

## Chapter 5

# Interdisciplinary Approaches to Sustainable Development in Higher Education: A Case Study from Croatia

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### ABSTRACT

*This chapter aims to test the positive change in students' sustainable behavior that is expected to be found under the influence of relevant subjects. Therefore, a simple quasi-experimental design was applied to test the differences between those groups of students who have not taken the subject Pedagogy of sustainable development and those who have. Since studies for primary school and preschool teachers at the Faculty of Teacher Education, University of Rijeka, Croatia are designed for building needed competencies in future educators, the case study was expected to determine statistically significant differences between those groups of students who have taken relevant subject and those students who have not. Finally, correlation analyses were run for relationship between life satisfaction, optimism, and sustainable behavior to be analyzed. Based on previous research studies and theoretical models, it was expected to determine significant positive relationship between students' sustainable behavior and their levels of life satisfaction and optimism. Both hypotheses are confirmed in this study. All findings are discussed in this chapter within theoretical models and future study guidelines. The results confirm the usefulness of the course Pedagogy of sustainable behavior within higher education of future educators, and its influence within positive change in their sustainable behavior. Besides, the expected positive relationship of life satisfaction and optimism with sustainable behavior was confirmed and so provided a platform for creating a suggestion of implementation of the interdisciplinary course/subject of Pedagogy of Sustainable development and Positive psychology.*

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## **INTRODUCTION**

Higher education represents one of the most important segments of society, and thus those expectations that demand of it the responsibility for the organization of all those activities that lead to the better, happier and more quality life of humankind are completely justified. Highly educated young people are those who create the future, and thus their actions are not only bound to their personal responsibilities – in addition, future teachers and educators are expected to take responsibility for the future behavior of the generations of teacher they will teach. Thus, it is of exceptional importance to create study programs that will directly influence the creation of competent and responsible teachers and educators, individuals that possess a readiness for lifelong learning and a positive outlook towards themselves, others, children and the environment the life inside. However, it is also of equal importance to leave enough free room within study programs for deliberation and contemplation, i.e. studying in the truest sense of the word, in which a critical approach can be used to discuss the development of (pre) school children, their needs and interests and how to satisfy them, and how to teach them and instill in them fundamental human values with the aim of producing individuals with fulfilled, satisfied and quality levels of to achieve sustainability. This is not an easy task, and thus all institutions that are the bearers of higher education are forced to grapple with this problem in one way or another.

This chapter has two main goals – the first pertains to testing the influence of the pedagogy of sustainable development on the creation of sustainable behavior among future educators and teachers. The second goal encompasses an analysis of the connections between this manner of sustainable behavior and the fundamental concepts of positive psychology, such as optimism and life satisfaction. Our expectations are that the results of both the analyses will allow for the formation of conclusions that can serve as the bedrock for

creating an interdisciplinary approach to sustainable development in higher education, one that will also implement the fundamental principles of positive psychology. It is thus evident that the importance of this topic is reflected on the possibility of creating interdisciplinary connections between sustainable behavior and a pedagogical approach to education for sustainable development with the fundamental concepts from positive psychology. The results of the research completed point towards a significant possibility of the influence of the knowledge/information obtained through courses on sustainable development and their pedagogical context for the formation of more sustainable behavior in future educators and school teachers or educational workers. When viewed in this fashion, there is a justifiable basis for deliberating options for creating interdisciplinary courses as part of the education of teachers and thus creating a more innovative approach to practice in modern higher education institutions.

The development of courses for the initial training of educators/teachers conceived in this interdisciplinary fashion – with the pedagogical principles of sustainability on one side and the principles of positive psychology on the other – represent the foundation for innovation and deliberation on the means of approaching teaching for sustainable development in education. In addition, they are focused on stimulating a more quality, satisfied and optimistic way of life that are based on the satisfaction of the needs of present and future generations through the encouragement of more sustainable ways of thinking, acting and living and their transmission to educational practice.

## **HISTORICAL BACKGROUND**

### **The National Context**

Developmentally speaking, a significant number of authors from the local science and research scene have deliberated the issues of ecology, en-

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