Belonging, Relatedness, Connection, or Social Presence? Theoretical Constructs of Human Connection in Online Learning

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Abstract

While post-secondary institutions increasingly make online and hybrid offerings available to learners, special care must be taken to foster human and social connection. In this conceptual paper we compare four key constructs of human connection: (a) relatedness (Ryan & Deci, 2000), (b) sense of belonging (Goodenow, 1993), (c) social presence (Garrison et al., 1999), and (d) sense of connectedness (Lee & Robbins, 1995). By examining constructs, we aim to uncover similarities and differences as well as considerations regarding their varying contributions to the support of online learning experiences.

Keywords: relatedness, sense of belonging, connectedness, social presence, online learning

Introduction

During the COVID-19 global pandemic, the prevalence of online learning rapidly accelerated as universities were forced to adopt digital learning tools and approaches at an unprecedented rate (Rahman et al., 2021). Today, online learning continues to be an essential part of post-secondary education. While online learning has several benefits regarding access and flexibility, high-quality online learning requires supporting social connection and guarding against feelings of isolation which can occur in learners without careful attention to course or program design (Rahman et al., 2021; Singh et al., 2020; Thompson et al., 2021). Research from varying perspectives supports the idea that feeling connected plays an essential role in motivation (Capon-Sieber et al., 2022; Reeve, 2018; Ryan & Deci, 2020; Zhou et al., 2021; Zumbrunn et al., 2014) and performance (Fong Lam et al., 2015; Niemiec & Ryan, 2009; Rahman et al., 2021; Yang et al., 2021) as well as engagement and persistence (Chiu, 2022; Hausmann et al., 2007; Holzer et al., 2021; Ng, 2019; Peacock & Cowan, 2019). Although these constructs are related, we suggest they can each contribute uniquely to our understanding of how online learning can be best designed to support human connection. As such, the purpose of this session is to compare four constructs related to feeling connected in an online learning context: (a) relatedness (Ryan & Deci, 2000), (b) sense of belonging (Goodenow, 1993), (c) social presence (Garrison et al., 1999), and (d) social connectedness (Lee & Robbins, 1995). Specifically, we review the definition of each construct and their root and domain theory. Finally, we conclude with considerations regarding the contributions of these constructs to understanding and supporting the experiences of online learners. Exploring constructs of human connection

Exploring Constructs of Human Connection

Relatedness

From the perspective of Self-Determination Theory (SDT), relatedness is one of the three basic needs, alongside autonomy and competency, facilitating well-being and motivation (Ryan & Deci, 2000, 2020). Specifically, relatedness refers to the need to be connected and accepted by significant others in a specific context and the need to establish close emotional bonds and attachments with other people. From this perspective, relatedness emphasizes the desire to be involved in warm relationships and connected. While few studies have empirically examined relatedness in online learning alone, it appears to play an important role in self-determination.

Sense of Belonging

Sense of belonging is rooted in Goodenow's work (1993), where it refers to a sense of being accepted, valued, included and encouraged by others, a sense of feeling as an important part of the life and activity of the context. This perspective of belonging draws on Maslow's psychological hierarchy, in which support plays an important role. Moreover, a sense of belonging is also often defined in work by Baumeister and Leary (1995) as the pervasive human drive to form and maintain at least a minimum quantity of lasting, positive, and significant interpersonal relationships. As a result of this drive, humans have a need for frequent, affectively pleasant interactions with a few other people and these interactions must take place in the context of a temporally stable and enduring framework of affective concern for each other's welfare.

Social Connectedness

Based on Kohut's (1984) belongingness in self-psychology theory, Lee and Robbins (1995) defined social connectedness as one factor with key importance for belongingness. From this perspective, social connectedness refers to one's opinion of self in relation to other people and focuses on the emotional distance or connectedness between the self and other people. For example, scale items that tap into social connectedness include "I don't feel I participate with anyone or any group" and "I catch myself losing all sense of connectedness with society." This construct is closely aligned with the feelings of security and being part of a group.

Social Presence

From a community of inquiry (COI) lens, social presence refers to the ability of participants in a learning community to present themselves to the other participants as 'real people' (i.e., their full personality; Garrison et al., 1999). Specifically, from COI perspective, social presence contributes to the creation of deep and meaningful learning experiences alongside and in interaction cognitive presence and teaching presence.

Considerations for Research and Practice

Although there are distinct differences in the above constructs, an overarching theme is interpersonal communications and connections as perceived by learners themselves. A second commonality is the positive impact each is reported to have on learning, such as experiencing higher levels of inclusion (DiGiacomo et al., 2023), positive emotions (Fong Lam et al., 2015), motivation (Capon-Sieber et al., 2022; Reeve, 2018; Ryan & Deci, 2020; Zhou et al., 2021; Zumbrunn et al., 2014), performance (Fong Lam et al., 2015; Niemiec & Ryan, 2009; Rahman et al., 2021; Yang et al., 2021), and higher engagement and persistence (Chiu, 2022; Hausmann et al., 2007; Holzer et al., 2021; Ng, 2019; Peacock & Cowan, 2019). On the other hand, these constructs are also commonly linked with lower stress and fewer challenges (Utvær et al., 2021).

Although there are many similarities amongst these constructs, they differ in their emphasis. For example, while sense of belonging focuses on creating a supportive and inclusive environment, relatedness from a SDT perspective emphasizes meaningful relationships and autonomy more than other elements. Similarly, while social connectedness highlights peer interactions and social activities, social presence provides more emphasis on real-time interactions and multimedia engagement.

Notable research— when it comes to learning—of each of these constructs provides similar recommendations in practice. For example, these recommendations include intentionally fostering peer and learner-instructor interaction and participation; establishing a welcoming and supporting environment; making students feel valued, respected, and included; promoting channels of communication; facilitating personal connections; and providing timely and personalized feedback.

Conclusions

The constructs discussed in this session, relatedness, connectedness, sense of belonging, and social presence, have many similarities, but also differ in their emphasis. As such, we suggest that research examining ways to support human connection in online learning should draw

across these multiple emerging lines of research. From our view, each provides invaluable insight into the design of online environments where students feel they belong.

Author's Contributions

BK: lead the conceptualization of the paper and presentation.
MM: contributed to conceptualization and preparation of proceeding paper and presentation.
VI: contributed to conceptualization of the paper and presentation.

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Ethics Statement

Ethical approval is not applicable because the study involves reflection on practice.

Conflict of Interest

The authors do not declare any conflict of interest.

References

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as fundamental human motivation. *Psychological Bulletin*, *117*(3), 497–529. https://doi.org/10.1037/0033-2909.117.3.497

Capon-Sieber, V., Köhler, C., Alp Christ, A., Helbling, J., & Praetorius, A. K. (2022). The role of relatedness in the motivation and vitality of university students in online classes during social distancing. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.702323

Chiu, T. K. F. (2022). Applying the self-determination theory (SDT) to explain student engagement in online learning during the COVID-19 pandemic. *Journal of Research on Technology in Education*, *54*(sup1), S14–S30. https://doi.org/10.1080/15391523.2021.1891998

DiGiacomo, D. K., Usher, E. L., Han, J., Abney, J. M., Cole, A. E., & Patterson, J. T. (2023). The benefits of belonging: Students' perceptions of their online learning experiences. *Distance Education*, *44*(1), 24–39. https://doi.org/10.1080/01587919.2022.2155615

Fong Lam, U., Chen, W.-W., Zhang, J., & Liang, T. (2015). It feels good to learn where I belong: School belonging, academic emotions, and academic achievement in adolescents. *School Psychology International*, *36*(4), 393–409. https://doi.org/10.1177/0143034315589649

Garrison, D. R., Anderson, T., & Archer, W. (1999). Critical Inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, *2*(2), 87–105. https://doi.org/10.1016/S1096-7516(00)00016-6

Goodenow, C. (1993). Classroom belonging among early adolescent students: Relationships to motivation and achievement. *The Journal of Early Adolescence*, *13*(1), 21–43. https://doi.org/10.1177/0272431693013001002

Hausmann, L. R. M., Schofield, J. W., & Woods, R. L. (2007). Sense of belonging as a predictor

of intentions to persist among African American and White first-year college students. *Research in Higher Education*, *48*(7), 803–839. https://doi.org/10.1007/s11162-007-9052-9

Holzer, J., Korlat, S., Haider, C., Mayerhofer, M., Pelikan, E., Schober, B., Spiel, C., Toumazi, T., Salmela-Aro, K., Käser, U., Schultze-Krumbholz, A., Wachs, S., Dabas, M., Verma, S., Iliev, D., Andonovska-Trajkovska, D., Plichta, P., Pyżalski, J., Walter, N., … Lüftenegger, M. (2021). Adolescent well-being and learning in times of COVID-19—A multi-country study of basic psychological need satisfaction, learning behavior, and the mediating roles of positive emotion and intrinsic motivation. *PLOS ONE*, *16*(5), e0251352. https://doi.org/10.1371/journal.pone.0251352

Kohut, H. (1984). *How does analysis cure?* University of Chicago Press. https://doi.org/10.7208/chicago/9780226006147.001.0001

Lee, R. M., & Robbins, S. B. (1995). Measuring belongingness: The social connectedness and the social assurance scales. *Journal of Counseling Psychology*, *42*(2), 232–241. https://doi.org/10.1037/0022-0167.42.2.232

Ng, C. (2019). Shifting the focus from motivated learners to motivating distributed environments: A review of 40 years of published motivation research in *Distance Education*. *Distance Education*, *40*(4), 469–496. https://doi.org/10.1080/01587919.2019.1681892

Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and Research in Education*, *7*(2), 133–144. https://doi.org/10.1177/1477878509104318

Peacock, S., & Cowan, J. (2019). Promoting sense of belonging in online learning communities of inquiry in accredited courses. *Online Learning*, *23*(2), 67–81. https://olj.onlinelearningconsortium.org/index.php/olj/article/view/1488

Rahman, Md. H. A., Uddin, M. S., & Dey, A. (2021). Investigating the mediating role of online learning motivation in the COVID-19 pandemic situation in Bangladesh. *Journal of Computer Assisted Learning*, *37*(6), 1513–1527. https://doi.org/10.1111/jcal.12535

Reeve, J. (2018). Understanding motivation and emotion (7th ed.). Wiley. https://www.wiley.com/en-us/Understanding+Motivation+and+Emotion%2C+7th+Edition-p-9781119367604

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, *25*(1), 54–67. https://doi.org/10.1006/ceps.1999.1020

Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, *61*, 101860. https://doi.org/10.1016/j.cedpsych.2020.101860

Singh, S., Roy, D., Sinha, K., Parveen, S., Sharma, G., & Joshi, G. (2020). Impact of COVID-19 and lockdown on mental health of children and adolescents: A narrative review with recommendations. *Psychiatry Research*, 293, 113429. https://doi.org/10.1016/j.psychres.2020.113429

Thompson, J., Fraser, S., Archambault, I., Beauregard, N., Dupéré, V., & Frohlich, K. (2021). Schooling, interrupted: A critical account of motivation and education during the first wave of the COVID-19 pandemic in Quebec. *Journal of Teaching and Learning*, *15*(2), Article 2. https://doi.org/10.22329/jtl.v15i2.6722

Utvær, B. K., Paulsby, T. E., Torbergsen, H., & Haugan, G. (2021). Learning nursing during the COVID-19 pandemic: The importance of perceived relatedness with teachers and sense of coherence. *Journal of Nursing Education and Practice*, 11(10), 9–18. https://doi.org/10.5430/jnep.v11n10p9

Yang, J., Peng, M. Y.-P., Wong, S., & Chong, W. (2021). How E-Learning environmental stimuli influence determinates of learning engagement in the context of COVID-19? SOR Model Perspective. *Frontiers in Psychology*, *12*. https://www.frontiersin.org/articles/10.3389/fpsyg.2021.584976

Zhou, X., Chai, C. S., Jong, M. S.-Y., & Xiong, X. B. (2021). Does relatedness matter for online self-regulated learning to promote perceived learning gains and satisfaction? *The Asia-Pacific Education Researcher*, *30*(3), 205–215. https://doi.org/10.1007/s40299-021-00579-5

Zumbrunn, S., McKim, C., Buhs, E., & Hawley, L. R. (2014). Support, belonging, motivation, and engagement in the college classroom: A mixed method study. *Instructional Science*, *42*(5), 661–684. https://doi.org/10.1007/s11251-014-9310-0