Journal of Vocational Behavior 107 (2018) 209–221

Contents lists available at ScienceDirect

Journal of Vocational Behavior

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

Correlates of gendered vocational development from middle childhood to young adulthood

Katie M. Lawson[a,*], Bora Lee[b,1], Ann C. Crouter[c,2], Susan M. McHale[c,3]

[a] Department of Psychological Science, Ball State University, USA
[b] Department of Education, Korea University, Seoul, Republic of Korea
[c] Human Development & Family Studies, The Pennsylvania State University, USA

ARTICLE INFO

Keywords:
Vocational development
Gender
Occupational attainment
Career aspirations
Longitudinal
Person-environment fit

ABSTRACT

Most research on the developmental correlates of gendered vocational aspirations and attainment utilizes cross-sectional designs and begins in adolescence or later. This study used longitudinal data collected from U.S. youth from age 11 to 26 to: (1) chart their gendered vocational development, that is, the gender typicality of vocational aspirations in middle childhood and adolescence and attainment in young adulthood; and (2) examine childhood gendered attributes as predictors of gendered vocational development. Results revealed that gendered vocational development differed for men and women: women's aspirations in childhood and adolescence were less gender-typical compared to their vocational fields attained in young adulthood, whereas men's remained gender-typical from childhood to young adulthood. Further, childhood attributes predicted aspirations and attainment *and* their developmental trajectory.

Despite recent gains made by women in the work force, the U.S. labor market is still largely segregated by gender (Charles, 2011). Women are more likely to pursue serving and caring vocational fields, such as health, clerical work, and education. In contrast, men are more likely to pursue vocational fields associated with power and physical strength, such as administrative, scientific, manual labor, and managerial jobs (Steinmetz, 2012). Gendered vocational segregation, however, has implications for business and industry and society as a whole. For example, it limits the number of skilled job applicants available for employers to hire, contributes to the gender wage gap and gender differences in power and influence within society, and deprives society of individuals' full range of skills and talents, making it more difficult to compete in the global market (Hegewisch, Liepmann, Hayes, & Hartmann, 2010).

Metaphors such as “leaky pipeline” have been used to describe the phenomenon of women who originally express interest in science, technology, engineering, and mathematics (STEM) fields and change their minds during the career development process: when choosing high school courses, applying to college, choosing majors during college, finding a non-STEM occupation after earning a STEM degree, or switching from a STEM to a non-STEM occupation after working in the field (Blickenstaff, 2005). A majority of research on the leaky pipeline has focused on individuals who are adolescents or young adults. Many researchers have argued, however, that career development research needs to begin in childhood, “before gendered conceptions of the world of work crystallize” (Porfeli, Hartung, & Vondracek, 2008, p. 29), in order to provide insights to reduce the gendered segregation of the labor market.

Most research on gender and vocational choices focuses on women, and research is also needed to better understand the role of

* Corresponding author at: Ball State University, 122 North Quad Building, Muncie, IN 43706, USA.
E-mail addresses: kmlawson4@bsu.edu (K.M. Lawson), boralee117@korea.ac.kr (B. Lee), ac1@psu.edu (A.C. Crouter), x2u@psu.edu (S.M. McHale).
[1] Korea University, Uncho Useon Education Building #715, Seoul, Korea.
[2] The Pennsylvania State University, 301 Health and Human Development Building, University Park, PA 16802, USA.
[3] The Pennsylvania State University, 114 Henderson Building, University Park, PA 16802, USA.

https://doi.org/10.1016/j.jvb.2018.05.002
Received 28 July 2017; Received in revised form 16 April 2018; Accepted 1 May 2018
Available online 03 May 2018
0001-8791/

gender in men's vocational choices. Due to recent economic restructuring, blue-collar, male-typed vocational fields have exhibited declines in wages and job growth (McCall, 2001). In addition, many male-typed jobs are more dangerous and hazardous to health than female-typed jobs (Padavic & Reskin, 2002). Little attention has been given to the narrowing of men's vocational aspirations (Gottfredson, 1981). This lack of research may be due to the assumption that male-typed vocational fields are more prestigious and pay higher salaries than female-typed vocational fields (Charles & Grusky, 2004). Thus, toward a better understanding of the precursors of gender segregation in the labor force, the goals of the present study were to utilize a 15-year longitudinal dataset to chart the gendered vocational development of *both* men and women – conceptualized as aspirations in childhood and adolescence and as attained vocational field in young adulthood – and to test whether and how children's attributes, specifically their gendered attitudes, personality, and skills, play a role in this development.

1. Vocational development: aspirations to attainment

Gottfredson's (1981) theory of circumscription and compromise asserts that individuals seek out vocational fields based on their own self-concepts, defined as, "one's view of one-self, one's view of who one is and who one is not" (p. 547). According to Gottfredson, self-concept can include individuals' views of their personality, interests, skills, and/or place in society. According to this theory, individuals determine a range of acceptable vocations, referred to as a social space, by considering their self-concept and comparing it to their images of vocations. Individuals then narrow down this social space by considering factors such as size and power (~ages 3–5), gender roles (~ages 6–8), social class (~ages 9–13) and their own interests, capacities, and personal qualities (starting as early as age 14). For example, a boy may first circumscribe his social space by removing female-typed jobs if he identifies with more male-typed gender roles, then later may continue to narrow down his social space after considering his own personal attributes such as gendered personality, attitudes, and skills. Finally, according to Gottfredson, both contextual obstacles and opportunities contribute to the accessibility of a vocation. As a result, individuals compromise when implementing vocational goals, which can mean changing or sacrificing a part of their self-concept.

Although Gottfredson's theory notably acknowledged the important role of gender in vocational development, it has received criticism for its application of the concept of development (Vondracek, Lerner, & Schulenberg, 1983). Therefore, the social cognitive theory of gender development (Bussey & Bandura, 1999), which focuses on psychological and socio-structural determinants of gender across the lifespan, may inform the gendered vocational development process proposed by Gottfredson (1981) in two ways. First, the social cognitive theory stresses the importance of context in gender development. This can include more immediate contexts, such as family and peers, but also larger societal-level contexts. Context may be particularly important when considering gendered vocational development because gender is socially-constructed. Therefore, the context surrounding youth may have implications for the circumscription process proposed by Gottfredson (1981). For example, given research illustrating that there may be less contextual support for boys' than girls' transgressions of gender norms (Kane, 2006), boys may limit their social space due to gender roles more than girls do.

Second, the social cognitive theory of gender development holds that there are different types of environments - some imposed on individuals and others selected or created by individuals. For example, as youth grow older, they gain more control in the choice of activities they pursue and their companions in those activities. In addition, the social cognitive theory stresses the idea that gender role development occurs across the life span and is not restricted to childhood. Therefore, although Gottfredson argues that gender plays a crucial role in circumscribing social spaces around ages 6–8, the social cognitive theory of gender development indicates that initial gendered attributes, such as personality, may ultimately influence the gendered vocational development process at later ages through an individual's selected environments, which supports theories asserting that career development is a lifelong process (Super, 1951). The present study - grounded in Gottfredson's (1981) theory of circumscription and compromise and the social cognitive theory of gender development (Bussey & Bandura, 1999) – uses longitudinal data to examine how children's personal attributes – namely, gendered attitudes, personality, and skills – may play a role in gendered vocational development.

Gottfredson (1981) defined occupational aspirations as "the single occupation named as one's best alternative at any given time" (p. 548) out of one's social space. Aspirations are seen as the first stage of the implementation of the self-concept process of vocational development, whereas young adulthood attainment is the next stage of implementation (Super, 1951). Limited longitudinal research has examined the development of youth's vocational aspirations and attainment, and typically longitudinal studies cover only one or two developmental periods. For those covering two periods, they often focus on childhood and adolescence, or adolescence and young adulthood (often college students; Low, Yoon, Roberts, & Rounds, 2005).

Often research examining changes in vocational aspirations from childhood to adolescence focuses on *types* of vocations (e.g., professional v. non-professional, Holland's occupation types; Low et al., 2005; Mello, 2008; Tracey & Robbins, 2005; Rojewski & Kim, 2003), with evidence that some dimensions of vocational aspirations are relatively stable across childhood and become even more stable in adolescence (Porfeli et al., 2008) and young adulthood – particularly between the ages of 18 and 21 (Low et al., 2005). Longitudinal research, using multiple samples of participants and examining the prestige of adolescent and young adulthood aspirations, however, indicates that development may be curvilinear – showing an increase in prestige levels across adolescence, followed by a decrease in young adulthood (I. Lee & Rojewski, 2009; Rojewski, Lee, & Gregg, 2012). In addition, there is evidence that the *type* of adolescent vocational aspirations predict their vocational *attainment* in young adulthood (Croll, 2008; Mello, 2008; Schoon, Martin, & Ross, 2007; Schoon & Parsons, 2002; Trice & McClellan, 1993).

We know little, however, about how the *gender typicality* of vocational aspirations and attainment develops from childhood to young adulthood. Using data collected from second to twelfth, Helwig (2008) found that in the second and fourth grades, both boys and girls reported strong preferences for gender-typed vocations. In the sixth and eighth grades, boys still preferred male-typed