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How Situational Theory of Publics Might Help Design Better InfoSec Messaging

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TREO Talk Paper

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Abstract

One of the biggest threats to organizational data and systems is employee noncompliance with Information Security (InfoSec) policies. As the first line of defense against noncompliance, robust Security Education, Training and Awareness (SETA) programs must be properly designed, implemented, and assessed (Nieles et al., 2017). The awareness effort is the communication mechanism for the company's awareness messaging making its efficacy particularly important. Without awareness, the recipients of the messages simply don't know what they don't know (Hu et al., 2021). Noncompliance research to date has focused largely on fear appeals and protection motivation theory (PMT) (Rogers, 1975) as a way to persuade individuals to comply with policies with limited success (Johnston et al., 2019).

We propose that messages need to be carefully crafted to engage the target audiences, otherwise, it doesn't matter whether they are fear-based, informative, descriptive, or helpful. We propose to apply a new perspective, the situational theory of publics (STP) from the field of public relations, to improve the awareness piece of SETA programs. STP states that individuals process messages based on (1) whether the issue needs their attention, (2) the level of personal relevance of the issue, and (3) whether there are obstacles preventing them from addressing the issue (Grunig, 1997). With the support of STP, we companies ought to have better insight into crafting messaging to more successfully increase awareness and build frameworks to measure the efficacy of those messages. If an organization can use STP to craft better messages for its various internal publics, then it should see increased awareness and in the longer term, reduced noncompliance.

This project is at the research design stage. We plan to study the following research question: *How will designing an awareness program based on situational theory of publics increase awareness of InfoSec policies and ultimately reduce noncompliance?* For this TREO, we seek feedback on potential contexts in which to apply this theory in order to develop robust measures of messaging efficacy.

References

Grunig, J. E. (1997). A situational theory of publics: Conceptual history, recent challenges and new research. In D. Moss, T. MacManus, & D. Verčič (Eds.), *Public relations research: An international perspective* (pp. 3–48). International Thomson Business Press.

Hu, S., Hsu, C., & Zhou, Z. (2021). Security education, training, and awareness programs: Literature review. *Journal of Computer Information Systems*, 1–13.

Johnston, A. C., Warkentin, M., Dennis, A. R., & Siponen, M. (2019). Speak their language: Designing effective messages to improve employees' information security decision making. *Decision Sciences*, *50*(2), 245–284.

Nieles, M., Dempsey, K., & Pillitteri, V. (2017). *An Introduction to Information Security* (NIST Special Publication (SP) 800-12 Rev. 1). National Institute of Standards and Technology. https://doi.org/10.6028/NIST.SP.800-12r1

Rogers, R. W. (1975). A protection motivation theory of fear appeals and attitude change. *The Journal of Psychology*, *91*, 93–114.