Chapter II

Gender and the Information Technology Workforce: Issues of Theory and Practice

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Abstract

Despite increases of women in the labor force, females are largely under-represented in the American IT workforce. Among the challenges that managers face in addressing the under representation of women in the IT workforce is the identification of an appropriate theory as a basis for understanding data about gender and IT in order to reverse the gender imbalance. Hence, the purpose of this chapter is to demonstrate the managerial implications of theory choice when addressing the under representation of women in the IT workforce. We provide an overview of the three main theoretical perspectives, the essentialist theory, the social construction theory, and the individual differences theory of gender and IT, which are used to understand and investigate the IT gender gap. We then make the argument that the essentialist and social construction theories do...
not provide the analytical robustness required to pay attention to more nuanced managerial recommendations. Finally, we demonstrate how the individual differences theory of gender and IT can significantly contribute to the reconfiguration of analytical knowledge of the IT gender gap and spur innovative management policies.

Introduction

The explosion of the Internet has transformed and revolutionized the information technology (IT) workforce. The IT workforce has also become a large component of the world’s economy and researching the composition and predicting the direction of the industry is an important matter for discussion. In addition, organizations and managers strive to identify ways to foster a business climate that encourages successful participation in the information economy. Therefore, researching, measuring, and evaluating the IT workforce are of growing importance.

Unfortunately, women are largely under represented in the American IT workforce, a phenomenon typically termed the IT gender gap. This female under representation in technical careers has gained the attention of researchers who have concluded that women are alarmingly under represented in the IT workforce, despite the recent growth of female workers in the American labor force. Thus, those concerned with managing IT professionals are faced with the task of recruiting, motivating, and retaining the necessary personnel to meet the current and future demands of the information age while promoting greater diversity and equality within the field.

Among the challenges that managers face in addressing the under representation of women in the IT workforce is the identification of an appropriate theory as a basis for understanding data about gender and IT, so as to reverse the gender imbalance. Hence, the purpose of this chapter is to demonstrate the managerial implications of theory choice when addressing the under representation of women in the IT workforce. We begin with a brief background on the under representation of women in the IT workforce. Next, we provide an overview of three theories used to understand and explain the IT gender gap: (1) the essentialist theory; (2) the social construction theory; and (3) the individual differences theory of gender and IT. In this discussion, we demonstrate how these theoretical foundations serve as a lens for interpretation and recommendations to address the IT gender gap. We then make the argument that the essentialist and social construction theories do not provide the analytical robustness required to pay attention to more nuanced managerial recommenda-
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