Chapter 5
The Role of Self–Regulation in Experiences of Digital Distraction in College Classrooms

Daniel B. le Roux
Stellenbosch University, South Africa

Douglas A. Parry
Stellenbosch University, South Africa

ABSTRACT

The chapter investigates digital distraction in college classrooms from the perspective of self-regulation theory. To this end, the chapter commences with a brief analysis of the distinction between behavioural and cognitive shifts in attention, the role of intentionality in digital distraction, and the concept of online vigilance. Thereafter the general premises of self-regulation theory are described, and prominent theoretical models that have emerged in this domain are briefly outlined. Two models deemed particularly applicable to digital distraction are selected from these. The first is the value-based choice model which frames self-regulation as a process of deliberative decision-making which foregoes action taking. The second is the process model which emphasises the strategies individuals employ to prevent goal conflict. Both models are described before being applied as interpretive lenses to analyse key findings from empirical studies of digital distraction.

INTRODUCTION

A rapidly expanding body of research provides evidence for the prevalence of digital distraction in college classrooms and the impacts that this can have on academic performance (Flanigan & Titsworth, 2020; Kuznekoff et al., 2015; Ravizza et al., 2014). The high levels of smartphone ownership among students (le Roux et al., 2021) and the ubiquity of wireless internet access on university campuses create an en-

vironment characterised by permanent online connectedness. For instructors, the challenge of keeping students engaged in academic material for the duration of their lectures is perceived as a "never-ending battle" (Aagaard, 2015) against the allures offered by an ever-expanding range of online media platforms.

Despite the prevalence of digital distraction in college classrooms, studies have indicated that some students are able to manage this challenge effectively and keep their attention focused on academic material during lectures (le Roux & Parry, 2021; Ragan et al., 2014; Ravizza et al., 2017). While teaching style and the nature of the material presented play important roles in student engagement (Flanigan & Babchuk, 2020; Parry et al., 2020b), students' goals, abilities, and approaches to academic work are also central to their attention management efforts in the classroom. One line of investigation which has received attention from scholars in this domain concerns the notion of *self-regulation* — the processes involved in striving towards a desired goal by monitoring thoughts and behaviour and, if these are incongruent with the goal, taking actions to support alignment (Inzlicht et al., 2020). Students' abilities to effectively manage digital distraction, accordingly, have been framed as resulting from their successful self-regulation of the urge to engage in media use activities when they should be concentrating on their academic work.

While this is an emerging line of enquiry which has only been investigated in a small collection of studies, the present chapter aims to integrate their findings by systematically exploring the dynamics which underlie media use self-regulation among college students. To achieve this aim three theoretical perspectives are adopted, each of which provides an important and unique vantage point from which the antecedents, processes and effects of digital distraction can be examined. The first perspective, *online vigilance*, addresses the way the current generation of students experience a high level of psychological connectedness to their online spheres even when they are not engaging with digital media. The second perspective—the *value-based choice model of self-control*—provides insight into the manner in which students weigh various factors before they decide to engage with online media in academic settings like classes or study sessions. Finally, the *process model of self-control* is used to investigate the range of strategies that students can use to manage digital distraction.

While emphasis falls on classroom settings specifically, the self-regulation of media use has also been shown to play an important role in students' personal study settings (le Roux & Parry, 2021). Accordingly, many of the arguments outlined in the chapter apply across these two settings and examples from both are provided. The chapter commences with a brief discussion of the behavioural and cognitive dimensions of digital distraction with reference to the notion of online vigilance. Thereafter a general introduction to theories of self-regulation is provided, before more detailed analyses of the two aforementioned models in relation to digital distraction in college classrooms are presented.

CONCEPTUALISING DIGITAL DISTRACTION

Before considering digital distraction in relation to self-regulation theory, it is important to provide a clear conceptualisation of the phenomenon. Two aspects of digital distraction, in particular, require elaboration. The first concerns the distinction between behavioural and attentional (or cognitive) shifting, while the second concerns the degree of intentionality or deliberateness associated with instances of digital distraction. The sections which follow outline key arguments relevant to these two aspects.

Related Content

Blue, BlueJ, Greenfoot: Designing Educational Programming Environments

Michael Kölling (2018). *Innovative Methods, User-Friendly Tools, Coding, and Design Approaches in People-Oriented Programming (pp. 42-87).*

www.irma-international.org/chapter/blue-bluej-greenfoot/203839

Change Detection in Water Body Areas Through Optimization Algorithm Using High- and Low-Resolution Satellite Images

A. Sivasankari, S. Jayalakshmiand B. Booba (2023). *Recent Developments in Machine and Human Intelligence (pp. 138-152).*

www.irma-international.org/chapter/change-detection-in-water-body-areas-through-optimization-algorithm-using-high--and-low-resolution-satellite-images/330325

Formation and Control of Identity: In a Social Media World

Christine Yunn-Yu Sunand Steve Goschnick (2018). *Innovative Methods, User-Friendly Tools, Coding, and Design Approaches in People-Oriented Programming (pp. 286-323).*

www.irma-international.org/chapter/formation-and-control-of-identity/203848

The Impact of Perceived Visual Complexity, Gender, and Cognitive Style on Children's Aesthetic Preferences for Learning Web Pages

Hsiu-Feng Wang, Pei-Yu Wang, Ching-Chih Liaoand Yu-Yin Lin (2014). *Human-Computer Interfaces and Interactivity: Emergent Research and Applications (pp. 248-265).*

www.irma-international.org/chapter/the-impact-of-perceived-visual-complexity-gender-and-cognitive-style-on-childrens-aesthetic-preferences-for-learning-web-pages/111761

Semantic Intelligence

Maria K. Koleva (2019). *Advanced Methodologies and Technologies in Artificial Intelligence, Computer Simulation, and Human-Computer Interaction (pp. 158-167).*

www.irma-international.org/chapter/semantic-intelligence/213125