

Higher Education Students' Learning Preferences in a Hybrid Course and its Relationship to Self-Determination Theory (Poster)

Amit Shlomo **Rinat B. Rosenberg-Kima**
Technion – Israel Institute of Technology Technion – Israel Institute of
Technology Technology
info@amitphysics.com rinatros@technion.ac.il

העדפות הלמידה של סטודנטים בהשכלה הגבוהה בקורס היברידי והקשרה לתיאוריית ההכוונה העצמית (פוסטר)

עמית שלמה **רינת ב' רוזנברג-קימה**
הטכניון – מכון טכנולוגי לישראל הטכניון – מכון טכנולוגי לישראל
info@amitphysics.com rinatros@technion.ac.il

Abstract

Since the beginning of Covid-19, we have lived in a revolutionary time where technology has become necessary in all fields, including education. As a result, many students across the globe had to experience an online learning environment. Research shows that students' motivation is a critical factor in engagement in online learning (Mahande & Akram, 2021) as can be seen in increased erosion throughout the term (Esra & Sevilen, 2021). Self-Determination Theory (SDT) regard the conditions that can affect an individual to be curious and self-motivated in daily life (Ryan & Deci, 2000). SDT points to three basic psychological needs, which are not dependent on culture: autonomy, competence, and relatedness (Ryan & Deci, 2019). SDT may provide a theoretical platform for understanding students' learning preferences. This research aims to shed light on students' learning preferences post-COVID-19, and find the relationship between their preferences to self-determination theory. One hundred thirty-four undergraduate university students attended a hybrid course consisting of three common strategies provided simultaneously: synchronous face-to-face lessons, synchronous online lessons (via Zoom), and asynchronous online lessons (lesson recordings). All the courses are reinforcement courses (i.e., there is extra tuition to attain the course) held beyond formal university lessons. Quantitative and qualitative measurements were used to determine students' attendance and preferences. At the beginning of the course, students answered demographic questionnaire. At the end of the course, questionnaires were delivered to students, including (a) learning attendance modality by each lesson (F2F/Zoom/lessons' recordings) and (b) open-ended questions regarding their reasons for their attendance choice, e.g., "what were the reasons for attending via

*Proceedings of the 18th Chais Conference for the Study of Innovation and Learning Technologies:
Learning in the Digital Era*

D. Olenik-Shemesh, I. Blau, N. Geri, A. Caspi, Y. Sidi, Y. Eshet-Alkalai, Y. Kalman, E. Rabin (Eds.),
Ra'anana, Israel: The Open University of Israel

F2F/zoom/lesson-recordings?". Thematic analysis was conducted on students' answers. The results reveal that most students preferred to arrive face-to-face at the beginning of the course, but there was a shift to online modalities and an inconsistency in students' attendance throughout the course. Students' initial preference for learning F2F is consistent with other pre-COVID-19 studies (e.g., Barak et al., 2016; Jaggars, 2014). Nevertheless, their pre-learning preferences are not entirely met with their actual attendance, which shifted to online learning modalities, and inconsistencies of one learning modality choice. Overall, six main categories were found through all benefits and pitfalls: Attention, self-discipline, learning efficiency, social support, time/space flexibility, and health. Self-Determination Theory (SDT) was linked to the categories retroactively (inductive). Attention, self-discipline, and learning efficiency can be linked to competence; self-support to relatedness; time/space flexibility and health to autonomy.

Keywords: Hybrid Learning, Self-Determination Theory, Online Learning, Learning Preference, Higher Education.

References

- Barak, M., Hussein-Farraj, R., & Dori, Y. J. (2016). On-campus or online: Examining self-regulation and cognitive transfer skills in different learning settings. *International Journal of Educational Technology in Higher Education*, 13(1), 1–18.
- Boulton, C. A., Hughes, E., Kent, C., Smith, J. R., & Williams, H. T. (2019). Student engagement and wellbeing over time at a higher education institution. *Plos One*, 14(11), e0225770.
- Esra, M., & Sevilen, Ç. (2021). Factors influencing EFL students' motivation in online learning: A qualitative case study. *Journal of Educational Technology and Online Learning*, 4(1), 11–22.
- Jaggars, S. S. (2014). Choosing between online and face-to-face courses: Community college student voices. *American Journal of Distance Education*, 28(1), 27–38.
- Mahande, R. D., & Akram, A. (2021). Motivational factors underlying the use of online learning system in higher education: An analysis of measurement model. *Turkish Online Journal of Distance Education*, 22(1), 89–105.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68.
- Ryan, R. M., & Deci, E. L. (2019). Brick by brick: The origins, development, and future of self-determination theory. In *Advances in motivation science* (Vol. 6, pp. 111–156). Elsevier.
- Standage, M., & Ryan, R. M. (2020). Self-determination theory in sport and exercise. *Handbook of Sport Psychology*, 37–56.