly gained confidence the closer they got to adulthood. The research suggests it may take years before students grasp whether they chose the right vocation and that the long-term effects of career preparation are more crucial than the short term (Skorikov, 2007).

A longitudinal study by Stringer, Kerpelman and Skorikov (2011) assessed three

career development dimensions from a career identity perspective. They examined the effects of the relationships between career decision-making, career planning and career confidence from grade 12 to four and one-half years after high school. As they expected, Stringer and her colleagues found the career preparation dimensions to be interrelated and simultaneously developing over time. The team also discovered that career indecision can be quite strong in high school but decreases as adolescents establish some identity development and make their way closer to postsecondary education or work (Stringer, et al., 2011).

Systems theory approaches. As the previous section demonstrated, career decisions are typically made in the context of a social system having many different influencers. Systems theory, which is broadly based, provides the overarching infrastructure for many theories that attempt to comprehend the career selection process (Patton & McMahon, 2006). Patton and McMahon cited Bertalanffy (1940) as the originator of systems theory, explaining how living organisms are interacting elements that essentially become one unit to have an affect on outcomes and maintain balance.

It is important to highlight family systems theory as an extension of systems theory, suggesting that individuals are interconnected and interdependent in the family unit and not understood in isolation from one another (Bratcher, 1982; Patton & McMahon, 2006). Family systems theory, which includes psychological and sociological influences, suggests that career decision-making is part of the adolescent development process that is dependent on family, particularly parents (Lopez & Andrews, 1987). The family systems perspective contemplates the context for the adolescent's family

environment, which is a complex unit of personalities, rules, beliefs and traditions, unknowingly applying an influence on members (Bratcher, 1982; Zingnaro, 1983). Lopez and Andrews (1987) viewed this as an antecedent to career decision-making. Instead of viewing career decision-making as independent, they argued that family functioning is also responsible for career decisions or indecisions (Lopez & Andrews, 1987).

Another aspect of systems theory promoted by Bratcher (1982) was the concept of boundary. He suggested internal and external boundaries limit individual autonomy. The more flexible these boundaries, the more likely the individual will be able to separate and make decisions independent of the family, including those related to careers (Bratcher, 1982). One traditional boundary that may influence occupational choice is types of careers selected by other members of the family. Family systems theory purports that systemic forces within the family framework may steer an individual into an occupation regardless of the individual's desires. When potential expectations are strong, children may become confused over whose expectations they are trying to meet (Zingnaro, 1983). Even the use of a counselor may not assist adolescents attempting to differentiate their identity from the desires or expectations of their families (Zingnaro, 1983). Zingnaro (1983) suggested the use of systems theory and educating adolescents on the dynamics of family may help. Specifically, Zingnaro (1983) posited that adolescents who understand where they fit into the family system and the emotions that come with it have career decision-making advantages over those who do not.

Stigma and taint ideology

To fully understand the complexity of the PEI decision-making process, stigma

and taint ideology must be considered. It is important to first understand what stigma is and how it relates to PEI choices. This section reviews the related constructs of stigma and taint.

Goffman (1963, as cited in Link & Phelan, 2001) classifies stigma as, "...A special kind of relationship between an attribute and a stereotype," (p. 1525) and, "...An attribute that is deeply discrediting," (Goffman, 1963, p. 3, as cited in Link & Phelan, 2001) to the point of being tainted. A main property of stigma is that it conveys a devalued social identity for someone in a particular context (Crocker, Major & Steele, 1998, as cited in Link & Phelan, 2001). It was originally only associated with persons having mental illness (Ostman & Kjellin, 2002), but was subsequently extended to the homeless (Roschelle & Kaufman, 2004) and particular ethnic groups (Bos, Pryor, Reeder & Stutterheim, 2013).

Two main functions of stigmatization are power and conformity (Phelan, Link & Dovidio, 2008). Power (social, economic or political) enables persons who possess it to hold down or suppress those who do not (Link & Phelan, 2001). Conformity is thought to encourage non-conformists to acquiesce to in-group norms (Phelan, Link & Dovidio, 2008).

Phelan (et al., 2008) likened stigma to prejudice, as both are socially constructed and have similar human characteristics, such as categorization, labeling, social rejection and status loss. Therefore, the scholars are more inclusive of their characteristic targets of stigma and prejudice and propose three types of stigma: 1) exploitation/domination, 2) enforcement and social norms and 3) avoidance of disease.

The most applicable to stigma as it relates to educational choices may be exploitation/domination and social norms. Phelan (et al., 2008) contended some groups in society, "...Provide labor that is exploited by others or perform unpleasant or dangerous tasks," (Phelan, et al., 2008, p. 362). Link and Phelan (2001) argued that the application of stigma comes through the convergence of several inter-related acts of labeling. They identified four inter-related components for stigmatization to occur. First, individuals are labeled as a result of their differences. Second, in-group members link the labeled individuals to undesirable attributes. The negatively labeled are then categorized into distinct and separate groups. Finally, status loss occurs as a result of the first of three components (Link & Phelan, 2001). Essentially, the categorization into groups allows for the over simplification of societal differences.

Stigma is based on materially and discursively constructed perceptions of the non-stigmatized (Meisenbach, 2010) and is associated with identity negotiation through occupations (Meisenbach, 2008). Meisenbach (2008) provided a reminder that occupational and workplace stigmas have had much less focus on them than health and disability stigmas and, "...Little consideration is given to how various types of stigma types might impact strategy, choices and outcomes," (Meisenbach, 2010, p. 269).

Stigma and taint impact on postsecondary institutions. Given the stigma and taint ideology effects on career selection, it is not surprising that two year colleges are perceived as less desirable than four-year institutions. Two-year colleges are a viable alternative to the mainstream four-year college education but are considered second rate (Stevenson, 2005). The popularity of two-year colleges has prompted detractors to speak

disparagingly about them for years. For instance, the term *talent loss* was utilized by the U.S. Department of Health, Education and Welfare (1969, as cited in Plank & Jordan, 1997) to describe the number of high school graduates not pursuing some form of college within five years of high school completion (traditional-aged college students). Plank and Jordan (2001) created a more severe definition of *talent loss* to describe any high-achieving students who do not attend a four-year PEI, including those attending a two-year PEI. They categorized attendance at a community college as a lesser value option than a four-year college. Bers (2005) referred to this perspective of talent loss as “elitist.”

Stevenson (2005) contended *vocational* is mistakenly “... At the bottom of a hierarchy of knowledge and value” (p. 335) and is “... A stream of learning available to the ‘lower achiever’” (p. 336). He points out that the synonym *training* is often used to describe learning for these imitation-based learning procedures and social class divisions have resulted. In contrast, Stevenson argued that the more explicitly valued forms of learning are afforded descriptors such as *education* and *development* or *abstracted*, *theoretical* and *generalizable*. This occurs even though vocational occupations often garner much higher earnings, “.... High incomes are often earned in many such occupations, much to the chagrin of their ‘betters’” (Stevenson, 2005, p. 337). He argues that all education that has meaning and includes significant activity should be categorized as *vocational*.

Strong economies in the world (e.g. Germany, Japan and South Korea) are often those that have successful vocational and technical education programs (Vlaardingerbrock & El-Masri, 2008). The U.S. has a strong economy, but unlike these

other economic powers, it has appended a stigma to its vocational and technical education programs (Vlaardingerbrock & El-Masri, 2008).

The two-year college stigma may be associated with in-group desires. Kreiner, Ashforth and Sluss (2006) examined the dynamics of occupational identity using social identity theory as a foundation. Social identity theory is centered on how in-group and out-group membership influences an individual's self-concept (Hogg, 2003). The research team postulated that an individual's self-identity motivates him or her to establish distance from the stigmatized out-group toward the higher status in-group. Bartel (2001) added that a threat to an individual's identity occurs when his or her in-group is criticized or downgraded and status is compromised. Pryor, Reeder and Monroe (2012) addressed distancing in their work, which suggested that individuals fear the spread of stigma to companions given the secondary effects of it. It can be spread through meaningful and simple associations with one another. Family association is one of the most common connections to stigma. The researchers reaffirmed that individuals employ the distancing strategy to disassociate themselves from roles, associations or institutions that can be stigmatizing (Link & Phelan, 2001). An example of this would be community and technical college alumni who are insecure about acknowledging where they received their postsecondary credentials.

Stigma and taint relationship with occupational selection. Hughes (1951, as cited in Ashforth & Kreiner, 1999) used the label *dirty work* to describe occupations that have been stigmatized. Ashforth and Kreiner (1999) used the label *taint* as a category of stigmatized jobs to describe dirty work occupations, or those that are considered less than

desirable, such as funeral director or sanitation worker and *dirty work* to describe morally tainted occupations, such as pawnbroker or stripper (Ashforth & Kreiner, 1999). Kreiner, Ashforth and Sluss (2006) later expanded the application of stigma to most occupations, contending that stigmas vary by breadth and depth and also differ by type of occupation (2006).

While many in our society may view hands-on occupational work as virtuous, they often prefer that it be left to individuals other than themselves (Ashforth, Kreiner, Clark & Fugate, 2007). Longitudinal research by the Wisconsin Technical College System (2013) showed how the overwhelming majority of parents would recommend a two-year college, but not necessarily to their own sons and daughters.

Society's view on occupations often varies by discipline, with some getting the bulk of occupational stigmatization (Kreiner, et al., 2006). However, virtually all occupations, even the most innocuous, have at least some dirty work (Kreiner, et al., 2006). Members of society heavily rely on service, craft and trade positions but continue to stigmatize many of them, especially those labeled as *dirty work* (Kreiner, et al., 2006).

Individuals in positions of taint may merely see their occupation as a job, but an occupation is much more than a source of income. Occupations establish self-identity and a sense of reality (Bandura, Barbaranelli, Caprara and Pastorelli, 2001). Occupations serve as badges for individuals to tell others about who they are (Ashforth, 2001). An occupational identity is used as a way an individual defines him or herself (Kitay & Wright, 2007). The chosen occupation can determine levels of happiness and fulfillment, which influences family relations (Bandura, et al., 2001). Our workplace selves help

define who we are and who we may become (Trethewey, 1997). Job titles establish social identities that extend beyond the workplace and are thought to have some impact on an individual's self esteem (Crocker & Major, 1989) and individuals are more interested in occupations that help achieve the preferred self (Tracy & Trethewey, 2005). The preferred or ideal self may be difficult to achieve for jobs that are considered *dirty* or *tainted* or that require education at a two-year college.

Counselors, parents and other influencers on postsecondary career choices

As this literature review has demonstrated, the postsecondary and career decision-making process is not always straightforward. Parents, counselors and others heavily influence these decisions, which often intensify an already complex process. This section addresses these influences on adolescents.

Plato said, "The chief purpose of education is to teach young people to find pleasure in the right things" (Hoy & Tarter, 2006, p. 3). Finding pleasure in the right things can be undermined by outside influences or unsupportive environments (Betz, 1989) that can provide support or create obstacles for an adolescent poised to make a career choice (Lent, Brown & Hackett, 1994).

In the 1960s, counselors were direct with students they deemed not ready or able to attend a four-year college (Turner, 1960). Over the next couple of decades, counselors maintained a strong influence on the destinies of students. More recently, counselors affirmed that they are not always able to assist with the college decision process because of higher caseloads for at-risk students (Johnson & Rochkind, 2010; Rosenbaum, Miller and Krei, 1996). Jordan and Plank (1998) postulated that counselors with heavier

workloads are only able to provide postsecondary planning to students nearest graduation, regardless of academic achievement (Jordan & Plank, 1998). Also, disadvantaged students face counseling obstacles preventing them from identifying occupational goals and interests (Goyette, 2008). Students in low SES are often in high schools where counselors are not available for guidance (McDonough, 1997) or often are not afforded financial aid resources that would allow access to a PEI and therefore, are discouraged from applying (Perna, 2002).

The role of the school counselor has changed (Jordan & Plank, 1998). Counselors no longer have the resources or motivation to serve as the *gatekeepers* or the persons who decide whether students are appropriate for four-year colleges. As a result, counselors often engage in the *college for all* approach (Jordan & Plank, 1998). Rosenbaum, Miller and Krei (1996) conducted face-to-face interviews with 27 counselors in Chicago metropolitan-area high schools and demonstrated how counselors were feeling they had lost authority in college advising and played down the influence they have on students' college plans. The interviews shed light on a number of factors that led to counselors advocating the college for all mentality (Rosenbaum, et. al., 1996). First, counselors do not want to spurn students' dreams, even if they are unrealistic. Second, students' attention is elsewhere and counselors indicated it is difficult to get students to listen to their advice. Third, parents' power often trumps counselors' authority; a common practice witnessed as parents push children in a predestined direction against the recommendation of counselors. Essentially, these perceptions by counselors have deterred them from engaging in gatekeeping (Rosenbaum, et al., 1996). Krei and

Rosenbaum (2001) later found counselors had not provided clear rationale for the kinds of students they believed should attend a university and approached the college planning process as "...A general panacea for all goals and all individuals," (Krei & Rosenbaum, 2001, p. 5).

The home is the environment in which children spend most of their time so it stands to reason that it offers a great degree of influence over career planning. As pointed out earlier, the family system and parents within it serve a critical role in the development of their children in many areas of practical knowledge, including the identification of occupational interest (Young & Friesen, 1992). Roe (1957) made early attempts to associate parental influence with vocational choice. Her seminal research proposed a connection between parental attitudes or style and occupational choices by their children. Those styles include being over-protecting, over-demanding, loving-acceptance, casually accepting or neglecting and rejecting. Trusty (1996) contended that parents involved in career development have a much stronger influence on postsecondary decisions than peers, teachers or counselors. Plank and Jordan (2001) arrived at a similar conclusion as they argued that career development resources from family, especially parents, were found to be more beneficial than those from school.

Otto (1984) also labeled parents as the biggest influencers in career planning. Otto (1984) argued that aspiration, or what an individual wants, and expectations of what others (such as parents) want, are major influencers in the lives of adolescents. Otto contended that parents' aspirations and expectations for occupations are established in developmental years as a result of school performance but parents and students gradually

adjust aspirations and expectations accordingly, based on what they perceive as high or low performance of the adolescents (Otto, 1984).

The process of acquiring occupational knowledge may rely on the adolescent-parent relationship (Ketterson & Bluestein, 1997) but many parents lack the expertise to assist children in career decision-making (Whitson, 1989). Adolescents are often expected to make their own decisions regarding career choice, but it is rarely a personal decision because parents fail to separate from their children (Lopez & Andrews, 1987). Parental involvement can lead to children feeling they are under the power of parents and unable to assert their feelings on their occupational choice (Young, 1994). Lopez and Andrews (1987) asserted that parents' over-involvement often leads to career indecisiveness while Agaliata and Renk (2008) found students often suffer from anxiety when they realize they are not living up to parents' expectations.

Parental involvement in children's education is based on two major beliefs, according to Hoover-Dempsey (et al., 2005). The first is parental role construction, which is a sense of responsibility for a child's achievement and a parental sense of efficacy, or a feeling that parents' actions will help their child succeed. The second, self-efficacy, is more outcomes based, with parents establishing goals for their children in a given situation (Hoover-Dempsey, et al., 2005). Higher efficacy tends to result in stronger persistence along with expectations for higher outcomes. Lower efficacy is typically associated with lower expectations and lower levels of persistence by parents (Hoover-Dempsey & Sandler, 1997).

Schulenberg, Vondracek and Crouter (1984) broke down family influence on

career development into two elements: opportunities provided by the family, such as educational attainment and financial resources, and the family social process, which includes relations between parents and children. Rowan-Kenyon, Bell and Perna (2008) concluded that parents support and encourage higher education opportunities in part through expectations of occupational attainment and discussions about college. Hill and Tyson (2009) referred to this as *academic socialization*, which includes communicating expectations for achievement, fostering educational and occupational aspirations and planning for the future.

Students agreed that parents are critical to the career planning process, according to research by Kotrlik and Harrison (1989). They studied high school students in Louisiana and found they believed parents are the heaviest influencers on career decisions; mothers more than fathers. The students also indicated they respect the opinion of parents over peers when it comes to career decision-making.

Parental involvement is a byproduct of the family system discussed earlier (Wechter, 1983). Wechter (1983) designated the boundaries of the family as its ego or family ideology. At some point, children confront this ideology in order to establish their own understanding of the environment. Adolescents who experiment with the boundaries of the family ideology risk violating the rules and values of the family (Wechter, 1983). Parents may react with attempts to control the adolescent or overprotection tactics, which may prompt power struggles. This often causes tension, anxiety and event separation or abandonment, as control of the adolescent poses a risk to his or her own individuality (Wechter, 1983).

Similar work by Penick and Jepsen (1992) analyzed perceptions of family functioning and discovered that family dimensions are predictive of adolescent career development. This makes it difficult for adolescents to distinguish between their own goals and their parents' (Penick & Jepsen, 1992), who end up having a dramatic level of influence over their children's future careers (McDaniels & Hummel, 1984). When parents become too enamored with career development, they steer their adolescents into identities of work the parents perceive as acceptable (McDaniels & Hummel, 1984). They may become frustrated when children are disinterested, which often leads to parents taking on the role of active counselor to keep children on task (McDaniels & Hummel, 1984).

Young and Friesen (1992) used qualitative interviews to understand the intentions of parents while influencing the career development of children. Parents intervened in the areas of skills development and attitudes in an attempt to facilitate aspirations for careers they deem appropriate for their children and augment feelings about their own parental development (Young and Friesen, 1992). Parents believed if their children feel good about themselves and have a positive self-image, they are more likely to be successful. Interestingly, many parents initially denied any deliberate influence on career choices (Young and Friesen, 1992).

Kim and Schneider (2005), however, argued it might be an oversimplification to assume that the mere presence of a parent-child relationship provides the social framework to make an informed PEI decision, especially if parents are not resourceful. Desired outcomes are no more than desired illusions if they are not linked to knowledge

of the real world and available resources (Kim & Schneider, 2005). The research team argued that parents are often limited in their capacity to provide these resources to children or may provide faulty advice as a result of inadequate or inaccurate labor market data (Amundson & Penner, 1998). According to a Stephan and Rosenbaum report to the Council of the Great City Schools (2011), parents who have not attended a PEI may lack the college-related social capital to assist their children in postsecondary education and career choices. Parents may also become too influential as they try to meet their own needs through their children's occupational direction (Amundson & Penner, 1998).

While many parents have high aspirations for their adolescents, they do not always feel it is within their responsibility to help their children plan for their futures (Schneider & Stevenson, 1999). Even when parents are not actively involved in their child's academics, they send clear messages about the value of education (Jodl, Michael, Malanchuk, Eccles & Sameroff, 2001). Jodl et al. (2001) found a correlation between early adolescents' positive identification with parents' values and beliefs, especially mothers,' and the level of academic self-efficacy, academic aspirations and the importance of their futures. When Puffer (1999) studied parental influence on career decision-making, he found a strong attachment between students and parents. Using six different surveys in his research, he discovered a strong correlation between parents who encourage autonomy for their children and commitment to career choice (Puffer, 1999).

Parents are not the only influencers in the family. There is recent evidence to suggest older siblings' college choices are strong predictors for younger siblings, who tend to follow with similar decisions (Goodman, Hurwitz, Smith & Fox, 2014). However,

the researchers admit this may not be a causal effect, given that each sibling in a particular family has similar influencing factors as a result of living in the same environment.

Teachers are often influential in this decision. A 15-year longitudinal study by Helwig (2008) tracked students from second grade to 23 years of age. The participants indicated parents were influential in career planning in high school, but teachers have some impact along the way. Participants indicated, however, that the high schools themselves did a poor job with career development programs. The researcher believed there was too much focus on college admission in high schools and not enough career assessment and planning for employment (Helwig, 2008).

Engaging in career assessment and development programs in high school may have an influence on college choices. In a longitudinal study by Lapan, Aoyagi and Kayson (2007), the researchers analyzed the career development outcomes of high school seniors three years after graduation. They found students who engaged in more enhanced career development programs or more fully-developed school-to-career skills showed measurable advantages by way of success in early adulthood, including a stronger sense of satisfaction and more certainty in direction (Lapan, et al., 2007).

Higher education certainty was the focus of a recent study by Gutman, Schoon and Sabates (2012), who evaluated the antecedents of uncertain aspirations by adolescents. It found that children of parents with higher expectations were more certain about continuing education beyond high school. The research suggested successful career decision-making might not be the result of career advising, but simply performance.

Researchers found that higher performers are more informed and able to make career decisions because they tend to seek out information (Gutman, et al., 2012).

Gutman and her colleagues (2012) also found SES and performance are significant factors for future career aspirations and career development. Parents in lower SES have lower expectations for children, which leads to lower motivation compared with parents and children in high SES households (Gutman, et. al., 2012). Parental involvement is slightly different, as Trusty, Watts and Erdman (1997) found family variables such as SES or divorce did not have an effect on parents' involvement with their adolescents' career development. Interestingly, Trusty, Watts and Erdman (1997) and McLanahan and Booth (1989) suggested that family hardships might actually motivate parents to become more involved in their children's career development.

A study on the effects of household income and parents' education (Knighton & Mirza, 2002) found both variables to be major influencers as to whether children pursue postsecondary education. The Knighton and Mirza study also revealed that parents' education is a strong influence on whether adolescents pursue a university degree or attend another type of PEI. Kim and Schneider (2005) also found that students' odds of attending either two or four-year colleges increases if parents attained a higher level of education. Education level of parents, however, was found as more positively associated with the child attending a four-year college. In other words, students whose parents have higher incomes are more likely to enroll at a four-year college. These findings are consistent with longitudinal research of middle and high school parents by the Wisconsin

Technical College System (2013), which found higher-educated parents prefer that their children attend a university rather than a two-year college.

Making the postsecondary education decision

Students have indicated that the leading factors in their career selection process are interest in the work, conditions, salary/wages and personal satisfaction (Kotrlik & Harrison, 1989). However, literature has shown that the decision to attend a two-year or four-year may not be so straightforward. This section addresses the multi-faceted complexity of the PEI decision by students, especially when most will be encouraged to attend four-year postsecondary institutions.

Rosenbaum, Miller and Krei (1996) were among the first scholars to establish that our society was increasingly expecting all children to pursue college. However, the university-focused *college for all* approach was not meant to include two-year colleges because it is based on the predisposition that the number of years in school is positively associated with future financial success. Typically, the expected benefits of postsecondary education prompts the decision to attend a four-year college (Young & Reyes, 1987). Roughly three decades ago, Young and Reyes (1987) postulated that enrollment numbers of universities would vary as the cost to attend rises above expectation of benefits. That does not yet seem to be happening, according to the National Center for Education Statistics (2014), which reports enrollment in degree granting institutions increased by 11 percent from 1991 to 2001 and 32 percent between 2001 and 2011. Much of this could be attributed to the influence and aspirations of parents. Gray and Herr (2006) blame adults (especially parents) for this phenomenon

because parents often advocate the *one way to win* message and do not accept alternative education and career choices.

Additional research showed how rising student educational expectations have helped establish four-year degrees as a norm (Goyette, 2008). Goyette (2008) analyzed tenth grade cohorts from 1980 and 2002 to test the relationship among social backgrounds, occupational ambitions and education expectations. She found reason to believe the increase is due to rising levels of parents' educational attainment associated with parents' aspirations. Another factor she found was that higher numbers of students desire more prestigious occupations, such as physician and attorney and plan their educational paths accordingly. Essentially, students' ambitions have shifted upward into higher-level occupations to parallel or exceed parents' educational attainment and aspirations (Goyette, 2008). Complementary research by Kim and Schneider (2005) showed how the stronger alignment of goals between parents and adolescents increases the likelihood adolescents will attend a four-year college instead of a two-year college. This research confirms earlier work on upward mobility, or enhanced educational attainment from one generation to the next (de Broucker & Lavalley, 1998). The authors found that this increasing mobility was the result of advanced learning environments and financial stability that offered children opportunities to excel to parents' level of education and beyond (de Broucker & Lavalley, 1998).

For parents who have never attended any form of postsecondary education, however, college is a monolithic concept, which makes it difficult for them to discern differences in rigor or curricular offerings (Rowan-Kenyon, et al., 2008). Rowan-Kenyon

et al. (2008) concluded there is value to parents having knowledge as to the full range of PEI options available to their children, especially high SES parents who suffer from anxiety that their children will have no chance at selective higher education options. Without the appropriate information, these parents have a smaller chance to distinguish the various PEI options available for their children (Rowan-Kenyon, et al., 2008).

The timing of these discussions can affect the type of PEI that students attend. Schmit (1991) contended that the process for choosing a PEI begins as early as middle school when students begin their plans of study. Hossler (1999) concurred by claiming that the majority of students who attend four-year institutions have a good idea about their decision in their early high school years. Plank and Jordan (2001), meanwhile, found that college choice discussions that occur beyond the sophomore year are not likely to influence the PEI decision.

Many students who attend two-year colleges may be ending up there by default. According to parent research by Bers and Galowich (2002), the default variables are finances, academic performance and maturity. The study showed a related factor for attending two-year colleges may be career uncertainty by students. Interestingly, the authors found that these students had not engaged in many college search activities or visits during high school and often had no major for which to aspire.

Two-thirds of parents whose children attended a two-year college indicated it was the first choice (Bers, 2005). The top reasons for attending, according to parents' response in surveys were, 1) ability to work while in school, 2) the ability to live at home, 3) more affordable choice, 4) ability to save money, and 5) the student needs time to

decide what he or she wants to do (Bers, 2005). Bers and Galowich (2002) found nearly half the parents (46 percent) indicated that the decision to attend the two-year colleges was mostly the students,' while more than half (51 percent) said it was a joint decision.

Exposure to the two-year colleges may lead to higher respect for the institutions, according to parents (Bers & Galowich, 2002). Parents admit they did not think very highly of two-year colleges until after the child had enrolled in one. It was at this point they realized two-year colleges are very high quality (Bers & Galowich, 2002). However, even when parents are open to two-year colleges, they are not always advocating for children to receive technical skills. Recent research (Bers, 2005; Rowan-Kenyon, et al., 2008) showed how most parents yearn for their children to acquire a bachelor's degree or higher.

The review of previous literature shows that the dynamics of the family, and specifically parents, are influential in adolescents' career decision-making process, especially given the diminishing role of school counselors in this area. There is ample evidence to suggest that parents have strong aspirations and predispositions for their children attending four-year universities and that these perceptions may have significant influence on their children's PEI choices. There is existing research on parents' perceptions about their children's PEI options, but not from the interpretation of the child. The present research examines the extent of parents' predispositions from the perspective of their children. This study explores students' perceptions of the extent to which parents had predispositions regarding PEI decision-making and whether parents go so far as to divert children from attending two-year community or technical colleges.

Method

Instrument

Data were collected through a self-administered, electronic, web-based questionnaire. A third party, online survey service called Qualtrics was utilized for software design and data collection. The questionnaire included 38 questions (SEE APPENDIX), most of which were Likert Scale questions to determine the level of agreement regarding students' perceptions about parents' predispositions to four-year PEI options.

Execution

Instructors from the university's communication department assisted the researcher by offering students a few extra credit points for completing the survey. Instructors used email and message boards to reach out to students regarding this opportunity. The researcher provided an electronic questionnaire link to instructors. Four instructors participated by informing students that the questionnaire was part of a graduate research project. Participants had no knowledge of the researcher. The questionnaire was in the field for three weeks.

Participants were informed in the introductory instructions that completing the questionnaire was entirely voluntary and participation was not required but that they would be provided extra credit points as incentive. Participants were informed they must be 18 years of age or older to participate in the study and it would take approximately 10 minutes to complete. To prevent the survey from being completed more than once by an individual, the questionnaire employed a setting prohibiting it from being completed

more than once by any one computer or device. To preserve anonymity of participants and prevent linkage of responses to students, students' names and instructors' names were collected in a second, separate questionnaire stored in a completely different data file.

A response dimension scale of strongly agree (1) to strongly disagree (5) was employed for 24 questions. The order of the value statements was randomized for internal reliability. A total of 14 nominal demographic questions were also solicited from participants, including biological sex, age, high school grade point average and estimated family income.

Participants

Traditional-aged undergraduate students at a four-year, midwestern university were recruited for the electronic online survey. There were 179 participants who attempted the survey, however, 168 were completed, resulting in an overall completion rate of 93.8 percent. All participants answered, "yes" to the qualifying questions of being adults and current students at the university.

The researcher removed eight participants based on age. These individuals, who were 24 years of age or older, are not considered traditional-aged undergraduate students attending college immediately after high school and, therefore, did not fit the desired sample frame.

The resulting sample was 160 cases. The sample was comprised of an overwhelming number of individuals who reported their biological gender as female (see TABLE 1). Males made up slightly less than 30 percent ($n = 47$) and females made up

slightly more than 70 percent ($n = 113$). This is consistent with research that indicates females are significantly more likely to complete online surveys than males (Smith, 2008).

TABLE 1
Biological Sex and Year in School

	<i>Freshman</i>	<i>Sophomore</i>	<i>Junior</i>	<i>Senior</i>	<i>Totals</i>	<i>Percentages</i>
Male	5	23	12	7	47	29.4
Female	17	42	29	25	113	70.6
Total	22	65	41	32	160	100.0

The ethnicity of the sample was 91.2 percent Caucasian and of those respondents who knew their family income, 27.5 percent reported it as above \$100,000 annual. Meanwhile 70.6 percent of students reported they earned mostly A's and B's in high school (see TABLE 2).

TABLE 2
Grades in High School

<i>Grades</i>	<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
A's	31	19.4	19.4	19.4
A's & B's	82	51.2	51.2	70.6
B's	13	8.1	8.1	78.8
B's & C's	28	17.5	17.5	96.3
C's	6	3.8	3.8	100.0
Total	160	100.0	100.0	

Results

An exploratory factor analysis was performed on 24 scale items to examine internal consistency among related variables from the survey instrument. These questions asked participants the extent to which they agree with statements about their own

postsecondary education planning, including several questions related to parents' perceptions about it. Corresponding values were given to each, including, strongly agree, 1; agree, 2; neither agree nor disagree, 3; disagree, 4, and strongly disagree, 5.

Visual inspection of the scree plot showed the potential for as many as eight components being retained. However, inspection of the rotated component matrix showed loading on seven components with Eigenvalues greater than one, which explained 17.8%, 9.7%, 8.9%, 6.9%, 6.0%, 5.5% and 4.4% of the total variance, respectively. The seven components explained 59% of the variance. Pair variables were examined to determine which items should be dropped from the data analysis, which resulted in 6 items being retained in two components. The components initially appeared fairly consistent with the student perceptions that the questionnaire was designed to measure, including attending college for social reasons and parents' predispositions.

Reliability testing was done to determine whether these components could be used as subscales. Only one component demonstrated internal consistency. The four-item *Attending College for Social Reasons Subscale* (TABLE 3) was established with a Cronbach's alpha of .76 ($M = 13.59$, $SD = 3.58$). One other subscale was established from a component measuring parents' predispositions to four-year universities. However, the two-item, *Parents' Predispositions Subscale* (TABLE 4) had a moderately reliable Cronbach's alpha of .512 ($M = 7.44$, $SD = 1.862$).

TABLE 3
Subscale: Attending College for Social Reasons

<i>Item</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>N</i>
The biggest reason I attended is the reputation of the athletics	3.81	1.124	160
I feel as if I am attending more for the social aspects than the academics	3.46	1.087	160
I decided to attend because there is a negative stigma with 2 yr. colleges	3.03	1.215	160
I decided to attend because I didn't want to miss out on college party experience	3.29	1.276	160

TABLE 4
Subscale: Parents' Predisposition for 4-year Universities

<i>Item</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>N</i>
At least one career I showed interest in did not seem good enough for my parent(s)	3.54	1.127	160
I feel the decision to attend a 4-year university was more my parent(s) decision than mine	3.46	.985	160

University students believe their parents have strong predispositions for their attendance at a university. The distribution of responses showed 78.8% of college students thought their parents expected them to attend a four-year college (responded as *strongly agree* or *agree*) ($M = 1.74$, $SD = .92$). Only 16.9% indicated they neither agree

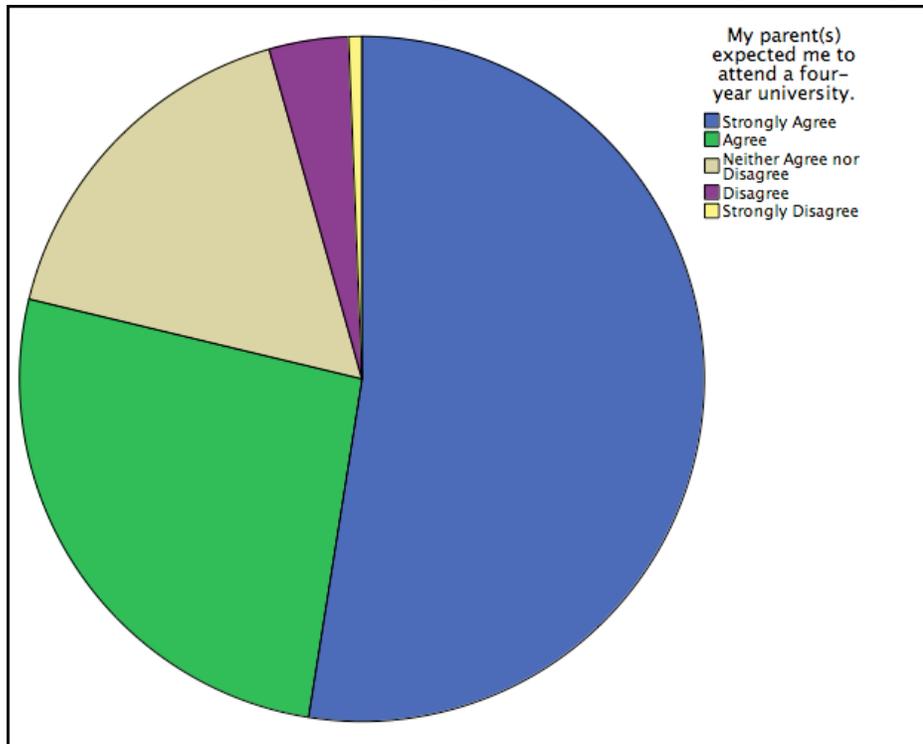
TABLE 5
Students Who Believe Parents Expected Enrollment at 4 yr. University

	<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
Strongly agree	84	52.5	52.5	52.5
Agree	42	26.3	26.3	78.8
Neither agree nor disagree	27	16.9	16.9	95.6
Disagree	6	3.8	3.8	99.4
Strongly disagree	1	.6	.6	100.0
Total	76	100.0	100.0	

nor disagree, while a mere 3.8% of respondents disagreed with the statement. Only one respondent strongly disagreed with the statement (see TABLE 5; FIGURE 1).

FIGURE 1

Students Who Believe Parents Expected Enrollment at 4-yr University



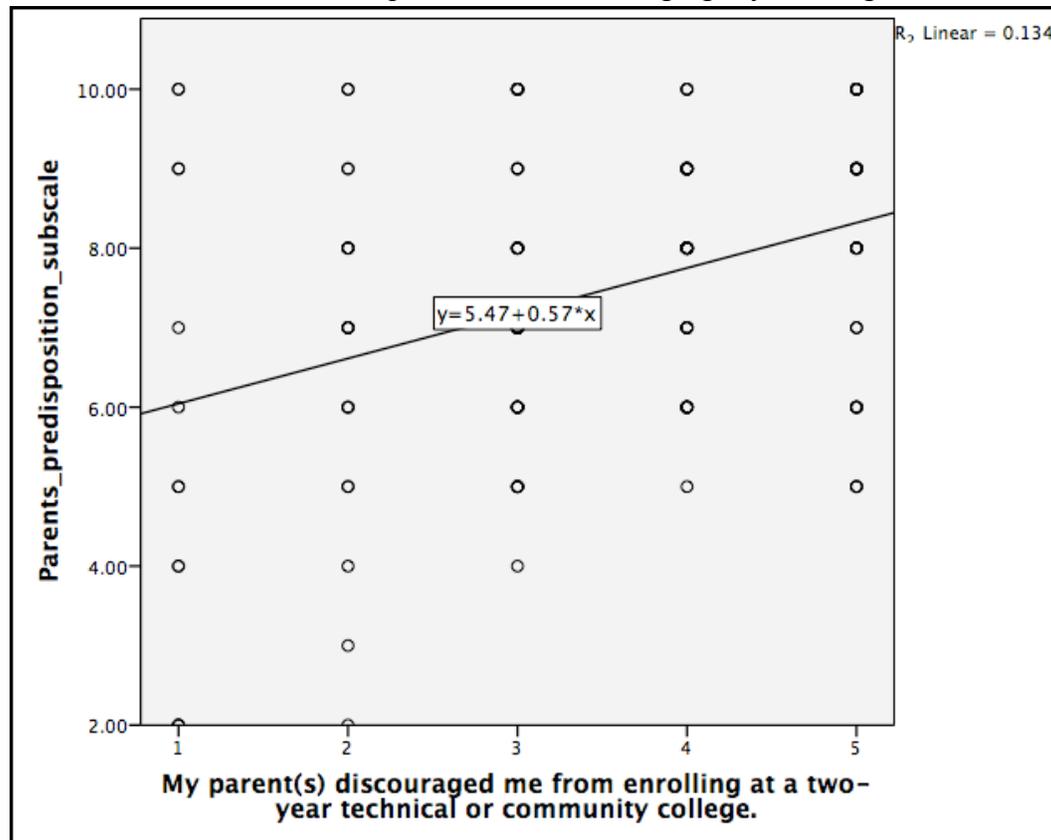
In a related question, more than two in ten (20.6 percent) students indicated their parents discouraged them from enrolling at a two-year college.

H1: There is a positive relationship between parents with strong predispositions for children attending a university and discouraging children to explore vocational or technical PEI's. Pearson's correlation coefficient was utilized to test the null hypothesis that there would not be a positive relationship between parents' predispositions to attend four-year universities and parents discouraging children from exploring two-year

colleges. Preliminary analysis showed a positive association between the two variables as assessed by visual inspection of a scatter plot (See FIGURE 2).

FIGURE 2

Correlation of Parents' Predispositions & Discouraging 2-yr. College



Consistent with the scatter plot, there was a moderate positive relationship between parents' predispositions about children attending four-year universities and parents discouraging their children from exploring two-year community and technical colleges, $r(160) = .37, p < .001$. Therefore, the null hypothesis was rejected in favor of the alternative hypothesis, which demonstrated a positive relationship between parents' predispositions for four-year universities and discouraging their children from exploring two-year colleges.

H2: There is a positive relationship between parents' expectations for children to attend four-year universities and students who come to college for the social experience. For H2, bivariate correlations were run to test the null hypothesis that there would be no relationship between parents' predispositions for children attending four-year universities as perceived by their children and children entering college for social reasons.

TABLE 6
Correlations with Attend for Social Reasons Subscale

		Attend for Social Reasons Subscale	Parents Predisposition Subscale	I would have like to explore more hands on careers or skilled trades	I'm at the university because my parent(s) felt strongly that my best option is a 4-yr. college
Attend for Social Reasons Subscale	Pearson Correlation	1	.346**	.313**	.392**
	Sig. (2-tailed)		.000	.000	.000
	N	160	160	160	160
Parents Predisposition Subscale	Pearson Correlation	.346**	1	.167*	.318**
	Sig. (2-tailed)	.000		.035	.000
	N	160	160	160	160
I would have like to explore more hands on careers or skilled trades	Pearson Correlation	.313*	.167*	1	.039
	Sig. (2-tailed)	.000	.035		.620
	N	160	160	160	160
I'm at the university because my parent(s) felt strongly that my best option is a 4-yr. college	Pearson Correlation	.392**	.318**	.039	1
	Sig. (2-tailed)	.000	.000	.620	
	N	160	160	160	160

- Correlation is significant at the 0.05 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed).

Fairly moderate correlations were found between the *Attending College for Social Reasons Subscale* and two other variables with a statistically significant Pearson's correlation coefficient. First, there is a relationship between the *Parents' Predispositions*

Subscale and the *Attending College for Social Reasons Subscale*, $r(160) = .35, p < .001$.

Second, there is a relationship between *Attending College for Social Reasons Subscale* and the variable *I'm at the university because my parent(s) felt strongly that my best option is a four-year university*, $r(160) = .39, p < .001$ (See TABLE 6).

Therefore, the null hypothesis that there is no relationship between parents' predispositions for children attending four-year universities as perceived by their children and children entering college for social reasons is rejected. The research showed evidence to suggest that a relationship exists between these variables.

H3: There is a correlation between parents who favor the four-year university option for their children and their level of involvement in postsecondary education planning. To test the null hypothesis that there is no relationship between parents favoring the four-year option for their children and level of parental involvement in postsecondary planning, bivariate correlations were again utilized.

Correlations were found between involvement and three relevant variables. A strong positive relationship was found between parents' involvement and parents' expectations that their children would attend a four-year university, $r(160) = .40, p < .001$. There were also moderate positive associations between involvement and the *Parents' Predisposition Subscale*, $r(160) = .31, p < .001$, and the variable *I'm at the university because my parents felt strongly that it is my best option*, $r(160) = .39, p < .001$ (see TABLE 7).

The null hypothesis that there is no relationship between parents who favor the four-year university option for their children and their level of involvement in

postsecondary education planning is rejected. The alternative hypothesis that a correlation exists is accepted.

RQ1: Are there differences between students who transferred into the university from a two-year college and students who enrolled directly from high school? An independent samples t-test was utilized to determine whether the transfer and non-transfer groups differed on either the *Attend for Social Reasons Subscale* or the *Parents' Predisposition Subscale*. Of interest, non-transfer students who came directly to the university ($M = 13.12$, $SD = 3.46$) were more likely to attend the university for social

TABLE 7
Correlation with Parent Involvement

		My parents heavily involved in postsecondary ed. decisions	Parents Predisposition Subscale	My parents expected me to attend a 4-yr university	I'm at university because my parents felt strongly it is my best option
My parents heavily involved in postsecondary ed. decisions	Pearson Correlation Sig. (2-tailed) N	1 160	.305** .000 160	.404** .000 160	.392** .000 160
Parents Predisposition Subscale	Pearson Correlation Sig. (2-tailed) N	.305** .000 160	1 160	.145 .067 160	.318** .000 160
My parents expected me to attend a 4-yr university	Pearson Correlation Sig. (2-tailed) N	.404** .000 160	.145 .067 160	1 160	.316 .000 160
I'm at university because my parents felt strongly it is my best option	Pearson Correlation Sig. (2-tailed) N	.392** .000 160	.318** .000 160	.316** .000 160	1 160

* Correlation is significant at the 0.05 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed).

reasons than transfer students ($M = 16.08$, $SD = 3.24$; $t(158) = 3.96$, $p < .001$). There were no differences between transfer students ($M = 7.36$, $SD = 1.58$) and non-transfer students ($M = 7.45$, $SD = 7.45$) for the *Parents' Predisposition Subscale* ($t(158) = -.23$, $p = .82$). However, there were differences for the two groups regarding two parents' predisposition-related variables, *My parents expected me to attend a four-year university* and *My parents discouraged me from enrolling at a two-year technical or community college*. First, non-transfer students ($M = 1.66$, $SD = .87$) were more likely to have parents who expected them attend a university than transfer students ($M = 2.16$, $SD = 1.07$; $t(158) = 2.21$, $p = .04$). Second, transfer students ($M = 4.28$, $SD = .843$) were more likely to have parents discourage attendance at the university than non-transfer students ($M = 3.3$, $SD = 1.2$; $t(158) = 4.99$, $p = .001$). An independent samples t-test was utilized to determine whether the transfer and non-transfer groups differed on grades in high school. Grades in high school were recoded so higher scores reflected higher grades. Transfer students ($M = 4.9$) showed much lower grades in high school than non-transfer students ($M = 5.8$); $t(158) = -3.13$, $p = .004$). This implies that parents and/or students who are earning lower grades in high school may be predicting academic performance and planning for college accordingly.

RQ2: To what extent do differences exist between males and females regarding intentions for college? An independent samples t-test was utilized to determine differences between biological sexes. Of interest, females ($M = 1.88$, $SD = 1.32$) initially felt they were going to attend a university at a younger age than males ($M = 2.55$, $SD = 1.6$; $t(158) = 2.74$, $p = .007$). Females ($M = 4.00$, $SD = .89$) were more likely than males

($M = 3.66$, $SD = 1.15$) to indicate the decision to attend a four-year university was more their parents' decision than theirs, $t(158) = -1.82$, $p = .046$. Also, females ($M = 2.43$, $SD = 1.39$) were more likely to know what they were going to major in when they entered the university than males ($M = 3.06$, $SD = 1.17$; $t(158) = 2.74$, $p = .007$).

RQ3: Is there a relationship between grade point average in high school and planning for college? The researcher also suspected that grade point averages in high school could result in differences on dependent variables relating to postsecondary options. Participants for the independent variable were classified into four groups: *A's* ($n = 31$), *A's and B's* ($n = 82$), *B's* ($n = 13$), *B's and C's* ($n = 28$) and *C's* ($n = 6$). Values for the dependent variable were: *8th grade or earlier* (1), *9th grade* (2), *10th grade* (3), *11th grade* (4) and *12th grade or later* (5). The one-way, between subjects ANOVA failed to show an effect with either the *Attend for Social Reasons Subscale* ($df = 4$, $F = 2.0$, $p = .10$), or the *Parents' Predisposition Subscale* ($df = 4$, $F = .09$, $p = .49$). The one-way, between subjects ANOVA, however, revealed a significant difference on a number of single item variables.

First, there was a significant relationship between grades in high school and planning for college, specifically on the variable, *When did you initially feel you were going to attend a four-year university* ($df = 4$, $F = 2.5$, $p = .048$). Students who earned *A's* ($M = 1.77$, $SD = 1.26$, $p = .003$) or *B's* ($M = 2.02$, $SD = 1.3$, $p = .018$) in high school were significantly more likely to know sooner that they were going to attend a university than students who earned *C's* ($M = 3.67$, $SD = 1.17$), according to the Fisher's Least Significant Difference (LSD) post-hoc comparisons of the groups.

Second, grades in high school appeared to influence whether students knew what they wanted to major in prior to attending a university. This has implications on whether the PEI is being chosen for program fit or simply as a better alternative to two-year colleges. The one-way, between subjects ANOVA used for this test showed a significant difference of grades on the variable, *I knew what I wanted to major in before I enrolled at the university* ($df = 4, F = 2.89, p = .02$). Students who earned A's ($M = 2.26, SD = 1.24$) were more likely to know their majors than students who earned B's ($M = 3.38, SD = 1.45$), $p = .01$ and B's and C's ($M = 3.11, SD = 1.32$), $p = .01$, according to Fisher's LSD post-hoc test. Students who earned mostly A's and B's ($M = 2.5, SD = 1.30$) were more likely to know their majors upon entering the university than students who earned mostly B's and C's, $p = .03$.

Examining the affects of high school grades on a third variable, *I started looking into my options after high school in my early high school years* ($df = 4, F = 4.28, p = .003$), showed that top performers in high school begin postsecondary planning sooner than students with lower/average grades in high school. While there was no significant difference between students who received mostly A's ($M = 2.13, SD = .922$) and students who earned mostly B's ($M = 2.77, SD = 1.16$), $p = .07$, there is a significant difference between students who earn mostly A's and those who earned mostly B's and C's ($M = 2.79, SD = 1.1$), $p = .02$, and more disparity between those who earned mostly A's and those who earned C's ($M = 3.5, SD = .837$), $p = .004$, according to Fishers LSD post-hoc test. Therefore, higher performers in high school tended to look at their postsecondary options sooner than the lower performing students (average/C-students). The higher

performing A-students tended to be the only group to both explore post high school options early and tend to know majors upon entering the university.

Fourth, grades in high school also appeared to have an influence on the variable relating to financing a university education. The one-way, between subjects ANOVA showed that grades in high school have an affect on the dependent variable *My parents are financing most or all of my education* ($df = 4, F = 3.17, p = .02$). A significant difference for financing college was shown between students who received mostly A's in high school ($M = 3.48, SD = 1.55$) and students who received A's and B's ($M = 2.71, SD = 1.52$), $p = .01$. Another significant difference was found between students who earned mostly B's and C's ($M = 2.39, SD = 1.29$) and those who earned mostly C's ($M = 4.0, SD = 1.1$), $p = .02$.

One final dependent variable, *My parents had little to do with my decision to attend a four-year university over a two-year technical or community college* was shown to be affected by high school grades through a one-way, between subjects ANOVA ($df = 4, F = 2.66, p = .04$). While no differences in parental influences were evident between students who received mostly A's ($M = 2.42, SD = 1.03$) and mostly A's and B's ($M = 2.84, SD = 1.14$) in high school, $p = .07$, there is a significant differential apparent between students who received mostly A's and students who received mostly B's ($M = 3.46, SD = .660$), $p = .004$. There was a significant difference between students who received mostly B's and students who received mostly C's ($M = 2.33, SD = 1.03$), $p = .04$. Essentially, parents are not as likely to be involved with the decision to attend a university if students are high or lower/average academic performers in high school.

RQ4: What difference does socio-economic status (SES) have on parents' affinity toward four-year universities? The researcher examined whether family income, as estimated by students, would show differences on the dependent variable that parents believe their children's best option is a four-year university. Participants for the independent variable were classified into three groups: *Lower income or less than \$50,000* (n = 23), *middle income or \$50,000 to less than \$100,000* (n = 71) and *higher income or \$100,000 or more* (n = 44). Students who indicated they did not know their parents' estimated income were removed from the sample (N = 138).

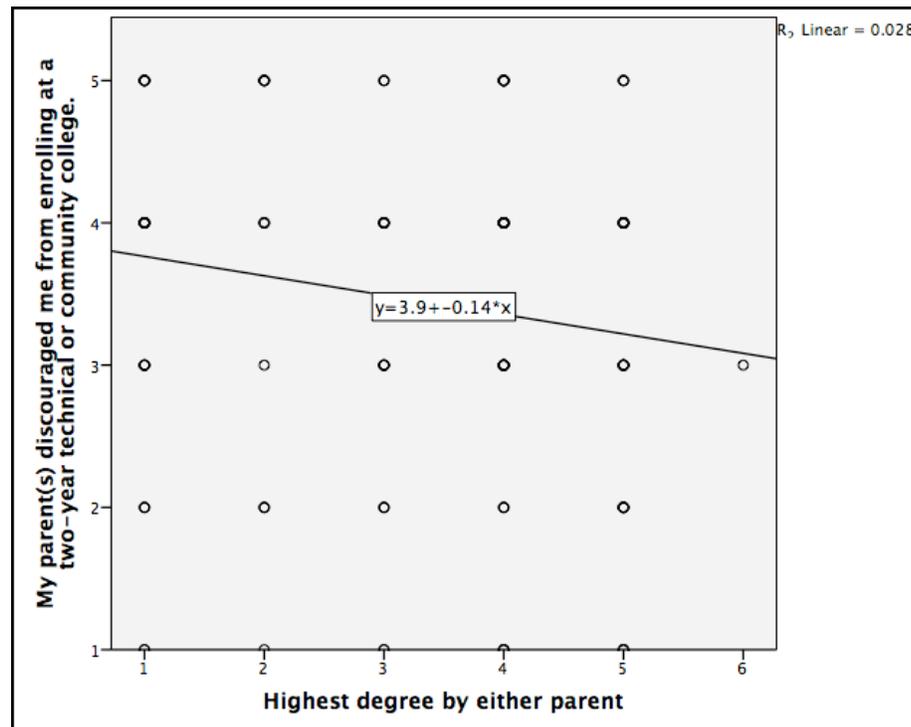
A one-way between subjects ANOVA was utilized for the variable *I'm at the university because my parent(s) felt strongly that my best option is a four-year university*. The ANOVA for parents' estimated income revealed differences in the means of parents feeling strongly about the best option being a four-year university (df = 2, F = 4.59, p = .01). A closer look using Fisher's LSD test showed a statistically significant difference between the *higher income* group (M = 2.52, SD = 1.09) and the *middle income* group (M = 3.0, SD = 1.13), p = .028. There were also significant differences in the means between the *higher income* group and the *lower income* group (M = 2.3, SD = 1.46), p = .005, but not between the *lower* and *middle income* groups, p = .199. Therefore, income, specifically higher income, played a statistically significant role in parents' preferences for universities over two-year colleges.

RQ5: Is there a relationship between parents' level of education and predispositions for four-year PEI's? A bivariate correlation test was utilized to determine whether there is any consistency with research that has shown a positive association

between parents' level of education and their predispositions for children attending four-year PEI's (Kim & Schneider, 2005; Knighton & Mirza, 2002). The test failed to show a statistically significant association between *highest degree earned by either parent* and the *Parents' Predisposition Subscale*, $r(158) = -.10$, $p = .20$. However, one area, *My parents discouraged me from enrolling at a two-year community or technical college*, did show significant differences, albeit weak, in level of education $r(158) = .17$, $p = .04$ as evident by the scatter plot (see FIGURE 3).

FIGURE 3

Correlation of Highest Degree By Parent and Discouraging 2-yr. College



Discussion

This research examined the predispositions parents have about their children attending four-year universities. Based on the overall research findings, there were many relevant points warranting further discussion. Results of the analyses supported a number of hypotheses regarding parents' influences on PEI decisions. Several other research questions were explored to determine other factors relating to influences for choosing four-year universities over two-year colleges.

Students' perceptions of parents' desires were prevalent in the results. Nearly eight in ten students perceived their parents as expecting them to attend four-year universities. Interestingly, fewer than four percent of students disagreed and only one student strongly disagreed with this perception. The research also found a moderate but positive correlation between parents' predispositions for children attending four-year universities and parents discouraging students from attending two-year community or technical colleges. This finding points to parents having a propensity to discourage their children from attending two-year PEI's.

Student transfer status provided some distinction in this research. Students who transferred from two-year colleges reported much different perceptions about parents' predispositions and expectations than students who attended the university directly from high school (non-transfer). The non-transfer students were more likely to have perceptions that parents expected attendance at a four-year university. The non-transfer students were also more likely to perceive parents as discouraging their attendance at two-year colleges. This implies that parental influence is inhibiting students from

including two-year colleges in their PEI consideration set. Transfer students, who tended to have lower grades in high school, may not have the same level of expectations from parents.

Parents' expectations were also linked to involvement. The research revealed a positive correlation between parents' expectations and predispositions for attending the four-year university and their involvement in the PEI decision process. Parents' involvement is also positively associated with parents' perceptions that four-year universities offer the best option for their children.

The study also showed parents' expectations for attending a four-year university are positively correlated with students attending the university more for the social experience. The non-transfer students were found more likely to attend for the social aspects of college than transfer students. The research suggests that students, especially non-transfer students, may be shunning two-year colleges and bypassing hands-on, skilled options that can be acquired at two-year colleges out of concern they will miss out on the social aspects of four-year universities. Students' perceptions that parents' believe four-year universities offer the best option may resonate early with students who consequently appease their parents. While academics may be the first priority for parents, many of their children who are prompted by parents to attend a four-year university, appear to be doing so more for the social aspects than the academics. Meanwhile, transfer students may be opting for a less-expensive transfer route or are apprehensive about committing to a four-year university without a major or without high grades.

It would be prudent for college recruiters and marketers to emphasize the social aspects of their respective colleges to potential recruits.

Students' high school grades showed a number of effects on decisions to attend a four-year university. Academic achievement was positively associated with the age for which students began to plan for options after high school and the time at which they realized they were going to attend a four-year university. Interestingly, nearly 54 percent of the participants knew they were going to attend a four-year university by the 8th grade (see Appendix C). Also, higher and lower academic achievers and females were much more likely to come to the university with a major in mind while the middle achievers were not as likely to know what they wanted to study.

College financing was also germane to the research results. Students who are considered middle achievers (earned A's and B's or B's and C's) in high school were found to be more likely to have parents who are financing most or all of their education. The research also showed that parents are more likely to be influencing the decision to attend a four-year university with this middle achiever group. High school students who receive the highest grades in high school are probably not as big a concern for parents who assume they will attend a university. However, parents may feel their middle achieving students are not as committed to attending a university and thus, feel a need to be more involved with the decision-making. They may have set aside financial resources they want to see used for this purpose or at some point decide they need to provide financing to increase the likelihood that their children will attend a university. This lesser commitment by these middle achievers may explain why they were more likely to attend

a university for the social aspects and less likely to know what they wanted to study. Meanwhile, parents of students who earned mostly A's may not have the resources to help pay for college, which results in students having to work harder for academic scholarships. These students could also be highly motivated to earn high grades because their desired occupations, such as pre-med or pre-law, require it. Meanwhile, students who receive mostly C's in high school may not be performing as well because they know their families lack the financing that makes college entrance more difficult. Another possibility is that the parents of these children may tend to be less confident that their children will be admitted into a university, and therefore, be less motivated to save for their children's college.

Gender influences appeared relevant to the results, particularly with females. Females appeared to experience more four-year university influence from parents than their male counterparts. Females were more likely than males to disclose the decision to attend a four-year university was more their parents than their own. In addition, parents were more likely to express dissatisfaction with the career choices of females. Female students also knew at a younger age that they would be attending a four-year university. The findings support earlier work by Hossler and Stage (1992) that female high school students have higher educational aspirations than male high school students.

The research adds to existing knowledge on parent and family influences on PEI decisions that warrant further discussion. For instance, the results of this study reinforce previous research regarding parents' influence on PEI decisions at early ages (Kotrlík & Harrison, 1989; Otto, 1984). It is consistent with research suggesting that parents'

expectations are set early in the family system (Lopez & Andrews, 1987) through academic performance, academic socialization and career self-efficacy (Bandura, et al., 2001; Hill & Tyson, 2009). A high number of these individuals (86 percent) know they are going to attend a four-year university prior to the 10th grade, which is also pertinent to research by Bers and Galowich (2002) that indicated students who plan early are less likely to attend a two-year college. Students apparently yield to these parental expectations without exploring careers that can be obtained outside of the four-year university option. Conversely, individuals who do not do any advance planning for postsecondary education may be more likely to attend a two-year college, as demonstrated by Bers and Galowich (2002). College recruiters and marketing representatives should understand the relatively early ages when most students begin PEI planning. Marketing should be executed more aggressively toward middle school aged students before parents' predispositions take hold. This could increase the likelihood that all colleges are included in the PEI consideration set.

High parental expectations to attend a four-year PEI uncovered in this research may indicate the existences of too much career development by parents (McDaniels & Hummel, 1984). A few decades ago, academics began advocating more parental involvement in adolescents' career exploration, given the premise that children needed guidance (Shoffner & Klemer, 1973). Many adolescents are confused about their identities and are, therefore, not ready to commit to an occupational future (Salamone, 1982). If students are indecisive in the types of careers to pursue, it is not difficult to understand how parental influence can become more instrumental in the PEI decision-

making process, especially in the presence of strong social capital, which dictates the quality of networks and opportunities available (Burt, 1998; Coleman, 1998; Plank & Jordan, 2001). Parents should also be enlightened as to the level of influence they are having on their children who may only be attending the university to appease parents.

Parents should consider providing assistance and encouragement during the career development state, but should maintain some distance from the situation, according to research by Lopez and Andrews (1987). This allows adolescents to become more active in the career selection process and feel they can make fairly independent decisions about their futures (Lopez & Andrews, 1987). Whitson (1989) believed that parents should leave the majority of career exploration and career developmental work to children, even if they may become frustrated with their slow career selection, as proposed by Super (1953). This approach gives students more control in the career selection process and the ability to make a fairly independent decision about their futures without uncertainty. Future research on the extent to which students' uncertainty gives way to these parents' expectations may be warranted.

Limitations

After completing the analysis for the current study, a few limitations surfaced. One limitation to the current study is the limited generalizability. While there was a good representation of students from a cross-section of socioeconomic means and school performance (Appendix E), the sample was relatively small, which reduced the sample size in some groups to a very small number (e.g. students who received C's in high school, $n = 6$; see Appendix D). Caution should be taken with regard to the sample size of

transfer students ($n = 25$). The number is relatively small compared with the students who matriculated to the university directly from high school. This is simply the result of the limited numbers of transfer students attending a university. Expanding the research to multiple universities could increase the generalizability of data.

Second, the sample was collected from one medium-sized university. The researcher assumes that higher tiered universities may show parents' having even higher predispositions, while universities of lesser quality may find the opposite. Further research on this assumption may be justified.

Third, the *Parents' Predisposition Subscale* was not as reliable as the researcher had hoped, having a relative low Cronbach's alpha of .518. The argument could be made that students are being asked to recall parents' involvement, but may not know what their true predispositions are for PEI's. Students may assume their parents' had predispositions for them attending four-year universities but are unable to know for sure without actually having these conversations with parents. This could contribute to the somewhat weaker Cronbach's alpha of the subscale. It could also contribute to somewhat weaker relationships between the two subscales and students' perceptions that parents feel four-year universities are the best option.

It is important to mention a couple of additional areas that may be ripe for further exploration. This research did not show how many students currently attending a two-year PEI are doing so in spite of their parents' predispositions for a four-year PEI. It also does not examine whether two-year college students feel their parents had predispositions for two-year colleges and dissuaded their children from attending four-year universities.

It mainly explored the perceptions four-year college students have of their parents' predispositions for four-year universities. It would be valuable to conduct a similar study with two-year college students to determine their perceptions of parents' predispositions to four-year colleges and how grades and families' financing of education are relevant to college planning. Second, the research did not address the level of conflict experienced between parents and their children regarding PEI decisions. While parents may have strong predispositions for students attending four-year universities and have some control over the decision, a good number of their children may not like their situation but are reluctant to dissent, which can cause anxiety with students (Agaliata & Renk, 2008; Wechter, 1983). Further studies should be conducted to determine the most effective ways for intervening with children before parents' predispositions take hold. Further research could investigate transfer students' rationale for beginning at a two year college. One final area of research could be to conduct longitudinal research to ascertain whether under-employed four-year graduates have regrets for their career development choices as influenced by their parents.

Conclusion

This study lends support to existing knowledge on parents' predispositions and accompanying influences regarding their children's PEI choices. Essentially, parental predispositions for four-year universities are precluding significant populations of children from exploring all forms of higher education. Decisions to attend four-year PEI's are being made at a very young age, often as early as middle school. Community and technical colleges would be well served to understand the forces that persuade

students from matriculating directly to four-year universities without any consideration of two-year colleges.

Parents' strong desires for children to succeed and be financially independent are laudable. While parental influences will always be important in children's pursuit of higher education, it is imperative that parents are educated as much as children regarding post high school options. Parents should understand that a four-year degree is not the only pathway to success. This misperception leads to high school graduates overlooking shorter-term technical career options that often provide higher incomes. Reality versus perception needs to be addressed to reduce the high numbers of underemployed four-year graduates while addressing the skills gap in the U.S. economy.

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Appendices

Appendix A

Student Higher Education Selection Survey

Q1 [Student Higher Education Selection Survey introduction]

Q2 Are you currently enrolled at [university]?

- Yes
- No

Q3 Are you at least 18 years of age?

- Yes
- No

Q4 Do you currently have a major?

- Yes
- No

Q5 Have you transferred into [university] from a two-year technical or community college?

- Yes
- No

Q6 When did you initially feel you were going to attend a four-year university?

- 8th grade or earlier
- 9th grade
- 10th grade
- 11th grade
- 12th grade or later

Q7 For the next few sets of questions, you will be asked how much you agree with each statement. Please indicate how much you agree with each statement:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
My parent(s) expected me to attend a four-year university.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I knew what I wanted to major in before I enrolled at UW-Whitewater.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My parent(s) was/were heavily involved in my education decisions for after high school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My parent(s) asked about my likes and career interests before deciding which type of college I should attend.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8 Please indicate how much you agree with each statement:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
My parent(s) encouraged me to explore career options at two-year technical or community colleges.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My parent(s) discouraged me from enrolling at a two-year technical or community college.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At least one career I showed interest in did not seem good enough to my parent(s).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I personally decided to attend a university because I didn't want to miss out on the college party experience.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q9 Please indicate how much you agree with each statement:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I have a good understanding of what programs/majors are offered at two-year technical and community colleges.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had access to technical education courses in high school, such as graphic arts, architecture, culinary, nursing, automotive, metalworking, woodworking, etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I'm at [university] because my parent(s) felt strongly that my best option is a four-year university.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I personally decided to attend a four-year university because there is a negative stigma with two-year technical and community colleges.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q10 Please indicate how much you agree with each statement:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I feel the decision to attend a four-year university was more my parent(s) decision than mine.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Had I attended a two-year technical or community college it would have only been as a means to transfer to a four-year university.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am aware that many four-year college grads enter the workforce without the skills that many employers need.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I started looking into my options for after high school in my early high school years.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q11 Please indicate how much you agree with each statement:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I would have liked to explore more hands-on careers or skilled trades.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel as if I am attending a university more for the social aspects than for the academics.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am attending a university because I believe it gives me the best opportunity to be gainfully employed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My parents are financing most or all of my education.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q12 Please indicate how much you agree with each statement:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
My parent(s) had little to do with my decision to attend a four-year university over a two-year technical or community college.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For me, attending a four-year university is more about getting a good job than about becoming a better-educated person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a good understanding of what programs/majors are offered at two-year technical and community colleges.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The biggest reason I attended this university is because of the reputation of the athletics.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q13 Please indicate your biological sex:

- Male
- Female

Q14 Please indicate your ethnicity:

- White
- Black or African American
- Asian
- Native Hawaiian or Pacific Islander
- American Indian or Alaska Native

Q15 Please provide your age:

Q16 Please indicate your year in school:

- Freshman
- Sophomore
- Junior
- Senior
- Graduate student

Q17 Please indicate your accumulative grade point average:

- Between 0.0 and 0.99
- Between 1.0 and 1.99
- Between 2.0 and 2.99
- Between 3.0 and 4.0
- Not sure

Q18 Please indicate the types of grades you received in high school:

- A's
- A's and B's
- B's
- B's and C's
- C's
- C's and D's
- D's
- Other

Q19 Please estimate your parents' total annual household income:

- Less than \$50,000
- \$50,000 to less than \$100,000
- \$100,000 or more
- Don't know

Q20 Please select the highest degree earned by either parent:

- High school diploma
- Technical degree or diploma
- Associate degree
- Bachelor's degree
- Master's degree or beyond
- None of the above

Q21 Please indicate the state in which you attended high school:

- Wisconsin
- Illinois
- Minnesota
- Other

Q22 Thank you for completing this survey. [Questions & Contact Information] You will be redirected to provide your personal information so it can be recorded for extra credit.

Appendix B**Year in school**

	<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
Freshman	22	13.8	13/8	13.8
Sophomore	65	40.9	40.9	54.7
Junior	41	25.6	25.6	80.0
Senior	32	19.5	19.5	100.0
Total	160	100.0	100.0	

Appendix C

When you knew you were attending a four-year university

	<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
8 th grade/earlier	86	53.8	53.8	53.8
9 th grade	27	16.9	16.9	70.6
10 th grade	15	9.4	9.4	80.0
11 th grade	12	7.5	7.5	87.5
12 th grade/later	20	12.5	12.5	100.0
Total	160	100.0	100.0	

Appendix D**Grades in high school**

	<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
A's	31	19.4	19.4	19.4
A's & B's	82	51.2	51.2	70.6
B's	13	8.1	8.1	78.8
B's & C's	28	17.5	17.5	96.3
C's	6	3.8	3.8	100.0
Total	160	100.0	100.0	

Appendix E

Parents' estimated total household income

	<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
Less than \$50,000	23	14.4	14.4	14.4
\$50,000 to < \$100,000	71	44.4	44.4	58.8
\$100,000 or more	44	27.5	27.5	86.3
Don't know	22	13.8	13.8	100.0
Total	160	100.0	100.0	

Appendix F

Highest degree earned by either parent

	<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
High school diploma	32	20.0	20.0	20.0
Technical degree/diploma	16	10.0	10.0	30.0
Associate degree	22	13.8	13.8	43.8
Bachelor's degree	52	32.5	32.5	76.3
Master's degree or above	37	23.1	23.1	99.4
None of the above	1	.6	.6	100.0
Total	160	100.0	100.0	100.0