The Influence of Socialization on Young Women’s Perceived STEM Opportunities
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Career Learning in Children
- Career interventions with young children are primarily aimed at maximizing their exposure to occupational opportunities and removing job stereotypes (Walsh & Savickas, 2005).
- Research on career choice in children, however, has shown that career interventions are not meeting those goals. Specifically, gender role socialization has been studied influencing young women’s perceived occupational opportunities.
- Gender role socialization dictates how children view “successful” careers based on modeled parental norms (Lawson, Crouter, & McHale, 2015).

Influence of Gender
- Young women are less likely to choose a science, technology, engineering, or mathematics (STEM) career than men, despite equal ability (Wang, Eccles, & Kenny, 2013).
- Researchers have attributed much of this disparity to gender role socialization, a form of social learning in which children learn which types of work roles are acceptable for their identified gender, by observing their parents, peers, and communities (Lawson, Crouter, & McHale, 2015).

Traditional gender roles translate to women taking careers in “supportive” roles on the lower end of the professional hierarchy, and being underrepresented in STEM and other high status fields (Eccles, 1987).

- There exists a “male standard of ideal achievement” in which the accomplishments of women are compared to their male counterparts. This is most evident in reviewing the strengths of males, which much of the scientific literature has been skewed towards. The inherent strengths of women are more likely to be ignored, while their “deficiencies” in comparison to men are often highlighted (Eccles, 1994).

Stereotype Threat
- Stereotype threat includes being in a situation where well-known and socially held negative stereotypes create judgment about one’s in-group. Regardless of the stereotype’s accuracy, it is readily accessible, including to those who are being stereotyped. Individuals may fear that any exhibited behavior may be interpreted as fitting a stereotype about their in-group. This additional pressure can interfere with performance (Spencer, Steele, & Quinn, 1999).

Disparities in STEM Careers
- Xu (2008) found that female faculty in STEM disciplines are more likely to have an increased frequency of job changes. While research has demonstrated generally no difference among gender in ability in STEM fields (Spencer, Steele, & Quinn, 1989), many postulate that systemic disadvantages are driving the high numbers in job changes for women in STEM fields.

Female Faculty in STEM Fields are More Likely to Experience:
1. Hiring Discrimination
2. Unequal pay as compared to males in similar positions
3. Decreased likelihood of promotion as compared to equivalent males
4. Less social support than men from other faculty members (Xu, 2008)

Initiatives to Increase Women in STEM Fields
- Promoting female participation in STEM fields increases diversity in thought and innovation, vital to their progression (Grossman & Porche, 2013).
- After school and summer programs – often not affiliated with the school or state
- Women in STEM – The Office of Science and Technology Policy, The Obama Administration (see additional handout)
- The problem with creating school programs to increase the number of females in postsecondary STEM programs is the oversimplification that increasing the career applicant pool will directly increase the percentage of females in STEM careers Xu (2008).
- As noted above, we may be setting up students for difficult or distressful careers if we ignore the oppressive culture in these fields.

Validating Choice
- Creating STEM program applicants can be problematic if the child is not intrinsically motivated.
- The education system should foster learning environments that promote equality and freedom to follow all perceived career interests, without influencing students for or against potential careers.
- When women and men have comparable math scores, women tend to have much higher verbal scores. This may push them to choose a non-math centered career, such as law, as high verbal-ability predicts transfer out of a STEM major for women (Wang, Eccles, & Kenny, 2013).

Implications for Career Counseling
Gottfredson’s Theory of Circumscription and Compromise
- Gottfredson’s theory works well in identifying the effects of gender role socialization and addressing how young women can learn limiting stereotypes about their ability to perform in STEM disciplines, and thus limit their perceived options for career choices (Brown & Lent, 2013). It would be important to understand if clients are making the most congruent career choices, or if they are making the best choice of a restricted sample they perceived as available. The client’s views on occupational gender types, prestige, and work field would help determine potential gender influence or bias (Walsh & Savickas, 2005).

Social Cognitive Career Theory (SCCT)
- SCCT would also be effective in addressing social influence and learning, as well as the potential internalization of socially perceived gender norms about STEM abilities.
- SCCT values examining contextual factors, which could provide a framework for reviewing learned gender roles and norms (Brown & Lent, 2013).