

LEARNING DISENGAGEMENT DETERMINANTS AND SOME PEDAGOGICAL PROBLEMS IN ONLINE LEARNING

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Abstract

Learning disengagement or what is also called *ghosting* or off-task activities is a situation where students are behaviorally, cognitively, emotionally, and socially not in learning conditions and activities. The learning disengagement phenomenon is one of the main problems in online learning. It can cause learning to be lost and learning objectives not to be achieved if this is not managed properly and appropriately. Therefore, it is important to find out whether students are engaged or not, and what are the determinant factors that cause this to happen. Recent studies have identified research on student disengagement in online learning as lacking, and thus it is critical to further understand why this is happening. This study uses a systematic literature review of the number of research in scientific journals on the conceptualization of learning disengagement in academic studies; learning disengagement phenomena (behavioral, cognitive, emotional, and social) in online learning; factors determining the occurrence of learning disengagement; levels (macro and micro) of learning disengagement; and several important issues in online learning pedagogy that cause learning disengagement to occur. Recommendations for further research and study contributions to the need for innovative online learning theories that involve students more active and participative are also discussed.

Keywords: Ghosting, learning disengagement, pedagogical problems, online learning.

1 INTRODUCTION

Learning disengagement or ghosting is an implicit term in theories of relationships (Freedman et al., 2019), and is commonly used in modern dating and social interactions to describe the act of suddenly cutting off all communication with someone, without any explanation or closure. Ghosting is one relatively prominent method or an unacceptable strategy for dissolving or terminating relationships where a person ends all communication and interaction with the other person, ignoring attempts to reestablish the interaction (Baxter, 1982; Collins, T. J., & Gillath, 2012; Freedman et al., 2022; Halpern-Meehin et al., 2013; Powell et al., 2021; Timmermans et al., 2021).

In the study of learning, ghosting commonly called learning disengagement or off-task activities is a behavioral, cognitive, emotional, and social phenomenon in learning conditions and activities (Bergdahl, 2022; Fredricks et al., 2004; Freedman et al., 2022; M. Te Wang & Fredricks, 2014). Learning disengagement in the context of online learning refers to a situation where students or participants suddenly disengage or withdraw from a course, program, or learning process without any prior notice or communication to the instructor or institution. Learning disengagement phenomena in learning activities are closely related to passivity, absenteeism, school dropout, and social problems (Bergdahl, 2022; Cakitaki et al., 2021; Wang & Fredricks, 2014).

Research on learning disengagement phenomena in online learning is an interesting and relevant area of study, especially considering the increasing prevalence of online education platforms and the unique social dynamics they create. However, learning disengagement is one of the main problems in online learning and can cause learning to be lost and learning objectives not to be achieved if this is not managed properly and appropriately (Koessler, R.B., Kohut, T., & Campbell, 2019). Therefore, it is important to find out whether students are engaged or not, and what are the determinant factors that cause this to happen. On one hand, recent studies have identified research on student disengagement in online learning as lacking, and thus it is critical to further understand why this is happening (Bergdahl, 2022; Hollister et al., 2022; Prakasha et al., 2023). On the other hand, the study of learning disengagement is critical for online learning can be reflected in several reviews conducted during recent decades and have been used to make solutions to prevent ghost students in online learning (e.g., Hollis, 2018; Kismiati et al., 2022; Le et al., 2017; Navarro et al., 2021; Rusnilawarni & Dwiyantri, 2021; Timmermans et al., 2021).

The study uses a Systematic Literature Review (SLR) of the number of research in scientific journals on learning disengagement in online learning and aimed to examine the dimensions of learning disengagement in online learning; learning disengagement determinants; learning disengagement levels; and several important issues in online learning pedagogy that cause learning disengagement to occur.

2 METHODOLOGY

The study uses a Systematic Literature Review (SLR) is a comprehensive and rigorous method used in research to identify, evaluate, and synthesize all relevant studies on a particular topic of learning disengagement in online learning (Booth et al., 2016; Chiang, F-K., Zhu, D., & Yu,

2022; Popay, J., Roberts, H., Sowden, A., 2006; Snyder, 2019). The review is based on various articles on learning disengagement in online learning published in scientific journals. The guidelines of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement and procedure were used for the selection criteria of articles (Chiang, F-K., Zhu, D., & Yu, 2022; Page et al., 2021; Sing Yun, 2023). After the exclusion criteria were employed, 51 eligible articles were selected and then analyzed in a descriptive overview. All articles focus on learning disengagement phenomena; learning disengagement determinants; levels of learning disengagement; and important pedagogy issues of learning disengagement in online learning.

The following are the guidelines of the PRISMA: (1) identifying all studies on learning disengagement through indexed publisher databases or other sources; (2) screening all studies for the results of identification; (3) assessing full-text articles for eligibility; (4) analyzing the content of all eligible full-text articles; (5) synthesizing the data; (6) conducting interpretation and discussion; and (7) formulating conclusion (Chiang, F-K., Zhu, D., & Yu, 2022; Page et al., 2021).

3 FINDINGS AND DISCUSSION

3.1 Dimensions of Learning Disengagement

The term learning engagement or off-task activities is borrowed from the dating context, where one person abruptly ends all communication with another without any explanation. Similarly, in the online learning context, learning disengagement involves individuals suddenly becoming inactive, unresponsive, or discontinuing their participation without providing any clear reasons or notice.

Although learning disengagement is relatively diverse in its definitions and coverage, researchers have reached a consensus that the construct of learning disengagement in online learning is multidimensional and encompasses different aspects, that is a behavioral, cognitive, emotional, and social phenomenon in learning conditions and activities (Alrashidi et al., 2016; Bergdahl, 2022; Chapman, 2003; Edy et al., 2019; Fredricks et al., 2004; Freedman et al., 2022; Mandernach, 2015; M. Te Wang & Fredricks, 2014), and reflecting the students' negative approach to learning like passivity, absenteeism, school dropout, social problems (Bergdahl, 2022; Cakitaki et al., 2021; Wang & Fredricks, 2014). This is different from engagement or on-task activities which are always closely related to the students' positive approach to learning (Appleton et al., 2008; Carter et al., 2012; Fredricks et al., 2004)

The following are the behavioral, cognitive, emotional, and social dimensions of learning disengagement in online learning (Table 1).

Table 1. Dimensions of **Learning disengagement** in Online Learning

Dimension	Authors
Behavioral	(Steenberghs et al., 2021) Freedman et al., 2019, 2022; Koessler, R.B., Kohut, T., & Campbell, 2019; Navarro et al., 2020; Navarro, Larrañaga, Yubero, & Villora, 2021; Powell et al., 2021; Sukmana, O., Astutik, J., Abidin, Z., & Widodo, 2021)
Cognitive	(Carlson et al., 2018; Kew & Tasir, 2021; Samuels-Peretz, 2014; Schnitzler et al., 2021; Zhu, 2006)
Emotional	(Freedman et al., 2019, 2022; Leckfor et al., 2023; Navarro et al., 2020; Powell et al., 2021; Schnitzler et al., 2021; Wood et al., 2023)
Social	(Azura, 2022; Navarro, Larrañaga, Yubero, & Villora, 2021; Nicol et al., 2003; Sukmana, O., Astutik, J., Abidin, Z., & Widodo, 2021)

Behavioral learning disengagement in the context of online learning refers to a situation where students or participants suddenly or unexpectedly disengage from the course or online activities, effectively becoming "ghosts" by not actively participating or interacting as expected. This could involve: (1) *non-participation*, in which some learners might stop attending classes, submitting assignments, or engaging in online discussions; (2) *abandonment of courses*, in which students may drop out of courses without formally withdrawing or completing the necessary steps; (3) *disappearing from group work*, in which learners might leave group projects or collaborations without communicating their departure to the team.

Cognitive learning disengagement in the context of online learning refers to a situation where a student or participant in an online learning environment abruptly disengages from the learning process without any clear reason or explanation. This could involve: (1) *lack of concentration*, in which students may lose focus during virtual classes, leading to reduced attention and understanding of the material, or not actively participating in discussions, assignments, or other learning activities; (2) *avoidance of difficult tasks*, in which learners might avoid challenging assignments or assessments, leading to incomplete learning experiences; (3) *failure to review material*, in which some individuals may neglect to review course materials, which hinders their comprehension and retention; (4) *lack of interaction*, in which students not engaging with instructors, peers, or the learning platform itself, leading to a sense of isolation; (5) *sporadic*

engagement, in which students sporadically engaging with the course content, leading to inconsistent learning progress; (6) *no progress tracking*, in which students not tracking their own learning progress or not making efforts to improve their understanding of the subject matter; and (7) *lack of communication*, in which students not communicating with instructors or fellow learners when facing challenges or difficulties.

Emotional learning disengagement in the context of online learning refers to a phenomenon where students or participants in an online course or educational setting disengage emotionally from the learning process, their peers, or the instructor. This can manifest as a lack of enthusiasm, motivation, or emotional investment in the learning experience. It's akin to the concept of learning disengagement in interpersonal relationships, where one person abruptly cuts off communication with another without explanation. This could involve: (1) *disengagement and apathy*, in which students might feel disinterested or dispassionate about the course, leading to reduced emotional investment in their learning; (2) *frustration and overwhelm*, in which online learning can be overwhelming, and learners might react by shutting down emotionally and disconnecting from the course.

Social learning disengagement in the context of online learning refers to the phenomenon where students or participants in an online learning environment engage minimally or not at all in social interactions or collaborative activities. It's similar to the concept of "learning disengagement" in social relationships, where one person suddenly stops responding or interacting with another without explanation. In traditional face-to-face classrooms, social interactions are often a natural part of the learning experience. Students can engage in discussions, group projects, peer reviews, and other collaborative activities that enhance their understanding of the subject matter and provide opportunities for meaningful social connections. However, in online learning environments, especially those that lack synchronous (real-time) interactions, students may feel a sense of isolation or detachment. They might choose not to actively participate in discussions, group activities, or virtual meetings.

Social learning disengagement could involve (1) *limited interaction*, in which learners might avoid engaging in online discussions or collaborative activities with their peers, resulting in reduced social interaction; (2) *Isolation and alienation*, in which some students may feel disconnected from the virtual learning community, leading to a sense of isolation; (3) *withdrawal from social support*, in which students might refrain from seeking help or support from instructors or classmates when facing challenges.

3.2 Dimensions of Learning Disengagement

Reasons for learning disengagement in online learning can have various causes and implications. Some common determinants or factors that contribute to learning disengagement in online learning include psychological and personal aspects (Table 2, Table 3).

Table 2. Psychological Determinants of Learning disengagement in Online Learning

Determinant s	Aspects	Authors
Psychology	<ul style="list-style-type: none"> • interest, needs, motivation, emotion, • avoidance of conflict • fear of facing rejection or negative reactions • personal accountability 	<p>(Ahmad, 2021; Alsaban, 2022; Freedman et al., 2022; Hollister et al., 2022; Kismiati et al., 2022; Koessler, R.B., Kohut, T., & Campbell, 2019; Leckfor et al., 2023; Navarro et al., 2020; Setiana et al., 2021; Ward & Wegner, 2013; Wood et al., 2023; Yuzulia, 2021).</p> <p>(Henra & Masliah, 2021; Stanworth, J.O., Yen, W-H., & Warden, 2022)</p> <p>(Ekler, T., & Tılfarlıoğlu, 2019; Ekler, 2020)</p> <p>(Forrai et al., 2023; Kismiati et al., 2022; Thomas & Dubar, 2021)</p>

As shown in Table 2, *psychological aspects* are the determinants of learning disengagement in online learning. These aspects include (1) lack of interest, needs, or motivation in pursuing a relationship or connection further; (2) avoidance of conflict when faced with uncomfortable or difficult conversations, so online learning more egalitarian and democratic learning conversations (Ozturk & Hodgson, 2017); (3) fear of facing rejection or negative reactions from the other person; (4) emotional unavailability to form or maintain deep emotional connections and protect themselves from vulnerability; and (5) lack of personal accountability that can lead to students not feeling as committed to completing assignments, participating in discussions, or attending virtual sessions.

Table 3. Other Aspects of Learning disengagement in Online Learning

Aspects	Authors
• communication and interaction skills	(Ahmad, 2021; Navarro, Larrañaga, Yubero, & Villora, 2021; Thomas & Dubar, 2021)
• time constrains	(Chiang, F-K., Zhu, D., & Yu, 2022; Forrai et al., 2023; Hollis, 2018; Kismiati et al., 2022; Rudolph et al., 2023; Timmermans et al., 2021)
• technical challenges	(Beruin, 2022; Ferri et al., 2020; Hollis, 2018; Hulick, 2020; Magesa & Josua, 2022; Ralston, 2021; Rudolph et al., 2023; Sing Yun, 2023; Timmermans et al., 2021; UNICEF, 2021)
• content, curriculum, learning activities, assessment	(Augusta & Henderson, 2021; Hollister et al., 2022; Kismiati et al., 2022; ul Haque, 2022; Hollis, 2018; Kismiati et al., 2022; Leckfor et al., 2023; Navarro et al., 2020; Navarro, Larrañaga, Yubero, & Villora, 2021; Rudolph et al., 2023; Thomas & Dubar, 2021; Timmermans et al., 2021; Zhu, 2006)
• communication or interaction intensity	(Anwar, K., & Adnan, 2020; Azmat & Ahmad, 2022; Beruin, 2022; Ferri et al., 2020; Forrai et al., 2023)
• personal challenges	(Kismiati et al., 2022; Timmermans et al., 2021; ul Haque, 2022)
• course design	(Hafeez et al., 2022; Hollis, 2018; Kismiati et al., 2022)

The other determinants of learning disengagement in online learning as shown in Table 3 includes: (1) lack of communication and interaction skills; (2) overwhelmed or time constraints and unable to dedicate sufficient time to the online course; (3) technical challenges due to internet connectivity issues, problems with the online platform, or lack of access to necessary devices; (4) perceived lack of value in relation with the course content or assessments do not align with their goals or provide real-world value; (5) isolation and lack of connection, especially if there's limited interaction between students and instructors or among students themselves; (6) personal challenges such as health issues, family emergencies, or other life events that make it difficult for them to continue participating actively in the online course; and (8) poorly designed course can make it difficult for students to engage with the content.

3.3 Levels of Learning Disengagement

Learning disengagement is a product of the learning situation and it can occur in three levels (macro, moderate, and micro). The levels of learning disengagement are influenced by some factors such as access to technology, support in using and understanding technology, usability, design, and technology choice (Cakir, 2013; Hollister et al., 2022; Sumuer, 2018); the level, extent, and duration of the communication, interaction or commitment of the relationship

(Dixon, 2010; Koessler, R.B., Kohut, T., & Campbell, 2019; Zhu, 2006); engagement strategies (Martin & Bolliger, 2018); learning design (Northey et al., 2018).

Micro or low-level learning disengagement or also called “*soft learning disengagement*” (LeFebvre et al., 2019; Sciortino, 2015) refers to someone 'liking' the last message or latest comment to the other students or participants on online learning platforms where it's possible to react to an interaction, but not replying and continuing the conversation. At this level, students or participants show temporary and less severe instances of communication breakdown (Abraham et al., 2011; Nghi & Khuong, 2014). It involves small periods of silence or delays in responding to messages. Students or participants may occasionally miss assignments, discussions, or virtual sessions. They might offer minimal participation or only engage when necessary. This level of learning disengagement might be due to challenges like time management issues, technical difficulties, or personal commitments (Navarro et al., 2020; Timmermans et al., 2021). For example, someone might take longer than usual to reply to texts or avoid initiating conversations for a brief period. While this behavior can be a sign of disinterest or preoccupation, it is not as extreme as complete learning disengagement and might not necessarily indicate the end of the relationship or communication.

Moderate-level learning disengagement. At this level, students or participants show a consistent pattern of disengagement. They frequently miss classes, fail to submit assignments, and rarely participate in discussions. They might not actively communicate their struggles or reasons for their absence. This level of learning disengagement could indicate a lack of motivation, a poor fit with the learning format, or external factors impacting their ability to engage (Chipchase et al., 2017; Hancock, K. J., & Zubrick, 2015; Schnitzler et al., 2021).

Macro or high-level learning disengagement. This is the most severe level of learning disengagement. At this level students or participants are in a “*mind-blanking*”, a situation when their mind goes away (Ward & Wegner, 2013). In this condition, students or participants suddenly disappear or stop all communication with another person for an extended period or indefinitely. They rarely or never attend classes, do not submit assignments, do not respond to messages, calls, or any form of contact, and/or avoid all forms of communication effectively cutting off all ties without any explanation. High-level learning disengagement might result from serious challenges such as overwhelming stress, health issues, or a complete loss of interest in the course. Macro or high-level learning disengagement can be emotionally

distressing for the person who is being ghosted, as they are left with unanswered questions and feelings of rejection (Hollis, 2018; Kismiati et al., 2022; March, 2022; Pfeiffer, 1975).

It is important to note that all levels of learning disengagement can have negative effects on the person who experiences it (Forrai et al., 2023; Navarro et al., 2020; Petric, 2022). While micro or soft-learning disengagement may be more forgivable and could be due to various reasons, macro or high-level learning disengagement is a clear and deliberate withdrawal of communication that is often considered more hurtful and disrespectful. In any relationship or communication, open and honest communication is crucial to maintain trust and respect between individuals.

3.4 Issues in Online Learning Pedagogy

Online learning pedagogy can also contribute to learning disengagement by failing to provide adequate support and engagement opportunities for students (Anderson & Dron, 2011; Prasad et al., 2019; Rudolph et al., 2023; Savvidou, 2010). In general, there are three generations of distance pedagogy, that defines the learning experiences encapsulated in the learning design, that are cognitive-behaviorist, social-constructivist, and connectivist pedagogy (Anderson & Dron, 2011). The three generations are related to aspects of pedagogy, technology, and institution (Aoki, 2012); teaching, cognitive, and social presence (Akyol et al., 2009; Anderson & Dron, 2011; Arbaugh, 2008; Garrison, D.R., Erson, T. & Archer, 2003; Garrison, 2009).

To mitigate learning disengagement in online learning, instructors can create a supportive and engaging learning environment by providing clear expectations, personalized feedback, and opportunities for collaboration and interaction among students. Instructors can also leverage technology, such as video conferencing and discussion forums, to create a sense of community and facilitate communication. Additionally, instructors can work with students to identify and address any personal or technological barriers to participation and success in the course. Institutions and instructors also must actively work on enhancing engagement, communication, personalization, technical support, and flexibility. Creating a positive and inclusive learning environment can encourage students to remain committed and invested in their online education.

The following are some pedagogical issues related to the learning disengagement phenomenon in online learning.

Lack of engagement strategies. Online courses that lack interactive elements, such as live sessions, discussions, group activities, or multimedia content, may fail to keep students

engaged. When students feel disconnected from the learning process, they are more likely to lose interest and eventually ghost the course (Dailey-Hebert, 2021; Hollister et al., 2022; Martin & Bolliger, 2018; Q. Wang et al., 2023; M. Te Wang & Fredricks, 2014).

Ineffective communication. Poor communication between instructors and students can lead to misunderstandings, confusion, and feelings of isolation. When students don't receive timely feedback or struggle to reach their instructors for assistance, they may become disheartened and drop out without notifying anyone (Alawamleh et al., 2022; Falloon, 2011).

Overwhelming workload. Online courses may sometimes have an overwhelming workload, making it difficult for students to manage their time effectively. If they feel too stressed or unable to keep up with the demands of the course, they might opt to disappear instead of communicating their challenges (Barrot et al., 2021; Hollister et al., 2022).

Lack of personalization. One-size-fits-all approaches to online learning might not cater to individual learning preferences and needs. When students don't feel that the course content aligns with their interests or goals, they may lose motivation and ghost the course (Bhutoria, 2022; Jenna Gillett-Swan, 2017).

Technical issues: Technical difficulties and challenges with the online learning platform can be frustrating for students. If they face persistent issues with accessing course materials, submitting assignments, or participating in discussions, they might give up on the course altogether (Beruin, 2022; Ferri et al., 2020; Hollis, 2018; Hulick, 2020; Magesa & Josua, 2022; Ralston, 2021; Rudolph et al., 2023; Sing Yun, 2023; Timmermans et al., 2021; UNICEF, 2021).

Limited social interaction. Online learning can lack the sense of community and social interaction that traditional classroom settings offer. Students might feel isolated and disconnected, leading them to withdraw from the course without any explanation (Azmat & Ahmad, 2022; Ivanec, 2022; Jenna Gillett-Swan, 2017; Tinmaz et al., 2022).

Lack of clear goals and expectations. When students are uncertain about the objectives and expectations of the course, they may become demotivated. Clear communication about course goals and expectations can help students stay focused and engaged (Amerstorfer & Freiin von Münster-Kistner, 2021; Meşe & Sevilen, 2021; Susilo et al., 2014).

Absence of timely support. Instructors and support staff must be readily available to address students' queries and concerns. If students don't receive timely assistance when they encounter difficulties, they might feel neglected and discontinue their studies without notice (Chiang, F-

K., Zhu, D., & Yu, 2022; Forrai et al., 2023; Hollis, 2018; Kismiati et al., 2022; Rotar, 2022; Rudolph et al., 2023; Timmermans et al., 2021).

Limited flexibility. Online courses should ideally offer flexibility to accommodate students' diverse schedules and learning styles. If courses are rigid and don't provide enough flexibility, some students may find it challenging to continue their studies (Barrot et al., 2021; Gilbert, 2015; Lodge et al., 2018; Selvaraj et al., 2021).

4 CONCLUSION

It's important to note that while learning disengagement is a challenge in online learning, it's not always indicative of a lack of interest or commitment. Learning disengagement also can be hurtful and harm the person being ghosted. Many factors can contribute to a student's level of engagement and addressing these factors through proactive and supportive measures can help reduce learning disengagement and improve overall student success in online learning environments. Open and honest communication is essential in any relationship or interaction, and choosing to ghost someone can leave the other person feeling confused, rejected, and disrespected. While it may be difficult, it's generally better to communicate honestly and directly if you no longer wish to pursue a relationship or connection with someone.

To address these pedagogical issues, institutions and educators can consider implementing strategies such as clear communication channels, regular check-ins, engaging course design, personalized feedback, proactive outreach to disengaged students, and providing additional support for struggling learners. By addressing learning disengagement and its associated challenges, online education can become more effective, engaging, and supportive for all stakeholders involved.

As online learning continues to evolve, understanding and addressing learning disengagement phenomena can contribute to the development of more effective and engaging online educational experiences. Researchers can collaborate with educators, instructional designers, and technology developers to create evidence-based solutions that enhance student engagement and success in online learning environments.

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