

SYSTEM GROUP DYNAMICS AND THEIR EFFECT ON UPPER LIMB INNOVATION IN O & P

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INTRODUCTION

This study examines the effects of group dynamics and social interaction with innovation among orthotist and prosthetists. Since any new innovation inherently comes with a higher degree of uncertainty and risk, the group or individual must deal with the anxiety created by innovative behaviour. Individuals who are less anxious and risk adverse may tend to adopt innovations more easily than others who regard changes with greater uncertainty. Individuals can be classified into adopter categories based on their rate of adoption of new technologies and capacity of risk and anxiety. Individuals who are more susceptible to anxiety in general, may seek the emotional scaffolding of their organizational group to support innovative behavior. This may be especially true in healthcare where contextual stress is heightened.

METHOD

The intent of this study was to examine if there is any relationship between an individual's differentiation of self and level of technology readiness. The level of differentiation within the work context will be compared to innovation technology readiness. This study construct was a non-experimental, associational, design using an electronic survey comparing emotional differentiation, as measured by the Workplace Differentiation Inventory (WDI), and technology readiness as measured by the Technology Readiness Index 2.0 (TRI-2.0). The intent of the study was to examine the potential relationships between the WDI and TRI-2.0 as well as the subattributes of both instruments. The analysis was done to find if any relationships exist between with demographic attributes of gender (G), years of experience (EXP), professional certification (CERT), technology self assessment (TSA), number of high-tech patients per year (HTP), number of external linkages (EXLK), number of internal linkages (INLK), and professional affiliation (AFF).

RESULTS

The survey, which included the eight demographic questions as well as the WDI and TRI 2.0, was made available with a link and invitation on the OANDP-L list server. The survey was posted on Qualtrics from August 18,

2015 until August 31, 2015, and had n = 148 respondents. Examination of the relationships using two-tailed Person's correlations showed significance between Technology Optimism with all attributes of the WDI; Fusion with Others, Emotional Reactivity, and Emotional Cut-off. Technology Innovation also had significant relationships with Fusion with Others, Emotional Reactivity, and Emotional Cut-off. The regression analysis showed a moderately strong predictive relationship between the WDI and the TRI-2.0. A very strong predictive relationship was found between Technology Optimism with Emotional Cut-off and Emotional Reactivity. Technology Optimism and Emotional Reactivity alone shared a strong predictive relationship. Conversely, the WDI had very strong predictive relationship with Technology Optimism, Technology Innovativeness and Technology Insecurity with Technology Optimism contributing a majority of the effect. An extremely weak relationship between the WDI composite score and Years of Experience.

DISCUSSION

This study has shown that Emotional Reactivity and Emotional Cut-off had a significant predictive relationship with Technology Optimism. This study has also shown that Technology Optimism, Technology Innovativeness, and Technology Insecurity had a very strong significant predictive relationship with Workplace Differentiation, specifically Emotional Reactivity. The other key result was that Gender, Technology Self-Assessment, Certification Level, Years of Experience, and Office Affiliation had little or no effect on the measures of differentiation or technology readiness. The implication is that continual introduction of new concepts and technology would be a strong predictor of a less emotionally reactive and thoughtful group for change represented by technologic and reimbursement advancements.

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