Journal of Vocational Behavior 88 (2015) 121–130

Contents lists available at ScienceDirect

Journal of Vocational Behavior

journal homepage: www.elsevier.com/locate/jvb

Longitudinal associations between gender-typed skills and interests and their links to occupational outcomes

Bora Lee [a,*], Katie M. Lawson [b], Susan M. McHale [a]

[a] Pennsylvania State University, Department of Human Development and Family Studies, 106 Beecher-Dock House. University Park, PA 16802, USA
[b] Ball State University, Department of Psychological Science, 113 North Quad Bldg. Muncie, IN 47306, USA

ARTICLE INFO

Article history:
Received 11 February 2015
Available online 25 February 2015

Keywords:
Gendered interests
Gendered skills
Occupational outcomes
Middle childhood
Adolescence
Young adulthood

ABSTRACT

Although gender-based occupational segregation has declined in past decades, the world of work remains segregated by gender. Grounded in research showing that individuals tend to choose jobs that match their interests and skills, this study examined the longitudinal associations between gendered activity interests and skills from middle childhood through adolescence and tested gendered interests and skills, measured in adolescence, as predictors of occupational outcomes in young adulthood. Data were collected from 402 participants at four time points—when they averaged 10, 12, 16, and 25 years old. Results revealed that the longitudinal linkages between male-typed interests and skills were bidirectional, that both male-typed interests and skills in adolescence predicted working in male-typed occupations in young adulthood, and that skills, but not interests, predicted income. In contrast, female-typed interests predicted female-typed skills, but not the reverse, adolescent female-typed skills (but not interests) predicted working in female-typed occupations in young adulthood, and there were no links between female-typed interests or skills and income. Discussion focuses on the differential meanings and developmental implications of male- versus female-typed interests and skills.

1. Introduction

Although past decades have witnessed a decline in occupational segregation, the world of work remains segregated by gender (Blau, Brummund, & Liu, 2013). In the US, for example, more women work in service-type careers such as healthcare or teaching, whereas more men work in managerial or physically-demanding jobs (Hegewisch & Matite, 2013). Given that individuals tend to choose jobs that match their interests and skills (Dawis & Lofquist, 1984), investigation of gendered interests and skills in childhood and adolescence may provide insights about processes underlying gendered occupational segregation. Recent research documents that youths' interests and skills develop in relation to each other, and so an important step toward understanding their role in occupational choice is to chart their interplay across childhood and adolescence. Accordingly, in this study we examined the longitudinal links between gendered interests and skills from middle childhood through middle adolescence and tested whether interests and skills in middle adolescence predicted occupational outcomes—specifically, the gender-typing of jobs and income—in young adulthood. Given the possibility of gender differences in career development, we also examined gender as a moderator of these linkages.

* Corresponding author.
E-mail addresses: boralee@psu.edu (B. Lee), kmlawson4@bsu.edu (K.M. Lawson), x2u@psu.edu (S.M. McHale).

http://dx.doi.org/10.1016/j.jvb.2015.02.011
0001-8791/

2. Gender and occupational outcomes

Policymakers have targeted the gendered nature of occupational achievement for its negative impact on individuals, work organizations, and society at large. Constrained opportunities—real or perceived—may limit individuals' feelings of accomplishment that might derive from gender atypical occupations, reduce the number of skilled job applicants and workers within an industry, and contribute to the gender wage gap and gender differences in power and influence at all levels of a society (Hegewisch, Liepmann, Hayes, & Hartmann, 2010). Accordingly, researchers have explored processes that may underlie gendered occupational segregation. Most work has focused on why women are less likely to pursue male-typed occupations in the science, technology, engineering, and math (STEM) fields. We know little, however, about why men fail to pursue female-typed occupations. Male-typed occupations have long paid higher salaries than female-typed occupations, but the past two decades have seen declines in job growth and wages of blue-collar, male-typed jobs (McCall, 2001); further, such jobs are often more dangerous than female-typed jobs (Padavic & Reskin, 2002). Thus, it is important to understand the underpinnings of gendered occupational choices of *both* men and women.

Sociocultural and psychological processes are thought to underlie gendered occupation segregation. Gottfredson's (1981) circumscription and compromise theory asserts that, by 6 to 8 years of age, children narrow their occupational aspirations based on their attitudes about gender-appropriate occupations. Betz and Fitzgerald (1987) argued that decision making about career choices differs for women and men because of women's shorter history of labor force participation and because of their family roles. Other scholars have posited that interpersonal relationships are more influential in women's than in men's occupational choices. For example, Mainiero and Sullivan's (2005) kaleidoscope model asserts that women consider the needs of family, friends, and coworkers in their career decisions, whereas men more often make decisions with the goal of career advancement. Accordingly, men and women seek different occupations. Studies testing these models highlight gender differences, and thus, we also test whether these developmental processes differ for boys and girls.

In the career development literature, individuals' interests and skills have long been regarded as critical factors in occupational choices (Holland, 1959; Lent, Brown, & Hackett, 1994). Individuals tend to choose careers that fit their interests, and such patterns are evident across a variety of occupations (Schmitt-Rodermund, 2004; Tracey & Hopkins, 2001). Moreover, self-assessed abilities are linked with school grades and perceived career options in adolescence (Zimmerman, Bandura, & Martinez-Pons, 1992), occupational choices among high school seniors (Tracey & Hopkins, 2001), and salary and status among adult professionals (Abele & Spurk, 2009). This study built on prior research that examined targeted sets of interests and skills aligned with specific occupations (e.g., asking engineering students about how much they liked "solving computer software problems"). With a broader focus on gendered qualities and outcomes, we asked whether individuals with greater male-typed and female-typed interests and skills were more likely to choose male and female-typed occupations, respectively. Specifically, we assessed youths' ratings of their interests and skills in a range of activities and their interrelationships over time and tested whether these were linked to gendered occupational outcomes in young adulthood.

3. The role of gender-typed interests and skills in occupational outcomes

A body of work on the implications of skills and interests for achievement in task domains ranging from academics to sports is grounded in the expectancy–value model (Wigfield & Eccles, 2000). This model holds that achievement and achievement-related choices can be explained by one's belief in the ability to succeed and how one values the task. In this model, skills predict interests and expectancies, which in turn predict outcomes, and skills predict outcomes via interests or expectancies. We built on this work to study the role of gender-typed skills and interests in gendered occupational outcomes. Gender is multi-faceted, including attitudes, preferences, and identity, and the course of development varies across domains (Ruble, Martin & Berenbaum, 2006). Research on gender development reveals, however, that sex differences in interests are some of the earliest to emerge (Ruble et al., 2006). In addition, studies of time use reveal that, across childhood and early adolescence, sex differences are evident in a wide range of daily activities in and beyond the academic domain (Ruble et al., 2006). Thus, to understand the precursors of gendered occupational choices, we focused on youths' gendered skills and interests in activities ranging from academics to leisure.

Prior studies suggest that gender-typed interests and skills may be related to gendered occupational outcomes. For example, gendered interests and skills were associated with gendered occupational aspirations in childhood (Etaugh & Liss, 1992). We know less, however, about the links between youths' gendered interests and skills and actual occupational outcomes in adulthood. Using retrospective data, Cooper and Robinson (1989) found that gender-typed childhood interests were associated with gendered occupational aspirations in college students, and one study found links between math and verbal skills in twelfth grade and occupational choices in the STEM field when individuals were 33 years old (Wang, Eccles, & Kenny, 2013). Acknowledging an important gap in the literature, researchers have called for longitudinal studies of the effects of childhood and adolescent characteristics and experiences on occupational outcomes in adulthood (Hartung, Porfeli, & Vondracek, 2005). We addressed this call by using longitudinal data from a study that began when children averaged 10 years of age and assessed gendered occupational outcomes in young adulthood. We also moved beyond previously measured outcomes such as career aspirations, college majors, and course enrollment intentions (Frome, Alfeld, Eccles, & Barber, 2006; Tracey & Hopkins, 2001) to assess the gendered nature of young adults' occupations (i.e., proportion of male/female in a given occupation). Finally, we also examined income as another marker of gendered occupational outcomes. Although the gender composition of the US workforce has changed with men now concentrated in both low-wage and high-salary occupations, women continue to earn less than men, on average (Hegewisch et al., 2010).