

PROVIDER EMPOWERMENT AND SATISFACTION WITH TELEHEALTH

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MOTIVATION

Telehealth has the objective to provide remote access to healthcare for patients. Irrespective of the widespread advantages, not many providers have adopted telehealth in their practices. Widely discussed challenges to adoption include reimbursements, license issues, technological barriers, expected results and social influence. Beyond these reasons, feeling empowered and satisfied that a doctor or clinician is able to treat a patient at the time of need is crucial for telehealth adoption.

The relevance of provider empowerment and satisfaction in telehealth context stems from two sources. First, telehealth helps healthcare providers reduce costs while increasing quality of care (McLean, Protti and Sheikh 2011). Patients can be taken care more efficiently using telehealth. For example, patients can stay home, avoiding the waste of time spent on a long-distance commute. Second, if providers do not feel satisfied, they are less comfortable using telehealth to diagnose and treat their patients (Allen, Whittaker and Sutton 2017). Thus, provider empowerment is an essential point in the loop of patient care through telehealth.

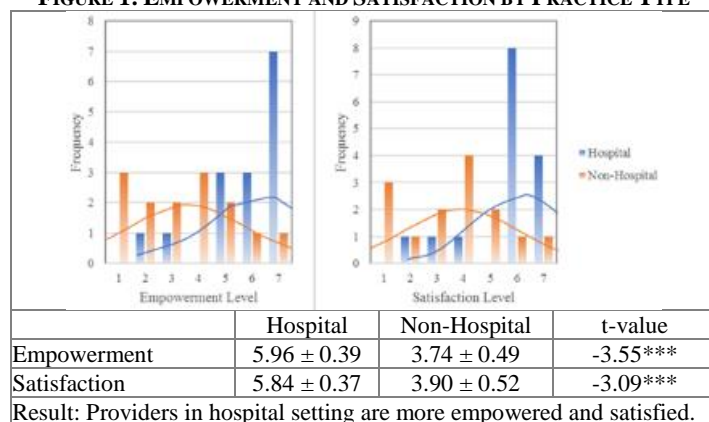
STUDY OBJECTIVES

In this study, we explore whether provider empowerment and satisfaction with Telehealth vary across structural context (e.g., hospital vs. non-hospital, including clinics and office), hospital settings (urban vs. rural), the structural distance of the doctor/provider in the organization, and the providers' demographics (e.g., age and gender). We expect that the feeling of empowerment and satisfaction will vary across different contextual and demographic factors.

METHOD

A survey instrument was designed and data were collected from providers. We developed our sample frame by exploring hospitals, providers, clinics and physician offices in the Denver area. Usable data were collected from 31 respondents using telehealth in their healthcare organizations. The analysis mainly consists of t-test comparisons and ANOVA for empowerment and satisfaction measures across other variables.

FIGURE 1: EMPOWERMENT AND SATISFACTION BY PRACTICE TYPE



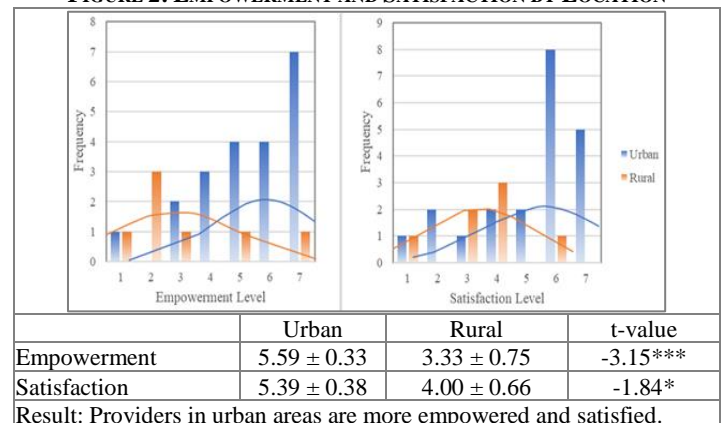
RESULTS

Results show that providers in hospital settings, in urban areas, in the age range of 41-50, and male providers derive higher empowerment and satisfaction from telehealth use. In addition, doctors or providers with an 'independent' role in practice feel more empowered and satisfied with telehealth. Insights and implications of the findings are discussed.

DISCUSSION

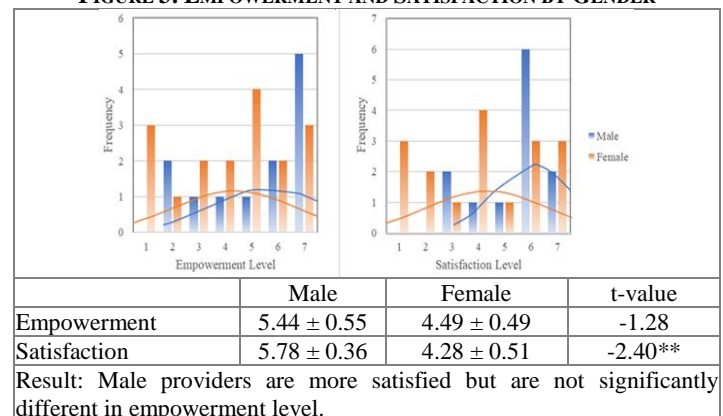
First, we found that hospital based use of telehealth is highly empowering and satisfying for providers (Figure 1). Plausibly, providers and doctors in a hospital setting do not have to pull the equipment and plug it in. They have a support system and other infrastructure which lead to a better appreciation of the utility of telehealth compared to non-hospital based providers in an office or clinic setting.

FIGURE 2: EMPOWERMENT AND SATISFACTION BY LOCATION



Second, by urban-rural setting differentiation, we found that urban area users have higher empowerment and satisfaction scores than rural providers (Figure 2). Possibly, rural providers are still not leveraging much from telehealth, regardless of the widely-hyped potential in telehealth for rural populations. In addition, rural providers may have concerns, issues and challenges; such as bandwidth, internet access round the clock, etc. for telehealth use. However, urban providers can better appreciate the value proposition of telehealth, leading to higher empowerment and satisfaction scores. Undoubtedly, more than the 'remote access' value proposition of the telehealth, the 'just-in-time' or 'just-in-place' care delivery provisions through telehealth is becoming highly beneficial to urban doctors.

FIGURE 3: EMPOWERMENT AND SATISFACTION BY GENDER



Amongst the demographic factors, males feel better with telehealth use (Figure 3). This may be related to the self-efficacy variations with technology use suggested in early literature (Deng, Khuntia and Ghosh 2013). Providers with higher structural distance are more empowered and satisfied with telehealth (Figure 4). Finally, the age group of 41-50 are more empowered and satisfied with telehealth use (Figure 5). This could be explained by difference that come with age and years of experience such as an increased satisfaction and desire to treat patients just-in-time or increased independence. Overall, providers with more independence are enjoying telehealth more.

In conclusion, empowerment and satisfaction are two key challenges to telehealth adoption. Variance across these two dimensions may help explain the variance in telehealth adoption. Our study establishes and demonstrated this variance across hospital settings, demographics and structural distance of providers. Future studies may explore nuanced impact of these variations on telehealth adoption and performance impacts.

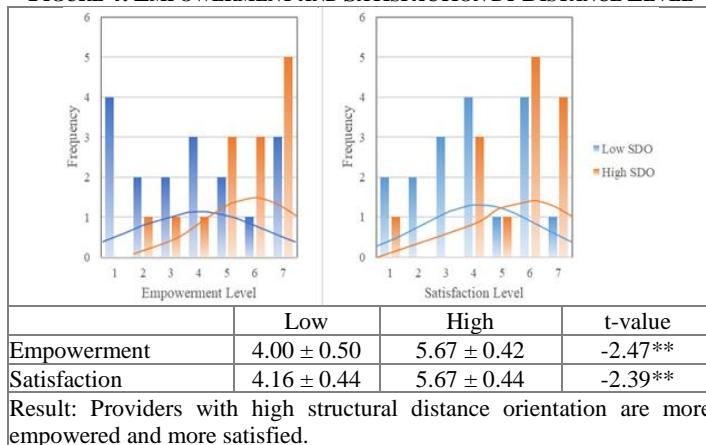
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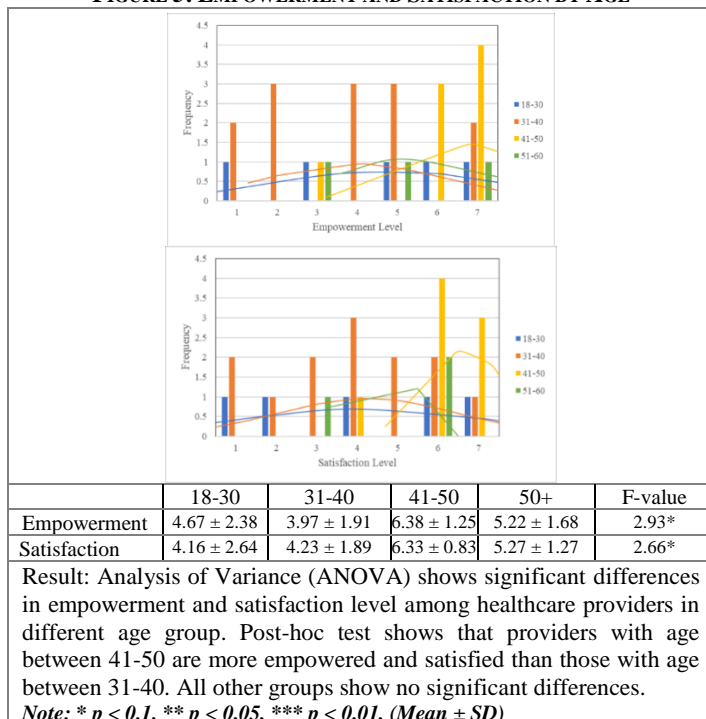
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FIGURE 4: EMPOWERMENT AND SATISFACTION BY DISTANCE LEVEL



An explanation for this could be that with higher age and experience, perhaps the satisfaction or feeling to treat a patient just-in-time is higher. This means lone-wolves are enjoying telehealth more. Obviously, independence and uniqueness in practice is a solid explanation for this finding.

FIGURE 5: EMPOWERMENT AND SATISFACTION BY AGE



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