

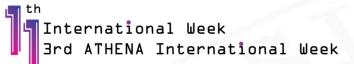


An approach to the study of SDG awareness among university students

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Spain



RESEARCH GROUP



RESEARCH IN ECONOMICS-ACCOUNTING FOR SUSTAINABLE DEVELOPMENT OF EMERGING

ECONOMIES (READEES)

- ✓ More than 8 Cooperation projects
- ✓ More than **50** research articles under the umbrela READEES



Sobre el Grupo de Trabajo

17 members of different Universities

UCM

URJC

UAM

UFV

UDIMA

CUNEF

UGuanajuato

UColombia

International Multidisciplinar



Elisa Isabel

Cano Montero





Manuela

Cañizares

VER PERFIL @

Espada







Pilar López











Mónica Santos

VER PERFIL ®



Martha Ríos

Menéndez

María José

María Jesús Ríos





Hermosa Del







Good Practices in research&sustainable cooperation

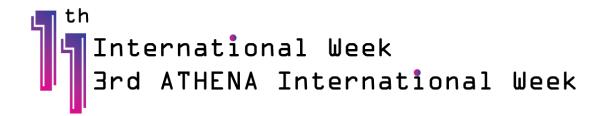


INTRODUCTION

- Sustainability has evolved from a concept on the fringes of academic discourse to a central theme in addressing the multifaceted challenges confronting our global society.
- Within the sphere of higher education, universities wield significant influence as hubs for knowledge creation and dissemination.
- As institutions entrusted with preparing future leaders and professionals, there is an increasing recognition of the role universities play in cultivating environmentally and socially conscious graduates.









AN APPROACH TO THE STUDY OF SUSTAINABLE DEVELOPMENT AWARENESS (SDA) AMONG UNIVERSITY STUDENTS

FIRST STAGE

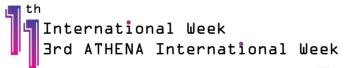




OBJECTIVES

- ✓ Raising awareness and educating students in Spanish universities on accounting and financial information aligned with the Sustainable Development Goals (SDGs) for 2030.
- ✓ Analyze the role of participatory learning activities in developing the dimensions of involvement, critical reflection , and thinking analysis.
- ✓ Achieving more professors engaged in development cooperation projects through Finance, Accounting, and Marketing with support from Information and Communication Technologies (ICT).

- ✓ Achieving knowledge transfer from the university to an emerging country like Ethiopia, which is strategic in the V Master Plan for Spanish Cooperation.
- ✓ Promoting economic growth through the training of farmers in emerging countries, leading to poverty eradication.
- ✓ Ensuring farmers are better trained in agricultural production, nutrition, and sales, with increased access to financial resources thanks to podcasts.





BIBLIOGRAPHIC REVIEW

Research lines

√ Advanced research on ESD

Vare and Scott (2007), Harpe and Thomas (2009), Jickling and Wals (2012), Wals (2011), Ojala (2013), Mochizuki and Bryan (2015), Laurie et al. (2016), Grossek et al. (2019), Schnitzler (2019) and Adams (2020)

✓ Education for sustainability

Ashford (2004), Nicolaides (2006), Barth et al. (2007), Svanström et al. (2008), Arbuthnott (2009), Barth and Rieckmann (2012), Lozano et al. (2013), Adombent et al. (2014), Azeteiro et al. (2015), Boewe de Paw (2015), Beynaghi et al. (2016) and Rieckmann (2018)

✓ Environmental education

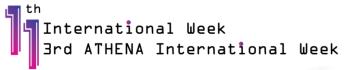
Warburton (2003), Petry et al. (2011), Murphy (2012), Koprina and Meijers (2014), Takeuchi et al. (2014), Smith et al. (2016), Ives et al. (2018), Walid and Luetz (2018), Amsler (2019), Chang et al. (2020) and Rahmayanti et al. (2020)

✓ Economic aspects of ESD

Boiral (2009), Ng and Burke (2010), Kelley and Nahser (2014), Wolfgramm et al. (2015), Setó-Pamies and Papaoikonomou (2016), Osagie et al. (2016), Hatipoglu (2018), El-Bassiouny et al. (2018), Prado et al. (2020), Haski-Leventhal et al. (2020)

✓ Multidisciplinary, which combines issues related not only to the social sciences, but also includes other aspects of interest to the rest of the scientific disciplines

Qablan et al. (2009), Teisl et al. (2010), Ojala (2012), Kilinc and Aydin (2013), Koprina (2014), Jegstad and Sinnes (2015), Karaarslan and Teksöz (2016), Payne (2016), Coleman and Gould (2019), Ninomiya-Lim et al. (2019)





RESEARCH QUESTIONS

RQ1: Are accounting students committed to sustainable development cooperation after participatory learning activities?

RQ1.1.: Are there differences between public and private universities?

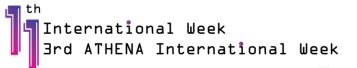
RQ1.2.: Are there differences by gender?

RQ2: What variables influence accounting students' commitment to development cooperation?

RQ3: What variables determine students' perception of the usefulness of NGOs' infrastructure projects?

RQ4: Can we develop an ESD model to engage accounting students and make a real difference in their understanding, critical thinking, and ability to act to further Sustainable Development?







METHODOLOGY I



✓ A seminar lasting 6 hours was designed, conducted in the classroom on different days, with the following dynamics:

✓ Preparation:

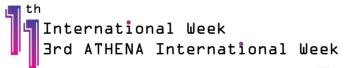
Students familiarize themselves with the topic by reading three articles published by various professors from the team and listening to the podcasts prepared by the students on agriculture and economics in rural areas of Ethiopia.

✓ Resolution of an interactive real case:

Students apply the knowledge gained by solving a practical case related to agriculture and economics in rural areas of Ethiopia. They use tools like Excel to analyze data and find solutions.

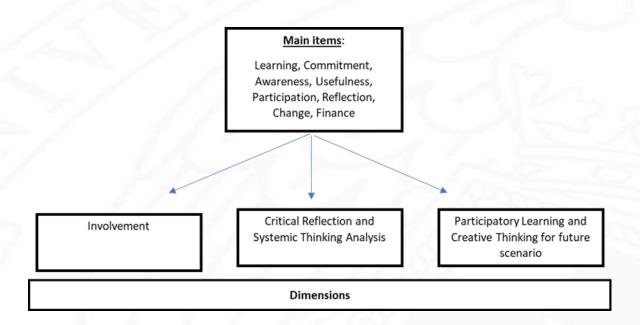
✓ Questionnaire:

Students are asked to complete a questionnaire covering the following aspects: commitment to cooperation and development, critical reflection, perception of participatory learning, creative thinking

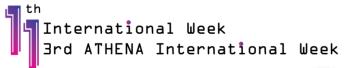


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METHODOLOGY II



- ✓ Structural equation methodology (SEM) was used to evaluate the suitability of the theoretical ESD model studied here to the empirical data and to examine the significance of the specific research questions using maximum likelihood estimation.
- ✓ This study first uses Confirmatory Factor Analysis (CFA) to show the different loadings on the items in the theoretical relationships. SEM aims to analyze the interconnected relationships among a set of variables and the theoretical dimensions simultaneously (Figueroa-García et al., 2018; Schreiber et al., 2006).
- ✓ We used the statistical package AMOS 27 to estimate the SEM model, as well as SPSS 27 for the previous descriptive analysis.



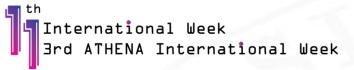
INSTRUMENTS

- ✓ Students fill in a survey related to the case study, which addressed:
 - ✓ Students' commitment to cooperation and development, Critical reflection and systemic learning through solving the case study.
 - ✓ Their perception of participatory learning and creative thinking.
 - ✓ The survey also incorporates sociodemographic characteristics that may be moderators of the interrelationships between the variables

The survey data were analyzed and multivariate analysis performed by applying backward stepwise regression with SPSS 27 software.
SEM Analysis



Code	Description	Values
UNVRSTY	UNIVERSITY	University 1=1 University 2=2;University 3=3;University 4=4
FACLTY	Faculty	ECONOMICS=1; COMPUTER SCIENCE=2; COMMERCE AND TOURISM=3; OTHER=4
DGREE	Degree	BUSINESS=1; ECONOMICS=2; COMPUTER SCIENCE=3; COMMERCE=4; TOURISM=5; OTHER=6
CRS	Course	Continue
GNDR	Gender	MALE=1; FEMALE=2
AWRNSS	You are very aware of Development Cooperation because you have done social projects before.	1= Totally disagree, 2= Disagree, 3= Neutral, 4=Agreement, 5= Totally agree.
LRNG	I have learned and deepened more about Development Cooperation through the conference/seminar.	1= Totally disagree, 2= Disagree, 3= Neutral, 4=Agreement, 5= Totally agree.
COMMTMNT	The conference/seminar on Development Cooperation has been interesting to me and has led me to get involved in helping from here.	1= Totally disagree, 2= Disagree, 3= Neutral, 4=Agreement, 5= Totally agree.
PARTCPTN	Have you participated in all the seminars on Development Cooperation?	Dummy
REFLEX	Do you think that some subject in your degree has made you reflect on the subject of development cooperation?	Dummy
CONF_FACLTY_SD	Do you think there should be at least one conference on Economics and development cooperation in your Faculty?	Dummy
USEFULNSS	How do you value from the usefulness point of view the well donations MCSPA is doing?	1= Totally disagree, 2= Disagree, 3= Neutral, 4=Agreement, 5= Totally agree.
CHGE_IMPRV	Do you think an organizational or technological change must be done to improve the MCSPA project?	Dummy
CHANGE	If so, please indicate which change have you proposed?	TECHNOLOGICAL=1; ORGANISATIONAL=2; BOTH=3
FFRR	To implement your proposal, would you need financial resources?	Dummy
MORE_SUBJ_SD	Do you think there should be more subjects focused on development cooperation?	Dummy
4FAM_PROFT	Do you think four farmers and their families would achieve enough profit to help NGO well building?	Dummy

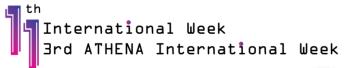




SAMPLE DESCRIPTION

- √ 446 Students
- ✓ From 7 undergraduate degree or double degree programs in Accounting and Finance.
- ✓ From 6 public and private Spanish Universities
- ✓ Average age 20 years
- ✓ 51% male, 49% female

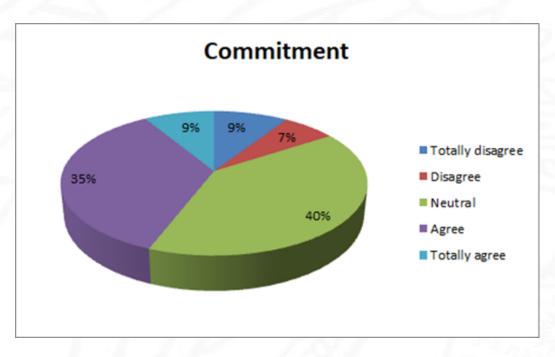




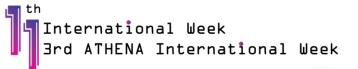


RESULTS (I)

RQ1: Are accounting students committed to sustainable development cooperation after participatory learning activities?



- ✓ The results on RQ1, on accounting students' commitment to sustainable development cooperation, showed that the students surveyed who performed the participatory activity expressed positive or very positive interest (44%) in the seminars
- ✓ Some of these students contacted the NGO in charge to express their interest and motivation to collaborate with the NGO's projects.



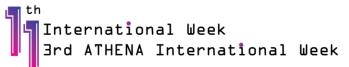


RESULTS (II)

RQ1.1.: Are there differences between public and private universities?

					Mean		Sig.
Dep. Variable	UNVRSTY	UNVRSTY		Std.	Differences	Dev. Error	
			Mean	Deviation	(I-J)		
		U2	2.49	1.193	.996*	0.163	0.000
	U1	U3	2.59	1.226	.891*	0.151	0.000
CONANATNANIT		U4	3.50	1.243	2.846*	0.289	0.000
COMMTMNT		U1	3.58	0.863	-2.846*	0.289	0.000
	U4	U2	2.49	1.193	-1.850*	0.324	0.000
		U3	2.59	1.226	-1.955*	0.318	0.000
	U1	U2	3.60	1.231	.707*	0.192	0.002
		U3	3.60	1.231	.707*	0.192	0.002
USEFULNSS		U4	4.75	0.452	3.974*	0.245	0.000
		U1	4.36	0.738	-3.974*	0.245	0.000
	U4	U2	3.60	1.231	-3.267*	0.305	0.000
		U3	3.60	1.231	-3.267*	0.305	0.000

- ✓ Students from U1, a public university, were more involved than the students from the private universities (U3 and U4).
- ✓ The seminars on development awakened more interest and led more students from U1 to get involved in cooperation projects



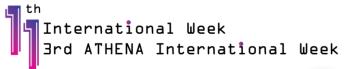
RESULTS (III)

RQ1.2.: Are there differences by gender?

					t test			
	GENDER	N	Mean	Dev.	t	Sig.	Mean differences	St. error dif.
LIND (DCT)	Male	229	1.4	0.814	-0.293	0.77	-0.022	0.076
UNVRSTY	Female	217	1.42	0.785				
FACITY	Male	229	1.72	0.863	-3205	0.001	-0.303	0.094
FACLTY	Female	217	2.03	1122				
DCDEE	Male	229	4.19	2502	-2729	0.007	-0.66	0.242
DGREE	Female	217	4.85	2607				
CDC	Male	229	2.11	1106	-5906	0.000	-0.582	0.099
CRS	Female	217	2.7	0.967				
AVAIDALCC	Male	227	2.83	1122	-2065	0.04	-0.228	0.11
AWRNSS	Female	213	3.06	1196				
DARTCRIAL	Male	227	0.89	0.932	-0.987	0.324	-0.082	0.083
PARTCPTN	Female	213	0.97	0.8				
1000	Male	213	3.32	1129	-2502	0.013	-0.271	0.108
LRNG	Female	205	3.59	1084				
CO. 4. 4T. 4.1T	Male	219	3.07	1161	-3394	0.001	-0.355	0.104
COMMTMNT	Female	208	3.42	0.985				
DEE! EV	Male	205	0.73	0.805	-1176	0.24	-0.094	0.08
REFLEX	Female	206	0.83	0.808				
MODE CUDE CD	Male	210	0.5	0.766	2721	0.007	0.193	0.071
MORE_SUBJ_SD	Female	212	0.31	0.693				
	Male	212	0.57	1093	1902	0.058	0.185	0.097
CONF_FACLTY_SD	Female	210	0.38	0.895				
LICEFILINGS	Male	193	3.99	1155	-2338	0.02	-0.258	0.11
USEFULNSS	Female	190	4.25	0.996				
45444 DDOST	Male	199	0.75	0.742	-1.43	0.153	-0.111	0.078
4FAM_PROFT	Female	178	0.87	0.769				
CHCE IN ARRY	Male	199	0.55	0.925	1687	0.092	0.151	0.09
CHGE_IMPRV	Female	179	0.4	0.803				
CHANGE	Male	155	1.89	0.872	-3778	0.000	-0.384	0.102
CHANGE	Female	153	2.27	0.912				
5500	Male	186	0.45	0.75	2406	0.017	0.179	0.074
FFRR	Female	172	0.27	0.648				



- ✓ Female students' awareness of sustainable development projects was significantly higher than that of the male students.
- ✓ Female students also perceived that they had learned more in the seminars and were more committed to international cooperation
- ✓ Male students perceived a need for more seminars and lectures on sustainable development and more ESD subjects in the degrees offered by their social science Faculties.
- ✓ When solving the case study, the female students had stronger perceptions of the utility of the NGO's infrastructure projects than did the male students.
- ✓ More female than male students found that the NGO needed an organizational and technological change, whereas the male students were convinced that the NGO needed more and different financial resources.





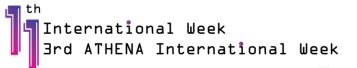
RESULTS (IV)

RQ2: What variables influence accounting students' commitment to development cooperation?

	S. Coefficients Beta	t	Sig.
(Constant)	Beta	3.587	0.000
UNVRSTY	0.097	1.848	0.065
CRS	-0.157	-3.232	0.001
LRNG	-0.1	-1.953	0.052
CONF_FACLTY_SD	0.427	8.482	0.000
USEFULNSS	-0.085	-1.694	0.091
R2= .327			

Multivariate analysis and backward stepwise regression.

- ✓ Significant variables are type of university the student comes from, study program in which the student is enrolled, students' perception of how much they have learned about sustainable development, whether the student states that the Faculty should offer more lectures and seminars on economic and development cooperation, and students' perception of the usefulness of the NGO infrastructure projects
- ✓ Students' perceptions of learning and usefulness are inversely related to their commitment.





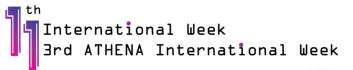
RESULTS (V)

RQ3: What variables determine students' perception of the usefulness of NGOs' infrastructure projects?

St. Coef. Beta (Constant) 15.547 0.000 UNVRSTY -0.132 -2.303 0.022 FACLTY -0.129 -2.508 0.013 CRS 0.132 2.437 0.015 LRNG 0.237 4.437 0.000 CONF_FACLTY_SD -0.119 -2.111 0.036 FFRR 0.114 2.079 0.038 4FAM_PROFT -0.086 -1.693 0.091 CHGE_IMPRV -0.2 -3.473 0.001 R2= .241					
Beta (Constant) 15.547 0.000 UNVRSTY -0.132 -2.303 0.022 FACLTY -0.129 -2.508 0.013 CRS 0.132 2.437 0.015 LRNG 0.237 4.437 0.000 CONF_FACLTY_SD -0.119 -2.111 0.036 FFRR 0.114 2.079 0.038 4FAM_PROFT -0.086 -1.693 0.091 CHGE_IMPRV -0.2 -3.473 0.001		St. Coef.	t	Sig.	
UNVRSTY -0.132 -2.303 0.022 FACLTY -0.129 -2.508 0.013 CRS 0.132 2.437 0.015 LRNG 0.237 4.437 0.000 CONF_FACLTY_SD -0.119 -2.111 0.036 FFRR 0.114 2.079 0.038 4FAM_PROFT -0.086 -1.693 0.091 CHGE_IMPRV -0.2 -3.473 0.001		Beta			
FACLTY -0.129 -2.508 0.013 CRS 0.132 2.437 0.015 LRNG 0.237 4.437 0.000 CONF_FACLTY_SD -0.119 -2.111 0.036 FFRR 0.114 2.079 0.038 4FAM_PROFT -0.086 -1.693 0.091 CHGE_IMPRV -0.2 -3.473 0.001	(Constant)		15.547	0.000	
CRS 0.132 2.437 0.015 LRNG 0.237 4.437 0.000 CONF_FACLTY_SD -0.119 -2.111 0.036 FFRR 0.114 2.079 0.038 4FAM_PROFT -0.086 -1.693 0.091 CHGE_IMPRV -0.2 -3.473 0.001	UNVRSTY	-0.132	-2.303	0.022	
LRNG 0.237 4.437 0.000 CONF_FACLTY_SD -0.119 -2.111 0.036 FFRR 0.114 2.079 0.038 4FAM_PROFT -0.086 -1.693 0.091 CHGE_IMPRV -0.2 -3.473 0.001	FACLTY	-0.129	-2.508	0.013	
CONF_FACLTY_SD	CRS	0.132	2.437	0.015	
FFRR 0.114 2.079 0.038 4FAM_PROFT -0.086 -1.693 0.091 CHGE_IMPRV -0.2 -3.473 0.001	LRNG	0.237	4.437	0.000	
4FAM_PROFT -0.086 -1.693 0.091 CHGE_IMPRV -0.2 -3.473 0.001	CONF_FACLTY_SD	-0.119	-2.111	0.036	
CHGE_IMPRV -0.2 -3.473 0.001	FFRR	0.114	2.079	0.038	
CHOL_INIT INV	4FAM_PROFT	-0.086	-1.693	0.091	
R2= .241	CHGE_IMPRV	-0.2	-3.473	0.001	
	R2= .241				

Multivariate analysis and backward stepwise regression.

- ✓ Significant variables are type of university, student's Faculty, study program in which the student is enrolled, student's perception of how much they have learned about sustainable development, whether the student believes that the Faculty should offer more lectures and seminars on economic and development cooperation, obtaining the correct solution for the accounting case study, and student's perception of the NGO's need for different financial resources and for organizational and technological change
- ✓ Variables such as the need for more seminars and having found the correct solution to the case study are inversely related to the students' perception of usefulness.





RESULTS (VI)

RQ4: Can we develop an ESD model to engage accounting students and make a real difference in their understanding, critical thinking, and ability to act to further Sustainable Development?

	Rotated Mat	rix: Factor loadings	
	FCD 1	FCD 2	FCD 3
Variables	Involvement	Critical Reflection & Systematic Thinking	Learning&Creative Thinking
AWRNSS	0,237	- 0,004	0,154
LRNG	0,991	- 0,095	- 0,091
COMMITMNT	0,668	- 0,430	0,039
PARTCPTN	- 0,169	0,552	- 0,033
REFLEX	- 0,167	0,178	0,158
CONF_FACLTY_SD	- 0,086	0,828	0,090
USEFULNSS	0,214	- 0,696	0,055
CHGE_IMPRV	- 0,053	0,577	0,358
MORE_SUBJ_SD	- 0,163	0,242	0,331
FAM_PROFT	- 0,060	- 0,008	0,280
CHANGE	0,001	- 0,028	0,042
FFRR	- 0,030	0,170	0,698

1 – Involvement (FCD 1)

Students who did not participate in the seminar are much more involved in and sensitized to Development Cooperation. They are thinking about helping or even doing their internship with an NGO.

2 - Critical Reflection and Systemic Thinking Analysis (FCD 2).

The more the students participate in seminars on development and cooperation, the more they think about SDGs and the more they request additional seminars and subjects on the issue. The students also think that the NGO's activity is useful and could improve the way it operates through organizational change.

3 – <u>Participatory Learning and Thinking Creatively for future scenarios (FCD 3)</u>.

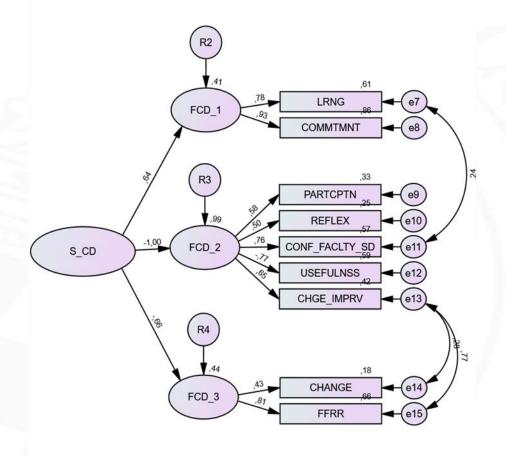
The students were able to propose several changes to improve the NGO's actions and assess its financial needs to carry out the changes.



RESULTS (VII)

RQ4: Can we develop an ESD model to engage accounting students and make a real difference in their understanding, critical thinking, and ability to act to further Sustainable Development?

Measure	Measure Shorthand Value		Rating			
	Low	Medium	High			
	Chi-square	0.057			Χ	
Absolute Fit	AIC	98.132			Χ	
	RMSEA	0.034			Χ	
Campanativa	NFI	0.979			Χ	
Comparative or Incremental Fit	TLI	0.987			Χ	
incremental Fit	CFI	0.992			Χ	
	PRATIO	0.583			Χ	
Parsimonious Fit	PNFI	0.571			Χ	
	PCFI	0.579			Χ	





CONCLUSIONS (I)

- ❖ Firstly, the development and accounting seminars organized by lecturers and members of NGOs at different Spanish universities contribute to transferring knowledge about finance, accounting, and cooperation to university students.
- This knowledge helps to sensitize and commit the students to sustainable development of emerging economies.
- ❖ The participatory activity fostered students' interest in and level of commitment to a fairer society, as well as their solidarity with and awareness of development cooperation projects.
- ❖ Further, motivated students involved in curricular internships in NGOs in Africa have transferred basic accounting knowledge acquired in the university to the NGOs' beneficiaries.
- ❖ These activities, which result in double transfer of finance and accounting knowledge will increase university students' level of commitment to and awareness of this type of development project, while simultaneously aiding micro-entrepreneurs in emerging economies—NGOs' main beneficiaries. The students also became involved in three ways: as recipients of the informative seminars, as contributors of feedback on accounting case study material, and finally as collaborators in educating micro-entrepreneurs in Ethiopia





CONCLUSIONS (II)

COOPERANTES TRANSFIRIENDOSE LOS

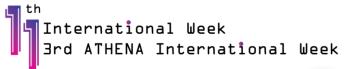
- Case study's approach enabled students to see other types of work, with few resources. They also saw how NGOs pursue their goals with enthusiasm despite this lack of resources and in difficult conditions and thus developed critical thinking skills.
- Developing each university's approach to the reality of marginalization. Understanding marginalization will help the university to assume the role of social agent of change and aid in the acquisition of globally conscious, solidary visions, complementing academic teaching to provide comprehensive education that includes the ethical principles of development education, in line with Argibay et al. (2014), Barth et al. (2007, and Ashford (2004).
- Female students were more aware of and sensitized to sustainable development issues, perceived that they learned more from the seminars, and were more committed after the seminars and willing to help through curricular internships.
- ❖ ☑Before carrying out the project, the accounting students did not generally know that they could do internships in collaboration with an NGO
- ❖ ②students recognizing the need for both different financial resources (crowdfunding or mortgage) and organizational and technological change in the NGO. These items influenced the students' perception of the usefulness of the NGOs' infrastructure projects presented in the case study, in line with Henk et al. (2020).



CONCLUSIONS (III)

COOPERANTES TRANSFIRIENDOSE LOS PODCASTS

- The results on learning and awareness among the students who participated in the activity showed that the activity gave them a vision of how to apply economic, financial, and accounting concepts to the real situation.
- Many students thus perceived that HEIs should offer more courses and seminars on cooperation in emerging economies, in line with Laurie et al. (2016), Fernández-Sanchez et al. (2014), and Koprina and Mejers (2014).
- ❖ → Validity of the theoretical ESD model proposed in this study was demonstrated empirically using SEM analysis. The participatory learning activities, performed through the seminars and case-study resolution, developed the students' critical reflection and creative and systemic thinking abilities. All these skills also increased involvement and fostered students' awareness of sustainable development, in line with Kishita et al. (2018), Veiga Avila et al. (2018), Lambrechts and Hindson (2016), and Van Poeck and Jürgen (2011).

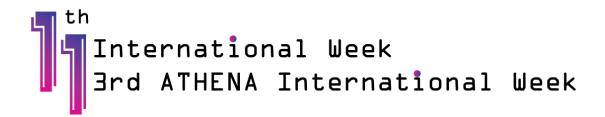




CONTRIBUTIONS

COOPERANTES TRANSFIRIENDOSE LOS PODCASTS

- ✓ Education should be the transformative process to encourage citizen participation in the struggle for a more solidary, just, and equitable global society.
- ✓ Universities should contribute value through conscientious teachers and students to achieve the Sustainable Development Goals (SDGs). Higher education institutions (HEIs) must play a central role as drivers of change (Sierra and Rodríguez-Conde, 2021; Sonetti et al., 2019).
- ✓ After attending the seminar, students show a greater involvement with development cooperation issues.

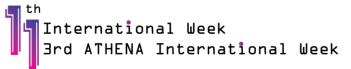




AN APPROACH TO THE STUDY OF SUSTAINABLE DEVELOPMENT AWARENESS (SDA) AMONG UNIVERSITY STUDENTS

SECOND STAGE







The level of awareness and involvement of university students towards sustainability and the SDGs.

- ✓ Higher Education Institutions (HEIs) have an important role in education for sustainable development by fostering the learning of skills and values and preparing students for decision-making to promote pluralistic development and sustainable societies (Laurie et al., 2016; Fernandez-Sanchez et al., 2014; Delors, 1996).
- ✓ The definition of ESD provided by the Environmental Association for Universities and Colleges (2013) is the process of acquiring the knowledge, skills and attitudes needed to build societies that are just, equitable and live together within the environmental limits of our planet, both now and in the near future.
- ✓ The turning point in this process came when UNESCO drafted the report of recommendations on Education for International Understanding, Cooperation and Peace and Education Relating to Human Rights and Fundamental Freedoms in 1974, recognizing the importance of this education as a means of contributing to the solution of the problems facing humanity (Martínez-Scott, Gea-Fernández and Barba-Martín, 2012).
- ✓ University students' awareness of the SDGs is vital to foster a sense of responsibility and empower them to become catalysts for change.
- ✓ Different factors influence the level of SDG awareness among university students. These include educational background, exposure to sustainability-related activities, curricular integration, and individual motivation.





- ❖ The consideration of education as one of the most important methods of solving the fundamental problems surrounding human survival and well-being along with cooperative measures, gives Education for Sustainable Development (ESD) a leading role at the international level (Rieckmann, 2018; Lozano et al., 2013; UNESCO 2014; Calder and Clugston, 2003).
- * Higher Education Institutions (HEIs) have an important role to play in ESD, fostering the learning of skills and values and preparing students for decision-making to promote pluralistic development and sustainable societies (Laurie et al., 2016).
- They also play a key role in clarifying the role of ESD, linking sustainability not only to environmental, but also to social and economic aspects (Kagawa, 2017).
- Engaging students in sustainability initiatives, student-led projects, and community-based activities can enhance their understanding of sustainability issues and foster a sense of responsibility and agency (Wiek et al., 2012). Creating platforms for student participation, such as sustainability-focused clubs or organizations, provides opportunities for peer-to-peer learning and collective action (Kirk & Thomas,

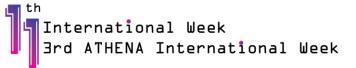




Several factors influence the level of SDG awareness among university students. These include educational background, exposure to sustainability-related activities, curriculum integration, and individual motivation. Research conducted by Oktaviani et al. (2020) found that students engaged in sustainability-focused programs demonstrated higher levels of SDG awareness compared to those in traditional disciplines.

Promoting SDG awareness among university students presents challenges such as limited institutional support, insufficient resources, and the absence of dedicated courses. However, opportunities exist for enhancing SDG awareness through innovative teaching approaches, interdisciplinary collaboration, and partnerships with external stakeholders (Baldacchino et al., 2021).

SDG awareness has the potential to drive tangible actions aligned with sustainable development. Studies have shown that students with higher levels of SDG awareness are more likely to engage in pro-environmental behaviors, volunteer in community initiatives, and advocate for social and environmental justice (Kiron et al., 2017).





OBJECTIVES

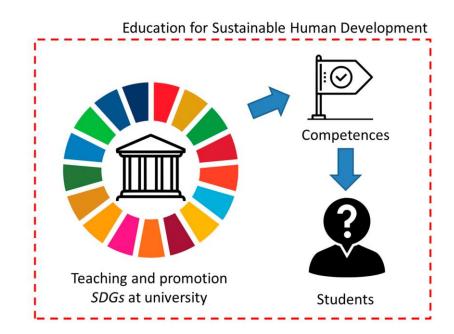
On the basis of the definition of sustainable development, which is described by the World Commission as: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987), the aim of this research is,

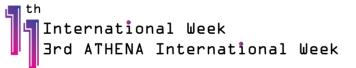
MAIN OBJECTIVE:

 to know first-hand the level of compromise and knowledge that the university students have about the SDG.

and specifically,

focusing in their proximal environment, that is the university.







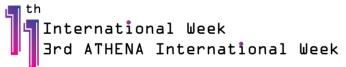
OBJETIVES (1/3)



Task 1: Determining the level of awareness

Objective: To know the level of awareness of university students towards sustainability and the SDGs.

Description: Continuing with the research conducted on the level of awareness of university students towards development cooperation, the aim is to go a step further, analyzing their level of awareness, but from a broader perspective towards the SDGs. Engaging students in sustainability initiatives, student-led projects and community-based activities can enhance their understanding of sustainability issues and foster a sense of responsibility and agency (Wiek et al., 2012). To carry out this objective, a questionnaire will be conducted to reflect the level of commitment of university students to different aspects of sustainability, such as what sources of information they use to learn about sustainability issues, whether they have recently taken any sustainable action in their daily lives, or what their position is towards certain sustainable





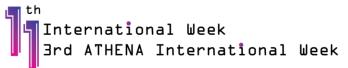
OBJETIVES (2/3)



Task 2: Determination of key factors

Objective: To find out which are the factors that most move university students towards sustainability.

Description: Once objective one has been achieved, the aim is to know which factors are those that influence the level of awareness of university students towards the SDGs, so an analysis will be made of the data obtained to see the type of statistical relationships that are obtained after a multivariate analysis whose result will be a relationship of variables that have a statistically significant relationship with the dependent one we want to analyze.



OBJETIVES (3/3)

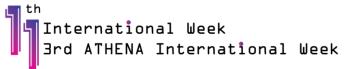


Task 3: Analysis of possible differences

Goal: To find out the existing differences among university students towards sustainability.

Description: In a third phase of the research, the aim is to find out the possible differences existing among university students according to characteristics such as gender, the degree they are studying or the year they are in, which will have been previously obtained through the completed questionnaire. If necessary, a difference of means will be carried out, which will give us information on the existing differences between the sustainability variables, for each of the variables to be analyzed, for example gender. Probably, and depending on the size of the sample and its characteristics, some of the demographic variables will establish differences, as in results achieved in previous articles (Pérez et al., 2023).





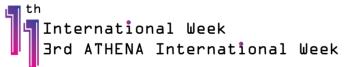


Research Questions

Are the students aware of sustainability?

Are the HEIs ready to prepare the students for decision-making to promote pluralistic development and sustainable societies?







Methodology

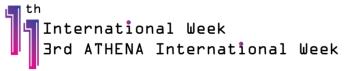
The methodology is empirical, based on a questionnaire prepared to be answered by university students from a public university of Spain. The response rate was an eighty per cent.

Reliability Statistics

Cronbach's
Alpha
N of Items
,888
58

Once we obtained the responses, the questionnaire was validated with a Cronbach test resulting in a 88%. Then, the data was treated and analised with SPSS software with firstly a CPA to strenght the factors and then we will carry out multivariate analysis to deepen in the topic trying to explain which are the factors that explain the SDA model. As primary expected results SD factors such cooperative learning, action statements, perceived functions for universities, source of information about sd students used, actions during the past month for sd reasons and attitudes towards esd, explained the awareness of university students related to SD.





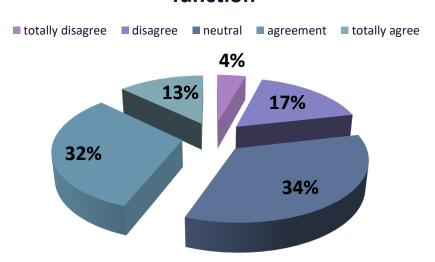


Results (1/5)

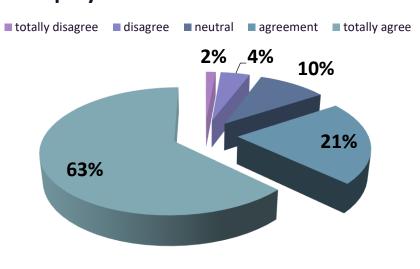
Are the HEIs ready to prepare the students for decision-making to promote pluralistic development and sustainable societies?

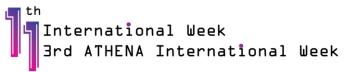
PERCEIVED FUNCTIONS FOR UNIVERSITIES

To replicate society and culture and promote citizenship-the socialisation function



To train people for future employment-the vocational function



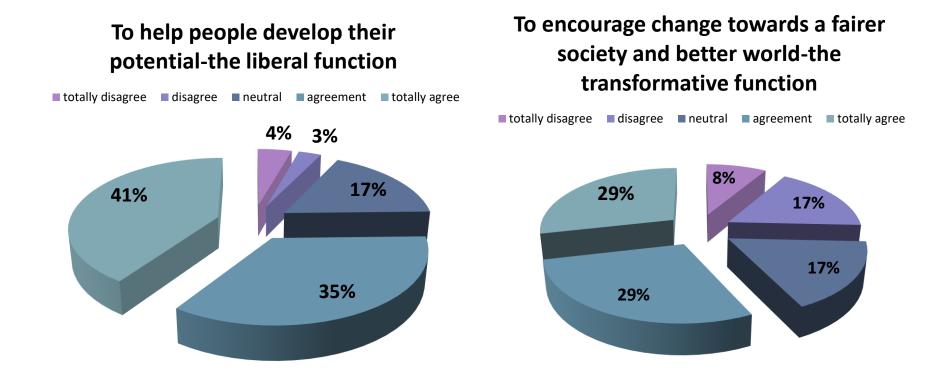


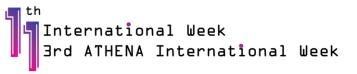


Results (2/5)

Are the HEIs ready to prepare the students for decision-making to promote pluralistic development and sustainable societies?

PERCEIVED FUNCTIONS FOR UNIVERSITIES

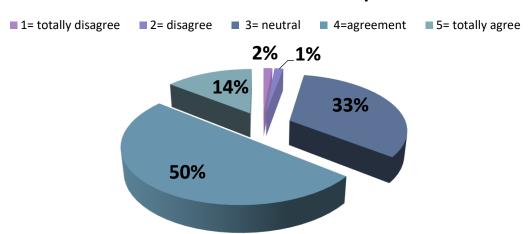




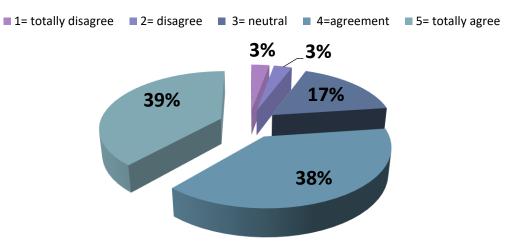


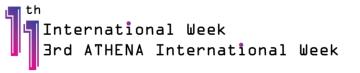
Results (3/5)

I understand the important role of education and lifelong learning opportunities for all (formal, nonformal and informal learning) as key drivers of sustainable development, to improve people's lives and to achieve the Sustainable Development Goals.



I understand that education is a public good, a global common good, a fundamental human right and a basis for ensuring the realization of other rights

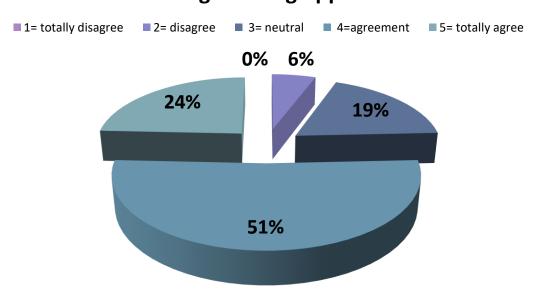




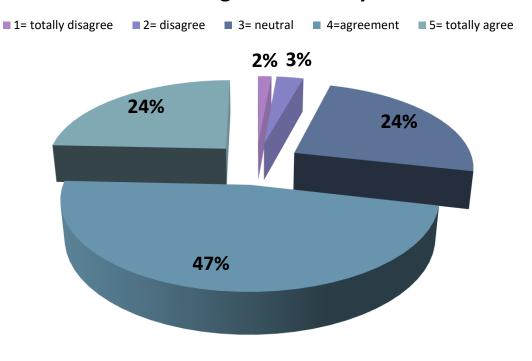


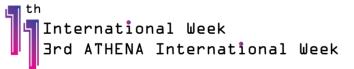
Results (4/5)

I am aware of the inequality in access to and attainment of education, especially among boys and girls and in rural areas, and the reasons for the lack of equitable access to quality education and lifelong learning opportunities



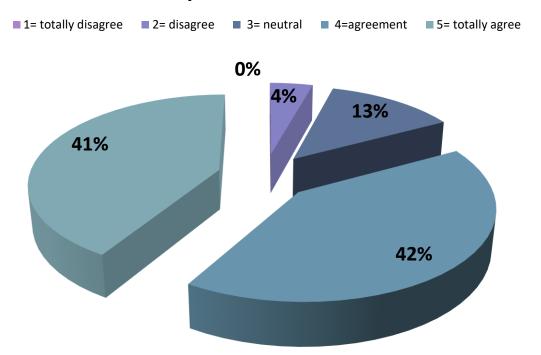
I understand the important role of culture in achieving sustainability.



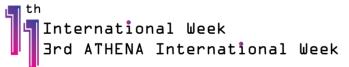


Results (5/5)

I understand that education can contribute to creating a more sustainable, equitable and peaceful world.



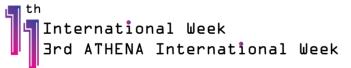






Conclusions (1/2)

- The findings of the literature review underscore the need for targeted interventions to enhance SDG awareness among university students. Academic institutions can play a crucial role in integrating the SDGs into their curricula, providing interdisciplinary education, and fostering partnerships with external stakeholders.
- * Engaging students through practical projects, internships, and extracurricular activities can also contribute to their understanding and commitment to the SDGs. Promoting SDG awareness among university students is essential for creating a generation of future leaders who are knowledgeable and committed to sustainable development.
- ❖ By understanding the factors that influence students' awareness and designing effective educational approaches, academic institutions can empower students to become agents of positive change. Continued research and collaboration between academia, policymakers, and practitioners are crucial for advancing SDG awareness among university students and achieving the goals outlined by the United Nations.





Conclusions (2/2)

- ❖ Promoting SDG awareness among university students is essential for creating a generation of future leaders who are knowledgeable and committed to sustainable development.
- ❖ By understanding the factors that influence students' awareness and designing effective educational approaches, academic institutions can empower students to become agents of positive change.
- ❖ Continued research and collaboration between academia, policymakers, and practitioners are crucial for advancing SDG awareness among university students and achieving the goals outlined by the United Nations.











An approach to the study of SDG awareness among university students