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The impact of Experiential Learning on Student´s Satisfaction and Social Responsibility in Business Subjects

El impacto del aprendizaje experiencial en la satisfacción de los estudiantes y la responsabilidad social en las asignaturas de empresa

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Abstract: This study analyses, across several business subjects, the relationship between experiential learning, student´s social responsibility, and student´s satisfaction. The sample comprises 132 university students who developed real business projects for small agri-food companies. Subsequently, using structural equation modelling (SEM), the validity of the proposed relationships was tested. The results show that participation in experiences with real and socially relevant companies fosters the development of 21st-century skills such as critical thinking, problem-solving, and ethical awareness, satisfaction with the learning process in business subjects. It is concluded that experiential learning oriented towards social responsibility constitutes an effective means of connecting academic training with the demands of the professional environment.

Keywords: Experiential learning, student´s satisfaction, student´s social responsibility.

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Resumen: Este estudio analiza, en diversas asignaturas de empresa, la relación entre el aprendizaje experiencial, la responsabilidad social de los estudiantes y su satisfacción. La muestra está compuesta por 132 estudiantes universitarios que desarrollaron proyectos de empresa para pymes del sector agroalimentario. Posteriormente, mediante el uso de modelos de ecuaciones estructurales (SEM), se comprobó la validez de las relaciones propuestas. Los resultados muestran que la participación en experiencias con empresas reales y socialmente relevantes fomenta el desarrollo de competencias del siglo XXI, como el pensamiento crítico, la resolución de problemas y la conciencia ética, así como la satisfacción con el proceso de aprendizaje en las asignaturas de empresa. Se concluye que el aprendizaje experiencial orientado a la responsabilidad social constituye un medio eficaz para conectar la formación académica con las exigencias del entorno profesional.

Palabras clave: Aprendizaje experiencial, satisfacción de los estudiantes, responsabilidad social de los estudiantes.

1. INTRODUCTION

The societal changes of recent decades require universities to reconsider their role and their responsibility in the holistic education of citizens. Education -understood as the acquisition of knowledge, skills, abilities, and professional competences- has been regarded as a driving force for economic and social development (Villalobos-López, 2022). In this regard, authors such as Cabedo et al. (2018) and Martínez (2008) argue that the university should become a space for the transformation of individuals and society, enabling students to acquire the civic competences necessary to live sustainably at personal, professional, and community levels. Consequently, concepts such as the student´s social responsibility should not belong exclusively to the personal sphere but must also be framed within the formative impact of universities on society (Aguiar et al., 2023; Vallaeys, 2014). Higher education should prepare professionals with a solid grounding in social responsibility so that they can make decisions on ethical dilemmas and commit to serving the most vulnerable (Kliksberg, 2009). In this vein, Gasca-Pliego and Olvera-García (2011) call for professionals with a sense of social responsibility, who question economic rationality, unlimited competition, and exacerbated egocentrism, and who develop values such as solidarity, cooperation, equality, and mutual respect. It is therefore desirable that higher education includes competences associated with student´s social responsibility, which requires the implementation of active pedagogies such as experiential learning (EL), applied in real business scenarios involving decisions with ethical implications (Felder and Brent, 2003).

At the same time, EL offers a unique opportunity to connect theory and practice. When students face the challenge of responding to a wide range of real business situations, they consolidate meaningful, contextualised, transferable, and functional knowledge, while enhancing their ability to apply what they have learnt. This proves highly motivating and student´s satisfaction (Chiang et al., 2021; González-Nuñez et al., 2024; Haverila et al., 2021).

In this context, this research presents a model that establishes the relationship between EL (specifically a service-learning experience applied in real business contexts), student´s social responsibility and student´s satisfaction in business subjects across two undergraduate and one master's degree programmes. First, the general theoretical framework supporting the research hypotheses is presented. The methodology is then explained, followed by the results, which are contrasted with theory, and finally the conclusions are drawn. The findings of this study aim to contribute to the educational change demanded by society. By describing the results obtained, the study seeks to foster the exchange of good practices among universities, thereby enabling

collaborative construction of improved educational dynamics for developing competences in business students.

2. THEORETICAL FRAMEWORK

2.1. Conceptual Delimitation of Experiential Learning

Educational change has driven the development of methodologies that bring students closer to real-world problems in which they can put their knowledge into practice (Herrerías and Isoard, 2014). Experiential Learning (EL) responds to this demand by highlighting the relationship between the individual and their environment. It is a pedagogy grounded in constructivism, as it seeks to construct knowledge and meaning through immersion in real experiences and reflection upon them. Some of the authors who have made significant contributions to EL theory include Piaget, Dewey, Vygotsky and Kolb, among others (Rodríguez, 2018; Rodríguez et al., 2020; Yardley et al., 2012).

EL argues that learning should be related to the context in which it takes place. Dewey (1938) points out that experience leads to lifelong learning and personal development. Vygotsky, on the other hand, emphasises that learning and development influence one another, since learning is shaped by social relationships, the cultural environment and activities (Yardley et al., 2012). For his part, Kolb (2014) recognises that through EL students integrate real-world experiences into their personal worlds by interpreting their experiences and giving them personal meaning in order to plan new actions. Kolb (2014) defines EL as a cyclical process involving four stages: concrete experience, reflective observation, abstract conceptualisation, and active experimentation. From the interaction between these dimensions, four learning styles emerge: (i) the divergent style (feeling + observing), which combines concrete experience with reflective observation; (ii) the assimilative style (thinking + observing), which results from the integration of abstract conceptualisation with reflective observation; (iii) the convergent style (thinking + doing), which combines abstract conceptualisation with active experimentation; and (iv) the accommodative style (feeling + doing), which integrates concrete experience with active experimentation.

This cycle enables students to integrate theory and practice, developing a deeper and more applicable understanding of knowledge. This methodology offers several significant benefits in the development of skills and knowledge, including: (i) practical learning: students have the opportunity to apply and directly experience what they are learning in real situations; ii) development of practical skills in a specific field of study; iii) critical reflection: students are encouraged to analyse and evaluate their experiences, identifying what worked well and what could be improved, thereby providing meaningful learning; iv) knowledge transfer: by experiencing how knowledge is applied in real or simulated contexts, students are prepared to transfer that knowledge to new situations; v) development of self-confidence: success in the practical application of skills and knowledge can increase individuals' perception of their ability to face challenges and solve future problems; vi) motivation and satisfaction: active participation in practical experiences can enhance these two variables, as students are more engaged in their own learning process and can see the direct relevance and applicability of what they are learning (Cruz et al., 2024; Guo et al., 2020).

According to Dewey (1938), EL involves the construction of knowledge from a concrete situation, representing a cyclical process of interrelation between different phases: experience, reflection, conceptualisation, and application. Learning is a process of mutual relation between experience and theory. Mere experience is not sufficient to produce knowledge; it requires modification of the learner's cognitive strategies.

Experience acquires meaning when linked to prior knowledge and when conceptual scaffolding is developed to enable the application of new knowledge to new situations.

This model contrasts with the traditional approach, which promotes a passive individual, a receiver of information who will transform it into knowledge in due course. EL adapts to new professional demands related to the development of competences and skills. Strategies within EL that foster meaningful learning include: i) problem-solving in real contexts where solutions may not be unique; ii) case analysis to promote application and integration of knowledge, decision-making, and problem-solving; iii) service-learning methodology, in which students learn through personal and active experiences oriented towards solving specific problems; iv) other methodologies aligned with active learning.

This research focuses on the development of projects based on EL for real companies, in which students adopt the role of business consultants to help these companies become competitive in the market. Following Kolb's (2014) principles, this proposal links knowledge acquisition, real-world experience (in this case, with local companies) and social construction. Students work with SMEs located in areas at risk of depopulation, contributing to their development and growth through the preparation of a marketing plan. This represents a precise convergence in which learning, experience and social awareness are aligned.

2.2. Experiential Learning and Social Responsibility

There is unanimous agreement in the literature on the importance of teaching methodology in the acquisition and retention of competences over time. Kolb (2014) identifies EL as the method offering the best framework for strengthening links between education, work, and personal development. On the one hand, it addresses competences demanded by the labour and social spheres; on the other, it responds to educational objectives, thereby integrating classroom work with the real world.

Students integrate real world experiences into their personal worlds by interpreting them and giving personal meaning to plan new actions. In this regard, it is important to develop competences linked to ethics, commitment to the surrounding environment, responsible citizenship, consider and social responsibility, so that students can integrate them into the response provided to the proposed educational practice. It is here that experiential learning methodology shows great potential for addressing social problems and influencing responsible behaviour in the medium and long term (Caulfield and Woods, 2013). EL (and more specifically, service-learning) therefore emerges as an effective methodological tool for incorporating social responsibility into higher education (Guerra et al., 2025). It is therefore important to develop competences related to ethics, commitment to the environment, responsible citizenship, and social responsibility, so that students incorporate them into their responses to educational practice.

The concept of social responsibility has been defined as a component of economic, environmental, and social sustainability that influences community quality of life. It relates to exemplary civic attitudes and behaviours and support for building a stable society. Student´s social responsibility is defined by ethical and proactive behaviour in addressing social problems (Fonseca et al., 2019). It is broader than voluntary altruism, encompassing tolerance, proactivity towards the common good, relational skills, and holistic understanding of reality.

Kliksberg (2009) argues that to foster student´s social responsibility competences, it is not sufficient to offer a course in ethics; rather, ethics teaching should be integrated into practice, addressing specific ethical problems in each field and committing to building

a more supportive world. EL has proven effective in working with both specific and occupational competences, including those associated with business student´s social responsibility, which are essential for preparing graduates effectively (Cabedo et al., 2018). Particularly, as described by Lee and Perdana (2023), due to its capacity to generate a positive impact on perceptions of community engagement and social responsibility. Along these lines, the first research hypothesis is proposed:

> H1: Student's evaluations of the outcomes of the experiential learning in a business subject is positively and significantly related to their social responsibility.

2.3. Experiential Learning and Student's Satisfaction

EL has been shown to have a significant impact on graduates' satisfaction with learning. Cruz et al. (2024) and Guo et al. (2020) demonstrate that students participating in practical experiences, such as community projects within EL (in this case service- learning methodology), tend to report higher satisfaction because they perceive acquired skills as more readily applicable in the workplace. Eyler (2009) and Jackson (2013) show that direct experience can enhance student engagement in the learning process, positively influencing satisfaction with educational programmes. Bradberry and De Maio (2019) argue that EL programmes improve academic success by accelerating graduation, increasing opportunities for continuous education (e.g., postgraduate studies), and enhancing satisfaction by offering better career prospects. EL also influences students' perception of learning, which ultimately affects satisfaction (Rahmaningtyas et al., 2025). In short, EL helps graduates feel more prepared to face professional challenges, improving their positive perception of their training (Rahmaningtyas et al., 2025; Van Wart et al., 2020). Authors such as Salam et al. (2019) note that methodologies linked to EL, such as service-learning, provide practical skills directly applicable to reality, thereby strengthening graduates' satisfaction with their learning experience. Caza et al. (2015) compared graduates who had used experiential methodologies (specifically service-learning) with those who had followed traditional methods, finding significantly higher satisfaction and professional self-efficacy among the former. According to these arguments, we propose the following hypothesis:

> H2: Student's evaluations of the outcomes of the experiential learning in a business subject is positively and significantly related to their satisfaction with the subject.

2.4. Satisfaction and Student´s Social Responsibility

Student´s satisfaction with a subject is not only an indicator of educational quality but also a causal factor in the development of attitudes and behaviours of social responsibility. This relationship has been explored mainly in EL contexts, particularly in service-learning methodology, where the link between positive academic experiences and students' social commitment is especially evident.

Satisfaction has been shown to be a motivational determinant that drives the internalisation of social and civic values. Moely et al. (2002) found that students reporting greater satisfaction with EL activities consistently showed increased intentions for community participation and stronger social responsibility attitudes. Similarly, Astin et al. (2006) identified a positive evaluation of socially oriented courses, establishing a relationship between satisfaction and sustained increases in civic awareness and commitment to the common good.

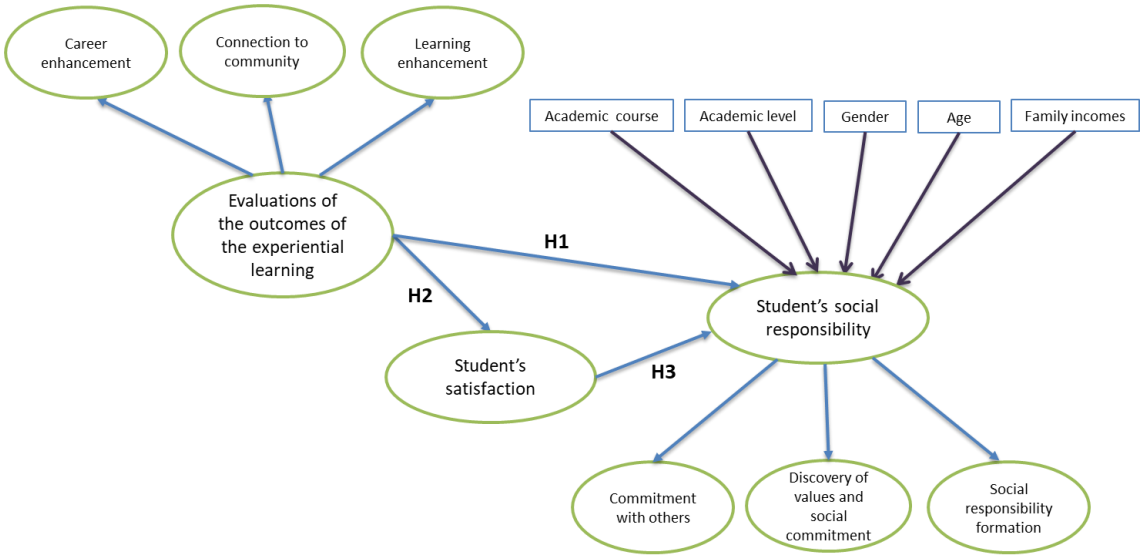
Recent studies confirm that satisfaction derived from meaningful experiences -where students perceive utility, relevance, and connection with real problems- enhances responsible behaviours. Choi et al. (2023) found that high satisfaction levels in community project-based subjects were mediated by perceptions of social relevance and critical reflection, which in turn increased students' sense of responsibility and belonging to the community. Saavedra et al. (2022) showed that subjects oriented towards social justice simultaneously produced higher levels of social responsibility.

Pegalajar-Palomino et al. (2021) assert that participatory methodologies are significantly associated with higher levels of perceived social responsibility. In this case, student´s satisfaction operates as an affective-cognitive mediator facilitating the integration of ethical and social values into students' professional identity. For these reasons, we put forward the following hypothesis:

> H3: Student´s satisfaction with a business subject applying experiential learning is positively and significantly related to their social responsibility.

The resulting research model comprising all the hypotheses is shown in Figure 1.

Figure 1. Model with the hypotheses



3. RESEARCH METHODOLOGY

3.1. Sample and scales of measurement

The research focused on students at a public university during two academic courses (2023–24 and 2024–25). In the first academic course, it focused on students taking one of the following subjects: third course of the degree in Industrial Design and Product Development; second, third and fourth course of the degree in Business Administration; and the only course of the master's degree in Marketing and Market Research. In the second academic course, the research focused on students studying the course of the master's degree in Marketing and Market Research. Since no master's students repeated the project, no participant completed the survey more than once. Finally, the reason for choosing these courses was the fact that their students were taking marketing subjects

in which, through an EL methodology, in particular a service-learning experience, marketing plans were developed for small firms in the Valencian agri-food sector. Through these plans, within each course, the intention was for students to assume a commitment and a sense of social responsibility toward a business sector characterised by economic viability challenges and significant training deficiencies among its managers. Finally, a sample of 132 students answered the questionnaire that was presented in the last class session, after their presentation of the projects but when students still have not known their marks (Table 1). In SEM, a sample of between 100 and 150 individuals is set as a minimum sample size to carry out the statistical analyses (Anderson and Gerbing, 1984, 1988; Ding et al., 1995).

Table 1. Student classification data

Academic course Frequency (%)		2023-24 107 (81.1%)		2024-25 25 (18.9%)		Total 132 (100%)
Student's academic level (Bachelor's/master's degree) Frequency (%)		Ind. Design degree 24 (18.2%)	Business Adm. Degree 45 (34.1%)	Master's degree in marketing 63 (47.7%)		Total 132 (100%)
Gender Frequency (%)		Female 81 (61.4%)		Male 51 (38.6%)		Total 132 (100%)
Age Frequency (%)	18-20 years old 8 (6.1%)		21-23 years old 72 (54.6%)	24-26 years old 25 (18.9%)	27 or more years old 27 (20.4%)	Total 132 (100%)
Level of family incomes Frequency (%)	0-600 euros/month 7 (5.3%)	601-1200 euros/month 13 (9.8%)	1201-2400 euros/month 53 (40.2%)	2401-4500 euros/month 34 (25.8%)	> 4500 euros/month 25 (18.9%)	Total 132 (100%)

Data were collected using a questionnaire composed of items adapted from previously validated scales in the academic literature (see Table A1 in the Appendix). All constructs were measured using a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Student's evaluations of the outcomes of the experiential learning were operationalised as a multidimensional construct, drawing on the evaluations of the outcomes of the service-learning scale developed by Main et al. (2022). This construct comprises three dimensions: (1) career enhancement (six items), (2) community connection (four items), and (3) learning enhancement (seven items). According to the literature, experiential learning has incorporated as examples several approaches such as service-learning methodology (Brower 2011; McGrath; 2023; Mabalay and Castillo, 2026). Finally, we have opted to consider the scale representing student's evaluations of the outcomes of the experiential learning because, according to Wang and Croft (2025), it is vital to understand the effects of a real example of experiential learning methodology and measure post event learning outcomes of students. While most studies have touched on the experiential learning stages in practice, less manuscripts have empirically examined explicitly students' evaluations of the outcomes of such experiences.

Students' satisfaction with the subject in which the experiential learning methodology is implemented was measured using a three-item scale adapted from prior empirical studies (Hunt et al., 1985; Johlke and Duhan, 2000). Finally, students' social responsibility was assessed using a multidimensional construct adapted from the scale developed by Ramos et al. (2016). This variable includes three dimensions: (1) commitment to others (three items), (2) personal and professional discovery of values and social commitment (seven items), and (3) social responsibility formation (three items).

We considered as the control variables in the model some student's characteristics, such as academic course (2023-24/2024-25), gender (female/male), age, academic level (bachelor's or master's degree), and level of family incomes.

3.2. Project description

In this teaching experience, Kolb's cycle is applied to the development of collaborative projects carried out by teams of 4 or 5 students who prepare different marketing plans for small Valencian companies producing wine (5 in total), olive oil (5 in total) or craft beer (8 in total), as well as other agri-food companies linked to cheese production, truffle and almond cultivation and marketing (10 in total). The author conceives learning as a cyclical process in which knowledge is generated through experience and its subsequent transformation through reflection and action. The pedagogy is structured into four phases:

- Phase 1 (concrete experience): The development of this initiative requires the active involvement of several agents: the Provincial Council (Diputación, a Spanish local government institution that administers the province), collaborating companies (28 in total) and the university (16 lecturers and 132 students). A couple of months before the start of the academic year, the Provincial Council carries out a screening of small companies located in inland areas of the province (municipalities with fewer than 5,000 inhabitants and at risk of depopulation) that are considered likely to benefit effectively from this project. The project, which lasts one semester in all subjects except for master's programmes, where it lasts two, aims to help these organisations grow and, in turn, to generate employment and economic development in sensitive areas at risk of depopulation (community engagement). During the project, each team is required to visit the assigned company at least twice, accompanied by a lecturer (acting as expert, facilitator, coach and assessor). During these visits, students analyse the company's situation, resources, competitors, target audience, products, pricing, distribution and communication, among other aspects. This field research is complemented by subsequent meetings with company managers via Google Meet. This approach places students in an authentic professional context in which they act in the role of business consultants.

- Phase 2 (reflective observation): Throughout the different phases of the initiative, students have the opportunity to reflect on two main aspects: (i) the importance of this work for territorial development; and (ii) the possibility of applying marketing strategies to different business realities beyond large corporations. These two ideas summarise the philosophy of the project and are continuously emphasised during tutorials. On the last day of class, teams receive feedback and criticism of their work during an event in which they publicly present their marketing plans for the following twelve months to lecturers, company representatives and the Provincial Council. After the presentation event, students are given one week to critically analyse their work and improve the final project, which is then sent to the company for subsequent implementation.

- Phase 3 (abstract conceptualisation): Students integrate the experience and reflection with the theoretical content of the subjects, which contributes to a deeper and more applied understanding of theory. This initiative enables the construction of transferable and functional knowledge. In addition, during the final week of the course, teams attend a tutorial session in which, in an informal setting, lecturers encourage them to reflect on what they have learned—not only in terms of the theoretical content assimilated, but also regarding its contribution to the development of their transversal competences.

- Phase 4 (active experimentation): Throughout the entire process, direct interaction with company managers allows for the implementation of short-term marketing actions related to online communication (website content, social media campaigns), product labelling or packaging design, among others. The implementation of these suggestions made by students in the short term allows them to experience an active experimentation, as it is the degree of market acceptance and effectiveness of their suggestions as consultants in a real business context. Finally, in the event in which they present their

marketing plans, students point the objectives, strategies and actions to be implemented over the following twelve months, with the real experience of those short-term actions implemented previously.

3.3. Complementary data analysis

The research design and data analysis were structured to minimise and assess the potential effect of common method variance. In the design phase, items measuring the dependent and independent variable were separated to reduce respondent bias, as the final version of the questionnaire included other variables that were not considered for the current study. Additionally, participants were assured of the anonymity of their responses to mitigate social desirability bias. Furthermore, to evaluate the presence of common method bias, we conducted Hartman's single factor test. The results of this analysis for the sample, with the 38 indicators loading onto a single factor, demonstrated a poor fit (Satorra-Bentler $\chi2$ = 1876.91, df = 665, p-value < 0.05; comparative fit index (CFI) = 0.50; Bentler-Bonnet nonnormed fit index (BBNNFI) = 0.47; Bollen's (IFI) fit index = 0.51; root mean square error approximation (RMSEA) = 0.12).

4. RESULTS

We used EQS 6.4 statistical package, along with the maximum likelihood estimation method and robust estimators, to analyse data. We followed a two-step approach: 1) the analysis of validity and reliability of the survey instruments, using the measurement model by means of the confirmatory factor analysis; and 2) the analysis of the causal relationships proposed in the research model.

4.1. Confirmatory factor analysis test

We assessed the scale dimensionality through a confirmatory factor analysis. We tested the multidimensional structure of the second order constructs, Student's evaluations of the outcomes of the experiential learning and Student's social responsibility. The final measurement model of the Student's evaluations of the outcomes of the experiential learning construct had an acceptable fit (Satorra-Bkentler $\chi2$ = 271.46; df = 116; p-value < 0.05; CFI = 0.89; BBNNFI = 0.87; IFI = 0.89; RMSEA = 0.10). In the case of the Student's social responsibility, fit indexes were acceptable (Satorra-Bentler $\chi2$ = 111.33; df = 62; p-value < 0.05; CFI = 0.87; BBNNFI = 0.84; IFI = 0.88; RMSEA = 0.08).

Second, we analysed a full measurement model with Student's evaluations of the outcomes of the experiential learning, Student's social responsibility and the other main construct of the model, Student's satisfaction with the subject in which it is applied the experiential learning methodology. One items, from the Student's evaluations of the outcomes of the experiential learning scale (P.1.4) had factor loadings below 0.6 and they were removed in order to fulfil the discriminant validity of each construct. The results of the final measurement model showed an acceptable fit (Satorra-Bentler $\chi2$ = 922.22, df = 600, p-value < 0.05, CFI = 0.86; BBNNFI = 0.85, IFI = 0.86; RMSEA = 0.06), with the ratio ($\chi2$/df) below 5. Additionally, we considered composite reliability and Cronbach's alpha to assess the reliability of the scales. The results were above the 0.7 threshold (Table A1 in the Appendix).

We consider the average variance explained (AVE) of each latent variable to test the convergent validity of the first and second-order variables, which yielded values higher than the recommended minimum value of 0.5 (Table A1 in the Appendix). Finally, the discriminant validity was also supported as the square root of the average variance

extracted (AVE1/2) from each latent variable was higher than the correlations between latent variables (Table 2).

Table 2. Discriminant validity of the scales

Factors	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) Evaluation	**0.95**						
(2) Satisfaction	0.80 (0.000)	**0.91**					
(3) Social responsibility	0.52 (0.000)	0.45 (0.008)	**0.88**				
(4) Academic course	0.01 (0.936)	-0.03 (0.751)	0.25 (0.000)	-			
(5) Academic level	0.07 (0.442)	-0.11 (0.224)	0.25 (0.005)	0.51 (0.000)	-		
(6) Gender	0.05 (0.615)	-0.02 (0.873)	-0.23 (0.028)	-0.19 (0.019)	-0.17 (0.051)	-	
(7) Age	0.18 (0.059)	0.07 (0.453)	0.22 (0.020)	0.37 (0.000)	0.47 (0.000)	-0.10 (0.205)	-
(8) Family incomes	-0.11 (0.212)	-0.07 (0.456)	-0.18 (0.083)	-0.16 (0.079)	-0.26 (0.002)	0.09 (0.312)	-0.20 (0.121)

Diagonal, bold: square root of AVE of a latent factor. Below the diagonal: Pearson correlation coefficients between variables (*p*-value)
(1) Student's evaluations of the outcomes of the experiential learning, (2) Student's satisfaction, (3) Student's social responsibility, (4) Academic course (1: 2023-24; 2: 2024-25), (5) Student's academic level (1: bachelor's; 2: master's degree), (6) Student's gender (1: female; 2: male), (7) Student's age, (8) Level of family incomes (1: 0-600 euros; 2: 601-1200 euros; 3: 1201-4500 euros; 4: 2401-4500 euros; and 5: more than 4500 euros).

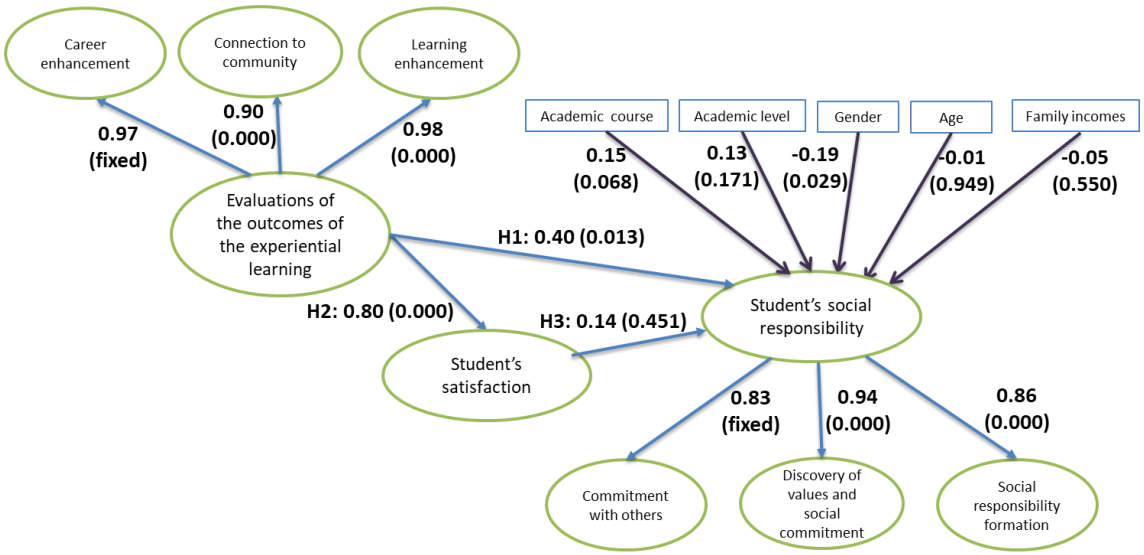
4.2. Structural model test: Hypothesis testing

The second stage of the SEM analysis consisted of estimating the structural model for the sample of students (Table A2 in the Appendix). Different statistics corroborate an acceptable fit of the model (Satorra-Bentler $\chi2 = 935.63$; df = 610; p-value < 0.05; CFI = 0.86; BBNNFI = 0.85; IFI = 0.86; RMSEA = 0.06), with the ratio ($\chi2/df$) below 5.

The results corroborate two hypotheses (Figure 2). The first hypothesis is proved as there is a positive and significant relationship between Student's evaluations of the outcomes of the experiential learning and Student's social responsibility (0.40, t = 2.48, p-value = 0.013). In addition, the results support the second hypothesis as there is a positive and significant relationship between Student's evaluations of the outcomes of the experiential learning and Student's satisfaction (0.80, t = 7.92, p-value = 0.000). However, the third hypothesis is not corroborated because there is a non-significant relationship between Student's satisfaction and Student's social responsibility (0.14, t = 0.754, p-value = 0.451).

The indirect relationship considered in the model between Student's evaluations of the outcomes of the experiential learning and Student's social responsibility is not corroborated (0.12, *t* = 0.771, *p*-value = 0.441). Finally, Student's gender (female) is the only control variable that is significantly related to Student's social responsibility (-0.19, t = -2.18, *p*-value = 0.029). In the research sample, those who are female reported greater social responsibility.

Figure 2. Model with the results of the causal relationships



Parameter estimate (*p*-value)

5. CONCLUSION, RESEARCH LIMITATIONS AND FUTURE RESEARCH

The findings of this research confirm that experiential learning based on projects with real companies is consolidated as a methodology capable of effectively integrating the development of professional and social competences with the strengthening of student´s social responsibility. This evidence supports Kolb's (2014) assertion that experiential learning enables the construction of knowledge through action and reflection on practice. In the university context, this dynamic encourages students to move from being passive recipients of information to becoming active agents in solving real problems. The results establish that real projects generate more authentic and motivating learning environments, where the practical application of knowledge enhances both conceptual understanding and the transfer of learning to new contexts. This process promotes the development of transversal competences such as decision making, effective communication, critical thinking, and ethical responsibility, all of which are fundamental for the training of well-rounded citizens and professionals.

with regard to student´s satisfaction with the subject in which this methodology is applied, the findings are consistent with Caza et al. (2015), as it is corroborated the positive and significant relationship between student's evaluations of the experiential learning and their satisfaction with the subject in which this methodology is applied. In this vein, Biggs and Tang (2011) argue that quality learning arises when educational experiences are aligned with learning outcomes and student expectations. Participation in real projects fosters this alignment by allowing students to perceive a direct connection between their university education and their future professional performance.

Moreover, this research revealed a positive but non-significant relationship within the development of experiential learning between student´s satisfaction with the subject and their social responsibility. In this study, which focuses on university students taking a marketing subject, their favourable evaluations of the outcomes associated with the

service-learning method used, typical of an experiential learning methodology, seems to explain the lack of prominence of their satisfaction with the subject as a precursor to their social responsibility.

In summary, this research provides empirical evidence of the need to transform traditional teaching practices. The results invite lecturers to design flexible learning environments where error, experimentation, and interaction with reality are considered essential components of the educational process. Furthermore, the analyses conducted support the potential of experiential methodology, and more specifically service-learning based on real companies. The development and implementation of this pedagogy not only foster the acquisition of technical competences but also promote students' ethical and social formation. This integration of learning, responsibility, and satisfaction represents an educational model consistent with the current demands of higher education and with the social mission of universities.

This study presents certain limitations that must be considered when interpreting the results, opening the door to future research. Firstly, the absence of a control group prevents the establishment of firm causal relationships between the application of experiential learning and levels of satisfaction or the development of student´s social responsibility. Therefore, the results should be understood as indicative of a trend rather than as conclusive evidence of impact (Kolb, 2014). Secondly, the study is limited to business-related subjects focused on the design of marketing plans for small agri-food enterprises in the Valencian Community, which restricts the generalisation of the results to other educational contexts, productive sectors or fields of knowledge. Thirdly, the sample is composed exclusively of students from the same university context and from degree programmes related to business and marketing, which limits the variability of academic profiles and prior experiences. In this regard, according to Kolb's classification of learning styles (convergent, divergent, assimilative and accommodative), and in light of the results obtained by Arquero and Donoso (2019) business students show a certain tendency to exhibit a divergent learning style. This means that they feel comfortable exploring and addressing new learning challenges. This project proposes an experience in which students are confronted with the business challenges faced by small agrifood, offering them a scenario conducive to creative development, multifaceted analysis and a deep understanding of their social and economic environment. This aligns particularly well with the training profile of a divergent learner. It would therefore be necessary to analyse whether, with other learning profiles, the proposed model would offer the same results, thus opening up a new line of enquiry for future teachers and researchers. Along these lines, it is recommended that researchers wishing to implement similar classroom experiences establish close coordination among all agents involved in the project, including the students themselves.

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Appendix

Table A1

Dimensionality, reliability, and convergent validity of the scales of the model

Items	Mean	St. Dev.	Factor Loading	*t*-test (p-value)
Student's evaluations of the outcomes of the experiential learning (Main et al., 2022) (AVE = 0.90, composite reliability = 0.96, Cronbach's alpha = 0.95)				
Career enhancement (AVE = 0.59, composite reliability = 0.88, Cronbach's alpha = 0.87)				
P.1.1 Overall, I feel that my service-learning experience added value to my Bachelor's/master's degree.	5.47	1.20	0.795	Fixed
P.1.2. I believe my service-learning activities will be important to my future career.	5.37	1.36	0.866	11.88 (0.000)
P.1.3. With this project, I hope to have a better professional future.	5.27	1.43	0.832	10.31 (0.000)
P.1.5. With this project, I have a clearer understanding of my professional goals	4.67	1.67	0.696	5.80 (0.000)
P.1.6. With this project, I have gained real-world professional experience	4.56	1.63	0.645	7.18 (0.000)
Connection to community (firms in rural areas) (AVE = 0.55, composite reliability = 0.83, Cronbach's alpha = 0.83)				
P.2.1. I understand the problems associated with firms in rural areas (lack of skilled workers, less financial opportunities...) better than I did before doing the project.	5.34	1.22	0.691	Fixed
P.2.2. Participation in the project has increased my confidence in my ability to help reduce the problems faced by firms in rural areas.	5.16	1.32	0.875	7.36 (0.000)
P.2.3. Through my participation in this project, I have benefited from the interaction with other people (related to entrepreneurship) outside the university environment.	4.75	1.70	0.647	6.35 (0.000)
P.2.4. As a result of my experience in this project, I have established new connections with people in business.	4.54	1.79	0.729	6.37 (0.000)
Learning enhancement (AVE = 0.62, composite reliability = 0.92, Cronbach's alpha = 0.92)				
P.3.1. In general, I have learned more in the service-learning methodology than I think I would have learned with another methodology.	5.53	1.34	0.733	Fixed
P.3.2. The service-learning activities have helped me to understand how what I am learning in the Bachelor's/master's degree applies to the real world.	5.51	1.09	0.673	7.54 (0.000)
P.3.3. Participation in this project made me want to learn more in the Bachelor's/master's I am studying.	5.17	1.46	0.864	9.16 (0.000)
P.3.4. I now understand my own values and ethics better than I did before doing this project.	4.52	1.71	0.737	6.54 (0.000)
P.3.5. Through my participation in the project, I have improved my problem-solving skills.	4.99	1.56	0.788	6.97 (0.000)
P.3.6. As a result of my service-learning experience, I have understood the course material better than I would have done with another methodology.	5.44	1.30	0.787	8.11 (0.000)
P.3.7. This project helped me develop a greater enthusiasm for learning.	4.97	1.50	0.910	8.55 (0.000)
Student's satisfaction with the subject (Hunt et al., 1985; Johlke and Duhan, 2000) (AVE = 0.83 composite reliability = 0.94, Cronbach's alpha = 0.94)				
P.4.1. I feel that this subject is valuable	5.52	1.33	0.931	Fixed
P.4.2. I feel that this subject is interesting.	5.57	1.35	0.899	17.47 (0.000)
P.4.3. Overall, I am satisfied with this subject	5.39	1.36	0.899	13.46 (0.000)

Items	Mean	St. Dev.	Factor Loading	*t*-test (p-value)
Student's social responsibility (Ramos et al., 2016) (AVE = 0.77, composite reliability = 0.91, Cronbach's alpha = 0.94)				
Commitment with others (AVE = 0.74, composite reliability = 0.90, Cronbach's alpha = 0.89)				
P.5.1 I have a global vision of the current world situation, and I am aware of the urgent need for sustainable development.	5.58	1.31	0.838	Fixed
P.5.2 This awareness increases my interest, as a university student, in contributing to the improvement of my immediate environment.	5.48	1.13	0.931	15.14 (0.000)
P.5.3 I put into practice my capacity for service and commitment to the community.	5.36	1.30	0.816	11.00 (0.000)
Personal and professional discovery of values and social commitment (AVE = 0.64, composite reliability = 0.92, Cronbach's alpha = 0.92)				
P.6.1 I believe that social commitment is grounded in the recognition and respect for the dignity of every person.	5.95	1.10	0.773	Fixed
P.6.2 I consider personal change to be a prior and necessary step toward transforming the reality around me.	6.02	1.06	0.798	11.25 (0.000)
P.6.3 I envision the practice of my future profession with a vocation for service and an orientation toward the common good.	5.34	1.45	0.783	8.63 (0.000)
P.6.4 I believe that good professionalism implies commitment, teamwork, perseverance, empathy, tolerance, honesty and respect	6.31	1.02	0.667	5.94 (0.000)
P.6.5 I believe that my personal fulfilment and happiness depend on being a professional committed to improving society.	5.79	1.13	0.862	10.57 (0.000)
P.6.6 I consider that the actions of a good professional have an impact on their immediate environment as well as on broader spheres of significance.	5.95	1.08	0.814	12.06 (0.000)
P.6.7 I believe it is realistic to affirm that social commitment is possible through professional practice.	5.77	1.07	0.871	10.95 (0.000)
Social responsibility formation (AVE = 0.68, composite reliability = 0.86, Cronbach's alpha = 0.85)				
P.7.1 I consider that being a university student helps to raise awareness of the importance of social responsibility.	5.33	1.33	0.846	Fixed
P.7.2 I believe that the more thoroughly I study and prepare at university, the more I will be able to contribute to social change.	5.28	1.41	0.880	17.19 (0.000)
P.7.3 I consider social responsibility to be a competence that must be fostered within the university.	5.73	1.29	0.736	6.58 (0.000)
Control variables				
P.8 Academic course (1: 2023-24; 2: 2024-25)	1.19	0.39		
P.9. Student's academic level (1: bachelor's; 2, master's degree)	1.48	0.50		
P.10. Student's gender (1: male; 2: female)	1.39	0.49		
P.11. Student's age	24.21	4.86		
P.12 Level of family incomes (1: 0-600 euros; 2: 601-1200 euros; 3: 1201-4500 euros; 4: 2401-4500 euros; and 5: more than 4500 euros)	3.43	1.07		
Fit of the model: Satorra-Bentler $\chi2$= 922.22; df. = 600; p-value = 0.000; Satorra-Bentler $\chi2$/df = 1.54; CFI = 0.86; BBNNFI = 0.85; IFI = 0.86; RMSEA = 0.06				

Factor Loading is standardised. Items removed to fulfil scales validity: P.1.4. (With this project, I have established contacts for future jobs, scholarships, or school reference).