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#### **Recommended Citation**

Kim, Dongyeob; Moon, Junwon; Park, Soomin; Zhao, Yu; and Kwak, Dong-Heon, "Curvilinear Effect of Task Cohesion on Self-Determination During Team-Based Gamified Training" (2023). *AMCIS 2023 TREOs*. 113. https://aisel.aisnet.org/treos\_amcis2023/113

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# Curvilinear Effect of Task Cohesion on Self-Determination During Team-Based Gamified Training

TREO Talk Paper

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## Abstract

Gamification, i.e., the use of game elements in non-game contexts, has become an increasingly popular way to increase organizational benefits (e.g., productivity) and facilitate individuals' good behavior (e.g., physical activity). In the context of IT training, gamification has been shown to be a powerful way to improve the effectiveness of training for business systems such as enterprise resource planning (ERP) (Kwak et al., 2019). Despite the tremendous benefits attributed to them, ERP systems are highly complex to implement and use successfully. Thus, inadequate employee training can prevent the realization of its benefits. In response to the need to train employees and students to be effective ERP users, firms and academics have used ERP simulation games (ERPsim), i.e., team-based gamified systems designed to offer learners handson experience with implementing and using ERP systems. It is therefore of interest for researchers and educators alike to understand how ERPsim can motivate users to spend additional efforts in learning about the systems. Much gamification research has focused on the effects of game elements (e.g., points, badges, and leaderboards) on user perceptions and behavior (Liu, Santhanam, & Webster, 2017). Moreover, prior research on gamified training examined how gamification can improve users' learning outcomes (e.g., knowledge and performance) (Zhao, Srite, Kim, & Lee, 2021). Despite these earlier insights, we remain less certain about the roles team task cohesion plays in regulating self-determination during gamified training. We thereby propose that team task cohesion can enhance intention to learn about ERP systems by increasing an individual's self-determination (i.e., autonomy, competence, and relatedness). Specifically, we hypothesize that while its effect on relatedness will be linear, self-determination will have curvilinear effects on autonomy and competence. To test our model by conducting a laboratory experiment on students who register for an ERP class and assigned to a team of 3 to 4. The results are expected to contribute to research on gamification and improving the effectiveness of team-based learning.

### References

Kwak, D.-H., Ma, X., Polites, G., Srite, M., Hightower, R., & Haseman, W. (2019). Cross-level moderation of team cohesion in individuals' utilitarian and hedonic information Processing: Evidence in the context of team-based gamified training. *Journal of the Association for Information Systems* (20:2), pp. 161-185.

Liu, D., Santhanam, R., & Webster, J. (2017). Toward meaningful engagement: a framework for design and research of gamified information systems. *MIS Quarterly* (41:4), pp. 1011-1034.

Zhao, Y., Srite, M., Kim, S., & Lee, J. (2021). Effect of team cohesion on flow: An empirical study of teambased gamification for enterprise resource planning systems in online classes. *Decision Sciences Journal of Innovative Education* (19:3), pp. 173-184.