

**Using Rogers' Theory of Innovation Diffusion for Evidence-Based Practice: Innovation
Properties**

Student Name

University

Course

Professor Name

Date

Outline

1. Introduction
2. Theory of Innovation Diffusion and EBP
 - a. Theory of Innovation Diffusion
 - b. The Use of TID for EBP
3. Conclusion

Using Rogers' Theory of Innovation Diffusion for Evidence-Based Practice: Innovation Properties

The present paper is devoted to the discussion of the application of Rogers' theory of innovation diffusion (TID) to the introduction and adoption of evidence-based practice (EBP). The work includes a detailed description of TID's view on innovation properties, after which their value for EBP is described and illustrated with two examples. The examples show that TID's innovation properties can be used as an analytical tool that informs change management and highlights the properties' significance for EBP implementation. Naturally, the properties are not the only aspect that affects the process of innovation (Wisdom et al., 2013), but they are a contributing factor (Pashaeypoor et al., 2016), which means that they should be taken into consideration.

Theory of Innovation Diffusion and EBP

Theory of Innovation Diffusion

TID was introduced by Everett M. Rogers (2010). It is a framework that helps to analyze the properties of a change (innovation) which can somehow affect the process of its adoption (Hadorn, Comte, Foucault, Morin & Hugli, 2016). This information can be used to improve the process of adoption and facilitate it (Pashaeypoor et al., 2016; Wisdom et al., 2013). TID singles out five properties. The first one includes perceived relative advantages, which means that the people who adopt the change need to be shown the differences between the previous practice (or its absence) and the new one (Rogers, 2010, p. 212). If the latter is perceived as a superior practice, the process of adoption can be facilitated. The second parameter is the compatibility of the innovation, which refers to the change being aligned with the needs, capabilities, and values of the adopters (Rogers, 2010, p. 224). If the alignment is present, the change can be adopted faster and easier.

The third aspect is defined as complexity or simplicity, and it refers to the perceived difficulty of mastering the change. If the innovation is viewed as complex, this perception will hinder the adoption (Rogers, 2010, p. 242). The fourth parameter is termed as trialability, which is the possibility of trialing the change (Rogers, 2010, p. 243). If adopters are provided with the chance to try innovations for a limited period of time and, possibly, experiment with them, the adoption can be facilitated.

Finally, the observability of outcomes is important. In particular, the ability to check out the positive outcomes of the implementation of the change (for example, during or after the trial) can boost the process of adoption (Rogers, 2010, p. 244). Also, Rogers (2010) continuously highlights the fact that perceived parameters are of particular importance, which is understandable since individual decision-making is an essential element of change routinization (Eaton et al., 2015).

The theory is usually adjusted to the needs of a particular project. For instance, Hadorn et al. (2016) specify the compatibility parameter to signify the compatibility of change with nursing roles. On the other hand, Hanrahan et al. (2015) do not change the attributes, but they incorporate them into their model of EBP integration, which is based on the Iowa Model of EBP. Similarly, Wisdom et al. (2013) use TID together with several other theories to expand the list of the properties that can be of importance. For instance, the authors distinguish between the ease of implementation and ease of everyday use, which can highlight the importance of these individual components of complexity (simplicity). Therefore, the theory can be customized.

Apart from that, there is some evidence to TID innovation properties being an effective choice of factors that can affect the implementation process. For instance, Pashaeypoor et al. (2016) present quantitative evidence to the fact that observability, trialability, and complexity have a direct effect on the adoption of change, which makes them

its predictors. In addition, the authors show that all of these properties and that of relative advantage tend to have a strong direct effect on the attitude of participants towards change, which can have the impact on personal decision-making in the adoption process. Similarly, Wisdom et al. (2013) cite evidence which indicated that all the mentioned parameters were of importance for the implementation of change. Therefore, the manipulation of the specified properties can be employed to the benefit of the adoption.

The Use of TID for EBP

The introduction of EBP is a complicated process: it typically requires making changes, which can be met with varying levels of enthusiasm and resistance (Hanrahan et al., 2015). EBP-related innovations aim to introduce the practices based on evidence and, therefore, expected to improve the quality of care and safety of patients, facilitate customer service and other relevant procedures, or cut expenses (Eaton et al. 2015; Hadorn et al., 2016; Hanrahan et al., 2015). As a result, the successful adoption and routinization of EBP are crucial for the continuous improvement of healthcare services. Given the fact that the above-mentioned innovation properties can affect the adoption process, they need to be taken into account and appropriately manipulated to achieve the best results.

On the one hand, Hadorn et al. (2016) use TID to analyze the success of the implementation of a new pain management protocol at a Swiss university hospital. The authors find that more than a half of the respondents view the change as advantageous, observable, and very compatible. The authors specifically comment on the fact that the format of the protocol (pocket-sized printed instructions) is perceived as convenient and accessible by the adopters, which makes it simpler to use. However, the authors mention the fact that the adopters experience complexity issues: the participants reported insufficient training and resulting insecurity; also, they found a particular requirement of the protocol, which implied the use of computer technology, complex. The authors make the conclusion

that the modification of the latter parameter can improve the frequency of the usage of the protocol and the pace of its adoption. This example predominantly focuses on the use of TID as an analytic tool which can offer solutions for EBP implementation. In this case, TID is employed after the launch of the implementation process with the aim of improving it, and the study relies on the feedback of the adopters, which is an appropriate approach. Indeed, as it was mentioned, TID focuses on perceptions and subjective views of innovation, which makes communicating with adopters especially important.

On the other hand, Hanrahan et al. (2015) report the results of a complex EBP promotion project (that targeted multiple practices from neurological assessment to cell phone use), which was undertaken to test their EBP integration model. This model was customized for working with old, well-established ideas that the authors termed as “sacred cows” due to the reluctance of healthcare workers to give them up despite them being outdated or not based on evidence. Still, this model employed TID, for example, by arranging various means of evidence presentation to improve the comparative advantage of the change. Similarly, the introduction of progress celebration methods would be expected to improve the observability of EBP implementation. It is also noteworthy that feedback solicitation was an important part of the project: Hanrahan et al. (2015) employed satisfaction reports to this end (p. 8). The outcomes of the project were positive and demonstrated quality improvements (for example, with respect to urinary tract infections) though the authors report that “sacred cow” ideas are persistent. This example demonstrates that the employment of TID for EBP adoption can have positive effects on the process and direct it. In this case, the authors used TID before the implementation process, which guided their activities and helped them with change management. Thus, TID's innovation properties can be employed before or during EBP implementation to improve the process.

Conclusion

The present paper has reviewed five TID's innovation properties and offered the examples of its employment in EBP implementation, which suggests the following conclusions. The innovation properties are evidenced to have an effect on the process of implementing a change. EBP implementation is a form of innovation, which is crucial for the continuous improvement of quality in healthcare. As a result, the use of TID in EBP implementation is of interest for modern practitioners. The examples used in the paper show that TID's innovation properties can be utilized as a tool for implementation analysis, which can be employed throughout the process. However, it is also possible to consider the parameters of innovation before implementing it and prepare some interventions for their improvement to facilitate the adoption process. In any case, the employment of TID is likely to assist in EBP adoption, but it needs to rely on the adopters' feedback because individual perceptions with respect to the properties of innovation are necessary for their management.

References

- Eaton, L., Meins, A., Mitchell, P., Voss, J., & Doorenbos, A. (2015). Evidence-based practice beliefs and behaviors of nurses providing cancer pain management: A mixed-methods approach. *Oncology Nursing Forum*, *42*(2), 165-173.
<http://dx.doi.org/10.1188/15.onf.165-173>
- Hadorn, F., Comte, P., Foucault, E., Morin, D., & Hugli, O. (2016). Task-shifting using a pain management protocol in an emergency care service: Nurses' perception through the eye of the Rogers's diffusion of innovation theory. *Pain Management Nursing*, *17*(1), 80-87. <http://dx.doi.org/10.1016/j.pmn.2015.08.002>
- Hanrahan, K., Wagner, M., Matthews, G., Stewart, S., Dawson, C., Greiner, J., Pottinger, J., Vernon-Levett, P., Herold, D., Hottel, R., Cullen, L., Tucker, S., & Williamson, A. (2015). Sacred cow gone to pasture: A systematic evaluation and integration of evidence-based practice. *Worldviews on Evidence-Based Nursing*, *12*(1), 3-11.
<http://dx.doi.org/10.1111/wvn.12072>
- Pashaeypoor, S., Ashktorab, T., Rassouli, M., & Alavi-Majd, H. (2016). Predicting the adoption of evidence-based practice using Rogers' diffusion of innovation model. *Contemporary nurse*, *52*(1), 85-94.
<http://dx.doi.org/10.1007/10.1080/10376178.2016.1188019>
- Rogers, E.M. (2010). *Diffusion of innovations* (4th ed.). New York, NY: Simon and Schuster.
- Wisdom, J., Chor, K., Hoagwood, K., & Horwitz, S. (2013). Innovation adoption: A review of theories and constructs. *Administration and Policy in Mental Health and Mental Health Services Research*, *41*(4), 480-502.
<http://dx.doi.org/10.1007/s10488-013-0486-4>