



The Impact of a 4-H Youth Development Program on the Future College/Career Aspirations of Youth Ages 14-19

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Introduction

Young people have numerous opportunities to explore careers during their preteen and adolescent years. According to Verhoeve (2009), youth have a cursory knowledge of approximately 50 occupations. They gain this knowledge through television, electronic media, neighbors, family, and friends. As they age, they have increased opportunities to acquire detailed information about careers, including career fairs, job shadowing, and participating in youth development programs such as 4-H (Michigan State University Extension 2006).

The Virginia Cooperative Extension 4-H Youth Development Program, in collaboration with the Center for Academic Enrichment and Excellence, conducted a career/college fair in conjunction with the 2008 4-H Congress. State 4-H Congress is an annual conference for 4-H teens ages 14-19. They participate in for a variety of reasons: to compete in events, such as public speaking; to run for state leadership positions; and to participate in the workshops, service learning opportunities, and social aspects of the event.

Purpose

The purpose of the career/college fair was to expose 4-Hers to career and postsecondary education options. This career/college fair also provided an opportunity for 4-Hers — as prospective postsecondary students — to receive specific information regarding colleges and universities, including entrance requirements, academic degree programs, and funding options.

Thirty-three higher education institutions across the commonwealth participated in the fair. Representatives from eight departments at Virginia Tech provided information about their programs of study and the occupations the youth might consider. This study sought to determine the impact of the career/college fair on the participants and specifically addressed two broad research questions:

1. Do participants' career aspirations vary by race/ethnicity, curricula participation, and years of participation in a youth development program?
2. Does participation in a youth development program help to clarify participants' career aspirations?

Career Development Framework

Theorists use development stages, personality, and engagement to define the process adolescents use to make career choices and career-related decisions (Holland 1959; Super 1954, 1997). Career development of youth is both influenced and affected by adolescent personality, skill level, interests, and the process of exposure and engagement in vocational exploration. Career development — defined as making career decisions and career-related choices — is a longitudinal process over one's lifespan and refers to the preparation for, choice of, entry into, and adjustment to work in a specific field (Super 1954).

The following sections describe the theoretical foundation for this study (Williams et al. 2010), including the Life Span Vocational Theory (Super 1954) and Holland's Typology of Personality Theory (1959, 1997).

Life Span Vocational Choice Theory

Super's Life Span Vocational Choice Theory (1954) has six life and career developmental stages; the crystallization/exploratory stage (ages 14-18) is the most relevant phase for this study (figure 1). The "crystallization/exploratory phase" is indicative of the time in adolescents' lives when they begin to define their identities as adults through their social and career choices (Duffy and Blustein 2005). During this stage, young people narrow their career choices, although they are not yet firm (Patton and McMahon 1998).

Important career decisions, such as whether to attend a college or technical school, enter the military, or go directly into the job market after high school are made during adolescence (Adams, Benschhoff, and Harrington 2007; Turner and Lapan 2002). Choices at this stage have a critical scaffolding effect on other stages of career development in the model.

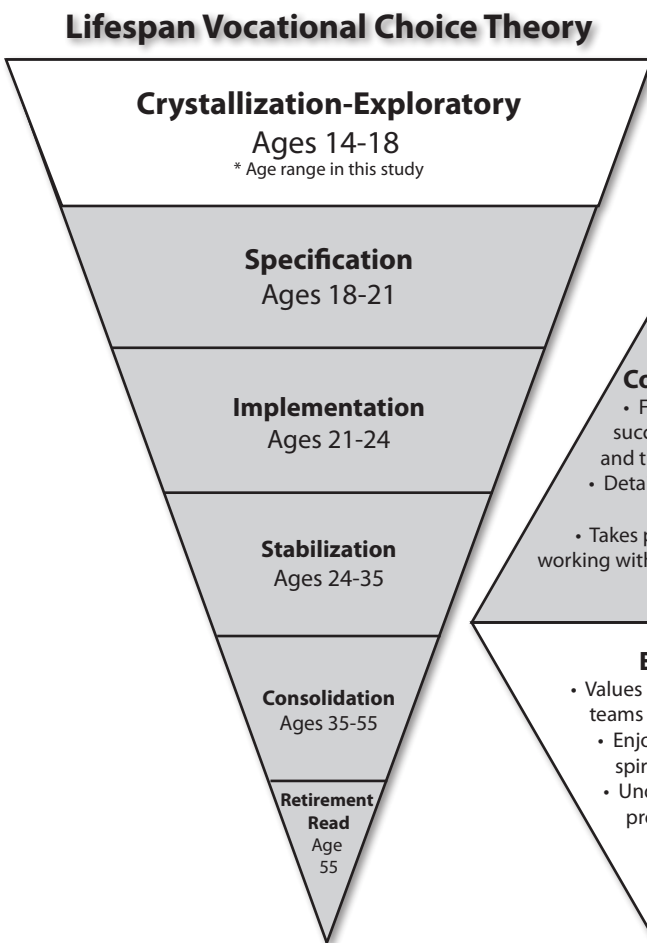


Figure 1. Life Span Vocational Theory.
Source: Super (1954); Salomone (1990).

Individual Personality Types

Holland's Typology of Personality Theory (1959, 1997) posits matching an individual's personality type with the same work environment. Holland concluded that there are six personality types in which individuals are categorized: artistic, enterprising, investigative, realistic, conventional, and social (figure 2). Depending on personality, people generally like to work in environments that are dominated by personalities similar to their own.

Career Choice

Adolescents' career choices are influenced by the community resources available to them, by support by family members (Jackson et al. 2006), and by their own self-efficacy (Anderson and Brown 1997).

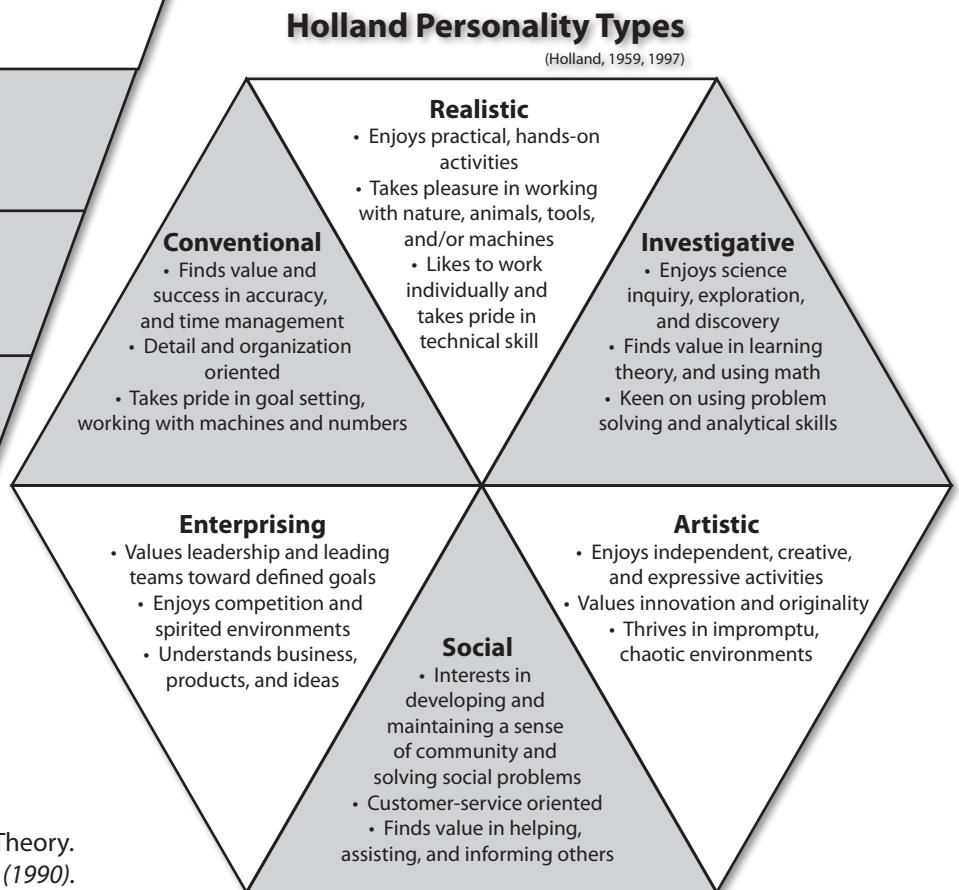


Figure 2. Holland's Typology of Personality Theory.
Source: Holland (1997).

Participants, Methodology, and Results

Demographic Information and Analysis

One hundred and seven youth submitted their completed Holland's Vocational Preferences Inventory (VPI; 1985) at the 4-H career/college fair; 72 percent of respondents were female, and 28 percent were male. This version of the VPI (1985) was chosen for its suitability for high school youth.

The racial/ethnic groups that completed the survey were as follows:

- African-American: 29.9 percent.
- Asian/Pacific Islander: 0.9 percent.
- Biracial or Multiracial: 1.9 percent.
- Caucasian: 58.9 percent.
- Latino/Hispanic: 4.7 percent.
- Other: 3.7 percent.

Demographic data were collected using the 4-H Career Decision Survey (Williams and Taylor 2008). The study was analyzed using ordinal regression.

Ordinal regression analysis estimates the conditional expectation of a dependent variable as a function of one or more categorical ... independent variables.

— Herbrich, Graepel, and Obermayer, 2000

Project/Curriculum Significant Difference

The results disclose positive significance ($p \leq 0.05$) in the areas of:

- Years in 4-H:
 - 2 years: <0.038
 - 6 years: <0.001
- Race/ethnicity:
 - African-American/black: <0.000
 - Asian/Pacific islander: <0.000
 - Caucasian/white: <0.004
 - Latino/Hispanic: <0.018
- Specific 4-H projects:
 - Animal science: <0.025
 - Camp/outdoor education: <0.021

The results indicated that youth who participated in the 4-H animal science project had knowledge about various careers before completing the Holland's Vocational Preferences Inventory. Results also indicated that experiences outside of 4-H had a significant impact on animal science project students' learning about careers. These "other experiences" were not defined in the survey.

Long-Term Involvement Difference

4-H had a significant impact on the career aspirations of study participants who were members of 4-H for two years and six years. Even though research has shown that long-term involvement has a positive effect on youth involved in the 4-H program (Lerner et al. 2008), in this study — for youth who participated in 4-H for seven years or who took part in the 4-H overnight camping program — experiences outside of 4-H were significant to their career exploration (Williams et al. 2008). As indicated earlier, survey participants were not asked to define "other experiences" on the survey instrument.

Long-term participation in 4-H has a positive impact on our youth's career development and youth development.

Racial/Ethnic Impacts

The Holland Vocational Preference Inventory (1985) was significant in assisting African-American youth with understanding their career interests. Based on ordinal regression analysis using the Career Decision Survey (Williams and Taylor 2008), the career/college fair helped to clarify college interests for the following racial categories: African-American, Asian/Pacific Islander, Caucasian/white, and Latino/Hispanic. The racial/ethnic category that did not have significance was the biracial category.

It is necessary to study race; in recent history, the American Psychological Association has signified the need to study culture. Because of the changing demographics in society, it has become more important to study culture, gender, race, and ethnicity (McGovern et al. 1991).

The career/college fair showed indications of significance in assisting young people with understanding their career choices. Understanding career choice was significant with the following racial/ethnic categories: African-American, Asian/Pacific Islander, and Latino/Hispanic.

Conclusions

Many students who completed the Career Decision Survey (Williams and Taylor 2008) indicated that 4-H helped them learn about different careers, suggesting that 4-H is exposing youth to specific careers and occupational experiences. Even though youth ages 14-19 may not be ready or equipped to make decisions about their future careers, it is developmentally appropriate for Virginia 4-H to intensify participants' exposure to various careers through their 4-H project work.

Results also indicated that students in 4-H have learned about careers not only by participating in 4-H but with activities outside of 4-H. When student data were aggregated by race, the results indicated that the Career Decision Survey (Williams and Taylor 2008), 4-H experiences, and outside experiences were not helpful to any racial group in deciding on career choice; it is not clear why this is the case.

However, Holland's Vocational Preference Inventory (1985) was significant in assisting African-American participants in understanding career interests. According to a study found in the "Journal of Extension," a substantial number of 4-H alumni felt that 4-H activities and people involved with leading the 4-H programs influenced their career choices (Rockwell, Stohler, and Rudman 1984).

As a direct result of exposure to a variety of academic programs and occupations, the career/college fair was helpful to students in determining their possible academic majors and career choices. Talking to representatives at the fair may provide participants enough insight to decide whether to explore college majors or career choices further or to think about other options.

Tips for Raising Youth Awareness of College Majors and Career Choices

- Encourage active engagement in long-term youth development programs, especially in programs such as 4-H.
- Research occupations that go along with certain projects as case studies so students can learn about real careers along with their projects.
- Be a coach/mentor when students express interest in certain careers.
- Utilize volunteers and community/industry contacts for job shadowing and mentoring opportunities.
- Have youth take career exploration assessments to help them identify their interests. The assessments should help to match students' interests with the skills and abilities of certain careers.
- Intertwine career preparation skills and activities (résumés, interviewing, applications) with current programming.
- Promote community college, vocational school, and military opportunities.
- Organize innovative activities through a collaborative approach, such as campus visits and company tours.
- Collaborate with high schools, university student affairs staff and faculty, business representatives, and parents.

Resources

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