## Cultivating Concentration and Flow: Evaluation of a Strategy for Mitigating Digital Distractions in University Education

Authors : Vera G. Dianova, Lori P. Montross, Charles M. Burke

Abstract : In the digital age, the widespread and frequently excessive use of mobile phones amongst university students is recognized as a significant distractor which interferes with their ability to enter a deep state of concentration during studies and diminishes their prospects of experiencing the enjoyable and instrumental state of flow, as defined and described by psychologist M. Csikszentmihalyi. This study has targeted 50 university students with the aim of teaching them to cultivate their ability to engage in deep work and to attain the state of flow, fostering more effective and enjoyable learning experiences. Prior to the start of the intervention, all participating students completed a comprehensive survey based on a variety of validated scales assessing their inclination toward lifelong learning, frequency of flow experiences during study, frustration tolerance, sense of agency, as well as their love of learning and daily time devoted to non-academic mobile phone activities. Several days after this initial assessment, students received a 90-minute lecture on the principles of flow and deep work, accompanied by a critical discourse on the detrimental effects of excessive mobile phone usage. They were encouraged to practice deep work and strive for frequent flow states throughout the semester. Subsequently, students submitted weekly surveys, including the 10-item CORE Dispositional Flow Scale, a 3-item agency scale and furthermore disclosed their average daily hours spent on non-academic mobile phone usage. As a final step, at the end of the semester students engaged in reflective report writing, sharing their experiences and evaluating the intervention's effectiveness. They considered alterations in their love of learning, reflected on the implications of their mobile phone usage, contemplated improvements in their tolerance for boredom and perseverance in complex tasks, and pondered the concept of lifelong learning. Additionally, students assessed whether they actively took steps towards managing their recreational phone usage and towards improving their commitment to becoming lifelong learners. Employing a mixed-methods approach our study offers insights into the dynamics of concentration, flow, mobile phone usage and attitudes towards learning among undergraduate and graduate university students. The findings of this study aim to promote profound contemplation, on the part of both students and instructors, on the rapidly evolving digital-age higher education environment. In an era defined by digital and AI advancements, the ability to concentrate, to experience the state of flow, and to love learning has never been more crucial. This study underscores the significance of addressing mobile phone distractions and providing strategies for cultivating deep concentration. The insights gained can guide educators in shaping effective learning strategies for the digital age. By nurturing a love for learning and encouraging lifelong learning, educational institutions can better prepare students for a rapidly changing labor market, where adaptability and continuous learning are paramount for success in a dynamic career landscape.

Keywords : deep work, flow, higher education, lifelong learning, love of learning

Conference Title : ICP 2024 : International Conference on Psychology

**Conference Location :** Zurich, Switzerland **Conference Dates :** January 11-12, 2024