

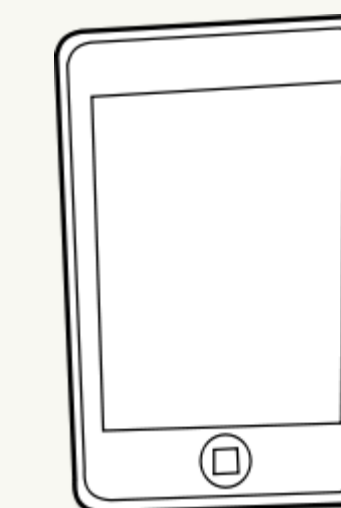


Institutional Factors Affecting Source Use: A study of the Source Choice Behavior of Medical Residents

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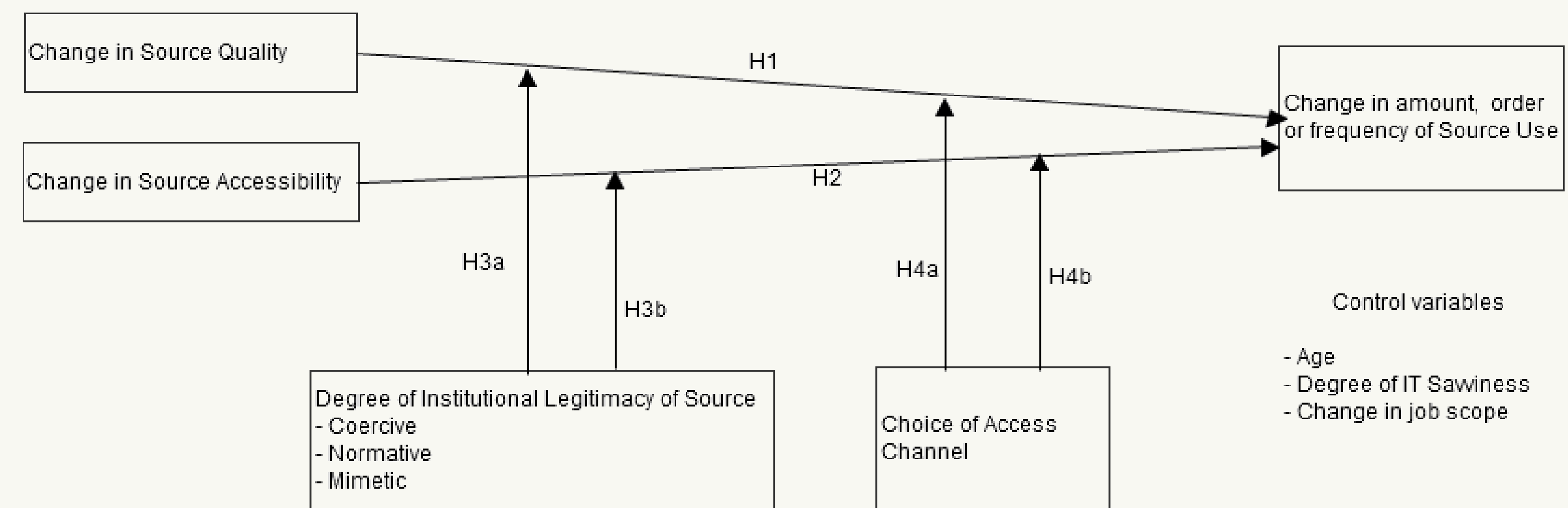
Introduction

An important question in information-seeking behavior is how people decide on which information source to use when they need information. Some past studies reported that seekers use the source that is most easily accessible, while others found that people go for the source with the highest quality. Addressing these conflicting findings using contextual variables, a survey study of 352 working professionals (Agarwal, Xu and Poo, 2011) found that quality (benefit) was the important factor in the use of a source. Accessibility (cost) was perceived by the seeker to be unimportant but was found important. While this study looked at knowledge workers from the Finance/IT fields, not much is known about the effect of contextual factors on the source-choice behavior of medical residents, though there have been studies on the information behavior of healthcare providers in hospital settings. This becomes especially pertinent in light of the varying degree of legitimacy accorded to digital sources, and the use of new channels of access such as mobiles and tablets.



Research Model

The research model shows the independent and dependent variables, as well as the moderators derived from institutional theory, and choice of access channel e.g. mobile. Control variables will be age and degree of IT savviness of the resident and the change in scope of task.



Research Questions

Using the institutional theory (see e.g. Scott, 2004; Appari, Johnson and Anthony, 2009), this study will carry out a survey of medical residents in one or more Boston hospitals to ascertain:

- 1) What are the conditions that make people switch from interpersonal sources (e.g. colleagues) to physical sources (e.g. books/manuals) to professional digital sources (e.g. a database such as UpToDate) to other digital sources such as Google or Wikipedia?
- 2) Does the degree of institutional legitimacy accorded to a source moderate its use?
- 3) Does the choice of channel (e.g. face-to-face, computer or mobile/tablet) moderate source use?

Methods

As the constructs in our model deal with perceived attributes, a questionnaire survey will be conducted to test our hypotheses. The target population is medical residents. The study population is the medical residents engaged in a residency programs in one or more hospital(s) in Boston. The survey will be sent out to the medical residents after IRB approval.

We will verify the construct validity of the instrument and conduct a pilot test for convergent and discriminant validity analysis.

Descriptive statistics and reliability of measurement items will be reported. A confirmatory factor analysis will be conducted for the data collected from the main study. We will carry out the hypothesis testing using stepwise Linear Regression and Hierarchical Linear Modeling.

Significance and Future work

Insights gained from the study will build on past work on information behavior and source choice, as well as the application of institutional theory to hospital settings, and help hospitals make optimal provision of information source types based on their preference and usage by medical residents. Ongoing and future work will involve validating the questionnaire and carrying out the study.

References

- Agarwal, N.K., Xu, Y. (C.), Poo, D.C.C. (2011). A Context-based Investigation into Source Use by Information Seekers. *Journal of the American Society for Information Science and Technology (JASIST)*, 62(6), 1087-1104.
- Appari, A., Johnson, M.E. and Anthony, D.L. (2009). HIPAA Compliance: An Institutional Theory Perspective. Proceedings of the Americas Conference on Information Systems (AMCIS 2009), August 6-9, 2009, San Francisco, CA. Retrieved April 6, 2012 from <http://aisel.aisnet.org/amcis2009/252>
- Scott, W.R. (2004). Institutional theory. In G. Ritzer (Ed.) *Encyclopedia of Social Theory*, Thousand Oaks, CA: Sage, 408-414.