



VANESSA CAMPOS
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ANA EJARQUE, DIRS.

**Connecting sustainability
organizational models
with SDGs**

VNIVERSITAT
ID VALÈNCIA

CONNECTING SUSTAINABILITY
ORGANIZATIONAL MODELS
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VANESSA CAMPOS, JOAN R. SANCHIS &
ANA EJARQUE (DIRS.)

UNIVERSITAT DE VALÈNCIA



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INTRODUCTION

The Economy for the Common Good (ECG) movement started in 2010 with the publication of the first edition of the book «Gemeinwohl-Ökonomie» (Economy for the Common Good) by Christian Felber and the presentation of a first version of the common good balance sheet by a group of Austrian entrepreneurs. Currently, more than 2,000 companies, mainly small and medium-sized enterprises (SMES), are registered as supporters and more than 600 companies in Europe have already produced an ECG balance sheet. Thus, the movement spread from the German-speaking countries to other geographies, especially in Europe and Latin America.

The ECG can be considered as a new approach in line with several socioeconomic and political approaches that aim to frame the economic activity within ecological and social boundaries, thus contributing to work under a sustainable framework. Recently, a growing number of scholarly works focussed on the ECG both from conceptual and empirical perspectives.

In this line, the «II Economy for the Common Good International Conference 2022», under the slogan «Connecting Sustainability Organizational Models with SDGs» aimed at bringing together those scholars working on topics related to the ECG and other sustainability approaches. It provided a platform for a critical review, a resonance space, and a platform for networking. To do so, the conference included 8 tracks, namely: (1) Principles, Antecedents, Methodologies and Foundations of ECG; (2) Embedding

Sustainability into Strategic Management Processes; (3) Sustainable Human Resource Management; (4) Sustainability Strategies; (5) Sustainability and SDGs in Higher Education; (6) Sustainability and SDGs, Impact Measurement and Non-Financial Reporting in SMEs; (7) The Political Relevance of Alternative Sustainability Frameworks; and (8) Sustainability, AI, Digitalisation and Innovation.

As a result, the present book comprises the main works, based on the received submissions, presented during the II ECGIC 2022 held in March 2022 at the University of Valencia. Thus, this scientific book allows analyzing several topics such as sustainable development, corporate sustainability, social responsibility, and SDGs. Therefore, being of great interest to both academia and practitioners related to sustainability and corporate social responsibility fields.

In this sense, the scientific works have been divided into 10 chapters. Hence, each chapter deeper analyzes the conference's main topic. Thus, focusing on the study of the social dimension of sustainability from the human resource management point of view, several studies analyze its influence on social performance, as well as its consideration when applying quality management principles and practices as a driver to the social dimension of the organization since these practices could lead to the development of a sustainable orientation. Additionally, it is also important to analyze how work-family conflict and professional stress among financial workers and their relationships levers to burnout syndrome. Another key point is the role of women in the economy as the performance of organizations has a great deal with gender diversity from its triple dimension (economic, social, and environmental). Moreover, based on the concept of Gender Equality presented in the United Nations' Sustainable Development Goals, the gender-role perspective is strictly related to the ECG.

Likewise, from a more holistic point of view, it is important to take into consideration those organizations that care about the socio-economic sector in which they operate. As a result, concepts such as Sustainability or Sustainable development, Corporate Social Responsibility (CSR) or Corporate Social Performance

(CSP), have emerged to help firms to improve the way they relate with their stakeholders, thus allowing them at performing both literature review and quantitative analysis. As a matter of fact, the Life Cycle Management (LCM) tools to analyze the sustainability of olive groves in the Alentejo region of Portugal are discussed among these chapters since sustainability assessment regarding the economic, social and environmental pillars can support decision-making processes.

Under those circumstances, fostering more accountable, democratic, and effective sustainability actions and outcomes is essential. This way organizations assess and report on their non-financial performance by means of ethical, social, and environmental accounting. However, it is also important to be aware that the complexity of the method landscape can hinder the method selection process.

The ECG encompasses the mentioned topics above through a holistic integration into the business strategy. Thus, some works focus on the understanding of common good economics. To do so, a specific chapter delivers an innovative way to not only normatively prescribe preferences for the common good but also to investigate them empirically. In like manner, the ECG facilitates the SDGs integration into the core business. So, it allows analyzing the integration of SDGs into supply chain management. As a result, the management of the firms' supply chains using the Common Good Matrix will produce positive social impacts along with positive environmental impacts. By doing so, firms will strengthen their competitive advantage in terms of differentiation.

Finally, we would like to recognize and thank all the support and funding received from Conselleria d'Economia Sostenible, Caixa Popular, and Universitat de València, the faculty of Economics, in making this book a reality.

1. INTEGRATING THE SUSTAINABLE DEVELOPMENT GOALS INTO SUPPLY CHAIN MANAGEMENT THROUGH THE ECONOMY FOR THE COMMON GOOD

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Abstract: Extant literature has pointed to sustainability-driven management practices to lever business transformation. Moreover, some authors hold that there is a possible trade-off between sustainability and performance. However, there is still little empirical evidence on the impact that sustainability-driven processes such as sustainable supply chain management have on a business's performance. Thus, the present study tries to fill this gap by providing empirical evidence using a sample of 206 businesses from five European countries that have adopted the Economy for the Common Good framework to integrate the Sustainable Development Goals into their supply chain management.

To this end, the authors followed a quantitative research approach based on structural equations that allowed them to test for direct and indirect (mediating) effects. The authors found a positive relationship between the implementation of sustainability-driven supply chain processes and firms' performance mediated by the deployment of competitive advantage based on product/service differentiation.

Keywords: Sustainable Development, Corporate Sustainability, Sustainable Development Goals, Sustainable Supply Chain Management, Economy for the Common Good.

1. INTRODUCTION

According to the Brundtland Commission, sustainable development (SD) is the one «which meets the needs of the present without compromising the ability of future generations to meet their own needs» (United Nations World Commission on Environment and Development, 1987, p.8).

In 2015, the United Nations (UN) launched the 2030 agenda for SD which consists of 17 goals and 169 related targets to operationalize SD. In this line, in a speech at the Global Economic Forum held in Davos in 2016, Mr. Ki-moon (the UN Secretary-General at the time) referred to the business role in the 2030 agenda as follows «businesses can provide essential solutions and resources that put our world on a more sustainable path». Thus, highlighting the key role that businesses are called to play in the implementation of a successful sustainability agenda. Consequently, SD is to be achieved through the cooperation of businesses and society.

In contrast, the literature body aimed at analyzing the intersection of SDGs and business practices is still scarce. This can be due, in part, to the novelty of the SDG framework and the lack of understanding of how to operationalize the SDGs (Van Zanten and Van Tulder, 2018; Howard-Grenville, et al., 2019; Sachs et al., 2019; Ejarque and Campos, 2020).

Following Dyllick and Hockerts (2002), corporate sustainability (CS) entails the integration of economic, ecological, and social aspects in an organization's short and long-term planning. Moreover, according to Engert et al. (2016) CS demands a strategic approach to ensure that it is an integrated part of the business strategy and processes to make real progress. Hence, they argue that CS needs to encompass a holistic perspective moving from being a set of disconnected actions and weak sustainability reporting to becoming a coherent part of the firm's vision, culture, governance, management, and performance systems.

In this line, Johnson and Schaltegger (2016) point to CS as the business approach that addresses SD. Therefore, the current

literature body on CS and, the existing CS frameworks can shed light on the challenge of understanding how to operationalize the SDGs at the business level.

Indeed, some authors argue that «one main aspect of the operationalization of CS is the implementation of management instruments, concepts, and systems, i.e., sustainability management tools» (Johnson and Schaltegger, 2016, p.481). Within these systems, Supply Chain Management (SCHM) and its transformation into Sustainable Supply Chain Management (SSCHM) may become a critical point to operationalizing CS.

In this vein, SSCHM is defined as one that is «consistent with the principles of SD, such as ensuring a strong, healthy, and just society, living within environmental limits, and promoting good governance» (Walker & Brammer, 2009, p. 128).

For his part, Galbreath (2009) considers that CS practices can provide firms with competitive advantages (CA). Therefore, we hold that following the same logic the SDGs should be integrated into SSCHM as they can also become a source of CA through both, cost reduction and market differentiation.

Hence, the present research is aimed at empirically testing the impact of the implementation of the Economy for the Common Good (ECG) in the supply chain, as a stakeholders-driven management system that allows the sustainable transformation of businesses through the integration of SDGs (Dyllick and Muff, 2016; Giesenbauer and Müller-Christ, 2018; Müller-Christ et al., 2018; Felber et al., 2019; Ejarque and Campos, 2020), on the performance of 206 European firms. In this sense, this study contributes to the knowledge to advance by providing empirical evidence on the impacts of the integration of SDGs into SCHM through the ECG model on business performance. To this end, we used structural equations to test for direct and indirect (mediating) effects.

This chapter is structured into five sections. After the present introduction, in section 2 we present the conceptual framework based on the extant literature on CS, SDGs, SSCHM, and their connections to competitive advantage, and performance. At the end

of section 2, we present the hypotheses development. In section 3, we present the research methodology and sample profile. In section 4, we discuss the findings. Finally, the conclusions are presented in section 5.

2. CONCEPTUAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

2.1 The ECG as a holistic organizational model to integrate CS into business strategy

Pinelli and Maiolini (2017) state that CS has businesses' sustainability agendas as a starting point. However, according to them, such agendas often lack strategic thinking. Consequently, these agendas usually turn out to be ineffective or inadequate. For that reason, they propose to analyze the determinant factors that influence the organizations' sustainability agendas according to two key variables: the organization's posture towards stakeholders' expectations, and the employment of static (reactive) or developmental (proactive) models to give a response to stakeholders' expectations.

Hence, they classify the scope and features of such sustainability agendas by employing a matrix with four quadrants describing how a sustainability agenda can evolve, based on an organizational learning process. In like manner, an organization's sustainability agenda is expected to evolve from considering sustainability as a means to achieve economic performance based on company-specific resources and expertise to an agenda that considers sustainability as an end strategy to promote SD based on the importance of the different issues for the stakeholders. Important to realize that this classification is following two of the three most widely used organizational theories applied to CS (Montiel and Delgado-Ceballos, 2014; Kock et al., 2012): stakeholder theory (Freeman, 1984) and resource-based view (Teece and Kay, 2019).

For its part, the ECG sustainability framework has as its main purpose to re-align business goals with society allowing the integration of SDGs into business operations (Giesenbauer and Müller-Christ, 2018; Müller-Christ et al., 2018; Felber et al., 2019). Thus, following the same logic as that of shared value (Porter and Kramer, 2011), it works on the idea that businesses can co-create three types of value (i.e., social, environmental, and economic) and, consequently, the creation of social and environmental value reinforces the business ability to create economic value. It is worth mentioning that no matter whether organizations are aware or not of such an ability, they possess it. To do so, the ECG relies on two interconnected sustainability management tools to enable businesses to implement and monitor their sustainability agendas: the common good matrix (CGM) and the common good balance sheet (CGBS) (Felber et al., 2019; Ejarque and Campos, 2020; Talavera and Sanchis, 2020). In sum, the ECG sustainability framework is suitable to design and handle a sustainability agenda that considers sustainability as an end strategy to promote SD based on the importance of the different issues for the stakeholders, following the classification by Pinelli and Maiolini (2017).

Thus, on the one hand, the CGM guides the implementation process. It is conceived as a strategic matrix to guide the integration of sustainability into the business operation. To do so, the CGM takes stakeholders' management (Freeman, 1984) as a reference and drives it according to four cross-values: human dignity, solidarity and social justice, environmental sustainability, and transparency and co-determination. Likewise, the CGM allows the identification of the different sources of non-economic value creation for the different stakeholder groups. Thus, it facilitates the implementation of sustainability-driven management following a multi-stakeholder orientation. Among the stakeholders considered in the CGM, suppliers are depicted in its first row. Figure 1, below, shows, the CGM.



Figure 1. The Common Good Matrix

On the other hand, associated with the CGM, the ECG model proposes a set of indicators to monitor the process evolution which constitutes the ECG measurement theory. By its side, the CGBS takes such a set of indicators as a starting point and works as an integrated report that allows process monitoring. The main novelty of the CGBS as an integrated report, however, is that it works as a source of information related to sustainability concerns for both internal and external stakeholders and quantifies how sustainable the stakeholders’ management of the firms using a scoring system. Thus, concerning SSCHM using the ECG framework the firms could get a maximum score of 200 points, the higher the score the more sustainable SCHM is.

Moreover, there are two versions of the CGBS. One version is designed to be applied in large enterprises¹, and another simplified version² is designed to be applied in micro small, and medium enterprises (MSMES). This can be relevant in the European context

¹ https://www.ecogood.org/wp-content/uploads/2020/04/ecg_full_balance_sheet_workbook.pdf

² https://www.ecogood.org/wp-content/uploads/2020/04/ecg_compact_balance_sheet_workbook.pdf

as, according to the annual report on European SMES (European Commission, 2021), 99% of European businesses are MSMEs, generating 56.4% of added value, and 66.6% of employment in the non-financial business sector. Consequently, in the European context the integration of the SDGs into business operations through CS practices, and sustainability management tools requires to be adapted to MSMEs.

Additionally, the extant literature on CS points to the need to distinguish between those organizations that do and those that do not make effective contributions to SD. In this line, Dyllick and Muff (2016) provide a clarification of the meaning of sustainable business by introducing a typology from business as usual to true business sustainability or sustainability 3.0. In fact, in their work, they mention the ECG businesses along with B-Corporations as holistic organizational models that practice sustainability 3.0. In the same way, they state that the ECG organizational model allows starting the making- decision process with sustainability challenges, facing the value creation taking triple bottom line as a base (Elkington, 1997), and holding an outside-in organizational perspective. In our view, it is an important contribution to legitimize and popularize the ECG organizational model which includes strategies, management systems, tools, and performance measures.

More recently, some authors (Baumgartner and Rauter, 2017; Silvestre and Fonseca, 2020) agree that the integration of CS into daily business practices is necessary for its adequate development due to the following reasons: it improves competitiveness and general well-being, it appeals to a holistic vision of the different sustainability dimensions, it allows the typifying of organizations actions and activities, it is a relevant part of organizational strategic planning, and it acts as a conceptual structure in the decision-making process. Accordingly, we argue that the ECG organizational model may leverage the competitiveness of the business where it is implemented. In short, those businesses that get higher scores in the different indicators used in the CGBS would be more likely to become more competitive and, consequently, experience performance improvements after its implementation.

2.3 Sustainable Supply Chain Management using the Economy for the Common Good framework

The most commonly accepted definition of SSCHM is the one that entails a procurement that is consistent with the principles of SD, such as ensuring a strong, healthy, and fair society, living within environmental limits, and promoting good governance (Walker & Brammer, 2009).

In contrast, over the initial period comprising from the 1990s to the beginning of the 2000s, the definitions of SSCHM usually focused on a single aspect of sustainability, i.e. green or environment-related concerns (Green, Morton, & New, 1996) (Hall, 2000). In this initial period, the authors take the Natural Resource-Based View (NRBV) by Hart (1995) as a base. Thus, looking at SSCHM as a strategic capability that can deliver a low- cost competitive advantage through continuous improvement processes associated with pollution prevention, preempt competitors through stakeholders' integration by minimizing the life-cycle cost of products, and promote SD by minimizing the environmental burden of the firm growth.

After performing a structured literature review on the theories underlying SSCHM, Taboulic & Walker (2015) concluded that there is no consensus regarding the definition of SSCHM. However, they identify the key theories underlying the concept of SSCHM pointing to the NRBV (Hart S. L., 1995), and the stakeholder theory (Freeman, 1984) as being the two most relevant in this context. In the same vein, they also state an evolution of a such concept toward a more integrated approach that includes social concerns. Thus, being the more recent definitions more tied to the concept of SD. This way, they also point to social and human dimensions of sustainability as under-explored aspects of SSCHM (Czinkota, Kaufmann, & Basile, 2014) (Wolf, 2014) (Meixell & Luoma, 2015) (Genovese, Acquaye, Figueroa, & Leny Koh, 2017).

On their side, according to some authors, the ECG framework takes the stakeholder theory and proposes to base the manage-

ment of the firms' relationship concerning their stakeholders on the principles of SD (Campos, Sanchis, & Ejarque, 2020) (Felber, Campos, & Sanchis, 2019) (Ejarque & Campos, 2020). Hence, the ECG model allows for aligning the management of an organization's supply chain with the SDGs through four principles: human dignity in the supply chain, solidarity and social justice in the supply chain, environmental sustainability in the supply chain, and transparency and co-determination in the supply chain. Thus, filling the existing gap in the unexplored areas of SSCHM. Consequently, we hold that the ECG framework is one of the available alternative models that can serve to implement SSCHM.

2.4 Hypotheses development

According to previous developments in CS literature the operationalization of sustainability processes and operations into business strategy as being an antecedent of competitive advantage and business performance (Porter and Kramer, 2011; Ganescu, 2012; Peters and Zelewski, 2013; Stead and Stead, 2014; Engert et al., 2016; Silvestre and Fonseca, 2020).

Given that ECG organizational model is stakeholder-oriented as it takes stakeholders management as a reference to integrate CS into business strategy (Felber et al., 2019; Ejarque and Campos, 2020), and previous studies point to stakeholder management as showing a positive correlation with business performance (Patel et al., 2016), we can expect that organizations that are more effective in integrating sustainability-driven stakeholder management through the ECG framework show better performance levels.

Therefore, we propose the following hypothesis:

Hypothesis 1. The perceived social and environmental impact caused by SSCHM using the ECG framework has a positive effect on organizational performance.

In addition, following the NRBV theory (Hart S. L., 1995) (Hart & Milstein, Creating Sustainable Value, 2003) (Hart & Dowell,

2010) and its more recent extension the Social- Resource-Based view of the firm (SRBV) (Tate & Bals, 2018), those firms that actively contribute to SD may benefit from differentiation opportunities that arise from improvements in legitimacy, reputation, and brand image. Some authors have discussed and tested the positive effects of SSCHM on firms' legitimacy to face their stakeholder's expectations, reputation, and brand image (Czinkota, Kaufmann, & Basile, 2014) (Genovese, Acquaye, Figueroa, & Leny Koh, 2017). Whilst, some others have examined the impact of SSCHM on businesses' reputation as good citizens creating a differentiated brand image that drives improvements in organizational performance (Wolf, 2014) (Meixell & Luoma, 2015).

Taking into consideration that the ECG organizational model integrates some values coming from the social responsibility approach, i. e. respect for human dignity, solidarity, and social justice, and transparency and co-determination with environmental sustainability. Thus, following a holistic approach. we propose the following hypotheses.

Hypothesis 2. The perceived social and environmental impact caused by SSCHM using the ECG framework has a positive effect on the ECG firm's competitive advantage based on differentiation.

Hypothesis 3. The firm's competitive advantage based on differentiation plays a mediating role between the perceived Social and Environmental impact caused by the SSCHM using the ECG framework and the ECG firms' performance.

Figure 2, below, depicts the research model.

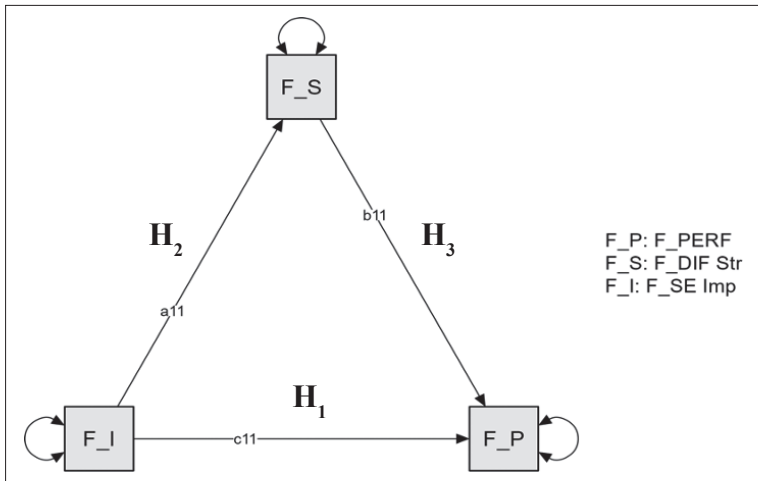


Figure 2. Research model

3. RESEARCH METHODOLOGY AND SAMPLE

3.1 Data collection and sample profile

Data were collected in European ECG firms as a part of a larger study using the following procedure. Firstly, we identified the firms that implemented the ECG framework from 2011 to 2017 in Europe. From this set, we selected the ones that had produced and audited their CGBS with the collaboration of an external certified auditor. Thereafter, we designed a cross-sectional study based on a questionnaire distributed among the above-mentioned firms. Such a questionnaire asked about the perceived impact that the ECG framework has had on different aspects, along with measures of organizational size. It also picked up information on the industry, age, and country of origin, being these variables treated as control variables for statistical purposes. We distributed the questionnaire through an e-mail addressed to the firms’ managers during the first quarter of 2018. The e-mail contained a link that allowed the

firms to fulfill the questionnaire on the online platform «Survey Monkey». This facilitated data-gathering.

The population comprised an overall 400 European firms that had implemented the ECG framework by producing and auditing their CGBS up to December 31, 2017. We sent the questionnaire to the overall population and got 206 full and valid responses, i.e., the sample comprised 51.50% of the population.

Five European countries concentrated most of the ECG firms included in the sample: Germany (39.8%), Austria (30.1%), Spain (19.4%), Italy (7.8%), and Switzerland (2.4%). Whilst the rest of the European countries accounted for 0.49%. This sample profile by country is very similar to the one of the population, with 45.1% of the ECG firms from Germany, 35.5% from Austria, 11.2% from Spain, and 4.3% from Italy.

3.2 Measurement scales

To empirically test the impact of the implementation of SSCHM using the ECG framework on firms' competitive advantage based on differentiation and firms' performance, we proceeded to define performance as the endogenous construct for this study. Hence, we measured the endogenous construct by the combination of two previous measurement scales (Johnson, 2015; Patel et al., 2016). Firstly, we took the multi-item perceptual measure employed by Patel et al. (2016) to measure firm performance as a base.

However, instead of measuring the items included in the original scale by Patel et al., (2016) based on a 0-100 Likert-type scale, we employed a 1-5 Likert-type scale. We considered the 1-5 scale more appropriate because our purpose was to test the impact of the ECG framework as a specific SSCHM framework on business performance, and thus, we needed to ask respondents about the perceived effects on different performance items from a sustainability tool implementation, as in the case of Johnson (2015).

Thus, we labeled the endogenous construct as performance (PERF). We measured PERF using the following items: sales revenue (PERF1), profitability (PERF2), market share (PERF3), and productivity (PERF4). Respondents were asked to rate the effects of the ECG as a SSCHM framework on these items on a 1-5 Likert-type scale (1 very negative effect, 2 negative effects, 3 no-effect, 4 positive effects, 5 very positive effects).

In line with the purpose of the present study, we took as the exogenous construct the perceived social and environmental impact of SSCHM after having implemented the ECG framework. This variable was labeled as SE_Imp in our research model.

To measure it, we adapted previous scales (Wolf, 2014) (Meixell & Luoma, 2015). Hence, we employed the following items: Fair and transparent product/service information to customers (SE_Imp1), customers' trust (SE_Imp2), cooperation with customers (SE_Imp3), minimizing the environmental impact of production and logistics (SE_Imp4), and sustainability reputation (SE_Imp5). Respondents were asked to rate these items on a 1-5 Likert-type scale (being 1 strongly disagree and 5 strongly agree).

Later on, we defined the mediator variable competitive advantage based on differentiation (Dif_S) and measured it through the adaptation of previous scales (Czinkota, Kaufmann, & Basile, 2014). Therefore, we used the following items: customers' satisfaction (Dif_S1), product/service perceived quality (Dif_S2), product and/or process innovation (Dif_S3), sustainable brand image (Dif_S4), perceived product/service differentiation (Dif_S5). Respondents were asked to rate these items on a 1-5 Likert-type scale (being 1 strongly disagree and 5 strongly agree).

Finally, we employed the industry, age, and country of origin of the firms as control variables in the study.

3.3 Analysis technique

The present study aimed to empirically test the impact of the SSCHM through the implementation of the ECG framework (SE_Imp) on

firms' competitive advantage based on differentiation (Dif_S) and performance (PERF), being Dif_S treated as a mediator variable in the research model. Therefore, we employed a quantitative approach based on structural equation modeling (SEM) as the suitable technique. We did so because SEM is considered the technique of choice when the research purpose is to examine a series of dependence relationships simultaneously by employing all possible information and testing for mediating effects (Hair, Black, Babin, & Anderson, 2018).

Finally, to avoid the issue of potential common method bias (CMB) we controlled for VIF and partial correlation analysis (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

4. RESULTS AND DISCUSSION

Following (Hair, Black, Babin, & Anderson, 2018), SEM requires a two stages approach. Firstly, we must validate the measurement model to continue with the structural model assessment which allows us to accept or reject the research hypotheses. Secondly, we must assess the structural model. Tables 1 and 2 below show the overall model fit indices and the validation of the measurement model.

TABLE 1. Fit Indices

χ^2	<i>df 74; p < 0.001</i>
CFI	0.921
TLI	0.903
NNFI	0.903
NFI	0.899

As we can see in table 1, the overall fit indices fall within the recommended thresholds. Therefore, as the model showed an appropriate level of goodness of fit we considered we were working with a reliable model.

TABLE 2. Validation of the measurement model

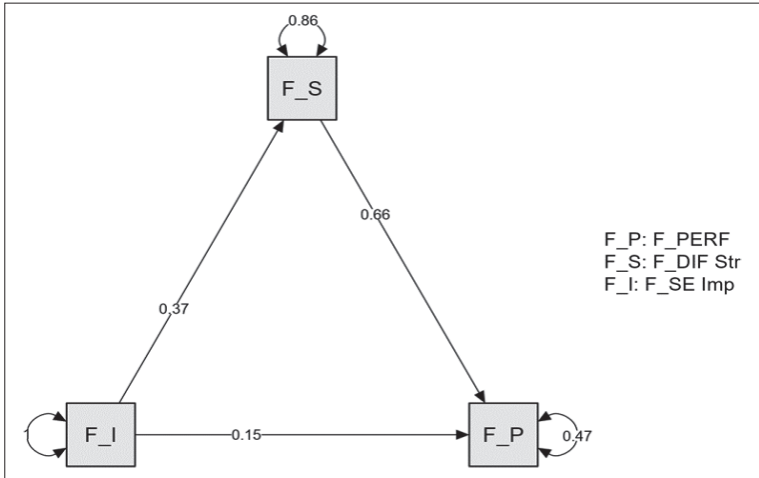
<i>95% BCACI</i>					
<i>Construct</i>	<i>Indicator</i>	<i>CR</i>	<i>Lower</i>	<i>Upper</i>	<i>Loading</i>
SE_Impact	SE_imp1	0.931	0.377	0.624	0.856*
	SE_Imp2		0.433	0.653	0.937*
	SE_Imp3		0.426	0.643	0.939*
	SE_Imp4		0.261	0.558	0.721*
	SE_Imp5		0.314	0.598	0.825*
Dif_S	Dif_S1	0.933	0.489	0.700	0.844*
	Dif_S2		0.462	0.654	0.847*
	Dif_S3		0.538	0.718	0.883*
	Dif_S4		0.535	0.725	0.895*
	Dif_S5		0.511	0.740	0.834*
PERF	PERF1	0.919	0.486	0.694	0.970*
	PERF2		0.398	0.665	0.833*
	PERF3		0.446	0.679	0.955*
	PERF4		0.240	0.525	0.687*

Thereafter, we examined the reliability of the measurement scales included in the measurement model (Hair, Black, Babin, & Anderson, 2018). As table 2 shows, the standardized loadings of all the items used to measure the constructs were above 0.7 and statistically significant according to the 95% bias-corrected and accelerated confidence intervals (BCACI). In addition, the composite reliability of the three constructs was above the recommended threshold of 0.7. Hence, we concluded that the measurement scales we used in our research model were valid and reliable.

Thereafter, we proceeded to test the structural model relationships. Figure 3 and Table 3 below depict the results of the structural model assessment generated using JASP statistical software.

As we can observe in figure 3, the three path coefficients that capture the relationships among the three variables under study

showed a positive sign. Thus, indicating that the relationship among the variables was positive in all the cases. Thereafter, we proceeded to statistically test their significance using 95% BCACI and to assess the portion of variance that our research model was able to explain through R^2 (Hair, Black, Babin, & Anderson, 2018).



```
# -----  
# Mediation model generated by JASP  
# -----  
  
# dependent regression  
F_PERF ~ b11*F_DIF Str + c11*F_SE Imp  
  
# mediator regression  
F_DIF Str ~ a11*F_SE Imp  
  
# effect decomposition  
# y1 ~ x1  
ind_x1_m1_y1 := a11*b11  
ind_x1_y1 := ind_x1_m1_y1  
tot_x1_y1 := ind_x1_y1 + c11
```

Figure 3. Structural model results

As we can see in figure 3 above and table 3 below, all the path coefficients were positive and statistically significant. Thus, con-

firming the positive impact of SSCHM using the ECG framework on business performance (total effects and direct effect). Moreover, we confirmed the positive impact of SSCHM using the ECG framework on firms' competitive advantage based on differentiation (total effects). Therefore, evidence supported hypotheses 1 and 2.

In addition, evidence also confirmed the positive mediating role of competitive advantage based on differentiation strategy between the impact of SSCHM using the ECG framework and business performance (mediating effects). Indeed, as shown in table 3 (mediating effects), most of the positive effects that the impact of SSCHM using the ECG model has on business performance are due to mediation. i.e. the positive impact of SSCHM using the ECG model on organizational performance happens because it reinforces the business's competitive advantage based on differentiation. Therefore, evidence also supported hypothesis 3.

TABLE 3. Structural model assessment

Total effects			95% BCACI					
		Estimate	Std. Error	p	Lower	Upper		
F_SE Imp→	F_PERF	0.394	0.064	< 0.001	0.264	0.552		
Direct Effects			95% BCACI					
		R ²	Estimate	Std. Error	p	Lower	Upper	
F_SE Imp→	F_PERF	0.137	0.151	0.052	0.004	0.054	0.263	
Indirect/Mediating effects			95% BCACI					
		R ²	Estimate	Std. Error	p	Lower	Upper	
F_SE Imp→	F_DIF Str→	F_PERF	0.526	0.243	0.047	< 0.001	0.147	0.383

Finally, according to its R², the mediated model was able to explain 52.6% of the variance of business performance through

the competitive advantage based on differentiation that these businesses build based on their sustainable management of the supply chain using the Common Good framework. In contrast, according to its R^2 , the model without mediation (direct effect) was only able to explain 13.7% of the variance of business performance. Thus, this indicates that the social and environmental perceived impact of SSCHM using the Common Good framework has a positive effect on business performance because it reinforces businesses' differentiation strategy.

5. CONCLUSIONS

5.1 Contributions

The present study aimed to analyze the impact of the operationalization of SDGs into SSCHM utilizing the ECG framework on organizational performance and to assess the mediating role of differentiation competitive advantage. To this end, it took the CS literature body as the one that can potentially provide a framework of management tools and systems to embed SD, and thus SDGs, into SCHM.

In this line, some authors have pointed to the operationalization of CS to be one of the most challenging management topics in the present days, mainly due to businesses' lack of knowledge regarding the impacts of their activities (Shields and Shelleman, 2015; Engert et al., 2016; Engert and Baumgartner, 2016; Kyaw et al., 2017; Stubbs, 2019; Manning et al., 2019; Rosati and Faria, 2019; Silvestre and Fonseca, 2020; Tabares, 2021).

Besides, this study also analyzed the role of the ECG framework in the hybridization process of ordinary business. In this sense, we pointed out that by adopting the ECG organizational model, businesses evolve through a hybridization process. This, in turn, facilitated the coexistence of SDGs pursuit with performance requirements due to the development of multivocal skills it supposed.

Thus, the present study tries to fill this gap in the literature by assessing the impact of the operationalization of CS through the ECG organizational model on the competitive advantage based on differentiation and organizational performance of a sample of 206 European ECG businesses.

Overall, our findings suggested that higher social and environmental impacts of SSCHM using the ECG framework were positively associated with better firms' performance.

Additionally, the present study provided empirical evidence on the mediating role that the competitive advantage based on differentiation played between the social and environmental impact of SSCHM and business performance. Hence, we can assume that the integration of the SDGs into the SSCHM following the ECG values and principles reinforces the ECG firms' performance by strengthening their competitive advantage based on differentiation.

These results are in line with the findings that Engert et al. (2016) deduced in their literature review by following a theoretical approach. Consequently, our study contributes to the knowledge about CS operationalization to advance by providing empirical evidence on the impact of a specific CS framework (the ECG) on business performance.

5.2 Limitations and future research

The present study also has some limitations, mainly because it examines the impact of embedding SDGs into SSCHM on performance through the operationalization of CS using the ECG organizational model. i.e., we focused our analysis on one specific framework. Future research should examine the impact produced by other sustainability frameworks that are being employed to operationalize CS.

On the other hand, our sample besides being international refers to the European context. Hence, future research could expand the sample to other continents and examine the possible differences.

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2. THE ROLE OF WOMEN IN THE ECONOMY: MULTIDISCIPLINARY FOUNDATIONS FOR THE ECONOMY FOR THE COMMON GOOD (ECG)

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Abstract: This work wants to contribute to the creation of multidisciplinary foundations of the Economy for the Common Good, based on the concept of Gender Equality presented in the United Nations' Sustainable Development Goals. This gender-role perspective can be incorporated in two directions. Make visible all those aspects that have been made invisible by capitalism and that directly affect women and indirectly the whole of society. And using only the studies and works of women, both economists and non-economists, provide a multidisciplinary perspective to reduce the existing gap in women's roles in the ECG model.

Keywords: Economy for the common good, Women, Economy, Multidisciplinary foundations, and Gender equality.

1. INTRODUCTION

1.1 Alternative economics and gender perspective

In previous articles on the scientific foundation of the model of the Economy for the Common Good (ECG), we have been able to observe how various problems that the capitalist system has not been able to solve, and that negatively affect society, have been addressed. However, we believe that so far both the model and its theoretical foundation has a lack of gender perspective.

The lack of a gender perspective in fields such as the economy has been a historical problem that has direct repercussions across all of society. Employment and salary discrepancies, workplace aggression or abuse, and other forms of gender discrimination are a real problem in both developed and underdeveloped countries. This lack of gender perspective has caused, among many other problems, the feminization of poverty, systematically positioning women in a less economically favorable position than men, generating significant inequalities throughout the world.

In order to remedy the negative externalities detected after decades of neoliberal economics, and offer an holistic, interdisciplinary model, it is important to include gender perspective in the theoretical basis of the ECG, so this model will be a step closer to representing a real and complete alternative to the current system.

So, we consider this work necessary for the improvement and expansion of the theoretical foundations of the ECG model.

1.2 SDG and women

The awareness of the need for a change of paradigm is a reality for countries across the world, as an example we find the Sustainable Development Goals (SDGs), 17 goals proposed by the United Nations (UN) as a call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity. As an example some of these goals are: quality education, clean water or climate action among others. Regarding the topic of this article, it is important to note that the UN has considered gender equality (SDG number 5)¹ has a specific topic to walk towards a better society.

¹ Objetivo 5: Lograr igualdad entre los géneros y empoderar a todas las mujeres y las niñas. ONU. https://www.un.org/sustainabledevelopment/es/wp-content/uploads/sites/3/2016/10/5_Spanish_Why_it_Matters.pdf

In this article, we want to base the ECG model providing it with a gender perspective with the common thread of the SDGs, specifically SDG 5.

For this reason, we have drawn on data provided by the UN itself on the state of the issue regarding women²:

- On average, women worldwide still earn 24% less than men in the labor market.
- 35% of women worldwide have experienced physical and/or sexual violence at the hands of their partners or at the hands of others.
- While it is true that women have made significant progress in taking political office around the world, their representation in national parliaments at 23.7% is still far from parity.
- Globally, only 13 percent of women own agricultural land.

According to the UN, «gender equality is a fundamental human right», and significantly for the argument of this article, they also state that «The empowerment of women and girls is essential to drive economic growth and promote social development».

The gender equality problem covers various issues but empowerment is undoubtedly a key element, which is why the ECG must contribute to women's empowerment. Based on these UN assertions, and the articulated goals of the ECG, women, representing 51% of the population, should have an equal voice and equal representation in alternative economic models of the future.

² Igualdad de género: Por qué es importante. Objetivos de desarrollo sostenible. ONU. (https://www.un.org/sustainabledevelopment/es/wp-content/uploads/sites/3/2016/10/5_Spanish_Why_it_Matters.pdf)

1.3 ECG and women

In previous articles of the ECG, we have observed the same gender biases found in mainstream economic research. We would like to point two examples:

It is known that ECG wants to contribute to and promote the implementation of the SDG as we can read «The model of the Economy for the Common Good (ECG) and its control instrument the Common Good Balance Sheet serve as essential strategic and business management tools to help businesses reach [the Sustainable Development Goals].»³ In this paper we can see how SDG 5: Gender Equality is categorized as a ‘Human Dignity’ issue.

Also, we have observed that in the 4.1 matrix⁴ (2013), the problem of the salary gap was taken into account, assigning negative points to companies that offer lower remuneration for the same job based on gender. However, in the new matrix, although there is a section on ‘Pay structure’, in no case is there a reference to any penalty for discriminating based on sex. This reduction of real gender representation in the matrix indicates a move by the ECG away from the goals of SDG 5 and removes gender pay equality as a significant criteria of a healthy economy. The gender bias here is that the salary gap, one of the most significant challenges to the advancement of gender equality, makes no difference to a business’s overall Common Good score.

The second one, we analyzed the article: From neoclassical economics to common good economics (Dolderer, Felber & Teitscheid, 2021) because it provides foundational concepts of the ECG, we have observed this implicit gender bias. In section 2.b) ‘Materials and methods’, the authors cite various economic

³ Kasper, M; Hofielen, G. Businesses act for the Common Good and the SDGs. Economy for the common good. <https://www.ecogood.org/apply-ecg/sustainable-development-goals/>

⁴ Foundations and applications of the Economy for the Common Good (ECG) <http://www.gemeinwohl-institut.org/ecg-Foundations.pdf>

paradigms, contributions to economic theory, and interdisciplinary authors as contributors to the theoretical foundation of the ECG. Out of 14 citations' authors, women form a remarkable minority: less than 25%.

In fact, all citations of «non-economist» individuals are men, showing a 100% bias in choice of input. We believe that the fact that women's contributions have less representation in the economics field produces a bias for the entire society.

1.4 What can materials created by and about women contribute to the ECG model?

In this article, we will focus on the lack of gender perspective in the current capitalist system, and the scarce visibility that has been given to womens' contributions in the foundation of the ECG model. By not directly addressing the issue of gender inequality in economics and society at large in its model, the ECG has replicated the gender biases found in the current economic system.

For this purpose, we formulate the following research question: What can materials created by and about women contribute to the ECG model? With this as a guiding query, we will present ideas by and about women, and how they may be used to further the goals of the ECG on the whole.

2. REVIEW OF NEW FOUNDATIONAL MATERIAL

We have collected the works of five influential women and their contributions to the economy and investigated how their work can be related to the ECG, and if the ECG model offers solutions to the needs they have detected. There are many others, but these five were selected as initial representatives because their ideas

provide a clear view of the gender-role perspective that we hope to bring to the ECG.⁵

In order to provide the theoretical foundation with a gender perspective, all the contributions have been formulated by women. We also want to provide the foundation of an interdisciplinary perspective, therefore, two of the authors are economists, while the others are a journalist, a political scientist, and a public policy expert.

2.1 Katrine Marçal

2.1.1 *Explaining her work*

Katrine Marçal is a Swedish journalist, specialized in financial politics and feminism, her approach is to clearly and precisely demonstrate the androcentric perspective of neoclassical economics. The underlying thesis of Marçal's work (Marçal, 2016) clearly argues that the field of economics has a notable gender bias, which can be understood to be caused by the historic male exclusivity of economists and economic thinkers.

In this article we will be referring to Marçal's work in two areas: the concept of 'man' and the places of the economy. We chose this two sections because correspond also with two section of the aforementioned article (Dolderer, Felber & Teitscheid, 2021), so it will be easier to place Marçal contributions inside the ECG model.

2.1.1.1 *The concept of 'man'*

Katrine points out, that if economics is the science of self-interest as Homo economicus tells us as a maximizer of utilitarianism, and Adam Smith affirms as follows:

⁵ This article represents a first draft and starting point for further research. In future publications, we intend to elaborate on these authors' works and widen the perspective to include more authors and inputs.

It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own self-interest. (Smith, 1937).

In order to describe what she sees as gender biases in the concept of man in economics, Marçal uses the *Homo economicus* character. She points out that all the qualities that have been assigned to *Homo economicus* are qualities that are historically granted to the male gender: self-interest, individualism, rationality. The character is theoretically an asexual being but is perceived as male since the characteristics inherent to it separate it from the common patterns of women's prevailing gender roles in society.

Marçal argues, «Women have been assigned the task of caring for others, not maximizing their own benefit. But if economics is the science based on self-interest, how can women fit into it?» (Marçal, 2016).

This care-based role, one traditionally and statistically aligned with womanhood, represents a part of humanity that *Homo economicus* ignores; altruism, care work, and human emotions. By using this representation of humanity, in ignoring all parts that do not follow the «self-interest» creed of *Homo economicus*, we are also ignoring the work of half of the population, by organizing economies as if we all had access to performed male economic values.

2.1.1.2 *Places of the economy*

She also developed some theories about the places of the economy that can explain a bit more about this gender bias.

Marçal defends that, in order for the butcher, the brewer, or the baker to go to work, somebody has to prepare the meals, clean the house, bring the kids to school. In short, so many different actions need to happen before the economic activity that gives wealth to the nations starts.

Nevertheless all these activities are placed outside the market, and are performed mostly by women. This, apart from invisibilizing

areas where needs are not satisfied, gives an incomplete image of the whole economy and what it needs to function.

If you want to have an accurate picture of the market, you can't, for example, ignore what half the population does half the time. (Marçal, 2016).

2.1.2 *Relating to the ECG*

2.1.2.1 *The concept of 'man'*

As we pointed out before, we extract the name of this section in the aforementioned article. We can confirm this bias only by looking at this section, because all the individuals composing the economy are named as 'man' apart from that, what ECG states in this article is that: «With homo economicus, neoclassical economics offers the model of a rational, utility- maximizing human being and, with a monetary operationalization, suggests that their character is composed of the calculable components of «self-interest», «short-term perspective», and «immediate expediency», with a tendency towards «materialism.

By contrast, altruistic behavior tends to be interpreted as irrational.» (Dolderer, Felber & Teitscheid, (2021).

Marçal coincides with the analysis that the authors point out that has been done historically on the character of the Homo economicus but goes further by introducing the gender perspective in this aspect.

2.1.2.2 *Places of the economy*

In the aforementioned article, explicit reference is made to the invisibility of certain areas that are crucial for the functioning of the economy, but which are systematically ignored and considered minor.

Nevertheless, with its market-focused perspective, neoclassical economics systematically overlooks large areas of need satisfaction, and resource management, and thus of the economy in principle. It also ignores non-market forms of work such as domestic, care, education, and voluntary work, which contribute to the success of society in a similar way to gainful employment. (Dolderer, Felber & Teitscheid, 2021).

Katrine Marçal also agrees with this critical analysis of the areas that are considered economics and those that are not, but once again Marçal goes further and gives the analysis a gender role perspective, noting that, in the invisible part of the economy, what is found is a large majority of women, who have historically been in charge of carrying out these tasks.

The result is a biased view of the market and the economy, as well as of the people who are part of the economy and are in the invisible part of it.

2.2 Kate Raworth

2.2.1 *Explaining her work*

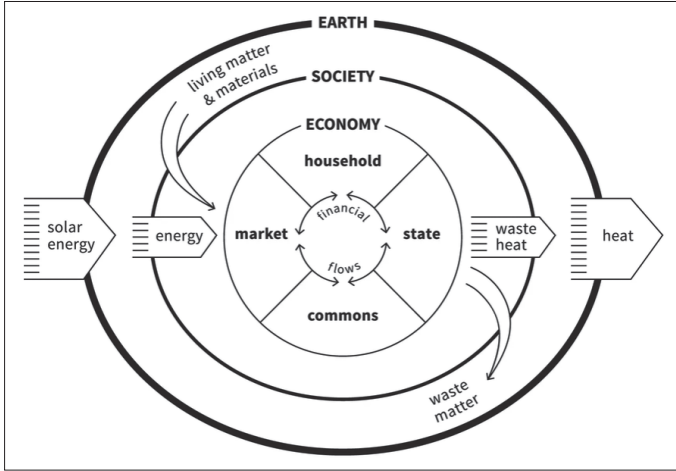
Kate Raworth is an English economist, defender of the need to seek new alternatives that respond to the challenges presented by the 21st century, her work *Doughnut Economics* (Raworth, 2017) presents an alternative economic model that seeks to satisfy human needs while respecting planetary boundaries.

Inside the Doughnut economy work, there is a concrete contribution that we consider essential for the change in the economic paradigm is the so-called: Embedded Economy.

As the author explains, it is a diagram that answers the question: what do we depend on to satisfy our needs?

In Raworth's diagram (Raworth, 2017) we observe how economic activity is situated within the earth and society, and can understand within the economy there are spheres of satisfaction

of human needs, and these are: the market, the commons, the state and the household.



Given that this article wants to provide the ECG model with a gender role perspective, we will focus on the household, where women traditionally bear the majority of the work. As she explains in her work, the household is basic, and it is necessary to value its contribution to economic activity. Therefore, the household is a place not only for the satisfaction of needs but also for the creation of the common good, for which its contribution must be protected and valued. Within the household historically and currently, it has been mostly the unpaid and invisible work of women that has contributed to the functioning of the household unit (Waring & Steinem, 1988).

2.2.2 Relating to the ECG

In section 2. b. of the article: ‘From neoclassics to common good economics’, the work carried out by Kate Raworth in *Doughnut Economics* is expressly quoted, as a heterodox economic model and critical of neoclassical economics revised for the elaboration

of the critique of the capitalist economy: «Critical Analysis (of Neoclassical Economics)».

In addition, Kate Raworth and Christian Felber wrote a comparative article on both models (Felber & Raworth, 2018). We also observe that the Raworth's model is present and related to the ECG model, although it is true that aspects of the Doughnut Theory has been incorporated into the critique of the capitalist economy, but the Embedded economy is never mentioned.

In order to theoretically base the ECG model, we have analyzed the article written jointly by Raworth and Felber, where a comparison is made between both models, within it we want to pay attention to the following sections:

- Innovative insights from other disciplines: both models mention that they are nourished by other disciplines for the development of innovative visions, in this case both models cite feminism.
- Sectors included: each of the models indicate the sectors included within what is recognized as 'economic activity', in the case of Doughnut Theory, as we have explained, it includes as part of its contribution to the embedded economy: the market, the commons, the state and household. However, the ECG, Fields of economic activities: self-sufficiency, gift economy, markets, commons, and state. In other words, they coincide in market, commons, and state, however the household is not found within what is called sectors of economic activity in the model of the Economy of the Common Good.

2.3 Elinor Ostrom

2.3.1 *Explaining her work*

Elinor Ostrom is a political scientist and was the first woman to receive the Nobel Prize in economics in 2009.

During her work she tried to revoke the so-called ‘tragedy of the commons’ (Hardin, 1969) is a theory by which it is broadly concluded that when a shared-use resource exists, people tend to behave independently and selfishly, causing the deterioration or depletion of said resource. Therefore, it is used as evidence to justify the need for market or public sector intervention in natural resource management. So, the tendency of the current system is to play down the importance of common goods and tend towards their privatization or nationalization.

Ostrom decided to study how common goods have been managed, she wanted to check if the premise of neoclassical economics, which tells us that certain goods or resources are more efficient if they are nationalized or privatized, was true, so she visited different communities of different types in different parts of the world, to study their functioning and their organization patterns. In her study, she found communities that had been self-managed for more than 500 years, that is, that they have endured droughts, wars and important generational changes.

According to Ostrom, for the proper functioning of these communities, 8 principles must be taken into account (Ostrom, 1990):

1. Clearly defined boundaries (effective exclusion of uninvolved third parties).
2. Rules for the use and enjoyment of common resources adapted to local conditions.
3. Collective agreements that allow users to participate in the decision and modification processes.
4. Effective control by members of the community.
5. Progressive scale of sanctions for users who break the rules of the community.
6. Cheap and easily accessible conflict resolution mechanisms.
7. Self-management of the community, recognized by external governmental authorities.
8. In the case of large common resources, organization at various levels; with small local communities at the grass-roots level.

2.3.2 *Relating to the ECG*

As indicated in the aforementioned article in neoclassical economics, public and common goods are considered minor issues, private management is the most recommended within the framework of neoclassical economics.

The ECG model coincides with Ostrom in the Theoretical foundation, as we can read in the article: «Variable and diverse forms of goods, with limits and conditions», but there is no citation to Elinor Ostrom, whose Nobel Prize grants this theoretical foundation credence.

2.4 **Mariana Mazzucato**

2.4.1 *Explaining her work*

Mariana Mazzucato, has been Professor of Economics at University College London, and for the last twenty years, she has collaborated as a consultant for public institutions.

In this article we will focus on her book, *The Value of Everything* (Mazzucato, 2018), where Mazzucato wants to raise awareness of the need for a new capitalism that works for everyone, and this must be done from a key concept, which is value. She explains that value is something we no longer talk about, and it turns out to be a key piece in the current capitalist system.

In order to better understand the significance of her research and contextualize the definition of value in today's economy, Mazzucato reviews the history of value theory in recent centuries. Below, we briefly summarize it to help understand its relationship with the ECG.

She points out that Physiocrats was a society based on agriculture and animal husbandry, so they considered the Earth and work as production sources, and the creation of surplus is what made the economy grow.

The classical economy, represented by Adam Smith, David Ricardo, Karl Marx, among many others, considered that value was created through work and industrial labor, and they devised the division of labor for greater production and thus created surplus to reinvest precisely in the source of value creation.

In the current neoclassical economy, according to Mazzucato, there is a great revolution, the value is simply based on individual preferences, those determine a price for a good or a service and this price is what reveals value.

So this is the first time in history that value is a subjective concept rather than objective.

Mazzucato also indicates that we have completely forgotten this debate, and that therefore we have lost the meaning of the theory of value.

2.4.2 *Relating to the ECG*

We consider that with the ECG matrix we can make that transition from subjective to objective determinations of value.

To begin with, classical theory uses the word value, through the ECG we can specify it as a contribution to the common good that takes into account quantitative and qualitative value. To put it into practice, and relate it to the ECG: the value creators would be all those companies and organizations that obtained a positive score in the matrix.

Also, and thanks to the possibility of assigning negative points through the matrix, we could conclude that the extraction of value would be all those activities that would subtract points.

Through the matrix, we will identify from an objective perspective the activities that create value.

2.5 Marilyn Waring

2.5.1 *Explaining her work*

Marilyn Waring, one of the first women to become MPs in New Zealand, was appointed to the Public Expenditure Committee in 1978, the only woman and the youngest member.

Waring devoted herself to studying the effectiveness of Gross Domestic Product (GDP) as a macroeconomic indicator and the negative externalities of using it. It established a relationship between the reality of the economy and what the GDP reported, showing serious biases in said indicator (Waring & Steinem, 1988).

2.5.2 *The boundary of production*

Waring explains the GDP from another perspective, she defends that this tool has what she calls the production boundary, that is, a border that marks what is included in the GDP and what is not included.

On one side of the boundary, there are the actions that are included in the GDP, the ones that have an exchange in the market and generate an economic transaction resulting in a

GDP increase. This increase is received as something positive for the economy and for the growth of the countries.

On the other side of the boundary, everything that is not exchanged in the market is not included and therefore is invisible in the eyes of the economy because it does not generate an economic transaction and does not affect the accounts or the development of a country.

This generates a paradox widely studied and explained by Waring: The fact that millions of dollars are spent on the purchase of weapons for war purposes and devastating consequences for people and humanity, would add to the GDP.

The fact that a person spends her day collecting firewood, fetching water, cooking, caring for the elderly and children, is totally irrelevant to the development of a country.

2.5.1.2 *The negative externalities*

Waring emphatically identifies this problem: GDP does not take negative externalities into account. To illustrate it, Waring gives the following example:

If an economic activity pollutes, GDP only takes into account the added value generated by the products sold, but ignores all the undesirable collateral effects, such as loss of biodiversity or damage to public health.

In other words, GDP includes the added value of activities, even if they are harmful to the development of a country or its population, but it does not include the loss of biodiversity, the impact on public health or the destruction of natural resources, because they do not generate a monetary transaction.

2.5.2 *Relating to the ECG*

The ECG model solves the problem of negative externalities pointed out by Waring, because the Matrix has the possibility of assigning negative punctuation. But, the ECG partially solves the problem of the boundary of production, because the matrix is a qualitative and quantitative indicator. The missing part in the ECG is the fact that we still perceive care work or gender issues as invisible, because they are still located in the invisible side of the boundary of production, so for the moment is not completely solving the problems pointed out by Waring.

3. SUMMARY OF CONTRIBUTIONS

After analyzing the work of these authors, we divided the contributions in three main groups:

3.1 Reaffirmation of ECG principles through independent influential academics and their work

Elinor Ostrom:

As we explained before, for us there is a clear relation with Common Good Theoretical foundation (Dolderer, Felber & Teitscheid, 2021) and the Nobel Laureate research of Ostrom, but there is no citation of Ostrom in the whole aforementioned article. So we think that a Nobel prize supports the theoretical foundation of ECG and thus must be cited.

Marianna Mazzucato:

Studied how the concept of value has changed through the years from something objective to something subjective.

And when relating her work with the ECG model, we conclude that the ECG matrix can help us to identify what is value if we take the common good as a value, we can affirm that the value creators are who increase the common good and on the contrary for value extractors.

Marilyn Waring:

Sustains that GDP is not a complete indicator, because it only takes into account the actions that have a direct market transaction, and always from a quantitative perspective. For this the ECG has the matrix for micro economics that has qualitative aspects into consideration and also, it's been developing the Common Good Product that is going to also have these aspects in consideration. Also, Waring points out that GDP has no debit side, as a response to this, the Common Good Matrix does have a negative counterpart, a debit side by applying negative punctuation to some practices.

The missing part in the ECG is the fact that we still perceive care work or gender issues as invisible, not solving the problems pointed out by Waring.

3.2 Complement the ECG model through some theories that go in a very similar direction and can be a perfect alliance

Katrine Marçal:

Marçal, defends that the values that Homo economicus represents are ignoring other dimensions of humanity, and this is exactly the same as the ECG theoretical foundation. The new contribution of Marçal is the consideration, that, all the values that we perceive as economic values, such rational, maximization of self interest, are values attributed to man in the traditional and economic gender roles, and this value results to be contrarious to the ones attributed to women's in prevailing gender roles of society, and this affect to the construction of the economy.

The androcentric approach of the neoclassical economy has been proven by the arguments previously stated, and that is why the economy of the common good must know the origin and solve this bias after centuries of androcentrism in the economy with its corresponding consequences such as salary gap or feminization of poverty, these facts are global, for this reason SDG 5 pays special attention to them.

3.3 New Contributions that currently are not taken into consideration in the ECG movement and can be a good direction to open new research lines in the future

Kate Raworth:

In the model proposed by Raworth, the internal part of the doughnut is the same as the SDG, that means that again, gender equality is treated as a topic separated from social equity.

Is important to make this distinction in order to address gender issues specifically, because the causes are probably different than the causes of social inequality including other aspects such as origin, religion, age and so on.

Also in her model, Raworth recognizes the four means of provisioning: the market, the state, the household, and the commons. For us the significant contribution is that the household is considered as a fundamental part of the economy, at the same level as, for example, the state. We think it is an interesting approach that the ECG model has to take also into consideration.

We find it contradictory that in the article cited above (Felber & Raworth, 2018) feminism is cited as the foundation of the ECG model but the household is excluded from economic activities. Although its importance is assessed in the comparative article in the care work section, we have not found references in the matrix or in other ECG publications in this line.

4. RECOMMENDATIONS FOR A BETTER THEORETICAL FOUNDATION TO THE ECG.

We wanted to suggest concrete actions for a better theoretical foundation of the ECG and more approach to SDG 5.

- To promote inclusivity, in future theorizing articles, avoid using the title of ‘the concept of man’, substituting it for a neutral term.
- In order to truly contribute to SDG 5, we suggest including again the gender pay gap erased in the 2013 matrix.
- The ECG claims to respect and uplift human dignity, but true human dignity can only be valued in a system that recognizes and validates the work and contributions of all of humanity, ergo both sexes. We suggest to distinguish gender discrimination from human dignity.
- The ECG should take into account the contribution of households to the economic system. We propose to open a line of study and research in that direction to include the ‘Care

Work' section in the ECG manuals, matrix and common good product, and include it as one of the relevant aspects in the model.

- Elinor Ostrom should be cited in the theoretical foundation articles of the ECG.

With these recommendations we hope to initiate improvement of the women's content gap in the ECG. In further research we will continue to seek out new women's voices and ideas to support this economic model.

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3. TOWARD AN EVALUATION OF THE ALENTEJO'S OLIVE GROVE SYSTEMS SUSTAINABILITY: A PROPOSAL BY REFLECTING ON LIFE CYCLE ANALYSIS AND AGRARIAN METABOLISM APPROACHES

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Abstract: Olive groves are an important crop for the Mediterranean region and the Alentejo region of Portugal. The Alentejo region, despite its dry Mediterranean climate and extensive and multi-functional farming systems, has been experiencing a rapid process of agricultural intensification. This intensification has been fostered by local, national, European and global factors and processes, in close alignment with the

dynamics of urban-financial capitalism. The general objective of this paper is to discuss about the use of Life Cycle Management (LCM) tools to analyze the sustainability of olive groves in the Alentejo region of Portugal. Specifically, following the methodological approach proposed in the international project Sustainolive, life cycle-based methodologies, namely Life Cycle Assessment (LCA), Life Cycle Costing (LCC), social Life Cycle Assessment (sLCA) and Social Agrarian Metabolism (SAM) will be described to argue about their potentiality to effectively measure environmental, economic, and social performances of sustainable management systems in olive growing.

Keywords: Sustainable management of agri-food systems, Life Cycle Management, Olive groves, Alentejo region of Portugal, Sustainolive.

1. INTRODUCTION

Sustainable management of agri-food systems is directly linked to the rational use of available natural resources and existing social and economic pressures.

Sustainability assessment regarding the economic, social and environmental pillars can support decision-making processes, playing a role in planning and project processes' strategies and operational levels, including policies, plans, programs, projects and activities or operations that address sustainable development goals and indicators (Ramos, 2019). In addition, understanding everything that surrounds this sustainability makes us have an understanding of the environmental, economic and social impacts of these activities, contributing to the management of natural and human systems.

The application of appropriate sustainability assessment methodologies should be considered for taking measures to make those systems more sustainable, taking into account the operationalization of these methodologies by society (Ramos, 2019). In the case of agricultural and agri-food systems sustainability assessment is complex as it has to simultaneously satisfy economic viability, environmental protection and social equity, with the focus on the long term. Moreover, this complexity also concerns being a prob-

lem mainly related to the biological characteristics of agricultural production processes.

Within the methodologies for assessing, measuring and monitoring impacts there are a set of tools linked to the life cycle methodology. According to De Luca et al., (2015a) life cycle methodologies are recognized as powerful tools that allow to assess the economic performance and estimate the social and environmental impacts of a product or service, also in contexts of agri-food production processes. They are useful tools to characterize and quantify various typologies of impact generated by all stages of a production process. In the evaluation of complex socio-environmental systems, such as agricultural and agri-food ones, uncertainty often arises and the quality of decision processes can be a major concern.

Olive groves are an important crop for the Mediterranean region and the Alentejo region of Portugal. The Alentejo region, despite its dry Mediterranean climate and extensive and multi-functional farming systems, has been experiencing a rapid process of agricultural intensification. This intensification has been fostered by local, national, European and global factors and processes, in close alignment with the dynamics of urban-financial capitalism (Silveira et al., 2018). This intensification and its production practices alter environmental impacts and raise the question of the sustainability of these agricultural systems (Beaufoy, 2001; Romero-Gamez et al., 2017).

The general objective of this paper is to discuss about the use of Life Cycle Management (LCM) tools to analyze the sustainability of olive groves in the Alentejo region of Portugal. Specifically, following the methodological approach proposed in the international project *Sustainolive* (2021) referred in De Luca et al. (2021a, 2021b), life cycle-based methodologies, namely Life Cycle Assessment (LCA), Life Cycle Costing (LCC), social Life Cycle Assessment (SLCA) and Social Agrarian Metabolism (SAM) will be described to argue about their potentiality to effectively measure environmental, economic, and social performances of sustainable management systems in olive growing.

2. CONTEXT

The European Union is the leading world producer, consumer and exporter of olive oil, accounting for 68.4% of olive oil produced, 54.2% of olive oil consumed and 66.9% of exports (GPP, 2020). Olive farming is an important cultural and traditional system in the Mediterranean region that has considerable environmental impacts (Camarsa et al, 2010; Mohamad, et al., 2014). Olive grove areas represent 7.7 million hectares in the Mediterranean basin with important environmental, social and economic contributions. It occupies 95% of the total world cultivated area of 10.8 Mha, producing 97.8% of total world olive oil production. European Union (EU) countries produced an average of 2 161 000 tonnes per year (2006-2012) of olive oil (COI, 2012; FAOSTAT, 2017, Sustainolive, 2021). In Portugal, olive grove production systems have been undergoing major technological changes, such as irrigation, biotechnology, land mobilization and mechanization. Extensive and traditional systems have been progressively replaced by intensive and super-intensive systems generating environmental, social and economic impacts and externalities (Marques & Carvalho, 2017).

Portugal has been self-sufficient in olive oil since 2014 and accounts for 3.4 per cent of world olive oil production (GPP, 2020). The Alentejo olive grove in Portugal represents 40% of the national olive grove area and produces 70% of the national olive oil production (INE, 2017). Out of a total national area of 347 thousand hectares of olive groves, 6% is on olive groves in intensive and super-intensive systems, located mainly in the Alentejo area (GPP, 2020).

3. OVERVIEW OF SUSTAINABILITY ASSESSMENT METHODS

For Zhang & Zhu (2020:2) «sustainability can be understood as the achievement of higher levels of well-being distributed more equitably within ecological limits». Sustainable development is proposed based on the «Ends-Means Spectrum» and strong

sustainability, which underline that improving well-being is the ultimate goal and ecological consumption is the ultimate means and has biophysical limits (Daly & Farley, 2004; Zhang & Zhu, 2020). The term «sustainable agriculture» means «an integrated system of plant and animal production practices having a site-specific application that will, over the long-term— (A) satisfy human food and fiber needs; (B) enhance environmental quality and the natural resource base upon which the agriculture economy depends; (C) make the most efficient use of nonrenewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls; (D) sustain the economic viability of farm operations; and (E) enhance the quality of life for farmers and society as a whole» (USDA/NIFA, 2002).

Climate change and increasing urbanization pressures add urgency to the challenge of ensuring global food security without compromising the sustainability of social- ecological systems (Garnett et al. 2013). Olive farming has presented changes aiming at increasing productivity and profitability and, according to Caruso et al., (2014) in recent years, the diversity of olive grove management types in the main growing areas has thus increased and, intensification techniques have been widely adopted. This intensification differs from the traditional structure in relation to the performance and technique adopted, such as irrigation, fertilization, mechanical harvesting and pruning. By the rapid adoption and demands of this intensification raises doubts about its future sustainability (Mairech, et al., 2021). Therefore, the adoption of innovative production strategies is necessary to undertake sustainability pathways. The impacts must be assessed so that corrective actions can be taken and public programs and policies that promote them can be shaped.

As an example there is the green direct payment or ‘greening’ which according to European Commission (2021) supports farmers who adopt or maintain agricultural practices that contribute to EU environmental and climate objectives through reward. Under the new Common Agricultural Policy 2023-2027 (CAP 2023-2027) that will start in January 2023, there will be stronger incentives for

climate and environmentally friendly farming practices through receipt of green direct payment if they comply with some mandatory practices that benefit the environment (soil and biodiversity in particular).

Improving product sustainability can be achieved by maximizing economic and social values while reducing environmental impact and cost (Hanieh et al., 2020). Therefore, characterizing and quantifying impacts becomes so important to identify the bottlenecks in adopting sustainable management strategies.

Within the life cycle methodologies and that help to assess impacts, there is Life Cycle Thinking (LCT), which concerns the conceptual part and Life Cycle Management (LCM) which is its operational complement. For Sonnemann et al. (2015) within LCM there are different tools and concepts that can be used, for example LCA, LCC, SLCA, organizational LCA (OLCA), hotspot analysis, different forms of water footprint and carbon footprint, cost-benefit analysis (CBA), material flow analysis (MFA), substance flow analysis (SFA), input-output analysis (IOA), environmental risk assessment (ERA), among others.

Among the many environmental and economic studies (leaving aside the social aspect) on olive groves, we can highlight for example, Mohamad et al. (2014) compare environmental impacts and economic performances between organic and conventional olive farming systems in the Puglia region (Italy) using LCA to assess environmental impacts, and LCC to assess the economic performance of the studied systems. The study by De Gennaro et al., (2012) performs the environmental and economic assessment of intensive and super-intensive systems by integrating the two methods using a common database.

In order to obtain a complete assessment of the impacts, it can be seen that the joint use of environmental, social and economic analysis tools and methodologies proves to be effective, as it supports decision making and assists the formulation of strategic actions to improve the sustainable management of olive production systems (Remmen et al. 2007). According to Finkbeiner et al. (2010) and UNEP (2011), life cycle sustainability assessment

(LCSA) is the combination of LCA, LCC and SLCA to assess the three dimensions of sustainability for products. In this study and several others, such as that of Sala et al. (2017), the importance of complementing LCA with other scientific methods and domains (environmental, social and economic) is highlighted enabling LCA to become a key element for the sustainability of food systems.

De Luca et al., (2021a) proposed and are in working progress for the joint application of LCC, LCA, and SLCA as in De Luca et al. (2018), with a further assessment method named Social Agrarian Metabolism (SAM) as in González de Molina et al. (2020), in order to evaluate sustainable technological solutions applied in olive farms compared to typical managerial approaches.

From an environmental perspective, LCA is a technique that identifies «where» and «how» resources are consumed and emissions occur, during the life cycle of a product/service. It ensures that impacts throughout this cycle are addressed in an integrated way, depending on the purpose and scope of the analysis (Cellura et al., 2012; Kyriakopoulos, 2007). It is the compilation and evaluation of the inputs, outputs and potential environmental impacts of a production system throughout its life cycle (ISO, 2006 a, b). A set of indicators, corresponding to different impact categories, are calculated using data available from dedicated databases through specific software for impact characterization.

Aware of the economic importance of olives in several countries, olive oil production is linked to several adverse effects on the environment, such as resource depletion, land degradation, air emissions, and waste generation. These impacts can vary substantially according to the practices and techniques adopted in this sector (Salomone and Ioppolo 2012). As a consequence, tools such as LCA are becoming increasingly important for this type of industry (Salomone et al., 2015).

LCC is an economic tool that allows important decisions to be adopted in the design, development and implementation of projects/products (ISO, 2008; Farr, 2011). It performs the economic valuation of resources (i.e. inputs) and environmental impacts (i.e. externalities) and identifies the bottlenecks of adopting a

sustainable strategy (Farr, 2011). LCC is dedicated to the elaboration of an account of all costs generated throughout the life cycle (Hunkeler et al., 2008; Iofrida et al., 2018). So LCC does put a price on environmental impacts. If all impacts have a price, they can be added up and the product has a price that representing its total environmental burden (Brouwer, 2020).

Within the umbrella of life cycle-based approaches, social impacts potentially generated from a production process are considered by means the youngest of methodologies, the «so-called» social LCA, that attempts to follow the same procedures and step of LCA, even up to now there has not yet been an unambiguous consensus and a recognized standardization of the method (De Luca, et al., 2015a; De Luca et al. 2015b; Iofrida et al., 2018a, 2018b). Several approaches have been proposed by sLCA scholars and some of them are described by the «Guidelines for Social Life Cycle Assessment of Products» (UNEP/SETAC, 2012, 2020) .

Social Agrarian Metabolism (SAM) shows itself as a concept that today is perhaps the most powerful theoretical tool to jointly analyze the relationships between natural and social processes (Toledo, 2011). It can be understood as the application of the metabolic approach to the field of agriculture, that is, it is the study of biophysical flows that maintain the generation of biomass and environmental services, considering that nature influences particular aspects of social systems in the same way that different social systems influence the environment (González de Molina & Toledo, 2011).

It is from the exchanges between society and nature that society feeds all the materials, energies and environmental services that humans and their artefacts need to maintain and reproduce (Toledo, 2012). It refers to the appropriation of biomass by members of society through the management of the agroecosystems present on the land (Guzmán Casado & González de Molina, 2017).

The strong interaction between humans and nature, in the context of agriculture, is undeniable and it is also inevitable to think that, because of this strong connection, some environmental problems may occur (Souza, 2013). In the case of olive intensi-

fication, the negative environmental effects, already cited, could be reduced considerably using appropriate farming practices; and, with appropriate support, traditional low-input plantations could continue to maintain important natural and social values (Pienkowski & Beaufoy, 2002). Therefore, whether analyzing economic, environmental and/or social sustainability, the important thing is that this process is carried out using the right tools that are most adapted to the context studied, producing clear results that have practical applicability.

4. METHODOLOGY

The choice to highlight in this paper some evaluation tools follows the combined methodology proposed by De Luca et al., (2021a, 2021b) and Sustainolive (2021), through LCT, with selected methods of LCC, LCA, social SLCA, and SAM, that will results, once the implementation and processing have been conducted, in the analysis of costs, economic performance, environmental impacts and social sustainability.

The combination of these approaches, vis-à-vis the ones initially mentioned (environmental and economic, without considering the social aspect), prove to be original, to our knowledge, never have life cycle perspectives been equated with SAM which, according to Gonzáles de Molina et al. (2020), measures the mutual dependencies incurred during the interaction between nature and society by measuring the flow of integrated and reproductive biophysical funds.

LCC as economic tool is susceptible to be applied to olive groves and olive oil production systems to support producers, to understand the profitability levels of production systems and to inform the long-term management strategy of policy-makers.

LCC looks at the total of direct and indirect, recurring, non-recurring, and other related or estimated costs over the lifetime (ISO, 2008; Farr, 2011). That is, all costs incurred in the life cycle of the olive grove (planting costs, operating costs and disposal costs),

as well as the revenues obtained by multiplying the average olive production by its market price and adding additional revenues (CAP payments, disposal revenues, etc.) (Stillitano et al., 2016; Stillitano et al., 2019; Guarino et al., 2019).

Tools such as LCA are becoming increasingly important for the olive industry, both at the agricultural stage and in olive oil production (Salamone et al., 2015; Romero-Gamez et al., 2017). Intensive olive growing is a major cause of one of the most serious environmental problems affecting the EU, especially agricultural production (Beaufoy, 2001; Marques & Carvalho, 2017).

From a methodological point of view, an appropriate and correct LCA is conducted following four standardized steps: purpose and scope definition; inventory analysis; impact assessment; and interpretation (ISO 2016 a, b). Being structured in these phases, regardless of the type of LCA, the process of the assessment remains the same (UNEP/SETAC Life Cycle Initiative, 2012).

The objective is defined according to the main reason for conducting the study, its scope and the target audience for which the results are intended. On the other hand, the definition of the scope considers methodological aspects of the study, such as the establishment of parameters such as function, functional unit and product reference flow, the setting of boundaries, criteria for the allocation of environmental loads, as well as the impact categories to be used in the corresponding naming stage (Guinée, 2006; Curran, 2016). In the second stage, the Life Cycle Inventory (LCI), there is data collection (primary or secondary), which according to ISO (2006a), as data is collected and knowledge about the system is expanded, new data requirements or limitations may be identified, requiring a change in data collection procedures so that the study objectives can still be met. There is also the quantification of all variables that relate to the life cycle of a product, process or activity, namely raw materials, energy, transportation, air emissions, effluents, solid waste, among others (Seo and Kulay, 2006; Guinée, 2006; Curran, 2016). Through the association between inventory data, impact categories and category indicators, Life Cycle Impact Assessment (LCIA) aims to understand these impacts (ISO,

2006a). It represents a process of understanding and assessing environmental impacts, which is based on the results obtained in the inventory analysis, taking into account the effects that may be caused to the environment and human health. Through the analysis of the results of the inventory and impact assessment phases, the interpretation is performed, which may result in conclusions and recommendations to assist the decision-making process (Seo and Kulay, 2006; Guinée, 2006; Curran, 2016). Analyzing the SLCA, which assesses social impacts, means understanding the consequences of a life cycle operation on people, actions and social phenomena. For Macombe et al. (2013) this tool addresses issues of human rights, health and safety, and governance, among others, while taking into account the utility of the product.

From another perspective of analysis, SAM analyzes the biophysical flows that maintain the generation of biomass and environmental services, considering that nature influences particular aspects of social systems in the same way that different social systems influence the environment. Using the SAM, information on biophysical functioning is obtained producing synthetic indicators of sustainability. Therefore, it refers to the exchanges of energy, materials and information established by the agrarian sector of society with its socio-ecological environment (Toledo, 2012).

5. EXPECTED RESULTS

The integrated analysis of LCC, LCA, SLCA results in the Life Cycle Sustainability Assessment (LCSA) for budgeting and economic performance assessment, estimating simultaneously the social (together with SAM) and environmental impacts of olive production systems.

The application of LCC allows achieving two main objectives: to adapt cost estimation approaches to relate environmental costs to specific processes and products, and to facilitate the identification of best practices to prevent pollution and reduce waste (Stillitano et al., 2016).

LCA has become a key tool to compare environmental impacts between alternative systems and different scenarios in the agricultural sector to suggest the most sustainable production technique (e.g. conventional versus organic) or the most sustainable product (e.g. comparison between different cultivars) or other alternatives (Iofrida et al., 2018). It can then be used as a decision tool to support the choices of producers of the surveyed product, to improve the ecological profile of the related production system and to inform the long-term management strategy of policymakers.

In agriculture, as in other sectors, LCA practitioners have, over the last decade, been dedicated to linking environmental assessment with economic and social aspects. It, therefore, becomes important to understand sLCA. This tool that assesses social impacts, has its roots in the cultural and scientific heritage of the social sciences and especially the management sciences. It can help organizations to make decisions on how to organize production processes according to the social impacts that they can potentially generate (negative to avoid and positive to encourage) (Iofrida et al., 2018).

From another perspective of analysis, SAM, in dealing with socio-metabolic transformations, presents, on the one hand, a critical grounding on the industrial aspects that influence agricultural activities in the process of modernization of the countryside. On the other hand, it has placed great emphasis on the importance of studies on peasant knowledge, which is fundamental for understanding the more sustainable management of agroecosystems (González de Molina & Toledo, 2011). The SAM approach is committed to offering horizons of analysis that guide us towards the achievement of increasingly sustainable societies (Lopez, 2014).

The applicability of these life cycle techniques in conjunction with SAM, for the Alentejo region becomes adequate, as it is the main olive oil producing region of Portugal and, therefore, needs to continue to develop and maintain itself through a sustainable management. Knowing the results and analysis of these techniques that can point where it is possible to mitigate the existing impacts, producers can adapt to the requirements of CAP and consequently receive incentives for sustainable agricultural practices. By us-

ing these techniques together it is possible to have an objective assessment of the possible consequences of the olive life cycle operation, such as impacts on workers' health, biodiversity and regional economy, environmental costs, among others.

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4. HOW TO INVESTIGATE INDIVIDUAL PREFERENCES FOR THE COMMON GOOD

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Abstract: We aim to contribute to the understanding of common good economics by delivering an innovative way to not only normatively prescribe preferences for the common good but also to investigate them empirically. A synthesis of experimental game theory, behavioral psychology, behavioral ecology, and professional gamification might constitute a theoretical connecting point between standard economics and the ECG model.

This paper presents an approach that attempts to combine the advantages of economic experiments with the analysis of contextual as well as internal factors that influence individual preferences for the common good.

Keywords: Common good, Experimental game theory, Behavioral psychology, Behavioral ecology, and Professional gamification.

1. OBJECTIVES

The model of economic rationality assumes that individual action can solely be explained by the motivation to maximize utility. Every individual has an idea of the goals he or she is pursuing in action.

Since the evaluation of alternative courses of action always takes place with a view to the goals formulated in the utility function, this concept represents instrumental rationality. With a view to the economy of the common good, this approach has two main implications: (1) A non-consequentialist, intrinsically motivated cooperation lies outside of economic rationality, and (2) the assumption of methodological individualism suggests that there are always only individual ideas about the common good.

An investigation of preferences for the common good cannot avoid taking into account the actual behavior of the individuals. The standard approach of economic theory to the study of individual preferences for non-marketable goods lies in experimental economics. However, there might be additional motives for individual action that cannot be interpreted as a rational evaluation of outcomes. One way of capturing the motives that are not part of the consequences of the decision is through the analysis of the social environment in which the decisions are observed. Further intrinsic motives and preferences of the individuals can also be examined through interviews or questionnaires.

This paper presents an approach that attempts to combine the advantages of economic experiments with the analysis of contextual as well as internal factors that influence individual preferences for the common good.

2. LITERATURE REVIEW

In the tradition of economic liberalism, the common good cannot exist objectively. Following Ulrich (2019) this underdetermination is essential since anyone who claims the political power or academic competence to finally determine the content of the common good is making a totalitarian claim. Hence, the common good can be solely perceived individually and has to be reconstructed in the paradigm of methodological individualism. In terms of decision theory, the economic concept of preference is based on means-end

relations. Goals are to be regarded as subjectively given, observable decisions result from the interaction of restrictions and preferences.

Dolderer, Felber & Teitscheid (2021) state a theoretical ground for the Economy for the Common Good (ECG) systematizing assumptions of the ECG model explicitly for the first time. They also clarify that «with regard to the overall social purpose of an economy, various ideals circulate: from the greatest possible happiness of the greatest possible number, to the maximization of the benefits of individuals, to the welfare of society as a whole.» Nonetheless, they criticize the inherent consequentialism of standard economic theory «ignoring social norms, and society being more than the mere sum of its individual members.» Earlier Felber (2018) challenged «the false guiding star of maximizing self-interest» of the homo oeconomicus model in economics.

The homo oeconomicus is in principle purely egotistical, but can also consider the interests of others and thus, behave cooperatively. Indeed, empirical evidence shows that individuals often opt for cooperative behavior in decision experiments. Thereupon, behavioral economics developed a concept of social preferences explaining interpersonal cooperation. The social preferences approach can be divided into at least three important sub-strands (for an overview see Erlei, 2008): theories of intentional reciprocity (Rabin, 1993, Dufwenberg & Kirchsteiger, 1998), the inequity aversion approach (Bolton & Ockenfels, 2000, Fehr & Schmidt, 1999) and a theory of social welfare preferences (Andreoni & Miller, 2002, Charness & Rabin, 2002). Hence, the assumption of self-interest maximization and altruistic behavior are not mutually exclusive. However, we argue that standard economic theory has two fundamental blind spots owed to normative, methodological individualism: presuming (1) personal endowments and (2) individual goals.

First, examining decision-making processes, the individual endowments (i.e., income or wealth) remain unquestioned but are interpreted as the result of utility maximization. Two major thinkers of liberalism argue for different reasons that the endowments cannot be seen as an expression of the moral merit of individuals:

Friedrich Hayek (2011) considers the individual endowments as outcomes of the market process. Even if these are possibly coincidental; take for instance a basketball professional, who is rich today regardless of whether a hundred years ago his or her skills would have represented a rather marginal talent. This particular case demonstrates that it is not the moral merit that defines the endowment, the player just has exactly the skills or productivity that is rewarded by society. According to Hayek, however, this process of remuneration eludes a consequentialist evaluation. Regarding the common good, the primary goal defines the realization of individual freedom, restricted at most by generalizable rules. Therefore, the act of redistribution follows an arbitrary or a constructivist attempt. Also, John Rawls does not consider the differences in the abilities and endowments of individuals to be their moral merit. In his «Theory of justice», which was first published in 1971, he interprets the distribution of abilities as random and embedded in a society of rational individuals characterized by mutually beneficial cooperation (Rawls, 1999). Thus, he only accepts inequalities insofar as the advantages of one should be used to compensate for the disadvantages of the other.

Here our work touches on a wide branch of literature that analyzes the effect of inequality in terms of endowment heterogeneity on contributions in public good experiments (see e.g., Chan et al, 1999, Paetzel & Traub, 2017). Findings generally show that endowment heterogeneity seems to stimulate selfish behavior in subjects. Consequently, the sociological fact that individual decision-making processes take place in a social context is disregarded by the economic model, which is solely committed to the freedom of the rationally acting individual. But how an individual received a certain endowment can certainly influence the claims of other individuals. The context or the social embeddedness is so far almost completely anonymized and masked out in economic experiments (see Weimann & Brosig-Koch, 2019). Indeed, individuals make observable decisions about the allocation and use of their endowments but it is entirely uncertain from which social position individuals decide.

Furthermore, we know that economic experiments concentrate primarily on the theoretical accuracy of the underlying behavioral model and lack real-world contexts and interrelations (Levitt & List, 2007). Gamification and the findings of behavioral psychology might help us to generate an immersive setting, that allows for translating abstract decisions into a visible outcome without the gentle pantalism of nudging, introducing a more liberal motivational design of a context with alternative options and feedback on certain decisions (Fleisch et al., 2018). There are publications considering the influence of immersion on subjects in scientific experiments. Immersion refers to the subjective impression of feeling spawned inside a virtual world and the ability to interact in this environment. In those interactive systems, the user is given control over decisions and provided with instant feedback for reacting and learning. Bigoni and Dragone (2012) and Gronberg et al. (2012) underline the ability of graphic interfaces for a better comprehension of experimental instructions. Bachen et al. (2016), Hou et al. (2012) and Hamari et al. (2016) verify that immersion increases the external validity of experimental economic studies. Similar studies focusing on the ability of computer-animated experiments to increase the credibility of cheap-talk designs have been reported by Madani et al. (2017) and Connolly et al. (2012).

Second, the above-mentioned fact that the common good does not exist in an objective sense means that individuals form their ideas about it. From an economic point of view, however, these goals and motivations can only be grasped in a consequentialist manner. Every single individual decision is the result of an individual benefit-cost calculation in a social vacuum. The preference existing at the respective point in time produces the action itself after weighing up the given options for action and underlying them with probabilities (belief-desire theory). Therefore, in standard economics empirically observable interpersonal cooperation can solely be explained by altruistic motives that take individual benefit calculation into account. A motive such as «I do something simply because it is my duty, regardless of the question of whether this brings advantages for me» lies outside of the consequentialist

economic concept of utility. If, on the one hand, a dutiful individual act dutifully, but realizes his or her advantage (e.g., because other individuals also act dutifully), economic theory will always use this individual advantage to explain the behavior. If, on the other hand, an individual does not derive any benefit from his action, the behavior must be interpreted as irrational.

Facing this fact, Amartya Sen (1977) advised us to extend the term of preference, dividing it into sympathy, a concern for others that affects one directly, and commitment, a concern for others that does not affect one directly (a moral obligation): On the one hand, sympathy describes what is depicted in the economic concept of social preferences: the well-being of others is considered and thus an object of the personal goal. Then cooperation can be rational. A blatant example is the construct of effective altruism as discussed in Sandel (2020). Take, for instance, the donation behavior of rational individuals. They want to be less dependent on a collective welfare organization (i.e., state, church, etc.), but rather want to support according to their ideas of who is worth donating. Certainly, this is an expression of utility-maximizing behavior. Assuming a wasting state or church, they aim to improve the world according to their ideas effectively. Commitment, on the other hand, is based on moral considerations that lie outside of a consequentialist, utility-maximizing logic. Commitment can lead to decisions that do not maximize utility. However, there is no fully convincing scientific language to describe this term yet. Sen (2009) illustrates the difficulty as follows: Person A is sitting by the window on a plane enjoying the light above the clouds. There is person B sitting next to

A. B wants to play a computer game on a portable device. To play better B asks A to black out the window. But A knows that such games are bad for the character. If A acts egoistically, he or she rejects the request since the view outside the window is enjoyable. As an altruist, A would also discourage B from playing the game because of the known side effects. And yet A might comply with B's request. Such a decision cannot be characterized as utility-maximizing. Presumably, such action already characterizes

something like a moral consideration. Sen derives the conclusion that human behavior cannot be fully explained by egoistic utility maximization (even in the case of social preferences), so considerations of fairness, feelings of solidarity, and similar motives, which are classified as deontological, must be taken into account. But, how can these enlightened ideas of a differentiated concept of utility be operationalized for economics?

3. METHODOLOGICAL APPROACH

The concept of utility maximization cannot be replaced by the simple hypothesis of common good preferences, evaluated on a newfound metric. Minkler (1999) provides a first «exploratory framework» for the operationalization of deontological decision motives in economic analysis. He defines moral rules as a kind of pre-condition for individual utility maximization. Based on the previous literature in experimental game theory, behavioral psychology, behavioral ecology, and professional gamification we aim to contribute an innovative way to investigate common good preferences empirically through economical experiments with further introspection of individual behavior.

The theoretical framework of our approach is two-fold. First, it is based on an incentivized, non-linear public good experiment. Experimental literature shows that in public good situations people usually tend to give more than predicted by an economist. Non-consequentialist motives might likely help us explain these findings (Minkler, 1999). Therefore, public good experiments are a suitable environment for an investigation of individual preferences for the common good.

Our underlying model is a derivative of the impure public good model as used in previous studies (Paetzel & Traub 2017, Menges & Beyer 2015). It features three core attributes of investments into a public good which are expressed in a payoff function: opportunity costs in terms of reduced private consumption (1), private benefits of common good investments such as local quality improvements

(2), and public benefits reflecting the positive spillovers of common good investments such as improvements of environmental quality (3). Hence, the methodological approach follows certainly the standards of experimental economics. However, the restrictive assumptions regarding the nature of individual behavior will be varied step by step to develop an interdisciplinary, methodical approach to the investigation of preferences for the common good.

Gamification is used to translate the social dilemma situation into a story and a social context, where the test subjects are asked to make their decisions. Using gamification, it is possible to create an enriched contextual frame in which decisions are made. Contextual factors can then be analyzed and discriminative stimuli pointing to different social structures or the need for diverse rule-governed behavior may be introduced allowing for the identification of behavioral mechanisms enhancing individual preferences for the common good. For Ulrich (2019) there is a strong link between the description of the common good and the idea of a good life. He states that the quality of life begins with participating in the determination of its content. Both the quality of life and the common good can only be mutually determined in a participatory manner with the same claim to the preservation of their inviolable subject quality. Individuals then understand themselves as political subjects of a community and its shaping as a public matter. Müller et al. (2018) present an idea of the good life in a professional full-computerized and animated gamification approach. We have further developed the story presented earlier in Müller et al. (2018) and implemented our model into the «mayor's dilemma» (figure 1).

The three players adopt the role of mayors in neighbored cities. They share a budget and can realize a payoff (as several inhabitants in their city) through the investment from this budget. The distribution of the total budget among the three players can be homogeneous (equal), but it can also be heterogeneous. The payoff depends on the individual investment decisions, but also on the investments of the other members (mayors) of the group

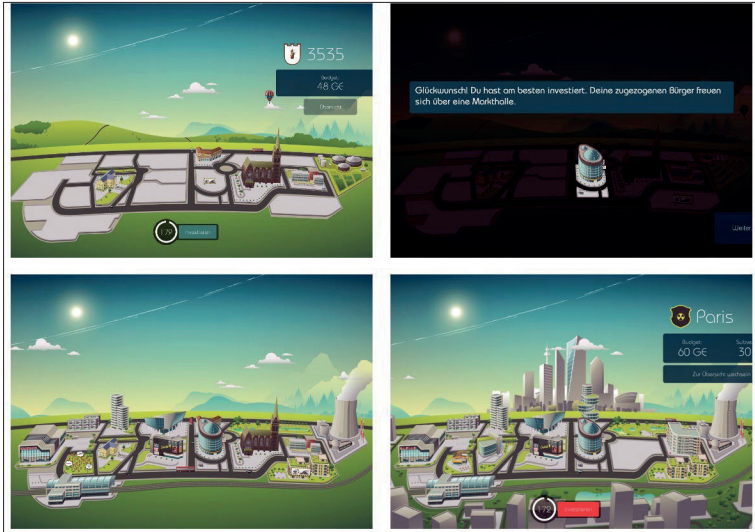


Figure 1. Gameplay

(spillover effects). At the end of the experiment, the payoff in a certain round is paid in cash to the players at a previously communicated exchange rate (Eurocents per inhabitant). In each group, the allocation of players to the budgets happens randomly but it is then fixed for the next 10 rounds. Players will see their budget and that of each other on the screen. The task of the players is to determine the proportion of their budget, which should be invested in the ecology of the city. The maximum budget can be invested, but the player can decide not to invest at all. To visualize the decision, there are three sliders on the screen, which each player can set for himself and the other two players between zero and the maximum. The personal slider represents the own investment decision, the other two sliders represent the expected investment decision of the teammates. As a consequence of the investment, cities become more (or less) attractive, and the population changes because of an influx of new citizens. The city development is endogenous. The (quasi-dynamic) events and city growth are

supported by individual history and partly by music. After each round, it is determined which player has the (relatively) largest increase in inhabitants. An event card is pulled from the program. All players then receive a variation of city growth in the ordinal ranking of their period result; e.g., the «most successful» player gets a whole new market hall, the second a new market place and the third nothing at all.

Each round consists of three minutes and at the end of each round, the mayors are invited to sightsee also their neighboring cities to visualize the results of their decisions. Each mayor has the objective to create a city that maximizes the number of its citizens. He knows about the effects and spillovers of each investment decision, but he does not know about the decision of the other two mayors when investing. The nonlinear payoff function described above defines the mathematical relation between investment and the resulting number of citizens in each city. The model also delivers the hypotheses which are needed for preference elicitation. The experiment finally includes a questionnaire concerning sociodemographic variables.

In a second step, the sociological fact that individual decision-making processes in the real world take place in a social context will be considered. From a psychological perspective, there are two approaches to explaining altruistic or common-good-oriented behavior. One assumes that there is either a stable personality trait that influences the behavior of individuals or that altruistic behavior is beneficial from a behavioral- ecological point of view. The two approaches mentioned do not necessarily have to be contrary to each other. In stable contexts, the same degree of cooperative behavior should be shown, which in this case could also be interpreted as a trait.

If the approach of an intrinsic personality trait is chosen, altruistic behavior can be accessed not only through behavioral observations in various experiments based on, for example, a dictator game or a prisoner's dilemma (Andreoni et al. 2010), but also through questionnaires (Rodrigues et al., 2017). Assuming that there is an altruistic personality trait, it should be difficult to

change. Hence, one should show altruistic behavior equally in different situations and at different times (Rushton et al., 1981). With the self-report altruism scale (Rushton et al., 1981), 20 items (for example, «I have given directions to a stranger.») are asked. The scores obtained correlate positively with having an organ donor card. Furthermore, there is the Prosocial Tendencies Measure (Carlo & Rendall, 2002).

Here, different types of prosocial behavior (altruistic, compliant, emotional, direct, public, and anonymous) are assessed with a total of 23 items. Altruism is understood here as voluntary helping that is largely motivated by concern for and the needs of others. Even well-known questionnaires that aim to describe an individual's personality in its entirety have sub-scales on prosocial attitudes. For example, the Freiburg Personality Inventory (Fahrenberg et al., 2010) has the Social Orientation scale, and the Costa and McCrae NEO Personality Inventory (Ostendorf & Angleitner, 2004) has a subscale on altruism. With the help of these questionnaires, we want to test whether this trait-psychological approach can explain behavior that does not correspond to rational utility reasoning.

From a behavioral ecology perspective, four mechanisms allow an explanation for stable cooperative behavior. One mechanism is kin selection (Davies et al., 2012). Since the unit of natural selection are genes (Dawkins & Davies, 2017), it can be beneficial for an individual to show cooperative behavior towards related individuals. This can increase the inclusive fitness of the individual. To find out whether this mechanism can serve as an explanation for stable cooperative behavior, a questionnaire would have to be used to find out whether there is a kinship relation between the members of the group or at least shared kinship signals. Reciprocity can be used as a further explanatory approach. For this, on the one hand, a stable social configuration must be in place, and individual identifiability of the actors as well as monitoring of cooperative behavior must be possible (Davies et al., 2017). These conditions may be assessable using a questionnaire. Cooperative behavior can also be explained as a by-product of actually selfish behavior. In this case, cooperative behavior has a higher benefit for each

individual than non-cooperative behavior and should therefore be preferred (Davies et al., 2017). To decide whether this can be an explanation for cooperative behavior, the cost-benefit ratio must be examined. It may also be possible to reinforce cooperative behavior and thus increase the benefits or punish non-cooperative behavior (Davies et al., 2012). This is called enforcement. To observe this mechanism, there has to be asked whether free riding has been punished with costs in the past and what consequences followed cooperative behavior.

4. IMPLICATIONS

This paper delivers a framework for an innovative way to not only normatively prescribe preferences for the common good but also to investigate them empirically. We know that experiments in economics need to assume a self-interest-oriented individual, because of the induced preferences (with payoff functions). Using gamification, it is possible to create an enriched contextual frame in which decisions are made. Contextual factors can then be analyzed and discriminative stimuli pointing to different social structures or the need for diverse rule-governed behavior may be introduced allowing for the identification of behavioral mechanisms enhancing individual preferences for the common good. Furthermore, based on the theoretical and empirical work from behavioral psychology as well as behavioral ecology, we design a questionnaire to introduce contextual factors that are known to influence the stability of systems of cooperative behavior and examine their role in our experimental model.

With the creation of different contextual contexts and introspection of individual decision-making, we might be enabled to observe how individuals leave short-term advantages in the interests of the common good behind - developing a new explanatory model for willingness to cooperate. A synthesis of experimental game theory, behavioral psychology, behavioral ecology, and professional gamification might constitute a theoretical connecting point between

standard economics and the ECG model, with its ideas already carried out practically within the common good movement. This may even be of some wider importance in utilizing behavioral psychological, biological, and economical theorizing in creating a new synthesis to explain the rationality of irrational individual preferences for the common good.

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5. CARE AS A CRITERION FOR EVERYTHING WE DO

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Abstract: This paper offers an exploration of what *care* – understood as a criterion – can mean and how it can change the way we look at the world. *Care* is currently understood as a socio-economic sector that includes the unpaid activities of care in private households as well as the often-underpaid services, especially in health and education and mostly done by women. During the last two years of the pandemic, *care as a sector* has gained visibility. *Care as a criterion* should be applied to all work and activity. If we wish to live carefully in this world, to do least harm as possible, which in my understanding is also a goal of the Economy of the common good as a movement, *care as a criterion* can be helpful. *Care as a criterion* will be thought of as an additional element.
Keywords: Socio-economic sector, Often-unpaid services, Women, Economy for the common good.

1. INTRODUCTION

This paper offers an exploration of what *care* – understood as a criterion – can mean and how it can change the way we look at the

world. A broader understanding of *care* deeply influences the way we live, or, as French philosopher Cynthia Fleury (2019) puts it: «(...) le soin est la seule manière d’habiter le monde. » (« care is the only way to live in this world »). *Care* is currently understood as a socio-economic sector that includes the unpaid activities of care in private households as well as the often-underpaid services, especially in health and education and mostly done by women*. However, work in this sector must be done as invisibly as possible within the current economic system. The functioning of the community owes itself to the almost invisible services of the care sector. During the last two years of the pandemic, *care as a sector* has gained visibility. While this is an interesting fact, there is also a danger to it. If we regard *care* as no more than a sector, we lose the opportunity to integrate *care* into our thinking concerning other sectors. The separation of productive and reproductive labour – the former meaning work like building a bridge or producing a chair, the latter meaning all activities that are commonly seen as *care*, e.g. nursing – leads to a narrow view of work as a whole. *Care as a criterion* should be applied to all work and activity. If we wish to live carefully in this world, to do least harm as possible, which in my understanding is also a goal of the Economy of the common good as a movement, *care as a criterion* can be helpful. Since the approach of using *care as a criterion* is a novel one, there is no literature discussing it explicitly. The following definition of *care* serves as a starting point for reflection: «*Care activities include the cultivation of land and hedges, looking after animals and plants, and also political activism, information, research, and development work.*» (Knecht et al. 2012, 2020 in English). *Care as a criterion* will be thought of as an additional element. Furthermore, the ideas of Skeptic thinkers, especially Sextus Empiricus (ca. 160–210 CE) help develop the notion of *care as a criterion* by offering a useful definition of criteria. The combination of Skeptic thought, and contemporary views leads to a new take on the notion of care.

2. WHAT IS A CRITERION?

In ancient Greece, criteria were often discussed in connection with truth. However, in Pyrrhonian Skepticism (founded by Pyrrho of Elis, c. 370-272 BCE), the focus was not on finding or defining truth, but on how we can act. From this we can see that a criterion in itself does not presuppose content but can be applied to what is considered important in the particular school of thought. One criterion can be used to look at what is true; another criterion can be used to make decisions in relation to action. This is an important point, since I will not postulate that *care* is the only valid criterion for everything – but that it should be considered explicitly as an additional criterion. A brief definition of «criterion» that is still useful today comes from Sextus Empiricus, a skeptic and physician who lived in the 2nd century: *«The criterion (...) has three several (sic) meanings – the general, the special, and the most special. In the «general» sense it is used of every standard of apprehension, and in this sense, we speak even of physical organs, such as sight, as criteria. In the «special» sense it includes every technical standard of apprehension, such as the rule and compass. In the «most special» sense it includes every technical standard of apprehension of a non-evident object; (...).»* (Sextus Empiricus 1983). Sextus identifies then three factors that are relevant to the criterion, namely the *«agent (by whom)»*, the *«instrument (by means of which)»* and the *«according to which»*. A specific example would be the following: A wall is to be built straight. The mason would be the *agent*, the ruler the *instrument* and the application of the ruler to the wall the *according to which*. From this excursion into antiquity, we learn that a criterion is a standard of knowledge that helps us to distinguish¹. What exactly this criterion must be is not predetermined but depends on what it

¹ The Greek κρίνω means «to distinguish, judge, decide», «criticism» and «crisis» are also words that stem from this root.

is to be used for. For the ancient sceptics, the criterion was above all something by which they guided their actions. Their *criterion of action* was appearances or the «normal rules of life» (Sextus Empiricus 1983). Following this line of thought, we can explore the question whether *care* can become a criterion (of action) for our recent times.

3. CAN CARE BE REGARDED AS A CRITERION IN THE SENSE DEFINED ABOVE?

If we consider the goal to be a society that enables a good life for everyone - a goal that is reflected in the Universal Declaration of Human Rights, for example - then we can define *care* as a criterion that shows us whether an activity is good and meaningful in terms of this goal. From the ancient example, we also learn that a criterion need not only serve knowledge but can indeed guide action (or non-action, since the sceptics abstained from action as far as possible). I will introduce the notion of *rich criterion* and will explain how this applies to care, and why this perspective is important.

4. WHY CARE AS A RICH CRITERION?

The notion *rich criterion*² is a term that I will use to convey a better understanding of the benefits that integrating *care as criterion* to thinking about a good life and sustainability goals can bring. While a criterion as described above encompasses three elements, they usually all belong to the present situation of its application. If the situation is building a wall – like in the example given above-, all three elements, the mason (agent), the ruler (instrument) and

² This term is being used for the first time in this essay, so I will fill it with meaning and not derive its meaning from other sources.

the process of applying it (according to which) are present. So, I would just use the notion of *criterion* and not enlarge it. A *rich criterion*, on the other hand, is a criterion with a history. *Care* is a notion that has been used for a specific kind of work for a long time. This use has a history in feminist thinking about unpaid and underpaid work. Feminist sociologists, economists, theologians have invested thoughts and time, problems and dilemmas have been exposed, ideas explored. *Care* is neither a new nor a pristine word. *Care as a sector* is a field of research that has largely been explored. In Switzerland, efforts are being made to show the value of this large sector that usually goes invisible since it is not included in the *Gross National Product*.³ While in this text it is not possible to give a summary of the work that has been done for many years, it is very important to stress that this work marks the notion of care. If we now proceed to using *care* as a criterion, its history cannot be excluded. *Care* is a criterion with feminist background and history, and this is what I call a *rich criterion*.

5. HOW CAN WE APPLY THE CARE CRITERION?

If we now choose *care* («by means of which») as our criterion and ourselves as agents («by whom»), then we need a method by which we use this criterion («according to which»). How does one apply care as a criterion to activities? This question cannot be answered conclusively in purely theoretical terms; it requires trial and error, discussion, and negotiation. This is also connected to the fact that the «by whom», the agent («us») is not clearly defined - we humans are different. It is important to integrate into the notion of «we» that all people are born dependent and needy. Specifically, the person who applies the *care* criterion should be

³ The Swiss Federal Office for statistics keeps track of the unpaid work and its value in a so called «household production satellite account» showing the monetary value of unpaid work.

imagined as a vulnerable and needy person, a baby rather than a «homo economicus». There are already approaches to applying *care as a criterion* without saying so explicitly. David Graeber (2015) shows a similar approach in his much-acclaimed book «Bullshit Jobs». A «bullshit job» is a job *that the person doing it* considers useless or even harmful. That means, the criterion is not applied from the outside, but the persons performing the job apply it themselves (as «agent»). In a broad sense, the applied criterion here is «care» - because *care* as a notion also encompasses being careful, being useful and helpful, or at least «not harming». The goal of *care* lies in the satisfaction of needs. This satisfaction is also claimed to be the goal of economic activity and economy as a whole – although our current notion of economy is often reduced to the monetary element. It is therefore necessary to look at what needs are and how they can be satisfied. And it is important to distinguish activities that satisfy real needs from activities that serve a different purpose (like maximising profits, for example). A criterion for this distinction could be *care*. In the following section, I will try to exemplify the use of care as a criterion on different levels. In each example, I will try to highlight some of the questions that will arise when using care as a criterion.

6. EXAMPLES

6.1 Micro level: Care as a criterion in classical care sector work

The first example is a situation from a health work environment that was presented as a case by a clinical ethicist in an ethics class: A young health worker (learning nurse) has to guide an old woman, inhabitant of an old people's home, to the next appointment. For this, the old woman needs to enter an elevator. She is reluctant and will not move while the young care worker is in a hurry – she too has to get to her next duty. So, she pushes the old woman to enter the elevator. Now, the ethical question was: if this is a form

of violence, what is the young nurse supposed to do? Does she have to report it to her boss?

This is a difficult situation – but, in my view, it is not a dilemma. Let's have a look at this, using care as a criterion. The agent (by whom) in this case would be a professional health care worker, someone with experience who knows how to handle this kind of situation (due to experience and skills). The «instrument» by means of which we look at the situation would be *care* (as a means of reflection and a kind of ethical ruler) – and the last element (according to which) would be asking the question: how could this have been done in a different way? Someone with more experience could have guided the old woman with friendly determination and inner calm. However, it is always possible that one fails even as an experienced and well qualified person. So, the handling of the situation itself is just one part – the *care criterion* should also be applied to the analysis of it and the question of how to handle it once it has happened. The ethicist who presented the case put forward the argument that, if the young nurse had an employee evaluation meeting afterwards (that was important for her), it would be justified to not talk about the incident with her boss since this was a minor issue. To challenge this view, I propose the following line of thought: If the incident is minor (not a problem), then it should be possible to talk about it without having a disadvantage from it. If the incident is major (a real violence problem), it is absolutely necessary to talk about it to avoid that it will happen again. There is no situation in which not telling is useful, on the contrary, it is unethical. Why? Let's try to use the *care criterion* to analyse the situation whether talking about this incident makes sense or not. We will have to leave the micro level for this, which is an important point: It is not possible to discuss on a purely individual level what affects a broader community. Care as a *rich criterion* also carries references to society, a society that would make a good life possible for all of us. The agent, in this case, cannot be a health care worker or another single person. It is necessary that the *care criterion*, the «by means of which» be applied by an agent that represents the (health) care system.

The perspective of how care work (as a sector) should be done is important in determining the agent. So, as agent we could choose the perspective of good care, represented hopefully by the director of the institution in this case. The application of the *care criterion* should be analysis of the situation and could lead to the decision that the atmosphere in the institution should make it possible to talk about such an incident and discuss how to deal with this kind of situation in the future. So, the *care criterion* is important for the analysis of the single incident but also for the analysis of how the institution should be organised to enable care workers to use the *care criterion*, to make mistakes and learn from this. If the atmosphere in the institution is one of fear, and the young nurse would be afraid to talk about the incident, then the director is not qualified to apply the *care criterion* and it must be applied from the outside. One possibility would be the community in which the old people's home is situated. The community representatives could act as agent and apply the *care criterion*. (This would hopefully also lead to the appointment of a more care-ful director.)

6.2 Meso level: Bridges

An example on a meso level could be the building of a bridge as David Graeber has stated in his already mentioned book. This is a complex situation that deserves analysing. The construction of a bridge certainly has a purpose, an expected benefit, and hopefully it will be done carefully. We build a bridge because people have the need to cross a river (perhaps because on the other side of the river is another village, or a school, or fertile land). The bridge makes it easier to get there, maybe less dangerous. The underlying need seems clear, and thus we see the *criterion of care* fulfilled. In this example, the «we» of society (community, village inhabitants) functions as the agent («by whom»), *care* as the instrument («by means of which») and the weighing of different arguments in relation to needs as the «according to which». That this assessment is not always easy, not even in this seemingly basic case, is something

we need to be aware of. *Care as a criterion* does not produce a recipe that we can apply equally to all situations. The criterion allows for a structured consideration. However, the assessment must be made individually in each case. To show this, let us imagine another bridge-example: The bridge could be situated in the vast city of Istanbul. Before the Yavuz Sultan Selim Bridge was built, there was in fact a discussion about the underlying needs and benefits. There were already two bridges across the Bosphorus when the construction of a third bridge began in 2013. At first glance, the situation appears similar to the previous example. There was a need to cross the Bosphorus, there was often congestion on the two existing bridges, so it could be assumed that it would be reasonable and useful to build another bridge to reduce it. But there was also opposition to the third bridge, because it was feared that the traffic congestion on the two existing bridges would not be reduced at all by the new bridge, which would be located far to the north. The third bridge was built primarily for long-distance traffic (high-speed train and motorway). Moreover, according to the critics, the motorway would destroy forests. The need to optimise traffic was thus opposed by the need to protect the environment. The bridge was completed in 2016, meaning it was decided that the benefits were greater than the damage. *Was «care» applied as a criterion here and if so, was it applied correctly?* In this example, there was no unified «we» that could take on the function of agent («by whom») and apply the criterion of care. Rather, there were different groups putting forward arguments. The political decision weighted the need to have another possibility to cross the Bosphorus higher than other needs, e.g. the need to keep the environment as intact as possible or to spare the residents stress. If *we*, as non-participants (another «by whom»), apply the *criterion of care from the outside*, environmental protection appears as an argument that is more likely to fulfil this criterion. In this case, the construction of the third bridge would not have been looked at as care work. It would have been helpful to consciously identify an overarching agent («by whom») to make the decision. In a civil society where negotiation and political processes are always needed,

this is not an easy process and should be kept in mind as a difficulty. Difficulties can arise not only in *determining* the criterion - just thinking of *care as a criterion* can generate resistance - but also in its application. However, this does not mean that the criterion must be bad but points out that diligence (that is also an element of care) is important in applying the criterion. The question of the agent - who will apply the criterion? - and in what way («according to which») is crucial. All this also applies in fact to the criterion of profit maximisation – although we rarely question it because we take it for «normal» and «given». The bridge example – or rather – the two bridge examples – show(s) that the application of the criterion of care, like the application of any criterion, is not simple and cannot be done in a standardized way.

6.3 Macro level: Care criterion and sustainability

Is *care* not always integrated when we think about sustainability? Why should we address this explicitly and use care as a criterion? The following quote by Alison Smale, Under-Secretary-General for Global Communications, Department of Public Information of the UN, shows the broad range and great aspiration of the SDGs: «*The Sustainable Development Goals (SDGs) define the world we want. They apply to all nations and mean, quite simply, to ensure that no one is left behind.*» Of course, one could say, that without *care*, these goals cannot be achieved and that therefore *care* need not be used explicitly as a criterion. Can *care as a criterion* make a difference, and if so, what would this be? I will try to show this on the example of goal 2: zero hunger. Like all goals (of the SDGs), this is split down into smaller and more precise goals, and there are targets and indicators defined:

Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding, and other disasters and that progres-

sively improve land and soil quality. Indicator 2.4.1: Proportion of agricultural area under productive and sustainable agriculture

Target and indicator help to see what should be reached and how success should be measured. Implicitly, I would say, *care as a criterion* is present here. We care for each other and aim at a good life for all. Zero hunger means satisfying a basic need of all humans. However, using the *care criterion* openly, and with regard to its characteristics as *rich criterion*, would make clearer what is actually being measured. To ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, as defined above, there are many processes that require *care as a criterion*. Especially the part «increasing productivity and production» could profit from this. *Care* could be applied, for example, to reflect the question of how much increase will be enough, and what might be too much. If we remember that care as well as economy should serve the purpose of fulfilling the needs (of humans, but also of the world as a broader system including all non-human life), the question of determining what is just right (enough) is important. Using care as a criterion could be applied like this: The agent (by whom) in this case should be someone with a broad perspective on life on this planet (maybe a representative of the UN). Care, as the instrument (by means of which) should be applied through looking at all aspects of agricultural productivity – the use of land weighed with the needs of the population (of the area with a broad outlook), the employment conditions of the workers (and their individual lives), the suitability of the desired use to the land. It is also important, from the perspective of the rich criterion, to have a look at who exactly will be doing what kind of work and what work is being paid and visible. Considering that women* have been doing the greater part of the *care-as-a-sector-work* so far, it is crucial to use care as a criterion to determine whether their contribution is weighed equally and whether the ratio can be changed, and the work can be distributed more evenly. For this, it is important that the agent (by whom) is diverse, and the perspective of women* is included.

6.4 Meta level: Finding words, building a theory

As a philosopher, I would like to add one more level to the list – the meta level. *Care as a criterion* could also be used as a philosophical notion and even as a kind of tool. From the antiquity, namely from Socrates, we can derive the notion of «*epimeleia tes psyches*» (care for the psyche, the soul, the self, see Schmid 2016). Philosophy and care have been close in these times, especially in the Hellenistic era (336-30 BCE), in which also the sceptics defined their criterion for action. An example of the application of the *care criterion* could look like this: The agent (by whom) could be a community of philosophers who are professionals but also human beings wishing to lead a good life themselves. Care would be the instrument (by means of which) and would be used to evaluate what good can philosophy do by analysing the effect of philosophical thinking (according to which). I used a *philosophical care approach* to ease a client's pain after the voluntary death of both of his parents (see Krueger 2022). First, I listened to the narrated story and let him tell his feelings. Then, together, we analysed his feelings and found words to describe them. While doing this, it became clear that the client was not alone in experiencing these feelings, that he was able to express himself, and that there was even literature to read about the topic. So, the *care criterion* could be used to evaluate the interaction and show that the client's wellbeing was improved by the philosophical intervention that consisted in finding words and notions for one's own feelings and understanding them better this way. This example on a micro level «use» of philosophical care (including philosophical reasoning) shows that the meta level can have an important influence even on a single person. Philosophical reflection can be useful regarding the care criterion on other levels as well. The *proprium* of this kind of care is finding words and notions that help express our feelings, wishes, and needs. From finding words to express feelings to building a theory that helps to apply care as a criterion, there are still quite some steps to be made. This paper's goal is to mark a beginning.

7. CONCLUSIONS

In the present paper, I have tried to show that it makes sense to add *care as a criterion* to evaluate and reflect on our activities with regard to the goal of a good life for all and everyone. Care as a *rich criterion* is not a simple tool, it carries a history of thought. This is complicated, and it is an advantage – we are reminded of the fact that *care-sector-work* is still undervalued while we are able to use the criterion to evaluate all kinds of work and activity. *Care as a rich criterion* is not already included in the Economy of the common good - approach. While sustainability implicitly encompasses care, since without care, it would not be possible to pursue any sustainability goals, there are many meanings of care, as I showed above – so it is helpful and clarifying to state what we mean by it. Using *care as a rich criterion* is a possibility to integrate a whole tradition of feminist thought and also a method for reflection. Sustainability models should integrate a *care as a rich criterion – element*, maybe across organizational levels, as a tool of pause and reflection. In pursuing the goal of an economy that aims at fulfilling needs and not primarily making profit, it is still possible to make mistakes or become caught in dynamics that are not easy to control. Care as a rich criterion is one element that enables to slow down, take on a position of reflection about the three elements agent (by whom), instrument (by means of what) and according to which. Each part of this trinity is important and worthy of reflection – who is meant by «we»? Are «we» excluding others? Whom? What instrument are we using? Is care a suitable instrument in this case? And how are we going to evaluate it, according to which ideas? *Care as a rich criterion* offers the opportunity of a viewpoint that is close to the one of the Economy for the common good, but not the same – like a friendly outside perspective.

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6. SOCIAL DIMENSION OF SUSTAINABILITY AND HUMAN RESOURCE MANAGEMENT: ITS INFLUENCE ON SOCIAL PERFORMANCE

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Abstract: The social dimension of sustainability is directly related with the preservation and creation of skills and capabilities, the promotion of health and the support of equality. And this dimension of sustainability is linked to a Sustainable Human Resource Management (HRM). Under this approach, the objective of the work is, firstly, to identify which the relevant sustainable practices linked to the social dimension of sustainability are, particularly the main HRM practices associated to the internal social dimension; secondly, to highlight the importance and influence of these practices on the supply chain. And finally, to show if these practices are related with an improvement in the social performance of the organization.
Keywords: Sustainability, Sustainable Human Resource Management, Sustainable social practices, Employees' loyalty, Work environment, Social performance.

1. INTRODUCTION

The social dimension of sustainability emerges when the organization actively supports the preservation and creation of skills and capabilities of current and future generations, promotes health and supports equality and democracy within and outside its borders (McKenzie, 2004). The current relevance of this social dimension implies a greater consideration of stakeholders regarding not only «where» products are manufactured but also «how» and «under what conditions» (Agarwal et al., 2016). Consequently, this dimension of sustainability is directly linked to the soft side of the organization and Human Resource Management (HRM) practices.

In turn, quality management becomes an important philosophy for today's firms and its implementation offers a broad set of principles with a significant effect on this human dimension of organizations (Wilkinson, 1992). Employees' engagement and participation, teamwork, leadership and customer focus, are just some examples. Thus, it makes sense to consider that the application of quality management principles and practices may influence the social dimension of the organization and, at the same time, lead it to the development of a sustainable orientation.

Under this approach, the objective of this work is twofold. Firstly, we want to reveal the relevant HRM practices linked to the social dimension of sustainability and their relationship to quality management principles; and secondly, we want to show if these practices are related to an improvement in the social performance of the organization.

2. LITERATURE REVIEW

Hong et al. (2018) specify that sustainability practices in an organization comprise both the internal and external dimensions. To determine which practices were more relevant, Magon et al. (2018) carried out a bibliographic review showing that the internal-sus-

tainable management practices (social and environmental) were the most frequently cited and studied. Although a great number of studies focused on the environmental dimension, different authors have specified the need to put the focus on the social aspects of sustainability (Hutchins & Sutherland, 2008; Kumar & Rahman, 2015; Mani et al., 2016; Zhu & Zhang, 2015; Zhu et al., 2016).

After developing a literature review on the subject, we can observe a tight link between quality management and sustainability approaches. A lot of considerations regarding social sustainability are being included into the quality management approaches and practices adopted by firms. In this respect, Siva et al. (2016) state that sustainability considerations are tackled through the application of customer orientation practices.

With these arguments in mind, a compilation of internal social sustainability practices was developed. We firstly identified some internal practices related to the working environment, health and safety policies, employee promotion and non-discrimination (Das, 2018; Mani et al., 2018; Wijethilake, 2017). Then, and taking into account the integration between quality management and social sustainability, we chose different practices that integrated some quality management principles and social sustainability. Particularly, we developed a theoretical contribution integrating the quality management principles proposed by Bastas & Liyanage (2019) with these internal social practices and social performance indicators.

In this vein, Bastas & Liyanage (2019) propose some quality management principles that are clearly linked to social practices oriented towards sustainability. Specifically, *leadership* implies that the leaders of the organization must promote commitment to the objectives of quality and sustainability in the organization's members. In this sense, several authors (Aquilani et al., 2016; Nguyen et al., 2018) highlight the positive impact of the leadership principle of quality management on sustainability.

It is also a key principle related to social sustainability the one related to *human resources engagement*. This principle refers to the participation, recognition and empowerment of the members of the organization to achieve its quality objectives (ISO, 2015).

Also, the literature on sustainability management strategically positions this principle as a fundamental cornerstone for sustainability performance (Aquilani et al., 2016; Luburić, 2015).

The principle related to *evidence-based decision making* is also related to sustainability. This is derived from the assumption that decisions with greater objectivity and confidence levels are made as a result of the analysis of facts, evidence, information and data (ISO, 2015). In this regard, the management culture and decision-making processes based on relevant data, facts and evidence are established as a fundamental element of an integrated sustainability management system based on quality principles (Kuei & Lu, 2012).

Another principle, *relationship management*, encourages companies to identify and manage relationships with stakeholders and seeks to make organizations more capable of responding to dynamic market conditions (Bastas & Liyanage, 2019). The management of relationships with stakeholders and the quality of relationships between members of the supply chain are identified as critical enablers of the sustainability of organizations and supply chains (Ansari & Qureshi, 2015; Aquilani et al., 2016; Reefke & Sundaram, 2016).

Finally, the principle related to the *integration of the supply chain* refers to the alignment, communication, coordination and cooperation in the continuous flow of internal and external information between members of the supply chain network (Bastas & Liyanage, 2019). In this sense, collaboration between companies in issues such as the exchange of information and the integration of processes throughout the supply chain, are classified as critical enablers of sustainable supply chain management (Reefke & Sundaram, 2016).

After the theoretical review, part of our theoretical contribution focuses on the development of a questionnaire identifying the different internal practices oriented to social sustainability in a quality management context. Particularly, in this work we only focus on the internal dimension of social sustainability. That is why the different practices identified are mainly referred to the

quality principles of leadership and human resources engagement. The rest of the principles analyzed are more oriented to external stakeholders and not considered in this research. The following table (see table 1) summarizes the variables used to analyze these internal social sustainability practices.

TABLE 1. Internal practices oriented to quality and social sustainability

<i>Quality principle</i>	<i>Variables</i>	<i>Authors</i>
Leadership	A healthy and positive work environment is provided for employees	Das (2018)
	There is an effective/efficient policy on health and safety in the workplace	Mani <i>et al.</i> (2018)
	The security measures adopted are updated and reduce the risk of accidents	Das (2018) Wijethilake (2017) Mani <i>et al.</i> (2018)
	All employees are promoted equally based on merit	Mani <i>et al.</i> (2018) Das (2018)
	The safety of women in manufacturing plants is guaranteed	
	Employees are not denied any rights and privileges because of their age, gender, race, community, religion, or national origin	
	We provide employment opportunities to the surrounding community	Das (2018)

Finally, we tried to elaborate a set of indicators, also based on some quality management principles, in order to measure social sustainability performance in its internal (employees) dimension. In addition to social sustainability practices, our literature review showed that there was a positive link between sustainable practices in its social dimension and social performance (Alsawafi *et al.*, 2019; Ming-Kuei, 2014).

The following table (see table 2) summarizes those variables in relation to the underlying quality principles.

TABLE 2. Indicators for internal social sustainability performance

<i>Quality principle</i>	<i>Variables</i>	<i>Authors</i>
Leadership	There has been an improvement in the work environment	Das (2018)
	Improved employee health and safety has been achieved	Wijethilake (2017)
	Employee loyalty increases significantly	Magon <i>et al.</i> (2018)
HR engagement	There is high participation of employees in education programs on prevention and control of risks in relation to diseases	GRI (2014)
	There is high participation of employees in skills management and training programs favoring the management of their professional careers	
	There is high participation of employees in training on policies and procedures related to human rights relevant to their activities	

3. METHODOLOGY

The research was designed with a quantitative approach that tries to quantify and assess the relationships of the constructs under study: sustainability practices in their social dimension and the social performance of the organization.

The study population are large and medium-sized companies in the textile-clothing sector in the main cities of Colombia, taking into account that, due to their size, their quality management practices oriented towards sustainability would be more visible and applied, as explained by several authors (Li & Huang, 2017; Sancha *et al.*, 2015; Walker *et al.*, 2008) who refer to the size of the company as an element to consider in the sustainability implementation. In the context of Colombia, companies are making an important effort on the road to sustainability. In the article

«Colombia has more and more sustainable companies» (2019), the world director of GRI states that since 2016 a program for SMEs has been working that seeks to motivate these organizations to commit to the development of sustainability reports through professional support and training. It also states that Colombia is one of the leading countries in Latin America in the preparation of sustainability reports, being this fact a trend in large companies, and with the programs they were developing they expected a significant increase in the involvement of SMEs in the management of sustainability. Along the same lines, the world director of GRI states that the work of SMEs is aimed at ensuring that their standards meet the requirements of the large firms to which they are suppliers. Consequently, large and medium-sized companies may have a greater application of sustainable practices and that will make them suitable to form an integral part of the sampling framework of this research. The sample frame was designed based on the Chamber of Commerce database, which contains the list of companies in the textile-clothing sector located in the cities of Bogotá, Medellín and Cali.

The final sample contains 120 companies (see table 3 below) for more details. Respondents to the survey had a middle and upper management role in the production department such as managers, heads or vice presidents of logistics, operations, production, quality management, supply chain or general manager.

TABLE 3. Sample composition

<i>City</i>	Bogotá (55%)	Medellín (30%)	Cali (15%)	
<i>Size</i>	Large (18.3%)	Medium (81.7%)		
<i>No. of suppliers</i>	<20 (39.2%)	21-99 (36.7%)	>100 (24.2%)	
<i>Seniority of respondents in the company (years)</i>	<3 (23.3%)	4-10 (41.7%)	11-20 (24.2%)	>20 (10.8%)

In the context of the study, the questionnaire made it possible to measure the perception of the target population regarding the possible relationship between quality practices aimed at social sustainability, with the sustainable performance of the organization in the social dimension. Variables forming each construct were measured with a Likert scale. The questionnaire was adjusted to the context of research. Adjustments were also made as a result of the pilot test to obtain a better understanding when sending the final questionnaire to the firms.

4. RESULTS

For an initial analysis, tables 4 and 5 show the average and standard deviation of the items of each of the 2 constructs of the model: internal practices and social performance (employees).

Table 4 presents the results for the internal social practices of sustainability. It is observed that all the practices measured have a high average (higher than 4.3) and a small standard deviation (lower than 0.9), which indicates that the internal social practices are really implemented and developed in the organizations that were part of the study.

TABLE 4. Social practices - descriptive

<i>Internal social practices</i>	<i>Mean</i>	<i>St. dev.</i>
1. A healthy and positive work environment is provided for employees	4,6	0,749
2. There is an effective/efficient policy on health and safety in the workplace	4,69	0,683
3. The security measures adopted are updated and reduce the risk of accidents	4,62	0,758
4. All employees are promoted equally on the basis of merit	4,38	0,944
5. The safety of women in manufacturing plants is guaranteed	4,48	0,84

<i>Internal social practices</i>	<i>Mean</i>	<i>St. dev.</i>
6. An employee is not denied any rights and privileges because of age, gender, race, community, religion, or national origin	4,77	0,561
7. We provide employment opportunities to the surrounding community	4,26	1,185

Table 5 presents the results of the internal social sustainability performance. The highest average (above 4.5) with a small standard deviation (0.7) are the achievements in improvements in the work environment and in the health and safety of employees.

TABLE 5. Social sustainability performance - descriptive

<i>Internal social sustainability performance</i>	<i>Mean</i>	<i>St. dev.</i>
1. An improvement has been achieved in the work environment	4,52	0,830
2. Improved employee health and safety has been achieved	4,60	0,715
3. Employee loyalty increases significantly	4,39	0,892
4. There is high participation of employees in education programs on prevention and control of risks in relation to diseases	4,35	0,827
5. There is a high level of employee participation in the Skills Management and Continuous Training Programs, favoring the management of their professional careers	3,80	1,171
6. There is high participation of employees in training on policies and procedures related to human rights relevant to their activities	3,79	1,166

With regard to internal quality practices oriented to the social dimension of sustainability, table 6 show us the percentage of firms with respect to the total that marked, for each of the items, a response of 5=totally agree.

TABLE 6. Results of companies that implement internal quality management practices oriented to the social dimension of sustainability

<i>Internal practices</i>	<i>Number of firms</i>	<i>%</i>
1. A healthy and positive work environment is provided for employees	85	71%
2. There is an effective/efficient policy on health and safety in the workplace	93	78%
3. The security measures adopted are updated and reduce the risk of accidents	87	73%
4. All employees are promoted equally based on merit	74	62%
5. The safety of women in manufacturing plants is guaranteed	80	67%
6. The employee is not denied any rights and privileges because of age, sex, race, community, religion or nationality	97	81%
7. We provide employment opportunities to the surrounding community	75	63%

Table 6 above shows that the implementation of internal quality management practices oriented towards the social dimension of sustainability are applied by a high percentage of companies, ranging between 62% and 81%. 81% of the firms in the sample affirm «The non-denial of rights to employees due to their sex, age, race, religion, nationality». Firms need to work more on practices with a lower percentage of implementation like «promotion of employees based on merit» and «offer employment opportunities to the community in which the company operates».

To find out if there are statistically significant differences between the results obtained by the companies that have achieved quality certification and those that still do not have it in relation to the implementation of practices oriented towards the social dimension of sustainability, a t-test of mean difference whose results are shown in table 7.

TABLE 7. T-test for equality of means - application of social quality practices between companies with and without quality certification

Practices	Variance Test (Assuming equal variances)		Levene's test for equality of variances		t test for equality of means		Difference
	Yes	No	F	Sig.	t	Sig. (bilateral)	
1. A healthy and positive work environment is provided for employees	Yes	No	0,360	0,550	0,546	0,586	No
2. There is an effective/efficient policy on health and safety in the workplace	No	Yes	7,396	0,008	1,706	0,091	No
3. The security measures adopted are updated and reduce the risk of accidents	Yes	No	2,238	0,137	1,082	0,281	No
4. All employees are promoted equally based on merit	Yes	No	0,533	0,467	0,986	0,326	No
5. The safety of women in manufacturing plants is guaranteed	Yes	No	1,446	0,232	1,155	0,250	No
6. The employee is not denied any rights and privileges because of age, sex, race, community, religion or nationality	No	Yes	4,581	0,034	1,177	0,242	No
7. We provide employment opportunities to the surrounding community	No	Yes	4,305	0,040	1,440	0,153	No

The results show that there are no statistically significant differences in any of the practices. This shows that the level in which companies are working for social sustainability is not linked to the fact of being certified or not in quality management. In this way, the fact of having a quality certificate is not a differentiating factor when the companies surveyed implement internal quality practices aimed at the social dimension of sustainability. Probably, the quality values that are implanted in an organization when a program of this type is launched guide the behavior of the company towards that social dimension of sustainability, and that behavior is not so much a matter of having a certificate or not but to establish in the company the culture of quality management. In any case, it would be interesting for future research to see if this orientation towards the social dimension of sustainability occurs equally among companies that do not have a certificate but have different levels of maturity in the implementation of quality.

Although there are no statistically significant differences, the same exercise of calculating the average values of the items was carried out to see where the highest averages were (see table 8).

TABLE 8. Results of the averages according to social practices between companies with and without quality certification

<i>Internal social practices</i>	<i>Certified (n=48)</i>	<i>Not certified (n=72)</i>
1. A healthy and positive work environment is provided for employees	4,65	4,57
2. There is an effective/efficient policy on health and safety in the workplace	4,81	4,61
3. The security measures adopted are updated and reduce the risk of accidents	4,71	4,56
4. All employees are promoted equally on the basis of merit	4,48	4,31
5. The safety of women in manufacturing plants is guaranteed	4,58	4,40

<i>Internal social practices</i>	<i>Certified (n=48)</i>	<i>Not certified (n=72)</i>
6. An employee is not denied any rights and privileges because of age, gender, race, community, religion, or national origin	4,83	4,72
7. We provide employment opportunities to the surrounding community	4,44	4,14

It is observed in table 8 above that the highest average values belong to certified companies. Consequently, we can observe that certified firms are the ones that implement with greater intensity practices towards sustainability.

Additionally, a mean difference analysis was made of the results obtained by the companies surveyed, according to their size (see table 9 below).

As we can observe in table 9 above, there are not significant differences in 5 out of the 7 practices measured (71,42%) between the two groups of companies based on their size (large vs. medium); this means that both groups have a similar behavior in relation to the implementation of these 5 quality practices oriented to the social dimension regardless of their size.

Table 10 below shows the average values for these practices in order to compare the results according to the size of the company and thus find a better explanation for the differences found. As it can be observed, all the values are greater for large companies compared to medium-sized ones. This result could be expected as big firms tend to have more developed programs and policies than medium-sized companies have, what in the end facilitates a more intense implementation of organizational social practices.

TABLE 9. T-test for equality of means – application of social quality practices between companies according to their size (large vs. medium)

Practices	Variance Test (assuming equal variances)	Levene's test for equality of variances		t test for equality of means		Differenc e
		F	Sig.	t	Sig. (bilateral)	
1. A healthy and positive work environment is provided for employees	Yes	1,461	0,229	0,881	0,380	No
2. There is an effective/efficient policy on health and safety in the workplace	No	6,612	0,011	1,999	0,050	No
3. The security measures adopted are updated and reduce the risk of accidents	No	10,133	0,002	2,721	0,008	Yes
4. All employees are promoted equally based on merit	No	4,368	0,039	1,948	0,059	No
5. The safety of women in manufacturing plants is guaranteed	Yes	1,079	0,301	0,997	0,321	No
6. The employee is not denied any rights and privileges because of age, sex, race, community, religion or nationality	No	13,323	0,000	3,019	0,003	Yes
7. We provide employment opportunities to the surrounding community	Yes	0,931	0,336	1,059	0,292	No

TABLE 10. Results of the averages - social practices between companies according to their size (large vs. medium)

<i>Internal social practices</i>	<i>Firms' size</i>	
	<i>Big (n=22)</i>	<i>Medium (n=98)</i>
1. A healthy and positive work environment is provided for employees	4,73	4,57
2. There is an effective/efficient policy on health and safety in the workplace	4,86	4,65
3. The security measures adopted are updated and reduce the risk of accidents	4,86	4,56
4. All employees are promoted equally on the basis of merit	4,68	4,31
5. The safety of women in manufacturing plants is guaranteed	4,64	4,44
6. An employee is not denied any rights and privileges because of age, gender, race, community, religion, or national origin	4,95	4,72
7. We provide employment opportunities to the surrounding community	4,5	4,2

Additionally, a correlation analysis was carried out to observe how the internal practices of social sustainability are related to the internal sustainability performance (see table 11).

TABLE 11. Pearson Correlation – Internal Social Practices and Internal Social Performance

<i>Correlation de Pearson/ Sig. (bilateral)/0,01</i>	<i>1. Improvement in the work environment</i>	<i>2. Improved employee health and safety</i>	<i>3. Employee loyalty increases</i>	<i>4. High participation of employees in education and prevention diseases</i>	<i>5. High level of employee participation in the Skills Management, Continuous Training and career development</i>	<i>6. High participation of employees in training on policies and procedures related to human rights</i>
1. A healthy and positive work environment is provided for employees	,659** 0,000	,483** 0,000	,501** 0,000	,404** 0,000	,262** 0,004	,231* 0,011
2. There is an effective/ efficient policy on health and safety in the workplace	,402** 0,000	,519** 0,000	,186* 0,042	,371** 0,000	,332** 0,000	,298** 0,001
3 The security measures adopted are updated and reduce the risk of accidents	,411** 0,000	,490** 0,000	,299** 0,001	,404** 0,000	,396** 0,000	,365** 0,000
4 All employees are promoted equally on the basis of merit	,523** 0,000	,311** 0,001	,263** 0,004	0,175 0,056	,388** 0,000	,384** 0,000

	1. Improvement in the work environment	2. Improved employee health and safety	3. Employee loyalty increases	4. High participation of employees in education and prevention diseases	5. High level of employee participation in the Skills Management, Continuous Training and career development	6. High participation of employees in training on policies and procedures related to human rights
<i>Correlation de Pearson/ Sig. (bilateral)/0.01</i>	,525**	,305**	,333**	,194*	,388**	,291**
5. The safety of women in manufacturing plants is guaranteed	0,000	0,001	0,000	0,033	0,000	0,001
6. An employee is not denied any rights and privileges because of age, gender, race, community, religion, or national origin	0,081	0,080	0,033	,250**	,184*	0,066
7. We provide employment opportunities to the surrounding community	,239**	,222*	,365**	0,006	0,044	0,471
	0,009	0,015	0,000	0,000	,310**	,362**
					0,001	0,000

Positive statistical significance was observed at the 0.01 level in a great part of the relationships analyzed, except in the relationships of different variables of social practices with the performance items «Improved employee health and safety», «High participation of employees in education and prevention diseases», and «Participation of employees in training on policies and procedures related to human rights». In this way, it can be concluded that the measured variables associated with social sustainability practices are correlated with the internal social performance of organizations, which allows us to estimate that the greater the stimulation of internal practices oriented to protect and promote people, the greater the achievement of internal social performance, specifically, improved employees' loyalty and participation.

5. CONCLUSIONS

One of our contributions focuses on the elaboration of different scales to measure social sustainable practices and social performance in a context of quality management. Quality management practices, although voluntary, are almost a necessary requirement to compete in some contexts. And these practices can facilitate the introduction of others directly related with them that will contribute to sustainability. The main focus of our work has been on the social aspects of these sustainable practices, directly linked to the way of managing human resources inside the firm.

With respect to our analysis, results allow us to conclude that, in general terms, regardless of the size of the company or whether they have quality certificates, companies in the textile-clothing sector in Colombia have been implementing quality practices for social sustainability.

Regarding the implications for the field of business practice, an important practical contribution has to do with the study of quality management practices and their relationship with sustainability practices. Our research has revealed a valuable concordance be-

tween both groups of practices, which should encourage companies to work both types of practices together. This joint consideration will favor the simultaneous attainment of two important aspects in the modern management of organizations (i.e. quality and sustainability), achieving the satisfaction of all stakeholders and facing the urgent need to conserve the planet, all based on sustainable practices and quality in production and consumption processes.

In the same way, the results achieved provide valuable information to the Colombian textile-clothing sector in relation to internal quality practices oriented towards sustainability by the companies surveyed. Thus, organizations in the sector can include this type of practices in their way of managing, based on the fact that there is a positive relationship between social sustainability practices and social performance. These results can constitute important arguments for firms' decision-making in their orientation towards sustainability.

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7. CORPORATE SOCIAL PERFORMANCE, SUSTAINABILITY AND STRATEGIC PROCESS: THEORETICAL REVIEW AND PROPOSAL OF AN INTEGRATIVE MODEL

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Abstract: The concept of Sustainability, together with models like Triple Bottom Line, Corporate Social Responsibility or Corporate Social Performance have emerged to help firms to improve the way they relate with their stakeholders, and also to make them be more conscious of their social, ethical and environmental responsibility, considering the level of globalization of our environments. In this regard, and from a strategic perspective, the goal of this work is to propose a new Corporate Social Performance (CSP) model based on the previous work of Wood's (1991; 1994 & 2010) and its antecedents (Carroll, 1979; Wartick & Cochran, 1984), showing also the relationship of these models with the concept of sustainability.

Keywords: Sustainability, Corporate Social Responsibility, Corporate Social Performance, Environment, Stakeholders, Strategic process.

1. INTRODUCTION

Recently, concepts as Sustainability or Sustainable development, Corporate Social Responsibility (CSR) or Corporate Social Performance, have emerged to help firms to improve the way they relate with their stakeholders, and also to make them be more conscious of their responsibility not only with economic but also with social, ethical and environmental concerns that affect our world, considering the level of globalization of our environments.

In this regard, and from a strategic perspective, the goal of this work is to carry out an analysis of Wood's (1991) Corporate Social Performance (CSP) model, its antecedents (Carroll, 1979; Wartick & Cochran, 1985), its evolution (Wood, 1994 & 2010) and its relationship with the concept of sustainability within the framework of the strategic process as well as decision-making in the company.

This work takes Wood's model as a starting point. This model is considered as 'integrative' of the different streams or theories that have been developed in the field of CSR (i.e., legitimacy, public responsibility, corporate social responsiveness, stakeholders, issues management, etc.). These streams have a reflection in what the current concept of sustainability raises. Our work, therefore, aims at carrying out a literature review, which allows the comparison between current models of sustainability and the CSP model, on the one hand, and developing a proposal on how this model can serve as a strategic tool in the company's decision-making process, on the other.

1.1 Sustainability and Sustainable Development

The concept of sustainability is closely related to the idea of sustainable development. In fact, sustainability as a concept is based

on the definition of Sustainable Development as defined by the United Nations through the Bruntland report in 1987 (Strand *et al.*, 2015). When the World Commission on Environment and Development published the Bruntland Report (WCED, 1987:8) defined the concept of sustainable development as a response to «*the needs of the present without compromising the ability of future generations to meet their needs*».

Although this report originally was focused on the environmental factor and concerns, the concept of sustainable development has evolved through time including the social dimension as well, being both elements part of the same equation to achieve a balanced sustainable development (Garriga & Melé, 2004:61). In this sense, sustainable development «*requires the integration of social, environmental, and economic considerations to make balanced judgments for the long term*» (WBCSD, 2000:2).

Since then, both concepts have been increasing in relevance simultaneously in the academic and business worlds, fundamentally due to the importance that society as a whole has given them due to the impact that different issues related with sustainable development have had on an increasingly global scenario (Meseguer-Sánchez *et al.*, 2021:1). Issues such as climate change or circular economy, or from a social perspective such as poverty, hunger or increase in inequalities, have put sustainability and sustainable development in the focus of attention of various social actors, like institutions, companies or the general public.

Numerous definitions have been proposed for sustainable development from different perspectives. In a business context, Savitz and Weber (2006) suggest that a sustainable company is one that balances its actions and processes trying to satisfy the expectations of their shareholders while addressing issues like the protection of the environment and the improvement of life conditions of different stakeholders that interact with that company. From this perspective, society, economic development and environmental protection are interrelated and are at the core of the concept of sustainability.

Although the concept of sustainable development was developed in its beginnings at a macro level (Garriga & Melé, 2004) and was focused on the adoption of its principles by institutions and governments, the role of corporations and companies has become more important through time due to the specific weight that companies have as social actors in the management of impacts on issues related to sustainability. Therefore, the corporate contribution to sustainable development is needed and companies have been invited and asked to participate in achieving the sustainable development agenda proposed by United Nations as has happened with the promulgation of the 2030 Agenda where the Sustainable Development Goals (SDG) have been proposed.

However, the definition of sustainable development and sustainability seems to have a normative and sometimes ambiguous meaning and content that generates problems for companies when developing strategies, processes and actions that try to address the challenge of sustainable development. In fact, in the classification of CSR theories and approaches made by Garriga and Melé (2004), these authors classify sustainable development and therefore sustainability within the ethical theories that are those that focus on the ethical requirements that tie the relationships between business and society. They are based on principles that express the right things to do or the need to achieve a good society. Therefore, companies need more practical frameworks and approaches to help them ground sustainability ideas in their strategic and daily management. In this line, «*the role of business in making our world a more sustainable place is at the center of the study of sustainability management*» (Dyllick & Muff, 2016:157).

1.2 CSR and Sustainability

CSR is one of the most accepted and discussed concepts, both in the academic and business fields, in the last 70 years. Talking about CSR means studying the relationships established between

companies and society, as well as the social role that companies play as social actors within it. Likewise, talking about CSR implies trying to answer some of the questions that have been present in the academic and business debate that has studied the company-society relationship in recent decades. In this sense, the following questions are relevant in this field of study: what are the social responsibilities of companies? How do companies respond to the expectations placed on them by society? To whom are companies responsible? o What are the expected results of the application of CSR?

Throughout the last decades of the 20th century, this concept had a notable evolution at academic level. Thus, numerous academic debates resulted in the development of theories and approaches that tried to complement this concept, in some cases, and improve its initial approaches, in others. In other cases, its substitution for other concepts was even proposed (Carroll & Shabana, 2010; Carroll, 2015).

In this line of thinking, CSR and sustainability are discussed by some as near synonyms and by others as completely distinct concepts (Strand *et al.*, 2015; Moon, 2007). However, «*sustainability appears to be gaining favor over CSR, among other reasons because the language of sustainability is more formally rational than the language of CSR, which is more normative*» (Strand *et al.*, 2015:2). According to Moon (2007:296), «*both terms are often used vaguely and even interchangeably*» and this is because, among other reasons, they share a big amount of lexicon (i.e., CSR tries to integrate the last sustainability trends including frequently references to sustainability issues, but this relationship works the opposite way also); so, when we talk about sustainability we include terms like impact, effects, issues, materiality, stakeholders, etc., terms that have been coined by different CSR theories and approaches through the years.

Van Marrewijk (2003), in his study of the concepts and the relationship between CSR and sustainability, and from an integrative approach, referred to the latter as the contemporary understanding

of CSR, qualifying this new approach (corporate sustainability) as a strategic response to the corporate challenges faced by firms, which had to assume the new role that they were beginning to have in society and that, therefore, forced them to make strategic decisions in the process of adaptation to its social context. Consequently, CSR should be strategically integrated into the company in its search for sustainability. From this integrating point of view, Van Marrewijk (2003:103) offered a broad definition of corporate sustainability and CSR. «*In general, corporate sustainability and CSR refer to the activities of the company, voluntary by definition, demonstrating the inclusion of social and environmental concerns in business operations and in interactions with stakeholders*».

This new role of companies in society, as pointed out by Van Merrewijk (2003), is found in other definitions of CSR in the 2000's. Werther and Chandler (2005), Husted and Allen (2007) or Porter and Kramer (2006), among others, reflected this new role in which companies «*need to be responsive to social expectations and should be motivated by the search for sustainability, which meant they would have to make strategic decisions to do so, opening the discussion around the benefits of strategic CSR*» (Latapi-Agudelo *et al.*, 2019:16).

Although CSR has undergone an important evolutionary process since the 1950s, the development of this concept has gained special relevance in the last 25 years due mainly to 2 factors that have been particularly important in the development and consolidation of the concept.

On the one hand, the institutional development carried out by various international organizations (Latapi-Agudelo *et al.*, 2019) such as the United Nations with the promulgation of the SDGs in 2015, as well as the publication in 2011 of the Renewed EU Strategy for 2011-2014, or the enactment of Directive 2014/95/EU through which it was established that large companies of public interest were required to disclose non-financial and diversity information. As a consequence, CSR has been relevant for the development of a

more responsible economic model, where companies play a leading role due to the responsibility they have for their impacts on society.

On the other hand, another of the most important aspects in the development and consolidation of CSR as a business management tool had to do with the emergence of Strategic CSR (SCSR) and the importance that CSR has had from an organizational approach (Lee, 2008). In this vein, CSR has broadened the focus towards what was happening, on the one hand, within organizations in terms of management and, on the other, in the business context in terms of stakeholder expectations. In this way, both aspects could, at a given moment, be a source of competitive advantages for the company (Lee, 2008).

However, in this research we have chosen to base our study on a stream of thought that analyzes the development of CSR from an integrative perspective formed by the various previous theories and approaches (Garriga & Melé, 2004). For this reason, we focus on the theoretical approach underlying the **Corporate Social Performance** model (hereinafter, CSP), an approach that emerges from the initial work of Carroll (1979) to the later works of Wood (1991; 1994; 2010). This approach has been able to combine, order, structure and sequence, the main theories and approaches that have emerged on CSR since the 1950s. In this regard, this model **can help bridge the gap in the relationship between CSR and the sustainability concepts.**

2. CORPORATE SOCIAL PERFORMANCE: ORIGINS AND EVOLUTION.

The model of CSP is considered an integrative theory for Garriga and Melé (2004). To them, this group of theories that develop CSR are those which defend that companies must integrate social demands in their decision-making and management processes, having as a basic principle of action the search and maintenance of the legitimacy granted by the company.

These theories or approaches fundamentally respond to the questions that have generated the most controversy in the theoretical development of CSR in the last 70 years: what issues are companies responsible for? How do companies manage their responses to social demands? And to whom are companies accountable for their impacts? According to these theories, *«the content of corporate responsibility is limited to space and time... and they focus on detecting, scanning and responding to social demands to achieve legitimacy»* (Garriga & Melé, 2004:57-58).

Thus, the CSP model deals with (1) the most normative and moral agency aspects of CSR, by proposing the search for legitimacy by companies, defining their responsibilities and establishing an ethical framework for the behavior of managers; (2) collects the pragmatic process approach of corporate social responsiveness; (3) integrates the issues management perspective when dealing with the management of social issues; and (4) develops as a fundamental aspect of the model the results of corporate behavior. In words of Wood (2010:51), *«the implicit moral foundation of the initial CSP was that companies should work to increase profits and to reduce or eliminate the damage resulting from their activities. Otherwise, companies could fail to adapt appropriately to their environments, or lose access to critical resources, or their right to manage internal processes would be challenged or revoked by external stakeholders, or they could even lose legitimacy and therefore the right to exist»*.

One of the first approaches or approximations to the CSP model was the work of Sethi (1975; 1979) where the differences between CSR and CSP began to be established. Sethi's reasoning starts from a basic premise, *«companies respond to two types of social forces, those of the market and those that are not of the market»* (Sethi, 1979:64), calling the latter externalities and relating them to social responsibility and responsiveness. As far as the analysis of the management of companies' externalities is concerned from the perspective of CSR, Sethi (1975) focuses on the principle of legitimacy, that is, on society's acceptance of the role of companies and their activities, in order to survive and grow.

Based on the above, Sethi (1975) establishes that one of the ways to evaluate CSP is to use the criterion of legitimacy, that is, companies try to reduce the gap between corporate performance and social expectations, therefore the validity and social relevance of any corporate action depends on the concept of legitimacy.

Although the work of Sethi was quite relevant in the field of CSP, undoubtedly the first work that extensively addressed the construction of the CSP model, laying the foundations for later developments, was that of Carroll (1979). For Garriga and Melé (2004:60), «*Carroll (1979), generally considered the one who introduced this model, suggested a corporate performance model with three elements: a basic definition of social responsibility, a list of topics or issues on which there is social responsibility and a specification of the philosophy of response or responsiveness to social issues*». That is, it integrated in the same model: (1) the aspects related to CSR and its definition; (2) elements related to corporate social responsiveness; and (3) issues management.

The basic argument of Carroll's (1979) model was that for company directors to carry out CSP actions they needed to have (1) a basic definition of CSR (does the responsibility of companies go beyond financial or legal concerns?); (2) an enumeration of the (social) issues for which CSR existed (what are the areas or social issues that companies are responsible for?); and (3) a specification of the responsiveness philosophy to issues (do companies respond reactively or proactively?).

In 1983, another fundamental work for the development of the CSP model was written by Strand (1983). According to Carroll (1999:285), Strand «*presented a systems paradigm of organizational adaptation to the social environment that sought to illustrate such concepts related to social performance as CSR, corporate social responsiveness, and risk management issues, were connected in an organization-environment model*».

Strand's approach is based on the understanding of the company from the point of view of the systems theory. In this sense, he understood that the three components of social performance constituted parts of a continuum of adaptation of the company to its social

environment, that is, CSR formed the inputs, the corporate social responsiveness corresponded to the performance or processing, or throughput, and the responses to social issues formed the outputs.

Two years later, in 1985, another of the models, from our point of view seminal in the evolution of the CSP model, was that of Wartick and Cochran (1985). According to Carroll (1999:287), *«the authors argued that Carroll's definition of CSR embraced the ethical component of social responsibility and should therefore be thought of as principles, social responsiveness should be thought of as a process, and social issues should be thought of as policies»*.

According to Wood (2010), Wartick and Cochran (1985) updated Carroll's 1979 model and included some additional concepts that made the CSP model more robust and logical. In their model they presented, criticized and synthesized what they saw as the 3 challenges of CSR, that is, economic responsibility, public responsibility and social responsiveness, which led them to incorporate 3 categories in their CSP model, which were related to them respectively. We refer to the categories of: (1) principles (CSR) of philosophical orientation; (2) processes (responsiveness) of institutional orientation; and (3) policies (management of social issues) of organizational orientation.

In this work, Wartick and Cochran (1985) tried to solve what for them was one of the main shortcomings of Carroll's previous model (1979), that is, its lack of dynamism, dynamism provided by his conception of CSP as a sequence of principles, processes and policies.

Continuing with the evolution of the CSP model, we find what, without a doubt, from our point of view, has been the key work in the development of this model, we refer to the work of Wood (1991). This work very clearly integrated all the advances, evolutions and perspectives generating a CSP model that has changed very little since its formulation in 1991.

According to Lee (2008), Wood's (1991) CSP model extended Carroll's (1979) and Wartick and Cochran's (1985) previous CSP models: *«Wood attempted to link corporate social performance*

to various related theories in organizational studies, such as organizational institutionalism, stakeholder management theory, and social issues management theories. By incorporating a number of other theoretical traditions under the rubric of the corporate social performance framework, she aimed to formulate a more practical and useful model for management» (Lee, 2008:60).

Garriga and Melé (2004:60) make reference to the different elements that form the model of Wood: CSR principles, including the institutional, organizational, and individual levels; corporate social responsiveness processes, such as environmental assessment, stakeholder management, and issues management; and corporate behavior outcomes, that included «social impacts, social programs, and social policies».

Wood (1991) gives her own definition of CSP based on Wartick and Cochran (1985). For her, CSP can be defined as «*a company organizational configuration of, CSR principles, social responsiveness processes, and policies, programs and observable outcomes that are related to the social relations of the company*» (Wood, 1991:693). Additionally, Wood proposes a dynamic vision of the CSP model where the interactions of the elements of the model should be studied together, that is, principles, processes and outcomes. With respect to social corporate strategy principles, Wood establishes legitimacy as an institutional principle, public responsibility as an organizational principle and managerial discretion as an individual principle. With respect to corporate social responsiveness processes, Wood (1991) talks about environment evaluation, stakeholders management and issues management. Finally, in the category of results of corporate behavior the model includes social impacts, programs and politics.

Later, Wood carried out an evolution of her model in a book published in 1994. This modification or improvement referred, fundamentally, to a new description of the results or outcomes category of this model, as we can see in figure 1.

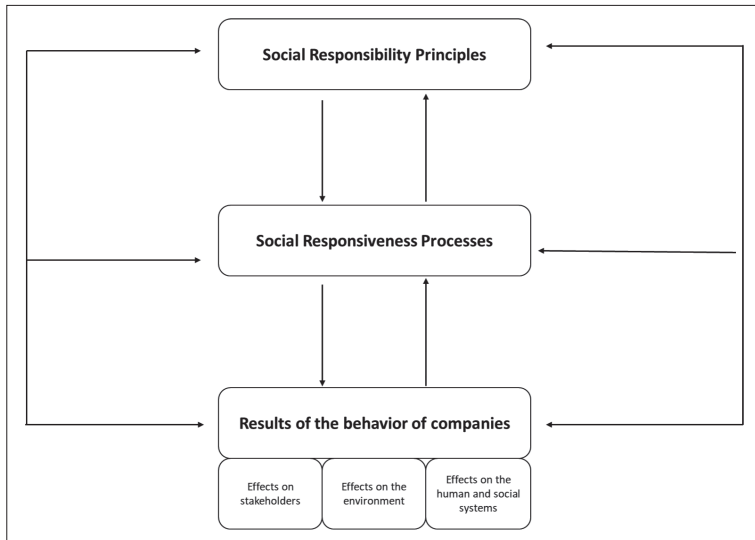


Figure 1. The Corporate Social Performance Model (Wood, 1994). Source Adapted from Wood (1994:122)

This new configuration brings the following changes. In the first place, it brings dynamism to the model by drawing different arrows of feedback relationships between the different elements of the model, which implies the existence of relationships between the different parts of it. Secondly, it renames the element of «results of corporate behavior», which is now called «results of the behavior of companies». And with regard to the latter, it abandons, at least graphically, the nomenclature of its original components, that is, social impacts, programs and policies, adopting a new nomenclature where these components or categories of results are now called «effects on stakeholders», «effects on natural and physical environments», and «effects on human and social systems».

Sixteen years later, Wood (2010) reviewed and updated the status of his CSP model and the different contributions that had been made to it through different works and lines of research. In that work, Wood (2010) graphically represented her CSP model again (see figure 2 below).

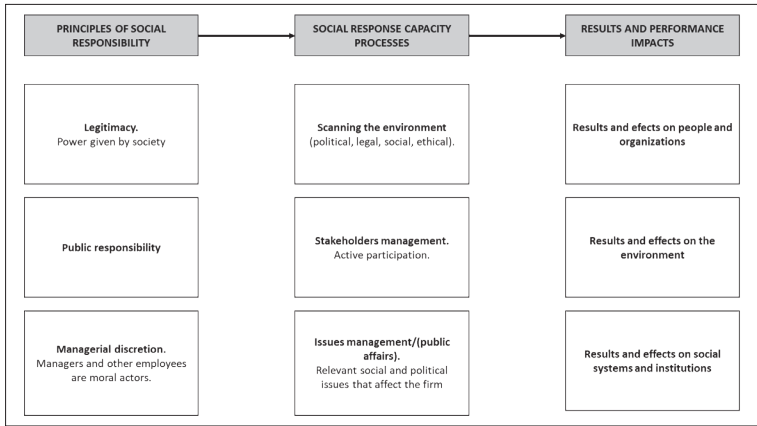


Figure 2. Corporate Social Performance Model (Wood, 2010). Source: Adapted from Wood (2010:54)

As shown in the figure above, once again, the author reconfigures her CSP model graphically and the main changes are the following. First, the 1994 model's feedback arrows between the different parts of the model disappear, leaving only those that reflect the sequential interaction between CSR principles, social responsiveness processes, and performance outcomes and impacts. Second, she renames the third element results, which she calls «performance results and impacts», as opposed to the 1991 nomenclature of «corporate performance results» and the nomenclature used in 1994 of «business performance results».

3. OUR CSP'S MODEL PROPOSAL

Starting from the CSP models of Carroll (1979), Wartick and Cochran (1985) and Wood (1991; 1994; 2010), we have developed a proposal, a CSP model that intends to be an evolution of the previous ones, reconfiguring some of its elements and introducing new ones, elements that, from our point of view, better explain, from an instrumentalist perspective, the dynamic functioning of

the CSP model. Our model is also based on the logic of Principles, Processes and Results or Outcomes, understood as a dynamic sequential process. Our model is formed by five categories: Principles, Processes, Responses, Accountability and Outcomes (see figure 3).

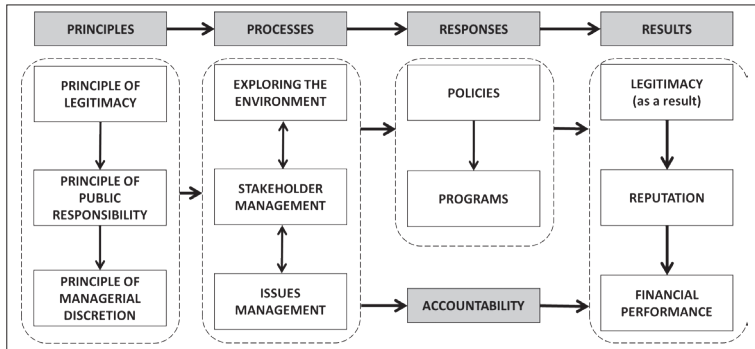


Figure 3. Proposed Corporate Social Performance Model. Source: Quílez (2021)

Regarding to the principles, our CSP model does not make any change compared to the «principles» category in the Wood model (1991). Therefore, our category of «principles» is composed of a series of beliefs and values that determine, guide and motivate the behavior of companies towards the search for **legitimacy, public responsibility and managerial discretion**.

With regard to the «processes» category, it is understood as those processes of corporate social responsiveness (Wood, 1991) that allow companies and managers to respond to changes in the conditions and demands of society and stakeholders. These processes will provide the action component after prior reflection based on CSR principles that, on the other hand, motivate and guide their development (see figure 3 above). Based on this idea, this category of our model maintains the processes and denominations provided by Wood (1991; 1994; 2010) but our model gives this category dynamism between these processes and suggests a different way of interrelation between them. Thus, the process of **exploring the environment** seeks to collect information on the environment in

which companies operate in order to improve their future ability to adapt to it and avoid possible surprises. The process of **stakeholder management** proposes the identification of stakeholders of the company, the prioritization of both the stakeholders and their expectations, and the engagement of the stakeholders in the strategic direction of the company through dialogue, in order to provide future responses to those expectations. Finally, the process of **issues management** should have a different approach from the one proposed in the Wood's model. We think that issues management process should change its focus towards decision making for the formulation of policies that respond to social demands. So, within this process implementation and evaluation stages are not carried out (just formulation). This is one of the contributions of our model.

With regard to the «responses» category, we present a new category made up of 2 components (see figure 3 above): **policies** and **programs**. We understand the components of this category as intermediate results or outputs (Strand, 1983) of the category of «processes» (throughput). That is, as results or outputs obtained from the previously developed processes (i.e. exploration of the environment, management of stakeholders and issues management), which have identified and analyzed the issues that come from the environment and from the stakeholders and formulated a strategic response to them. Regarding the «accountability» category, this is a new category (see figure 3) not present in the previous models. This category will help to understand the logic of our model in a dynamic and sequential way, and includes some of the most common practices in recent times to evaluate the social performance of companies in their relationship with stakeholders and society. Particularly, we refer to the category of accountability, normally developed through the so-called sustainability reports where companies communicate their stakeholders and society their impacts, positive or negative, based on the demands and expectations previously identified and analyzed in the category of «processes».

Finally, our model includes the «outcomes» category. This new category becomes a novelty in our model and is introduced

with an instrumentalist and finalist approach, that is, where these outcomes are understood as final results in terms of business results or returns (see figure 3). These final outcomes (i.e. legitimacy outcomes, reputation and financial performance) are the result of the systematic and sequential application of the previous categories of «principles», «processes», «responses» and «accountability». From our point of view, **legitimacy** is a result or condition sought by companies through a legitimization process that is achieved, in our case, through the application of a CSP model based on dynamic development of the sequence of CSR principles, responsiveness processes, responses and accountability, which finally try to satisfy the expectations of the stakeholders. Legitimacy has also been seen as the link between the CSP and corporate reputation (De Quevedo-Puente *et al.*, 2007). Finally, our CSP model adopts a structuralist approach and assumes the sociological approach of Wood (1991, 2010), but adds an instrumentalist and managerial component when trying to see how the sequence of the model (i.e., principles, processes, responses and accountability) impacts in organizational outcomes not only in terms of **reputation** and legitimacy but also **financial performance**. This concern for analyzing the relationship between social responsibility and the financial performance of companies became highly relevant for researchers who were developing their work in the field of strategic management (Lee, 2008). Those reasons made us introduce financial performance in the «outcomes» category.

With the introduction of this new category of «outcomes» in our CSP model we come to the end of the model. With it we intend to develop and provide arguments for companies to develop motivated management systems:

- based on CSR principles (legitimacy, public responsibility and managerial discretion),
- that will generate responsiveness processes (exploration of the environment, stakeholders management and issues management),

- which, in turn, will provoke organizational responses (policies and programs) in the form of organizational behaviors (impacts),
- and will communicate the results of their corporate performance to their stakeholders (accountability), being able to meet their expectations,
- and consequently, will facilitate the achievement of positive organizational results in terms of legitimacy, reputation and financial performance, as illustrated in figure 3 above. With this, managers will be able to make tangible the returns of the possible investment made in CSR and justify decision-making in this regard.

CONCLUSIONS

As a first conclusion, we think that there exist multiple similarities between the concepts of sustainability and CSP, taking the last model by Wood (2010) as a reference.

1. The model of CSP is the one that introduces the concept of impact or effect.
2. Outcomes or impacts in the CSP model correspond to the sustainable approach of Triple Bottom Line (i.e., social, environmental and economic).
3. Somehow, sustainable companies seek to legitimize themselves with society (principle of 'legitimacy' within the CSR principles), addressing relevant issues for it in the three areas.
4. When Dyllick and Muff (2016) argue about sustainability 3.0 they refer to the fact that companies are aware of and act on those issues that go beyond the direct impacts of their activity, that is, they worry about broader topics. This idea is closely related to the principle of 'public responsibility' of our model.
5. Sustainability implies managing stakeholders, taking the concept of Freeman (1984) as a basis. In the CSP model,

stakeholder management is one of the processes of corporate responsiveness.

6. The process of «Issues Management» within the category of «Corporate Social Responsiveness» implies a process of identification of relevant social issues so that firms can anticipate and generate suitable responses. The SDG are just 17 universal issues to which companies are invited to collaborate to reduce their negative impacts. From this perspective, it could be said that the United Nations has already done the identification process.

We have proposed a new CSP model inspired by Wood's model which tries to become integrative of current sustainability streams and always posed from a strategic perspective. This is the main contribution of the present paper. The main value of our CSP model, compared to Wood's model (2010), is the will to develop an approach to the concept of sustainability from a strategic perspective. This objective is specified in the following considerations:

1. By and large, all the previous remarks on the relationship between the CSP model and sustainability are applicable to our model.
2. As a roadmap, our CSP model presents the different steps that companies must take to reach positive organizational results (i.e., legitimacy, reputation, and financial performance) through the effective and sequential implementation of certain CSR principles. These principles positively affect the deployment of some processes of responsiveness that, on the one hand, generate organizational responses (i.e., social, and environmental impacts) in front of social trends and expectations previously identified, analyzed and prioritized. On the other hand, such processes of responsiveness facilitate stakeholders' accountability or communication activities that allow them to assess to which extent companies have met their expectations.

3. Our theoretical model turns the «outcomes & impacts of performance» category in Wood's model (2010) into «Responses» (i.e., policies and programs that generate social, environmental and economic impacts). We believe that this is how the sequence is better understood; before, except in Wood's model (1991), this was hidden.
4. We introduce the «Accountability» category as a way of communicating to stakeholders the results of organizational CSP.
5. Our «Processes» category is not static like Wood's; it is dynamic, and its dimensions are interrelated.
6. From an instrumentalist approach, we hypothesize that following the logic of Principles-Processes-Responses-Accountability (all of them with their different dimensions), the firm will achieve better organizational results in terms of improving its legitimacy, its reputation and financial performance.
7. As a future research line, our will is to generate a tool with a strategic focus that helps firms to include the sustainability issue in their strategic agenda and facilitate the implementation of actions that increase the number of firms that have the commitment to be sustainable in the long term.

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8. DECISION-MAKING CRITERIA FOR ETHICAL, SOCIAL AND ENVIRONMENTAL ACCOUNTING METHOD SELECTION

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Abstract: To foster more accountable, democratic and effective sustainability actions and outcomes, organisations assess and report on their non-financial performance by means of ethical, social and environmental accounting (ESEA). Applying an ESEA method allows organisations to communicate more effectively with their stakeholders and be transparent about the way they contribute to the common good. Such methods provide guidelines on how to assess and report on sustainability performance. There are ample ESEA methods and the complexity of the method landscape can hinder the ESEA method selection process. This article discusses problems and pitfalls that can occur during and after the selection process and lists decision-making criteria relevant to the domain. To elicit the decision-making criteria, we deployed a survey among ESEA method users, interviewed 15 experts in the domain and analysed 22 ESEA methods in-depth. In total, we elicited and validated 79 selection criteria that are relevant in the ESEA method selection process. Four ESEA professionals, involved in the ESEA of their organisation, have

confirmed that the list of decision-making criteria we have contributed, would facilitate making better-informed decisions.

Keywords: Organisational sustainability, Method selection, Decision making, Impact measurement, Ethical, social and environmental accounting

1. INTRODUCTION

Corporate stakeholders demand more information concerning organisations' ethical, social, and environmental (ESE) performance (Markota Vukić et al., 2018). Large firms even have a duty to produce a non-financial statement according to the European Directive 2014/95/UE (European Parliament, 2014). Apart from corporate stakeholders, consumers put additional pressure on organisations to report on their ESE performance and impacts (Fernandez-Feijoo et al., 2014). As Markota Vukić et al. (2018) state, it is no longer the question whether organisations should produce a non-financial report or not, it is rather why, how, and which reporting method organisations should choose to meet stakeholders' needs and comply with the regulatory framework. Non-financial reports contain data on business ethics, social and environmental topics. To produce these reports, organisations perform ethical, social and environmental accounting (ESEA). ESEA is the process of assessing and reporting the ethical, social and environmental effects of an organisation's actions to particular interest groups and to society at large (Gray, 2000).

The number of methods that define how to perform ESEA is abounding (España et al., 2019). Examples of ESEA methods are ISO 26000¹, ISO 14000², Common Good Balance Sheet (Felber et al., 2019), GRI Standards³, B Impact Assessment⁴, and REAS

¹ <https://www.iso.org/iso-26000-social-responsibility.html>

² <https://www.iso.org/iso-14001-Environmental-management.html>

³ <https://www.globalreporting.org/standards/>

⁴ <https://bimpactassessment.net>

Social Balance (Ballesteros et al., 2004). Each method has its focuses and strengths (Antolín-López et al., 2016). For instance, some methods are designed for organisations operating in specific industry sectors, such as STARS (Urbanski & Leal Filho, 2015) for higher education and the Data Centre Assessment⁵ for assessing the performance of data centres. Other methods are more focused on either environmental or social topics, and some methods are tailored to specific countries or geographical regions (e.g., REAS Social Balance, for organisations that are part of the Social and Solidarity Economy in Spain).

Choosing an ESEA method that fits the organisational characteristics and needs is critical since it forms the foundation for a journey toward becoming a more responsible entity. For organisations, gaining insight into their sustainability performance and recognising ESE improvement points may uncover and clarify the need for integration of sustainability into business management. If an unsuitable method is selected, it obstructs the organisation in realising continuous improvement. Moreover, ESEA requires time, effort, and many other resources. Not obtaining optimal results due to the selection of the wrong method can be discouraging. If an unsuitable method is selected, organisations spend resources without gaining the benefits of their investment. In this article, we investigate which decision-making criteria should be considered when selecting an ESEA method so that the risk of selecting an unsuitable method can be mitigated. Taking the decision-making criteria into account may help organisations reap the benefits of ESEA more effectively.

Section 2 lists the research questions and provides an overview of the research method. Moreover, the section shows the demographics of the surveyed and interviewed organisations. Section 3 explains potential problems that may arise when an unsuitable ESEA method is selected, as a result of an ill-informed

⁵ <https://greenit-switzerland.ch/app/dca/page/p-introduction>

decision-making process. Section 4 presents a comprehensive list of decision-making criteria that ESEA method practitioners can consult when selecting an ESEA method. Section 5 explains how we validated the list of decision-making criteria. Section 6 reflects on the results of this research and elaborates on opportunities for future work. This article concludes in Section 7.

2. RESEARCH METHOD

The research questions answered in this article is the following.

RQ1. What issues arise when an unsuitable ESEA method is selected? We intend to identify problems resulting from an ill-informed ESEA method selection process. We do this in order to understand the relevance of decision-making criteria in the selection process.

RQ2. What decision-making criteria are important in the ESEA method selection process? We intend to find out which decision-making criteria are important in the selection process.

We answer the research questions by executing the research method. First, we investigate the problem of ESEA method selection. For this, we have conducted four interviews with organisations that perform ESEA. The organisations are (i) Ghent University, a university located in Ghent, Belgium, (ii) Equinox, an organic kombucha brewer, located in the United Kingdom (UK), (iii) Standing on Giants, a UK-based agency for businesses that want to build a brand-owned, online community, and (iv) Stanford University, a university located in Stanford, United States of America (USA). We interviewed the professionals that are involved in performing the ESEA of their organisation. The interviews produce a list of potential problems that may arise when an unsuitable ESEA method is selected.

Then we elicit the decision-making criteria that lead to organisations selecting an ESEA method from the plethora of available methods. First, we performed a literature study where we analysed ESEA method documentation to discover which method

characteristics may influence the selection process. To further elicit the decision-making criteria we deployed a survey among ESEA practitioners and consultants. We refer as «practitioners» to employees who are actively involved in the ESEA of their own organisation. We refer as «consultants» to external professionals who are considered experts in one or multiple ESEA methods, therefore guiding and supporting their clients in ESEA. The survey questions for practitioners and consultants are similar, but some questions are formulated differently. For instance, the practitioner survey asks which ESEA methods are applied by the practitioner's organisation. The consultant survey asks which ESEA methods are applied by the clients of the consultant. In total, we analysed the responses of 32 practitioners and 18 consultants. The responses come from 2 micro, 2 small, 6 medium and 40 large organisations. The consultants that responded to our survey work for consultancy firms. The practitioners we surveyed work for companies in mining and quarrying (10), agriculture, forestry and fishing (7), manufacturing (4), finance and insurance (3), professional, scientific and technical sector (3), information and communication (2), electricity, gas, steam and air conditioning supply (1), water supply or waste management (1) and public administration (1). The survey respondents are asked in an open question why they chose a particular ESEA method for their organisation.

To produce a list of decision-making criteria that is close to exhaustive, we conducted interviews with 15 ESEA experts to elicit additional decision-making criteria. Eight interviews are conducted with ESEA method engineers (i.e., experts involved in the development and evolution of ESEA methods), 1 interview with an assistant professor in the field of impact measurement and accounting, and 6 with ESEA practitioners.

Lastly, we asked the experts to validate the list of decision-making criteria. The results of the validation can be found in Section 5. As a result of executing the research method, we can present a comprehensive, validated list of criteria. The list of criteria can be found in Section 4.

3. AN ILL-INFORMED ESEA METHOD SELECTION CAUSES PROBLEMS

Choosing an unsuitable ESEA method may result in issues. The first issue we identified is rework. One interviewee indicated that their organisation started to deviate more and more from the method they initially selected over the years because that method was not well aligned with their needs and they had to adapt it over time. This can eventually lead to rework since it might not be possible to reuse data collected from previous years, or it might be required to re-process the collected data when the method is adopted. In a scenario where the organisation decides to radically switch to a more suitable method, the employees responsible for the accounting have to invest time into gaining a deep understanding of the new, more suitable ESEA method. Redundant efforts and waste of resources may eventually lead to a higher resistance for performing ESEA.

The second problem we discovered was obtaining trivial results. One interviewee stated that they had to shoehorn the assessment because the way the ESEA method had operationalised the indicators did not fit the organisational characteristics and context well. Another interviewee mentioned that the method they selected did not fit so well with their regional context. Some ESEA methods are developed with a specific regional system in mind and they do not fit well in the context of other regions. For instance, the B Impact Assessment is developed by B Lab, a US-based NGO. Although the B Impact Assessment is globally adopted, the assessment was originally created with the US socio-economic system in mind. Therefore, some of the indicators offered by the method are more relevant to the US context, rather than that of other countries. For instance, the assessment asks to report on the percentage of employees that are eligible for health care benefits, either through a company or government plan. In countries where there is a universal provision of basic health care services, the percentage is naturally higher or even 100%. One of the non-USA based interviewees stated that they felt as if they were obtaining a high score because of this phenomenon.

Additionally, the interviewees expressed that the expenses for professional help may increase when an unsuitable method is selected. When organisations struggle to make an ESEA method fit their circumstances, they may have to spend more resources on ESEA. In some cases, they might need to spend more time in the assessment, even contacting the method engineers for help in understanding or applying the method. In other cases, they might even need to hire a professional, typically a consultant specialised in ESEA, to tailor the method to their situation.

In the worst case, organisations might unknowingly decide to apply a method that does not fit their needs at all; for instance, because it is not suitable for the industry sector that they operate in. There are methods for all types of industries, for example, methods specifically developed for educational institutions (Urbanski & Leal Filho, 2015), data centres (Obaid et al., 2020), and the palm oil industry (Laurance et al., 2010). If the selected method does not fit the industry sector of the organisation, the method cannot be properly applied, thus all efforts that went into the ESEA preparation go to waste. One of the interviewees stated:

If [an ESEA method] is not fit for purpose because it is either too complex or too focused even, it will be seen as a project that's picked up and dropped as soon as somebody changes roles, focuses in the business change, or strategies change. The most dangerous thing I have seen happening is if you start with something and you sell a tool or a method in and people get really excited and you start to implement it and it fails because it is not fit for purpose, people don't only lose confidence in the tool, they lose confidence in the whole purpose. [They say:] «we've tried sustainability and it was too complicated so we are not going to do it.»

4. DECISION-MAKING CRITERIA

Table 1 presents the full list of decision-making criteria elicited during this research. The table shows the identifier (ID) of the criterion, its name and its explanation. Moreover, the table shows

whether the criterion was identified by analysing survey responses, conducting an interview, or analysing method documentation. In total, we found 79 selection criteria. Sixty-one of these criteria are objective and 18 are subjective; from criterion C62 and onward, the criteria are subjective. For subjective criteria, the values are very personal and differ per decision-maker. Examples of subjective criteria are whether the decision-maker is already familiar with the ESEA method (C72), whether the method is easy to apply (C59), and whether the ICT tool support is simple to use (C60). For objective criteria, the values are the same for all decision-makers. Examples are whether the method issues an official label or certification after the method is successfully applied (C3), whether the method is supported by an online ICT tool (C11), and whether the method prescribes that the accounting data should be externally audited (C20). Both, objective and subjective, criteria can be taken into account when selecting an ESEA method.

TABLE 1: The decision-making criteria that are relevant in the ESEA selection process. The last column indicates whether the criterion was discovered by means of a survey (s), interview (i) or by examining the method documentation (d)

<i>Criterion</i>			<i>Source</i>
<i>ID</i>	<i>Name</i>	<i>Explanation</i>	
Cost			
C1	Total assessment costs	The total costs of an assessment, including the use of the software tool, the audit expenses, and the certification and/or membership costs.	i
C2	Free self-assessment option	The possibility to apply the ESEA method, without having to pay a fee and without having to officially become part of the network.	i
Obtain certification			
C3	Certification	After performing the ESEA and meeting all requirements prescribed by the network, an official document attesting to a status or level of achievement can be obtained.	i,d

<i>Criterion</i>			<i>Source</i>
<i>ID</i>	<i>Name</i>	<i>Explanation</i>	
C4	Scoring	The accounting is quantified by means of a numeric score. For instance «Company A's ESEA score of 2019 is 60/100». The scoring mechanism and range of the score are different for every method.	i,d
C5	Publishability of results	The network provides organisations with the possibility to publish the ESEA results (e.g., on the network's official website, on verified social media accounts or in an online repository)	i,d
Indicators			
C6	Predefined indicators	The method has already defined indicators that are part of the accounting. Examples of indicators are «annual water consumption», «number of women executives», «minimum wages».	i,d
C7	Extendable with indicators	In addition to the predefined indicators extra indicators can be added to the accounting.	i,d
C8	Indicator explanation	The predefined indicators are accompanied by explanations of the indicators. The explanations can be written in the method documentation or in an ICT tool.	i,d
Tool support			
C9	Official tool support	The method is supported by an official ICT tool.	i,d
C10	Offline tool	The method is supported by an official offline ICT tool.	i,d
C11	Online tool	The method is supported by an official online ICT tool.	i,d
C12	Whistle blowing mechanism	If someone sees that certain accounting results are incorrect or look suspicious they can report this. After a suspicion is reported, the accounting results are checked again.	i,d
C13	Built-in survey tool	The ICT tool has a built-in survey tool that allows sending our surveys to relevant stakeholders (e.g., employee satisfaction surveys).	i,d
C14	Infographic generation	The ICT tool can automatically generate an infographic based on the accounting results.	i,d
C15	Networking tool	All organisations that apply the same method can connect and communicate through a special networking platform.	i,d

<i>Criterion</i>			<i>Source</i>
<i>ID</i>	<i>Name</i>	<i>Explanation</i>	
C16	Multiple users per account	Multiple users can be added to an account in the tool. This allows designating assessment responsibilities to people in different departments, functions, positions, etc., without having to share the login credentials of the main user. Adding multiple users instead of sharing login credentials results in higher traceability.	i,d
C17	Continuous improvement of the tool	New features and functionalities are continuously added to the tool.	i,d
Audit			
C18	Internal validation	The method states that someone from the assessed organisation, who was not involved in the assessment, checks the accounting results (e.g., for inconsistencies, invalid or incorrect data).	i,d
C19	Peer review	Another organisation that applies the same ESEA method checks the accounting results of another organisation. This is done to make sure the data is complete, accurate and correct.	i,d
C20	External audit	An auditor, designated by the network, checks all accounting data for inconsistencies and checks for compliance with the requirements set by the network.	i,d
Network			
C21	Existence of network	There is a network of organisations that all use the same ESEA method for assessing their ethical, social and environmental performance (e.g., Economy for the Common Good or the B Corp network).	i,d,s
C22	Democratic method development	During the method development (e.g., changing indicators, adding process steps, changing requirements, etc.) input from the community is decisive. An example of democratic method development is when new indicators are added to the method specification based on votes by the network entities.	i,d
C23	Evolvability of the method	Over time, the method is improved and new versions are released periodically.	i,d

<i>Criterion</i>			<i>Source</i>
<i>ID</i>	<i>Name</i>	<i>Explanation</i>	
C24	Input from the community	Mechanisms are implemented to gather input from the community (e.g., an online form on the official website, a feedback field in the ICT tool, special events)	i,d
C25	Local network groups	The network has local groups based on the region. For instance, there can be network groups per country, per continent or per region within a country. The level of activity per local network group is not taken into account.	i,d
C26	Network-specific events	Special events are organised for members of a network. Events can lay focus on information providing, networking, discussing, etc.	i,d
C27	Helpdesk	The method is supported by a service providing information and support to practitioners of the ESEA method.	i,d
C28	Training material	The method is supported by any material that goes beyond the written material that can be used to learn more about the ESEA method or ESEA in general (e.g., workshops, webinars, knowledge clips, etc.)	i,d
Visualisation mechanisms			
C29	Online directory	The network has an online, publicly available repository where all members of a network are displayed.	i,d
C30	Map visualisation	An online, publicly available visualisation of a world map where all members of a network and their corresponding locations are visualised.	i,d
C31	Official trademark for members	An official label or logo of a network that can be used by members.	i,d
C32	Newsletter	A bulletin, issued periodically to the members of the network.	i,d
Disclosure topics			
C33	Social topics	Topics that influence groups within society or society as a whole (e.g., gender equity, forced labour, customer stewardship)	i,d
C34	Environmental topics	Topics that consider harmful effects of human activity on the biophysical environment.	i,d

<i>Criterion</i>			<i>Source</i>
<i>ID</i>	<i>Name</i>	<i>Explanation</i>	
Improvement areas			
C35	Support sustainability improvement planning	Either the method documentation explains how organisations should think about sustainability improvement planning or the network provides extra services and material that support organisations in sustainability improvement planning.	i,d
C36	Goal suggestion	The method or ICT tool suggests goals, based on the accounting results. These suggested goals can be based on the principles of the method.	i,d
C37	Improvement action suggestion	Either the ICT tool suggest action that can be implemented to improve the social and environmental performance of the organisation or the network provides a service that helps the organisation formulate ideas for improvement.	i,d
Social market			
C38	Existence of social market	The existence of a space where organisations and consumers can buy products and services from organisations performing ESEA.	i,d
C39	Discount for members	Members within a network can buy goods and services from each other at a discount.	i,d
Sustainable Development Goals (SDGs)			
C40	Mapping to SDGs	The topics and/or indicators defined in the method, are mapped to the sustainable development goals. The mappings can help organisations report on the results of the ESEA; increase comparability between ESEA methods; help select relevant indicators.	i,d,s
C41	Workshops on SDGs	The network organises workshops or webinars on how to apply the ESEA methods in the context of the SDGs.	i,d
Benchmarking			
C42	Existence of aggregated reports	The network creates (annual) reports in which they aggregate the data from their members. Examples of aggregated indicators are the number of organisations that apply the method, the average salary of organisations within the network, the gender ratio of organisations within the network, etc.	i,d

<i>Criterion</i>			<i>Source</i>
<i>ID</i>	<i>Name</i>	<i>Explanation</i>	
C43	Benchmarking/	The method defines mechanisms that allow organisations to compare and benchmark their results.	i,d,s
	Comparing results		
Featured press			
C44	Serious blogs	The network writes serious blog posts, for instance, on their own website or on platforms such as Medium.	i,d
C45	Newspaper coverage	The network or the ESEA method is mentioned in major local newspapers.	i,d
Reputation			
C46	Expelling members	Organisations can be expelled from the network if they do no longer comply with the network requirements and values.	i,d
C47	Commitment statement	In order to become a member of the network, organisations have to write a commitment statement.	i,d
C48	Public manuals	Method documentation and tool support manuals are all publicly available.	i,d
C49	Scientific coverage	The method and/or the network are mentioned in scientific papers.	i,d
C50	(International) recognition	The added value of applying the ESEA method or becoming part of the network is well-acknowledged.	i,s
C51	Reputation	The beliefs or opinions that are generally held about a method or network.	i
C52	Network maturity	The overall maturity of the method. Possible indications of the network maturity are when the network was founded, when the method was developed, and whether the documentation and tool support is available in multiple languages.	i,d
C53	Popularity in the market	The overall popularity of a method or network. Possible indications for the popularity are the number of network members, the number of countries in which a method is applied, Google trends, Twitter, LinkedIn and Facebook followers.	i,d

<i>Criterion</i>			<i>Source</i>
<i>ID</i>	<i>Name</i>	<i>Explanation</i>	
Method flexibility			
C54	Organisational fit	The method fits with organisational characteristics such as the legal entity type, size, industry sector, etc.	i,s
C55	Principle-based	The method is based on a set of principles that every member should comply with. The principles form the foundation of the ESEA method.	i
Clarity of instructions			
C56	Clear reporting format	The method documentation explains well how the accounting data should be reported.	s
C57	Clear requirements	The requirements for successfully applying the method are well-explained.	s
C58	Clear measurement framework	The method documentation clearly defines how every indicator should be measured and calculated.	s
Ease of use			
C59	Ease of application	The method is (relatively) easy to apply.	i,s
C60	Tool support simplicity	The tool support is easy to use (i.e., the tool has high usability because of its intuitive interfaces and icons, which minimise user training)	i
C61	Linguistically simple documentation	The method and tool documentation are written in language that is easy to understand. Meaning, jargon and complex language is purposely avoided.	i
Particular need fulfilment			
C62	Ensures accountability	The method defines mechanisms that keep organisations accountable for their actions.	i
C63	Fits with organisational needs	Applying the method helps fulfil the needs of the organisation (e.g., improving strategic management or complying with the values of the organisations)	i,s
C64	Promotes stakeholder communication	The method helps to regularly exchange information between the company and its stakeholders.	i
C65	Helps qualifying for tenders	Applying the method assists organisations in qualifying for tenders.	i

<i>Criterion</i>			<i>Source</i>
<i>ID</i>	<i>Name</i>	<i>Explanation</i>	
C66	Promotes building partnerships	The network of responsible organisations promotes building partnerships (e.g., by organising networking events and connection organisations in order to create synergy).	i
C67	Promotes building capacity	The method and network help organisations develop and strengthen the skills, instincts, abilities, processes and resources that organisations and communities need to survive, adapt, and thrive.	i
C68	Promotes ethical consumerism	The method defines mechanisms that can help consumers interpret the accounting results more easily and effectively. This may lead to more well-informed decisions about their consumer behaviour.	i
C69	Educational purpose	The method purposely defines more topics and indicators than organisations can report on. This is done in order to provide inspiration for potential improvements and make organisations aware of the possibilities.	i
C70	Market demand	The consumers put pressure on the organisation to perform ESEA according to a specific method.	s
C71	Laws & regulations	Applying the method helps organisations comply with specific laws and regulations.	s
Familiarity			
C72	Familiarity with the method	Someone within the organisation is familiar with the method already (e.g., someone has attended a promotion event or has used the method before).	i,s
C73	Commonly used by peers	The method is frequently used by entities that share similar characteristics.	i,s
C74	Mostly used by clients	The method is the mostly used method by clients of the organisation or a consultant advises a particular method because it is mostly used by the consultant's clients.	s
Method contents and context			
C75	Focus of the method	Methods can have different focuses. For instance, methods can focus on specific topics only, such as water, forest, or climate, or business ethics.	i,d

<i>Criterion</i>			<i>Source</i>
<i>ID</i>	<i>Name</i>	<i>Explanation</i>	
C76	Associated industry sector	Industry sector-specific ESEA methods and ESEA methods that can be used by organisations in all industry sectors. The associated industry sector of an ESEA method can determine whether the method is suitable for an organisation.	i,d
C77	Types of members	The types of members of a network may vary. Well-known organisations with very good sustainability performance might have a more positive impact on a network, in comparison to the average organisation. The presence of organisations with specific characteristics may influence the network as well.	i
C78	Geographical region	Some methods are developed for a specific geographical region (e.g., a province, country, continent, etc.).	i,d
C79	Material topics	The method covers most of the topics that are material for the organisation.	s

5. VALIDATION OF THE DECISION-MAKING CRITERIA

For eliciting the decision-making criteria we first performed a literature review. During this literature review, we discovered criteria, incrementally creating a list. In total we found 41 criteria in literature. Then, we deployed a practitioner survey and consultant survey. After gathering all responses, we started analysing them in order to identify decision-making criteria being mentioned by the respondents. At the beginning of the analysis, a new response typically resulted in one or multiple new decision-making criteria. The newly found criteria were incorporated to the list of previously found criteria, avoiding duplicates. As we progressed with the analysis, new responses did not necessarily result in new decision-making criteria. Figure 1 shows the data saturation graph, starting with the 41 criteria found in literature. The increments in the number of criteria that result from processing the survey are represented with the dotted line. Even when the slope of the

graph eventually became flat, suggesting a data saturation, we decided to employ a different elicitation technique, thus conducting expert interviews. We interviewed 15 experts in the domain of ESEA. Each of the experts validated all previously identified criteria; this means that they expressed whether they deem a criterion important in the ESEA method selection process or not. If a vast majority of the interviewees deem a criterion unimportant for decision-making, the criterion is removed from the list. For instance, the «number of Instagram followers» was not deemed an important decision-making criterion for ESEA method selection by the interviewees, so it was removed from the list. Besides validating the previously identified criteria, the interviewees could express additional, not yet discovered criteria. The solid line in Figure 1 represents the increment in criteria that results from processing the interviews. The final four interviewees did not identify any additional criteria and were, thus, presented with the full validated list of criteria. These interviewees were the four decision-makers from Stanford University, Ghent University, Equinox and Standing on Giants. Since they were presented with the full set of criteria we asked them how the list of decision-making criteria may help decision-makers select an ESEA method. All four decision-makers found the list valuable and enlightening, since they recognise in it the criteria that they applied for selecting the ESEA method for their organisation, and they also discovered other criteria that would have also been relevant. One decision-maker expressed that the long list may serve as a source for selecting a shorter list with the criteria that they deem really important, thus reducing the complexity of the rest of the decision-making process. Another decision-maker expressed that the length of the list requires the provision and usage of a decision-support system, since determining whether each ESEA method satisfies each of the requirements is too cumbersome and time-consuming. Nonetheless, they all coincided in expressing that the list of criteria in Table 1 allows for a well-informed decision-making process.

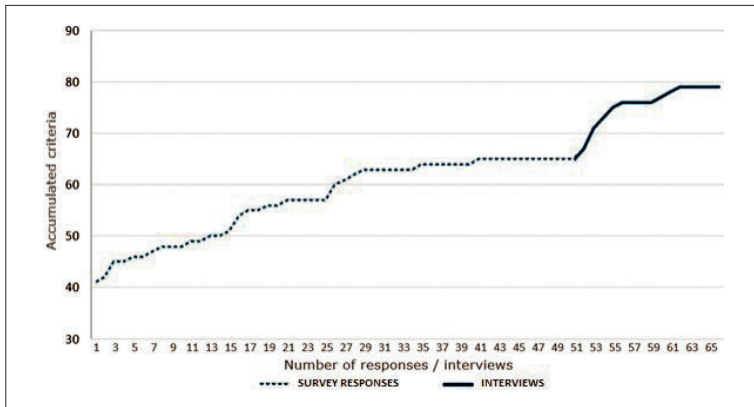


Figure 1: The data saturation graph of the decision-making criteria elicitation

6. DISCUSSION

We found that organisations may make an ill-informed decision if the relevant decision-making criteria are not taken into account. This may lead to having to do rework, obtaining trivial and unremarkable results, increasing the expenses, and losing confidence in sustainability reporting. To mitigate the risk of these problems, we computed a list of 79 validated decision-making criteria that decision-makers can take into account when selecting an ESEA method.

So far, a comprehensive list of ESEA method selection criteria, as the one we contribute in this article, has not yet been compiled. We found related works that mention organisational motivation for performing ESEA. These motivations overlap with some of the criteria we found. Hoque (2017) mentions that disclosures make companies transparent and enhance the reputations of organisations. In turn, this can result in business advantages. Suntae et al. (2016) found that organisations choose to certify as B Corporations to show that they are more genuine, authentic advocates of increasing ESE performance, in comparison to organisations that practice

non-financial reporting without a predefined, well-recognised ESEA method. Gray et al. (2014) also state that individual commitment is a reason why organisations produce non-financial reports. Apart from that Gray et al. (2014) mention idealism; competitive advantage; manipulation of public perception; forestalling of legislation; keeping up with competitors; inducing change; public image; pressure from ethical investors; communication of risk management and legitimisation as motivations for organisations to assess and report on their ESE performance. Our work has been inspired by research that has compiled lists of selection criteria for other domains, such as programming languages (Farshidi et al., 2021), and blockchain platforms (Farshidi et al., 2020).

To mitigate the threat of content validity, we have piloted the survey and interview protocol multiple times internally and externally with ESEA stakeholders. While eliciting criteria we found that ESEA method selection is more than a multi-criteria decision making problem. Several other factors influence which ESEA method is selected, such as to what extent a method contributes to transforming the traditional economic system; the priorities of the leaders of the organisations; actions of competitors. Therefore, the method that seems most suitable based on the criteria evaluation, may not always be the best fitting ESEA method, given the situational context. Moreover, we only conducted interviews with organisations that selected one ESEA method at a time. We suspect that there are organisations that select more than one ESEA method at a time. A limitation of this research is that we have not found such organisations.

To overcome the remaining threats to the validity and limitations, we suggest a number of actions. Firstly, we suggest creating a mapping between the objective criteria requirements and a set of ESEA methods. The mapping should contain values per criterion, per method (e.g., the Common Balance Sheet supports criterion C19, peer- reviewing). This mapping can be used by all ESEA method decision-makers, provided that it is kept up-to-date as the ESEA methods evolve. For the subjective criteria, the

decision-makers will have to determine the values themselves. Moreover, we suggest supporting the decision-making criteria in a decision-support system, to improve the efficiency and effectiveness of the selection process. The decision-support system can employ the mappings we mentioned previously. Such a system will encourage knowledge-sharing since it provides an overview of what each method entails.

7. CONCLUSION

In this article, we have shed light on the pitfalls of the ESEA method selection process. Moreover, we have presented a comprehensive list of decision-making criteria. The list has been validated by experts, who also considered it a valuable contribution to achieve a more thought-out, and better-advised decision-making process. This is a positive and encouraging outcome. As a next step, we aim at providing a decision support system that automates part of the activities of the ESEA method selection process.

With our work we encourage organisations to start measuring, reporting and monitoring ESE performance and impacts, so they discover how they can contribute to the common good. These improvement points may help them attract talent, gain global insight, and formulate change strategies necessary to become a sustainable organisation. Finally, our work can help networks that promote a given ESEA method (e.g., the Economy for the Common Good) understand the practitioners' and consultants' needs and preferences, so they can better meet those in future versions of their methods.

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9. SUSTAINABLE GENDER DIVERSITY MANAGEMENT. A PROPOSAL FOR THE EVALUATION OF MATURITY IN ITS ORGANIZATIONAL IMPLEMENTATION

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Abstract: The correct management of gender diversity is understood as one of the key factors for obtaining organizational sustainability from its triple dimension (economic, social and environmental). However, the measures implemented by many organizations oriented towards gender diversity only respond to regulatory compliance rather than a global and strategic awareness of its need. It is precisely this global and strategic approach in the implementation of gender diversity that is understood to significantly affect sustainability. Starting from this premise, in this work, the key aspects to be analyzed are proposed in order to assess the degree of maturity in this strategic implementation of gender diversity and with it its contribution to obtaining organizational sustainability.”

Keywords: Sustainability; Gender diversity; Maturity evaluation; Strategic approach; HR practices; diversity climate.

1. INTRODUCTION

In recent years, interest has been aroused in the influence of gender diversity management on sustainability. Thus, the last decade has witnessed the proliferation of many works focused on analyzing the relationship between gender diversity and the performance of organizations from its triple dimension, namely, economic, social, and environmental (Sánchez-Teba et al., 2021).

The importance of the correct management of gender diversity to achieve sustainability is also evident in the consideration of this aspect in the main sustainability standards such as the GRI, the United Nations Global Compact, or the Common Good Matrix, among others (Sanchis-Palacio et al, 2021), or the fact of establishing gender equality as SDG 5 (United Nations 2030 Agenda). However, as Galleta et al (2021) underline, it is still a goal that is far from being achieved in organizations and societies in general, hence the reason for this situation must be considered.

In some countries, moreover, at the normative level, laws and regulations «force» organizations, in a certain way, towards the fulfillment of the gender equality objective (quotas for the presence of women in management teams or the obligation of drawing up equality plans).

However, all the efforts seem insufficient if the organizations do not consider being diverse in terms of gender beyond mere regulatory compliance and therefore if their initiatives do not reflect a conviction and credible commitment that entails their integration at a global and strategic level that permeate the entire organization.

Therefore, based on the previous arguments and on the review of the literature, in this paper we intend to respond to what aspects should be considered key, from a global and strategic approach, to assess the degree of maturity in the management of gender diversity in each organization and, therefore, have a benchmark to assess its degree of solidity and scope in its implementation, as well as its contribution to corporate sustainability.

2. EFFECT OF GENDER DIVERSITY ON THE TRIPLE DIMENSION OF SUSTAINABILITY

Organizations should no longer be valued exclusively for their economic impact but also for their non-financial results (Werther & Chandler, 2010; Dolz-Dolz & Linares-Navarro, 2021), which should be reflected in their sustainability reports (ESG) (Provasi & Harasheh, 2021). It is in the satisfaction of multiple stakeholders where the key to the success of current and future organizations should and lies.

One of the most recently studied aspects for its influence on the achievement of sustainability is gender diversity. Thus, as evidenced by Sánchez-Teba et al (2021) in their bibliometric study, in the last decade a line of research has emerged focused on the impact of gender diversity on corporate social responsibility and the achievement of sustainability, considered a necessary strategic issue to be addressed by organizations.

Diversity management is based on understanding that there are differences between the people who make up the organization, and that, if these are properly managed, they are an asset to achieve a competitive advantage (Armstrong et al., 2010). According to Provasi and Harasheh (2021: 129) diversity management is «a managerial technique to empower each individual by enhancing the differences of the various members to improve working conditions and increase the effectiveness and organizational efficiency».

Previous works have found that since knowledge, life experiences, perspectives, levels of risk and aversion to competition, as well as management skills differ between men and women, gender diversity promotes, among others, creativity and innovation of products and services (Díaz-García et al., 2013; Fernández, 2015; Ali, 2016), and improves the quality of the decision-making process (Campbell & Mínguez-Vera, 2008; Ali, 2016).

And more at the individual level, gender diversity is understood to lead to reduced work- related stress, increased satisfaction, as well as the perception of a sense of justice in the organization

(Armstrong et al., 2010), increasing the motivation and commitment of the members of the organization and, therefore, the rate of abandonment or absenteeism will be lower (Armstrong et al., 2010, Ali et al., 2015).

All the above ideas arise in the same way in the works that have proliferated in the last decade in which the influence of gender diversity on sustainability has been analyzed, specifically (Sánchez-Teba et al, 2021). These, however, have focused almost exclusively on the effect of the presence of women on boards of directors and very few on other organizational levels, which appear almost as an exception (Ozordi et al, 2020). In this sense, although there are inconclusive results, in most of the works is found that gender diversity in senior management (strategic decision-making level) favors the achievement of better performance in economic, social, and environmental (sustainability) terms.

In addition, there is also recent work that show the possible positive relationship between female representation in governing bodies and ECG complete, relevant and accessible reporting (Bravo & Reguera-Alvarado, 2019; Zumente & Lace, 2020).

Therefore, the correct management of gender diversity not only impacts the corporate image and reputation internally, but also externally (Singh & Pandey, 2019) impacting its sustainability results. In this sense, it constitutes an opportunity, but also, at the same time, an important challenge. This is so because when the organization considers the improvement of diversity as a strategic objective, it must make important changes and transformations in the organization. Many things must change, such as leadership style, work team composition, values, or culture, among others (Evans, 2012).

With all the above, we can consider that an effective management of gender diversity is key to improving the corporate sustainability strategy; however, this requires that the organization formulate and implement gender diversity not from isolated measures or actions, but from a global, deep, and strategic approach, encompassing all levels of the organization.

3. ORGANIZATIONAL MATURITY IN GENDER DIVERSITY MANAGEMENT: A PROPOSAL

Establishing which aspects should be analyzed to assess the strategic relevance given to gender diversity and the actions carried out by organizations to assess the degree of maturity in their management is essential. In this sense, analyzing the degree of maturity in the management of gender diversity in an organization can facilitate the analysis of its impact on corporate sustainability. It can be helpful for those firms that, although they have begun the path towards diversity «out of obligation», begin to consider it as an «opportunity» and wish to undertake the necessary changes in the organization to «continue the path of diversity».

From a review of the literature and mainly based on Arns & Holzberg (2016) and Wieczorek-Szymanska (2020), our proposal identifies seven aspects (strategic and organizational) that help determine the strength and scope of the diversity management and that we analyze on next.

3.1 Strategic conception of the gender diversity objective

The organization may or may not confer strategic value to the fulfillment of SDG 5. To the extent that it does confer strategic value, the company's management will try, on the one hand, to align the fulfillment of this objective with its business strategy (Herranz de la Casa & Garcia-Caballero, 2021), and on the other hand, it will explicitly state its commitment to achieve, monitor and evaluate this objective.

To the extent that management incorporates the strategic importance of equal opportunities in a documental way, it will be able to communicate publicly its commitment to the entire organization (managers, supervisors, employees) and, especially, to those positions that must make decisions regarding people (Konrad & Linnehan, 1995).

Therefore, when the organization considers gender diversity as a strategic objective, senior management is sending signals to the entire organization about the commitment and the importance of this objective for the management team, which will indicate organizational maturity in its gender diversity management system (Wieczorek- Szymanska, 2020). Some of these signals can be translated, for example, in the incorporation of equality in the definition of the mission and vision of the organization (Armstrong et al., 2010), in the reward and recognition systems, or in the composition of the teams, regardless of their hierarchical level.

3.2 Gender Diversity teams

The advantages of having gender-diverse management teams have been highlighted. Ahmadi et al. (2018) point out that this fact inspires other women, improves the reputation and image of the company, and attracts investors. Likewise, the fact of incorporating women in these teams shows senior managers that talent is increasingly diverse and that the future and projection of the organization depends, among others, on women as the source of the next generations of leaders (Ali & Konrad, 2017).

Furthermore, one of the greatest signs of commitment to diversity that firms can show is the composition of their top management teams, since to the extent that there is this diversity in the teams, more evident will be that commitment. With this kind of strategic actions, the top management sends signals to the entire organization about the importance that the value of gender diversity acquires in it (Ali & Konrad, 2017), which will provide coherence and consistency to the initiatives that are formulated and implemented.

Although the presence of women in top management teams is an outstanding achievement, we believe that it is also important to promote it at all hierarchical levels, given the positive results that this brings to the organization, for example, in sustainability initiatives (Alazzani et al., 2017). Making gender diversity in

the teams of an organization something «usual» is a sign that it is a criterion assumed and rooted in the organization, and shows a greater degree of maturity, than if it is only carried out at the managerial level.

3.3 HR practices oriented towards gender diversity

In relation to gender diversity, many authors agree that one of the key levers to achieve more diverse organizations are human resource practices, which must be reoriented to incorporate the gender perspective (Konrad & Linnehan, 1995; Armstrong et al., 2010; Schauf, 2015; Ali, 2016). These practices must be framed in an equality management system with a global scope to achieve diversity (leadership, work teams, culture, values, structures, and processes...) (Konrad & Linnehan, 1995; Armstrong et al., 2010). Thus, the scope and depth of these practices (number, hierarchical levels and kind of jobs affected) will determine the degree of the organizational maturity in gender diverse management. If the practices constitute an integrated system with a common objective (horizontal fit), a better result can be expected to gender diversity field (Schauf, 2015; Ali & Konrad, 2017).

Hence, we can consider that those organizations that generate a set of coherent and consistent human resources practices among themselves, and that do not discriminate by gender, show a greater organizational maturity in diversity management.

3.4 Diversity Implementation

The success of an organization's diversity strategy depends, among other things, on its correct implementation. For example, middle-line managers play a key role in this process, so the organization must define specific actions towards them and verify compliance (Abramovic & Mercer, 2017; Gray et al., 2019).

Thus, middle-line managers must first receive training on what their responsibilities are and how to manage an increasingly gender-diverse workforce. They should also know in what terms the organization defines the objectives related to gender diversity and how they affect their departments. Also, they must know the criteria related to gender diversity that must be applied in their decisions. In terms of middle line managers' performance evaluation processes are concerned, it may be interesting to include the assessment of their attitude and behavior towards equal opportunities. Finally, they must receive precise information on the degree of achievement of the objectives related to gender diversity reached in their departments (Konrad & Linnehan, 1995).

Some organizations set up committees, which can run throughout the organization, to address diversity issues. The composition of these committees can vary from including members of the board of directors, managers, employees, or a specific group, such as women (Gomez-Mejia et al., 2008). Considering that equal opportunities is an issue that affects all members of the organization, the commitment of employees is basic, and this does not arise by chance, but is achieved through initiatives that seek that involvement. One of these initiatives could be, for example, holding workshops, where employees are encouraged to contribute their ideas and proposals on possible changes that they think would contribute to improving diversity and equal opportunities in the organization they belong (Anastasiou & Siassiakos, 2014).

In short, organizations with more advanced approaches to gender diversity management dedicate numerous resources to achieve an effective implementation of the policies and practices that they define for this purpose, which shows their degree of maturity.

3.5 Diversity Climate

Effectively designing and managing gender diversity will contribute to generating a better environment or climate in the organization. In

this climate, people, regardless of their gender, perceive that they are valued, respected, appreciated, and feel that they contribute to the achievement of organizational objectives (Dźwigoł-Barosz & Leooski, 2019), so values such as tolerance, respect and positive assessment of gender differences are common. Thus, diversity management increases the integration of people and makes them feel more committed to the organization (Kim et al., 2015). Managerial decisions can contribute to generating this positive climate, for example, if instead of mostly favoring the conciliation of women, through flexible work, senior management is concerned with generating a harmonious work climate where flexibility and cohesion are promoted. Family and work reconciliation for both men and women will be working in this direction (Bibi, 2016; Blake-Beard et al., 2010).

Ali et al. (2015) points out that diversity-oriented HR policies and practices encourage the development of a positive climate about gender diversity. Likewise, we emphasize that if the implementation of diversity initiatives is perceived by the members of the organization as trusted and credible, there will be a shared perception among them about diversity is an enriching value that contributes to have a fairer organization (Ali et al., 2015), concerned about the well-being of people (Schauf, 2015); and that contributes to the success and growth of the organization.

To the extent that employees are satisfied with diversity practices, a climate of diversity will be generated, which, to a certain extent, can inform about the effectiveness of these practices (Herdman & McMillan-Capehart, 2010). The existence of a climate of positive diversity will generate among the members of the organization, regardless of gender, a feeling of pride in belonging that will have a positive impact on their commitment and involvement, which is expected to reduce the intention to leave the organization (Ali et al., 2015; Mousa et al., 2020).

Thus, the development of a positive climate of diversity is a key point for those organizations that pursue to capitalize its positive effects (Herdman & McMillan-Capehart, 2010). In this sense,

those organizations that, through their actions, have managed to develop values that favor diversity, will present a better work environment and climate, which may imply a greater degree of maturity. On the contrary, if the initiatives are perceived by the employees as unfair or inequitable, it will be difficult to create this climate favorable to diversity.

3.6 Diversity Monitoring

Miles (2011) points out that without systematic control and measurement of progress in aspects related to gender diversity, it will not be possible to know whether the actions defined for this are achieving greater equality among the workforce of an organization. Thus, a management system must incorporate control mechanisms to determine the degree of compliance with the established initiatives and objectives. Based on the analysis of the information, the firm will be able to undertake improvement actions (Wieczorek- Szymanska, 2020). Thus, those organizations that actively work on gender diversity will include indicators and statistics that allow them to know the evolution of the variables linked to gender diversity (Konrad & Linnehan, 1995; Anastasiou & Siassiakos, 2014). However, not many companies establish specific commitments in their sustainability reports to measure and evaluate their contribution to achieving the SDGs (Herranz de la Casa & García-Caballero, 2021), such as gender equality.

The evaluation of the organizational climate constitutes an important aspect, since it can provide a large amount of information on the degree of acceptance of the gender diversity initiatives implemented. This information can be analyzed by gender and by hierarchical level.

Some of diversity indicators that organizations usually incorporate are (Gray et al., 2019): gender ratio, percentage of women who apply for a vacancy, representation of women in management teams, women in management positions, ratio of men/women included in conciliation plans, turnover ratios by gender, ratio

of women promoted, etc. It is interesting to report information about diversity disaggregate by gender, in order to know if the organization should rethink some of the actions it is carrying out.

Besides the above indicators, which we could call *performance indicators*, the organization can also include *result indicators* with the intention of knowing the effect of the implemented diversity practices, some of them may be the perception about: the improvement of the work atmosphere, the image of the company, the attraction and retention of talent, the loyalty and commitment of employees, the increase in diversity in clients (Dźwigoł-Barosz & Leooski, 2019) or the return to work and retention rates after parental leave, by gender (Miles, 2011).

The incorporation of indicators to the system is a keystone, since, on the one hand, provides information about on the effectiveness of actions related to diversity; but at the same time the value and evolution of the indicators can be communicated to those stakeholders for whom this information may be very useful (eg. middle managers, employees, society, or customers), as we include in the following section. To the extent that an organization defines these types of indicators, it will show a greater degree of organizational maturity regarding the gender diversity management.

3.7 Diversity Communication

The firm and its management must communicate their involvement with gender diversity, the actions implemented and how it is guaranteed that the initiatives are carried out effectively. This communication must be addressed both, to the internal and external scope of the organization. In respect of internal one, communication should be focus on informing all the members of the organization of the achievements made, the initiatives undertaken and the criteria that guide management decisions on gender matters. Communicating in this way will contribute to making the commitment of the leadership with diversity trustier for all employees.

Regarding the external scope, firms can communicate the diversity achievements and initiatives in their sustainability reports (Singh & Pandey, 2019) or through declarations and announcements. This external communication will contribute to improving the image and reputation of the organization, since with it the organization is not only demonstrating its commitment to gender equality, but also showing the real results of the initiatives implemented. The information reported can be of a quantitative and/or qualitative nature, and generally must be adjusted to the areas of interest and/or concern of the different stakeholders of the organization (Miles, 2011). It is expected that all this will generate positive perceptions among stakeholders, which will impact the decisions that each of these groups must make in each moment (future candidates, suppliers, employees, investors, clients, society...).

The adoption of this communication approach in corporate and/or sustainability reports shows the transparency of the company concerning the relationship between the actions and practices implemented and the results achieved (Miles, 2011). As has been pointed out, this communication may be, of great utility for the different stakeholders of the organization. On the other hand, it can serve as a reference for other organizations interested in actively incorporating gender diversity into their management system. Therefore, as sustainability reports become more complete and incorporate both quantitative and qualitative information, they will show a greater degree of organizational maturity in the management of gender diversity. Similarly, the improvement of this communication in the internal scope will be associated with a greater degree of maturity in the firm.

At this point, from our point of view, relationships can be established between all the aspects mentioned above (Figure 1). Thus, the fact of granting strategic importance to gender diversity will imply adopting a series of actions to implement the achievement of said objective. Within this implementation we would include the definition of HR policies aimed at gender diversity, the generation of a structure of diverse teams in gender, as well as internal communication actions that allow the entire organization to be made

aware of the commitment towards equal opportunities. However, it would be of no use if the mechanisms that allow us to monitor the degree of compliance with the actions undertaken in the area of gender are not established. All this will result, on the one hand, in an improvement of external communication processes, a key aspect in the relationship with stakeholders and, on the other hand, in the work climate or atmosphere that will enhance the commitment of people, the feeling belonging to the organization and, consequently, favor the retention of talent.

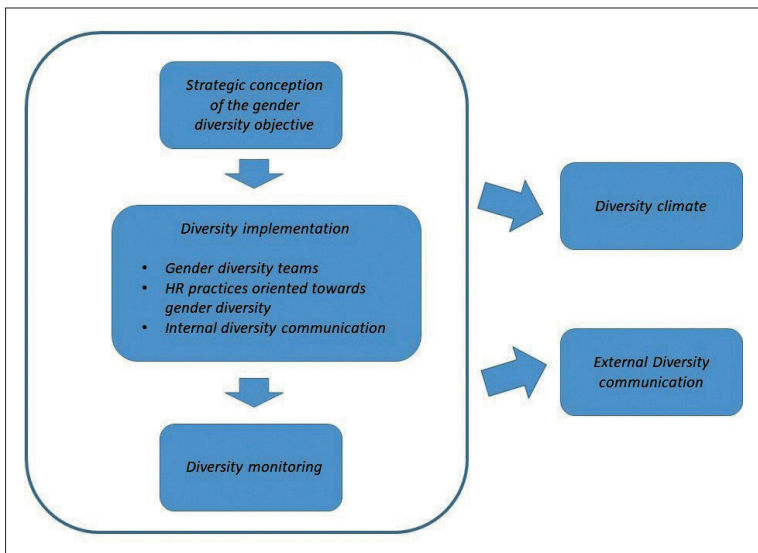


Figure 1. Maturity in Gender Diversity Management. Relationships

4. CONCLUSIONS

Previous works have highlighted the positive relationship that may exist between gender diversity and corporate sustainability. In this sense, it can be considered that there is a bidirectional relationship between gender and sustainability. On the one hand,

leaning towards greater gender diversity contributes positively to the results that the organization can achieve in its triple dimension (economic, social, and environmental). But, on the other hand, gender equality is key to sustainable development (SDG5). Proof of this is that many governments conceive it as a priority in their development policies and strategies (Miles, 2011). Promoting gender diversity contributes to achieving more egalitarian and fair organizations, a reflection of an advanced society (Blake-Beard et al. 2010). However, there is still a long way to go and the need to move forward in achieving gender equality, as well as having tools to assess the maturity of its organizational implementation at a strategic and global level. Although, as indicated by Tanova (2009), the differences in the organization's culture, HRM policies, leadership style and internal values can lead to different approaches to gender management at the organizational level, we believe it is essential to establish which aspects are key in strategic and global management of gender diversity, that is, those that can really explain a positive and lasting impact on corporate sustainability.

The proposal presented in this work should be understood as a first step towards achieving this objective. Thus, we understand that this allows progress in the analysis and implementation of gender diversity to positively impact sustainability. In this sense, we propose that the maturity and scope of gender diversity management should be assessed according to the degree of achievement of the following aspects: *Strategic conception of the gender diversity objective*, *Gender diversity teams*, *HR practices oriented towards gender diversity*, *Diversity implementation*, *Diversity climate*, *Diversity monitoring* and *Diversity communication*.

However, future research should validate the proposal through a qualitative case study to determine if these aspects are sufficient or if it is necessary to add others. In addition, this type of study could help establish indicators for measuring the aspects included in our initial proposal. This will allow, as a next step, a quantitative empirical contrast and assess the maturity in the implementation of gender diversity in different organizations, being able to identify,

likewise, a typology of organizations based on said maturity and, consequently, for its contribution to sustainability.

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10. THE WORK-FAMILY CONFLICT, PROFESSIONAL STRESS AND BURNOUT SYNDROME: THE CASE OF FINANCIAL PROFESSIONALS

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Abstract: This article analyzes the theme of work-family conflict and professional stress among financial workers and their relationships with burnout syndrome. This also studies how the socio-demographic and working characteristics of these professionals influence their levels of burnout. We adopted a mixed method based on the analysis of 255 surveys and 24 interviews carried out with financial sector professionals. The key results include verification of how these professionals register a positive

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relationship between work- family conflict and burnout syndrome as well as between professional stress and burnout. The study contributes to a better understanding of the impacts that work-family conflicts and professional stress have on financial professionals and how they contribute to the variations prevailing in their respective levels of burnout. *Keyword:* Burnout syndrome, Financial Area, Work-Family Conflict, Professional Stress.

1. INTRODUCTION

Burnout syndrome, as a disturbance of a depressive type, results from a gradual process of exhaustion and emotional tiredness followed by physical and psychological alterations, susceptible of afflicting any profession or class (Sousa & Mendonça, 2009) that faces working environments containing high levels of stress (Lewin & Sager, 2007). Burnout not only impacts on individuals but also those who surround and interact with them both in their working and personal lives. Symptoms such as absenteeism, the deterioration in social relationships and the desire to quit and abandon the organisation and position feature among some of the eventual reactions and consequences of burnout. However, there are countless other factors that may both cause and reflect professional stress and thus consequently lead to burnout syndrome and including: excessive workloads and responsibilities, the lack of career progression, ambiguity in the roles held, job insecurity and instability, internal conflicts, lack of professional recognition, among many others. In accordance with various authors (Bianchi *et al.*, 2015), burnout syndrome constitutes an unavoidable reality within contemporary organisational contexts. Correspondingly, many researchers and human resource specialists have set out to study the syndrome within the objective of understanding and/or minimising the potential consequences. Unfortunately, burnout indeed represents an adversity today with repercussions for tomorrow given that organisations are daily subject to extreme demands and

consequently tend to transfer these to their most important asset, their intellectual capital.

Nevertheless, despite the prevailing level of concern and the seriousness of such phenomena, there is a lack of research inter-linking work-family conflicts and professional stress to burnout syndrome (Dias & Angélico, 2018). In keeping with this short-coming and the desire to deepen the literature, the present article holds the objective of analysing the role of work-family conflicts, professional stress and burnout syndrome among professionals in the financial sector, studying the relationships among them in conjunction with the influence of the sociodemographic and professional characteristics over the variations in levels of burnout.

The financial sector context is frequently perceived as a «violent» world where long working days represent the norm. This furthermore involves taking work home and often obliging compromises to the living of life in the broader sense, potentially triggering serious physical, psychological and behavioural problems (O'Driscoll *et al.*, 2013). In accordance with its complexity and characteristics, this professional field displays high levels of vulnerability, instability, emotional overloading and exhaustion, negatively influencing the functional performance of individuals resulting in consequences for the organisation (Kalbers & Fogarty, 2005).

2. LITERATURE REVIEW

2.1 Conciliating Work – Family and Family-Work

The notions around work/employment and the value individuals attribute to their labour have undergone colossal changes over the course of recent decades. Individuals have progressively begun demanding not only «financially stable» positions but also employment that makes them feel valued. This highlights a long process in which the value of wellbeing has steadily risen and, whereas before the work and family dimensions were perceived as separate,

their obligatory intersection can today no longer be ignored (Pina and Cunha *et al.*, 2018). The interrelationship between these dimensions may be analysed according to three major perspectives: the positive (facilitating and enriching the relationship, highlighting the positive aspects and the advantages resulting from such relationships to individuals), integrative (spanning conceptions such as conciliation and balance between all parties, expressing a vision of equality, equity, the absence of conflict and the presence of enriching experiences) and the negative (marked by conflict).

In accordance with how work and family represent the core focal points in the lives of individuals, conflict between these dimensions becomes stridently present. Conflicts between these roles – in which pressures arising in the professional and/or the personal roles turn out mutually incompatible – demonstrates how investments made in any of these dimensions are constantly perceived as a trade-off given there is necessarily a decision that shall benefit one more than the other (Pina and Cunha *et al.*, 2018). The conflict may be based on time (more time spent on one dimension inevitably leads to less time invested in the other, provoking divergences of interest between individuals and the respective organisation), tension (when a specific concern on behalf of an individual due to demands in one of their roles jeopardises their appropriate performance in the other role) and behaviour (incompatibilities in the expected and/or desired behaviours in one of the roles). There is also reference to the bi-directionality of conflict, highlighting the distinctiveness of work-family conflicts, when the performance of a professional role enters into conflict with undertaking a personal role, and the family-work conflict, when a family role interferes with performing a professional role (Netemeyer & Boles, 1996; Pinto, 2003).

The literature includes studies that interrelate this type of conflict with burnout syndrome nevertheless without any consensus on the mutual directions of this relationship, thus, whether burnout consists of a consequence or an antecedent of conflict (Kinnunen *et al.*, 2006). According to the existing literature, work-family conflicts positively correlate with the first and second dimensions of burnout syndrome even while negatively correlating with

professional efficiency. Therefore, this approaches the demands of roles as enabling feelings of work-family conflict and, consequently, rising levels of emotional exhaustion and cynicism as well as the existing relationship among the work-family/family-work conflicts displaying all of the dimensions of burnout (van Daalen *et al.*, 2009). This relationship derives from the conservation of resources theory to the extent that when individuals experience difficulties in reconciling their professional and personal demands, they go through feelings of deficit and threats to their resources that triggers the onset of burnout. Some authors externalise the positive correlation between conflicts based on time and burnout syndrome (Brauchli *et al.*, 2011). Others complement this by affirming how such conflicts are stable and emphasising their consistency over the course of time (Namasivayam & Mount, 2004) and, that work-family conflicts emerge as one of the factors of risk that most instigates the origins and evolution of the syndrome in comparison with family-work conflicts (Piko & Mihalka, 2018).

Within this framework, we may conclude that burnout occurs more as an antecedent than a consequence of conflict and that there is a relationship between conflict and burnout syndrome (Souza & da Silva, 2002), with work-family conflicts emerging as the most predominant and associated with higher levels of burnout (Kossek & Ozeki, 1998a).

2.2 Professional Stress

Work increasingly takes a central dimension in the lives of individuals and provides their main source of income in the sense that it is through work that they satisfy their needs and where they spend a large proportion of their time (Seybold & Salomone, 1994). However, this may also have negative repercussions and emerging as a source of risk for individuals. Within this framework, professional stress has gained a rising profile as one of the phenomena of greatest importance and concern not only in accordance with its impact on the health and wellbeing of individuals

but also in terms of the sustainability of organisations. Stress may consist of a General Adaptation Syndrome or Stress Syndrome and be defined as a negative, emotional and psychological status associated with feelings of exhaustion, deception and anguish in the workplace characterised by three main stages, the warning (individuals encounter a source of stress, provoking a sensation of interior imbalance), resistance (efforts made by the body and the organism to recover the now suppressed balance) and exhaustion (deterioration in the symptoms verified in the first stage leading to high levels of alteration, disturbance and disease). However, there is now commonly included a fourth stage - «practical – exhaustion» (when individuals no longer hold the mechanisms and capacities necessary to adapt to new conditions and circumstances).

According to the European Agency for Safety and Health at Work (2010), stress ranks in 2nd place among the most common work related health problems, afflicting around 28% of professionals throughout Europe and with costs in excess of twenty billion euros, figures that have only surged in recent years. Hence, there are estimates that professional stress related disturbances costs organisations in the vicinity of 10% of their turnover (Dyck, 2001). Exposure to situations of stress causes a positive relationship with burnout syndrome even while, and on the contrary to this relationship with the first two dimensions, this triggers negative effects in terms of professional efficiency (third dimension).

2.3 Burnout syndrome

The burnout concept was proposed in the United States in 1974 in association with feelings of breakdown, disillusionment and exhaustion (Carlotto *et al.*, 2012). Furthermore, Christina Maslach at the 1976 Annual Congress of the American Psychology Association (Landeiro, 2011) developed and deepened the concept within the context of social and organisational psychology through proposing an instrument for its evaluation, the Maslach Burnout Inventory (MBI).

Over the course of this time, various authors have attempted to obtain a consensus around the best definition of burnout, whether as a state or a process (Enzmann *et al.*, 1998). The conceptions of burnout as a state gather together a set of symptoms that, when related and specifying a negative situation, enable their recognition as an actual syndrome (1998). According to Maslach and Jackson (Enzmann *et al.*, 1998), burnout emerges as a multidimensional syndrome «of emotional exhaustion, depersonalization and reductions in levels of self-realisation». Enzmann *et al.* (1998) define burnout as a constant negative state present in individual conveying feelings of exhaustion, suffering and declines in efficiency and motivation.

In turn, Cherniss (Enzmann *et al.*, 1998) defends burnout as a process «in which the practices and behaviours of individuals alter negatively in response to the demands imposed». Furthermore, this process contains three important stages: firstly, occurring with an imbalance between the resources available and the demands imposed, secondly, with the advent of emotional exhaustion that leaves individuals behaving in an automated and disinterested fashion and, finally, there occurs the loss of personal self-fulfilment and falls in efficiency and effectiveness.

Despite burnout syndrome not appearing identically in all individuals and with an almost countless number of definitions, there is general agreement that burnout results from displacements between expectations and the efforts of individuals, causing feelings of exhaustion, suffering, reduced levels of motivations and losses of both personal and professional self-fulfilment (Queiros, 2008).

2.3.1 *Causes*

Professional Characteristics

According to Freudenberger (Queiros, 2008), those individuals more dedicated and committed to their work display a higher tendency to experience burnout given they tend to live their

employment more intensely and perceive their jobs as the reason and meaning of their lives. Maslach, *et al.* (2001) emphasise how individuals with high expectations and surreal objectives experience a greater predisposition to the syndrome. Therefore, we may identify five factors as raising the potential of experiencing burnout, specifically:

1. Excessive workload – characterised by a demanding and frequently excessive workload, out of alignment with the professional competences and capacities of individuals and that may compromise their efficiency and effectiveness. This excessive workload leads to exhaustion and consequently to emotional breakdowns, preventing any quality or excellent response to whatever is demanded of them. This correlates to the first dimension of burnout; emotional exhaustion (Maslach *et al.*, 2001);
2. Lack of autonomy and control – reflecting the lack of freedom and autonomy of individuals as regards the resources and means essential to their work. Factors such as a lack of involvement and influence in decision-making and the lack of information also hold repercussions in terms of developing burnout. According to Maslach *et al.*, (2001), this correlates negatively with burnout;
3. Absence of team support and feeling – conveying the loss of a sense of relationship and the lack of support in the working context, with repercussions through social distancing;
4. Lack of rewards – on occasion, individuals do not get duly rewarded in accordance with their know-how and/or professional category, leading to feelings of dissatisfaction;
5. Lack of justice and conflicts of values – this encapsulates the absence of any sense of justice and disagreement at the demands of work and the principles and ideals of individuals, reflecting negatively on their self-esteem. This factor interlinks with each of the three dimensions of burnout syndrome.

However, these factors are not susceptible to analysis in isolation and furthermore interrelate with personal characteristics and features.

Sociodemographic and Professional Characteristics

Individuals experience different levels of burnout and react and act in equally different ways. According to Guevara *et al.*, (2004), sociodemographic characteristics rank as a determinant factor in the origins and evolution of burnout syndrome. Age features as one of the leading sociodemographic characteristics for developing burnout. This reflects how younger persons report higher levels of burnout in comparison with their older peers. The justification derives from the greater probability of this syndrome emerging earlier on in professional careers. When individuals are not able to deal with obstacles and setbacks at the outset, then they encounter difficulties in working under such conditions and end up almost inevitably quitting (Queiros, 2008). As regards gender, it is crucial to stress that the conflict of roles represents one of the greatest reasons for stress among women as they strive to reconcile their professional and personal lives (Queiros, 2008). The literature also details how individuals with higher levels of schooling experience higher rates of burnout in keeping with higher levels of responsibilities. Varoli and Souza (Queirós, 2005b) identify how individuals who regularly do overtime register higher levels of burnout. Individual characteristics, such as personality, emerge as factors of risk to the propensity to develop burnout as certain profiles and characteristics display a greater predisposition to developing this syndrome. Hence, strongly competitive individuals, active and with low levels of patience rank as those with the greatest propensity to burnout. This furthermore highlights the strong connection between burnout and neuroticism, associated with characteristics such as concern, hostility, self-awareness, exhaustion, depression and instability.

3. RESEARCH METHODOLOGY

As regards the choice of methodology, this took three aspects into account, specifically, the information available, the questions and objectives set and the respective complexity. This research study correspondingly opted for a mixed methodology.

The quantitative methodology involved the application of a questionnaire, made available online in order to facilitate both access and its respective completion. The questionnaire was promoted through social networks (Facebook and LinkedIn) given this provided the most holistic method as regards the social and economic situation prevailing (COVID-19). The survey and collection of data took place between May and July 2020. The processing and analysis of the information made recourse to the Python language program and the Statistical Package for Social Sciences (SPSS).

In keeping with the complexity of burnout related phenomena and the adjoining constructs, qualitative research represented the most efficient and effective means of complementing the knowledge returned through quantitative analysis. Within this logic, we prioritised recourse to interviews that took place between July and August 2020.

The study then advanced with the full reading and transcription of the data collected through recourse to MAX Qualitative Data Analysis (MAXQDA) software. Despite the qualitative methodology fostering scientific approaches enabling the understanding of phenomena as complex as burnout, its utilisation within the field of the socioeconomic sciences has remains circumscribed and relatively rare. Hence, this was perceived as an ideal opportunity to deepen and complement the content of the literature through this approach.

The questionnaire incorporated three scales, specifically the Work-Family Conflict Scale (WFCS), the Job Stress Scale (JSS) and the Maslach Burnout Inventory - General Survey (MBI-GS).

The WFCS is designed to study the work-family relationship. The second scale deals with the professional stress variable through

the JSS while exploring burnout syndrome, the core focus of this research, through MBI with particular attention to the MBI-GS, drafted by Maslach and Jackson in 1981 and divided into three main dimensions: Emotional Exhaustion; Cynicism; Professional Effectiveness.

Under the auspices of the quantitative study, there were 255 questionnaires filled in and submitted and covering various different organisations (banking, marketing, health, legal services, consultancy, etcetera).

4. RESULTS

The current article sought to analyse the role of conflict, professional stress and burnout syndrome among financial sector professionals, studying the existing relationships alongside the influence of sociodemographic and professional characteristics on variations in the levels of burnout.

According to the literature, the proposed rationale states the greater the level of conflict, the higher the degree of stress which, in turn, associates with the more expressive symptoms of burnout syndrome (Valério, 2018). There has also been analysis of the differences prevailing among the various professions in accordance with their sociodemographic and professional characteristics. The existing conceptions portray females, younger, and less experienced workers, nevertheless with more advanced educational backgrounds, as displaying the greatest probability of suffering from burnout. This may furthermore reflect how, in keeping with being relatively new to the organisation, they tend to deeply experience and live their surrounding environment and working situations and suffering as a consequence just as women may experience greater life pressure due to responsibilities for sustaining the family, being more demanding with themselves and pushing themselves to the limit.

The results confirm the existence of a positive relationship between conflict and burnout syndrome, thus, to the extent that conflict rises in all its forms, the levels of burnout experienced also rise. This conclusion aligns with Sousa and Mendonça (2009) and Montgomery *et al.* (2003) who, throughout their studies, put forward the possible association between these constructs with evidence of how conflict between these dimensions provides a strong predictor of burnout syndrome. On being questioned about their work-life balance, respondents pondered whether such was possible in the financial sector:

«I think that getting a balance between work and family in this area is extremely complicated and/or even rare.»(ENCO2);

«I think getting such a balance is extremely complicated and is one of the biggest reasons for the turnover in this area.»(ECCO6).

However, while the dimensions display a positive relationship with burnout related phenomena, the findings register a greater impact and influence of work-family conflicts on the contrary to family-work conflicts. In this setting, the organisation plays an essential role in minimising phenomena falling under the auspices of burnout, identifying the origins of the problems and acting to resolve them. In the absence, the work-family conflict leads to higher level of burnout.

«I often get accused of only thinking about work (...) I've even missed my children's events at school because of work issues (...) I missed moments that I shall never be able to get back and that were essential to them just as I've had to leave my children, when they were ill, in the care of others.»(ENFPA12)

«I missed medical appointments, school meetings, there were days when I had to stay at work until very late and was unable to accompany my son in school and sporting activities, on many occasions having to ask his friends to take him.»(ENAA15).

The results demonstrate the presence of a positive relationship between professional stress and burnout syndrome, which legitimates the position of authors including Zeinalpour *et al.* (2014) in referencing how variables such as the working environment, the ambiguity of roles, overburdened workloads and working rhythms are all strong predictors of stress and, consequently, burnout. However, this relationship does not obtain any great significance. Indeed, this reflects an interesting finding given that the relationship between stress and burnout syndrome has always received the greatest support and strongest results in previous studies (Seabra, 2008). This may derive from how the prevalence of situations of stress in the financial sector means these respondents do not pay great attention and put up with such situations. In the discourses of respondents, factors such as age, the lack of appropriate levels of remuneration, long working timetables, poor professional development, an excess and/or absence of responsibility in the organisation and breakdowns in interpersonal relationships all constitute important predictors of stress.

«at my age, it's not that easy to change or risk taking on a new challenge.»(ENCAQ9)

«I found myself with bills and a family to pay for. I don't have the luxury of being able to «quit» (...) at my age, it's very difficult to leave a company and try and find a place elsewhere.»(ENFPA12)

«I'm very often in a «position» and at the same time I already have to be thinking about what I still have to do in another.»(ENAA15)

There were also prominent references to the organisational culture and how individuals feel that they do not have any control over their actions and decisions.

«what matters there are the numbers, not the people and what they have to go through to get them.»(ENCO21)

«we're constantly getting monitored and questioned throughout the day about whether the objectives have already been met (...) constantly controlled.»(ENAA15)

Thus, while the relationship identified does not attain due significance, there is a notable and positive correlation between them. The results convey the existence of a negative relationship between professional stress and professional effectiveness, therefore, whenever individuals experience high levels of stress and are constantly exposed to situations of tiredness and exhaustion, their levels of efficiency commonly decline. This conclusion aligns with the study carried out by Seabra (2008). Furthermore, A. Pinto (2003) puts forward evidence of the relationship between stress and burnout syndrome, nevertheless, and contrary to the former two dimensions (negative), stress operates an inverse relationship (negative) with professional effectiveness, the only positive facet to this phenomenon.

«I and my team were allocated various projects and I would say «I cannot, it's too much for me» and explain how my team will feel and say the same thing and the managing entity does not understand this. As team leader, they pressure me for me to pressure my team because the work effectively has to be done and if it weren't for my team doing it, it would be me doing so and it doesn't matter how. It has to be done and delivered on schedule. And me pressuring my team more would be worse because they would turn against me, get demotivated and productivity would decline.»(ENCT23)

The results returned here are in accordance with the studies by Amigo *et al.* (2014), who maintain that burnout syndrome emerges at different intensities and with greater impacts under certain circumstances, especially among women, younger employees, individuals with high levels of qualification, etcetera. The respondents understand that «surviving» in this area essentially requires soft skills such as the «capacity for reinvention, self-motivation, concentration and organisation,» «patience, resilience, perseverance

and analytical capabilities» and especially «be able to cope with psychological and emotional overloads.» Hence, it is essential to provide the necessary tools and methods to these individuals so that they are able to minimise the potential incidence of burnout as well as analysing, encouraging and deepening their relationships with the organisation out of an awareness of the importance of their intellectual capital.

Burnout represents something real, serious and present in the lives of professionals in the financial area.

«getting home without any patience for my children and shouting at them, thinking about getting divorced, with constant headaches, not wanting to talk to anybody (...) not being able to deal with problems, bursting into tears, having panic attacks, sudden rises in blood pressure, I lose control with colleagues in discussions (...) it's too tiring and stressful.»(ENFPA12)

«(...) a positive case for burnout and depression (...) I did not seek psychological help at the right time and this cost me my health and my livelihood (...) I found myself crying in front of clients, shaking just at the thought of going to work, forgetting to do tasks and routine habits, lack of concentration and loss of memory, not remembering the route home, feeling guilty at not being able to accompany the growth of my children and self- mutilation (...) There were days, months, years when, after a day of work, on the way home, I would quickly clean my face and my eyes and again put on my «false» smile so that my family did not notice (...) I felt an affective distancing in my matrimonial relationship in the sense of not being able to stand talking about work and unloading what I was feeling against him.»(ENAA15)

5. CONCLUSION

This article stands out for its innovative theme given that there has thus far been no study analysing and evaluating the relationship between conflict, professional stress and burnout syndrome. This correspondingly seeks to contribute towards deepening knowledge

on the burnout concept and how this may emerge and impact on the lives of professionals in the financial area as well as proposing conceptions and actions suitable for applying in the organisational reality, empowering both the organisation and the individual through the tools necessary for dealing with this syndrome.

In this sense, the results produced may raise the awareness of professionals, human resource managers and organisations about a significant set of issues.

In first and second place, the existence of a positive relationship between work-family conflict and burnout syndrome warns about the role the former plays in the lives of these professionals as well as, dependent on the respectively unique individual dimensions prevailing, observing a positive relationship between these and burnout (Rubbab, 2017). As a result of countless demographic changes and the challenges of the business world, this type of conflict afflicts increasingly large numbers of professionals rendering impossible any efforts to totally isolate such a relevant construct. There is a fundamental need for organisations to raise awareness about this phenomenon and its association with burnout. Within this scope, organisations have to maintain their focus on what really matters, including listening to their professionals and facilitating the reconciliation of these dimensions and implementing ways that prevent individuals from pushing their bodies and minds to extremes.

Thirdly, the results identify a positive relationship between professional stress and burnout syndrome. Any organisation inevitably incurs situations of greater pressure or stress, especially when related to the financial sector. In this sector, employees deal daily with a variety of tasks with obligations to perform under constant pressure, frequently resulting in the working of extended hours with clear repercussions for the health of individuals. Therefore, the greater the level of occurrence of stressful situations that individuals have to face, the greater their vulnerability to burnout and other potentially fatal diseases.

Fourthly, the presence of a significant negative relationship between professional stress and the third dimension of burnout

syndrome – Professional Effectiveness – warns as to how individuals condition their performance based on the levels and situations of stress that they experience. Factors such as long working hours, accelerated working rhythms, excessive workloads, a lack of autonomy and poor professional development generate worrying feelings of insecurity in employees and with consequent reductions in their efficiency and the energy put into performing their roles.

Fifthly, the existence of positive relationships between sociodemographic and professional characteristics and burnout syndrome conveys how there are an ever rising number of characteristics with greater predisposition to this phenomenon. Society and the business world live extreme obsessions, with unrealistic expectations and utopian demands, in which younger persons, those who have recently entered the employment market /organisation and those deploying higher levels of knowledge, experience feelings of having to be the best, knowing how to do everything and being the biggest and the best in everything. This perception of demand is very often imposed by the work in itself, by the organisation as well as by everything that surrounds individuals, making them believe that they shall only enjoy true plenitude and wellbeing when they are the best. Nevertheless, this triggers feelings of emptiness and unattainable expectation that may then elicit feelings of tiredness and exhaustion, otherwise known as burnout.

Finally, these results, allied with the literature collected, demonstrate that factors such as conflict, pressure and stress, whether imposed by the individuals, the organisations or external environments heighten the likelihood of experiencing burnout in this professional sector.

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11. USING UNSTRUCTURED DATA TO DEVELOP A DYNAMIC ESG TOPIC CLASSIFICATION - AN EXPLORATION OF HUMAN CAPITAL

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Abstract: Human Capital (HC) deals with the human factor of corporate activities and is a core pillar of competitive advantage in the modern economy. While it is a multi-faceted and partially vague concept, the rise of ESG delivers greater transparency and measurability of its relevant topics and trends. Sustainability frameworks and ESG guidelines create a foundation for the exploration of human capital. To uncover blind spots of existing frameworks and to anticipate the dynamics and recency of HC topics, the analysis of unstructured text data creates holistic insights on HC that includes major topics that are related to employees as a stakeholder of a firm and a member of the society. Since ESG topics vary

across industries, companies and geographies, the different exposures towards its subtopics delivers crucial insights for strategic management researchers and practitioners.

Keywords: human capital; human resources; common good; big data; unstructured data; sustainability; ESG

1. INTRODUCTION

Human Capital (HC) is not only a major theme in the context of environmental, social and governance concerns (ESG), but also a central determinant of the success of a modern company. In the human resource literature, HC is classically linked to the way companies «effectively attract, motivate, develop, and retain talent» (Wright and McMahan 2011, p. 93). Going back to its roots in the economic literature, per definition HC covers «the knowledge, information, ideas, skills, and health of individuals'» (Becker 2002, p. 1) that summarize the value attribution of individuals to a company (Lepak and Snell 1999).

Though the strategic human capital literature so far ignored its close connection to concepts of meaning and purpose (Wright 2021, p. 5), topics that relate to the contribution of a common good and to public value cannot be ignored.

HC creates the link between topics that are quite diverse in its nature and focus. HC includes subjects that relate to the employee lifecycle such as recruitment and retainment of talents and to employee experiences ranging from a remote workplace to health-related issues such as burnout. In addition, topics that relate to social welfare, human needs and the common good such as human dignity in the workplace and self-determined working arrangements are tackled by the concept of HC.

With the growing importance of corporate intangible assets and corporate social responsibility frameworks and guidelines, HC not only becomes a better measurable concept for researchers but also a stronger value criterion for companies. By following a sustainable strategy and by incorporating sustainability into cor-

porate actions, private and public organizations can contribute to the common good and to public welfare while guaranteeing the benefits for other stakeholders such as customers and investors (Bhattacharya and Sen 2004; Orlitzky and Benjamin 2001).

However, in times where new narratives challenge traditional perceptions and convictions, a clearer compass on terms and topics that are relevant for exploring concepts such as HC helps to differentiate, to define and to reduce its contestability. The business and the financial world are in flux, and so are its risk and value components and definitions. Putting the common good and public welfare closer to the center of corporate actions and strategies asks for a more dynamic approach to classify the human factor as the most important capital and resource of a company.

The paper aims for the construction of a dynamic classification framework capturing relevant topics in the domain of HC that go beyond more static ESG frameworks. Contrary to existing research approaches that most often refer to terms and topics of HC of single ESG frameworks and a fixed terminology of HC, the paper develops a dynamic view on HC by integrating various existing sustainability frameworks and unstructured data sources. It includes the analysis of HC topics and its industry-related exposures based on its mentions in business and financial press. Such an approach enables a more holistic way to conceive HC and covers trends and terms that are not included in existing frameworks. It improves the granularity, recency and relevance of HC assessments.

The overarching goal is to contribute to theoretical research and its practical implications on the business world and financial industry by developing a dynamic classification framework of HC. With our dynamic term classification, researchers, financial service providers and companies are able to analyze industries and their entities with a holistic classification of terms that are relevant when looking at HC. HC thereby becomes a form of capital that is measurable and definable, contributing to the analysis of non-financial value drivers and intangible assets.

2. HUMAN CAPITAL IN THE LITERATURE

HC is a topic that embodies macro-economic developments, micro-economic dynamics and issues that are related to social welfare and the common good.

Various researchers focus on HC from a macro-economic and political perspective with a focus on topics such as income inequality and social and economic mobility (Erosa et al. 2010; Hanushek 2013; Neumark et al. 2021).

In the corporate and micro-economic context, a line of research analyzes HC and its influence on financial performance and sustainable competitive advantage (Harris and Brown 2021; Iwamoto and Suzuki 2019).

Research that aims to reduce the «micro-macro divide» (Delery and Roumpi 2017, p. 1) tries to bring back the human factor of human capital and calls for approaches that include more context-oriented research that grasps the individual, social and organizational context of human capital and human and organizational capabilities (Wright and McMahan 2011).

The concept of human capital asks for a more context-oriented exploration that includes individual capabilities, individual and organizational behavior, corporate outcomes as well as its societal implications. Corporate sustainability and ESG can, in a positive sense, narrow the concept of HC while taking its individual, organizational and social implications into account. Bernstein and Beferman (2015) analyze literature that contains surveys concerning HR policies to explore the financial materiality of HC. Absar et al. (2021) explore HC disclosures based on the Global Reporting Initiative (GRI) Guidelines by analyzing reports of Bangladesian banks. Rimmel (2018) focuses on GRI reports of Swedish state-owned companies by analyzing the amount of human-capital related topics and its GRI source. ESG disclosure delivers an insight into how companies relate to the concept of HC and what terms and topics are most relevant from a managerial perspective.

Stricter ESG disclosure regulations guarantee new access to information and a greater depth of information on HC and its related

topics. Since stakeholders have greater societal expectations and demand more transparent revelations of companies (Waddock 2003, Ruegg-Stuerm 2017, Ejarque and Campos 2020), the concept of HC is challenged to include a greater variety of topics that not only refer to traditional HR issues but also consider the implications of HC on the common good and the society. The common good can be understood as «that which is shared and beneficial for the general welfare of a human community» (Pettifor 2019).

Apart from macro-economic studies, HC research that relates to social welfare and the common good explores HC from the viewpoint of the positive impact that organizations can have on societies and communities. For example, Meynhardt et al. (2020) analyze organizational practices that relate to the common good and its impact on employee behavior and life satisfaction. The authors explore the common good with the concept of public value that argues that «organizations can only create value for individuals and for society if they respond positively to individuals' basic needs» (Meynhardt et al. 2020, p. 1562). Mamman et al. (2018) explore the role of human resource professionals for developing human capital in Africa. The authors consider micro- and macro perspectives on HC and emphasize that the industry- and socio-economic context of HC plays a critical role due to its impact on individuals and organizations.

Especially in knowledge-heavy industries, HC is a central component of the strategy and competitive advantage of a company. The awareness of companies and investors for financial implications of non-financial criteria such as HC is rising. This leads to more transparent disclosures and better access to information that is related to sustainability and the concept of HC. A variety of indicators exist for measuring sustainable development (Allen et al. 2017). Models such as the Economy for the Common Good (ECG) tackle stakeholder oriented ESG issues that are aligned with the SDGs and goals contributing to social welfare and to human rights. Sanchis et al. (2018) emphasize that the ECG model aims to align economic, social and environmental value creation (Sanchis et al. 2018, p. 11).

But what are the constituents for measuring sustainable development in HC and how to collect, extract, and analyze relevant data sources that go beyond corporate disclosures reflecting the managerial view and also embrace the investors, employees and the larger society as important stakeholders? In contrast to traditional financial data that is quantitative and available in structured databases, «most intangible and ESG data is unstructured, qualitative, scattered and incomplete» (In et al. 2019, p. 239). Innovative technologies such as text analytics allow for a fine-grained and dynamic definition of rather general concepts such as HC. Besides ESG disclosure, unstructured and Big Data analysis deliver insights on the concept and the main topics of HC. Hamilton and Sodeman (2019) explore corporate strategies on HC by integrating internal and external Big Data sources. Business and financial press sources provide a broader perspective on HC by capturing the viewpoint of investors, whereas general media reflect the perspective of the society. Finally, employer review websites reflect the view of the employees of a company.

The existing literature does not use the rich pool of relevant Big Data (data that is large- scale, dynamic and unstructured) to enrich and define the concept of HC. The goal of the paper is to bridge this research gap by exploring the concept of HC and its terms and topics with a lens on its industry-related exposures and by integrating its economic and societal attributes and characteristics.

3. METHODOLOGY AND DATA

ESG and its components such as HC are highly dynamic concepts. They eschew a clear definition that persists over time and space. The ESG landscape features a variety of frameworks which try to delineate its scope both on a general and an industry level. Examples are the Sustainable Development Goals (SDGs), the Sustainability Accounting Board Standards (SASB) of the Value Reporting Foundation, the Guidelines of the Global Reporting

Initiative (GRI) and the UN Global Compact. While ESG standards provide a valuable basis for ESG assessments, they are mostly coarse-grained and static in nature, requiring a long time for the enrichment with new topics.

We adopt a data-driven approach to the identification and analysis of relevant HC topics and proceed in four steps, as summarized in figure 1.



Figure 1. Overview of the processing pipeline

First, we collect more than 150,000 ESG-related articles published in various public online sources in the timespan of 2020-2022. For the extraction of relevant concepts, keywords and issues, this data is first brought into a structured form using Natural Language Processing (NLP) methods such as tokenization, part-of-speech tagging and stopword elimination.

In a second step, we match relevant HC topics in the text data. We first compile an initial framework that condenses HC topics that are linked to the SDGs, the SASB Standards, the GRI Guidelines and the topics of the UN Global Compact. The following table shows the main HC and employee-related topics that are included in the mentioned frameworks.

Many of these topics are formulated in a rather vague way and do not provide concrete and actionable guidance on their implementation. Taking «Diversity & Inclusion» as an example of an ESG and HC topic, the ECG model in Table 1, defines human dignity in the workplace and working environment as an ESG topic. However, ESG topics in its more general nature raise the question on the concrete subtopics, its industry relevance and materiality.

TABLE 1. Overview of sustainability frameworks and topics related to HC

<i>Sustainability Frameworks and Guidelines</i>	<i>HC Topics</i>
SDG1	<ul style="list-style-type: none"> – Human dignity in the workplace and working environment – Self-determined working arrangements – Environmentally-friendly behavior of staff – Co-determination and transparency within the organization
SASB Standards	<ul style="list-style-type: none"> – Employee Engagement – Diversity & Inclusion – Labor Practices – Employee Health & Safety
GRI Guidelines	<ul style="list-style-type: none"> – Programs for upgrading employee skills and transition assistance programs
	<ul style="list-style-type: none"> – Workers representation in formal joint management-worker health and safety committees – Ratio of basic salary and remuneration of women to men
UN Global compact	<ul style="list-style-type: none"> – The effective abolition of child labor – The elimination of all forms of forced and compulsory labor

With the help of a dynamic topic classification, each of these topics is enlarged using a set of related terms (words or multi-word expressions). First, we manually define relevant terms. Second, we enlarge these term sets using BERT word embeddings (Devlin et al., 2018). BERT word embeddings is an NLP technique that allows to identify related and similar terms based on their occurrence in similar linguistic contexts (distributional similarity). Finally, we use topic modeling on the data to discover new themes.

¹ SDG topics that are related to employees based on the ECG model (Kasper and Hofielen 2021).

A dynamic topic classification enables the development of a hierarchy of ESG topics. The classification starts with the main concept such as HC and its assignment to the E, S, or G pillar. It further lists and categorizes ESG topics based on its overarching domain. As a last step, the existing topics are enriched with subtopics that deliver concrete guidance on the actions that are related with the respective topic in the hierarchy. With the help of unstructured data sources and NLP, more than 80 fine-grained HC topics are constructed. Figure 2 shows only an excerpt from the taxonomy for HC:

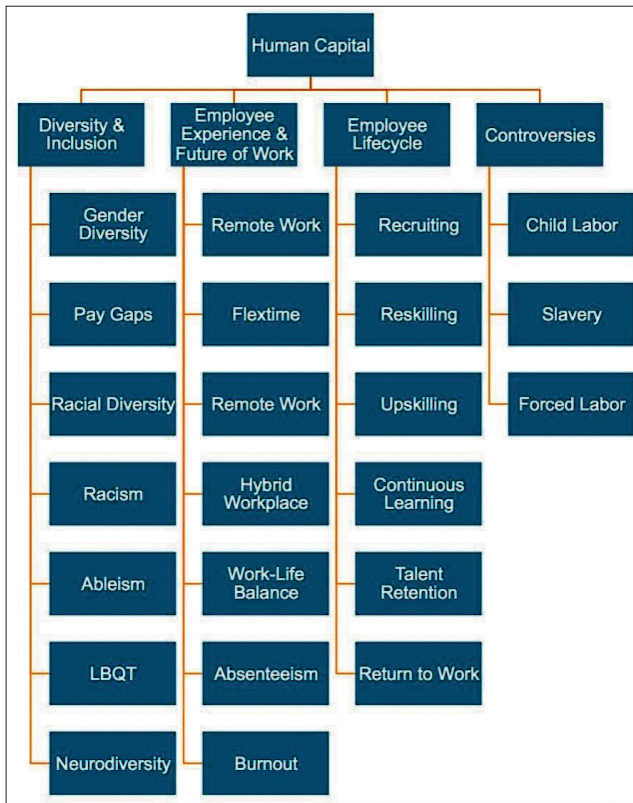


Figure 2. Excerpt from the HC topic classification constructed based on Big Data and NLP

4. KEY FINDINGS

As an example, for the development of a dynamic topic classification based on unstructured data analysis, the topic «Diversity & Inclusion» is expanded with terms such as Inclusion, Racial Diversity, Ableism, LGBTQ, and Neurodiversity. The following matrix in figure 3 shows the subtopics for Diversity & Inclusion as well as their relevance for various industries:

	Fashion	Education IT	Consumer Industrials Telco	Staples	Energy	Agriculture	Financials	Healthcare	Automotive	Real Estate	Utilities	Materials		
Equality	0.51	0.48	0.45	0.46	0.58	0.25	0.47	0.24	0.44	0.51	0.43	0.28	0.47	0.27
Gender Diversity	0.55	0.54	0.59	0.33	0.58	0.24	0.4	0.26	0.26	0.21	0.36	0.5	0.3	0.28
Pay Gaps	0.48	0.48	0.65	0.57	0.43	0.4	0.44	0.51	0.71	0.37	0.41	0.28	0.45	0.26
Racial Diversity	0.75	0.48	0.4	0.56	0.57	0.44	0.51	0.41	0.25	0.3	0.17	0.39	0.45	0.26
Racism	0.65	0.51	0.52	0.47	0.4	0.41	0.33	0.42	0.41	0.49	0.45	0.21	0.32	0.3
Ableism	0.84	0.84	0.75	0.62	0.27	0.31	0.21	0.22	0.47	0.28	0.44	0.14	0.29	0.24
LGBT	0.86	0.53	0.47	0.43	0.45	0.44	0.24	0.4	0.14	0.49	0.37	0.4	0.27	0.15
LGBTQ+	1.0	0.72	0.48	0.41	0.38	0.35	0.2	0.38	0.1	0.18	0.24	0.2	0.16	0.26
Neurodiversity	0.58	0.69	0.64	0.42	0.5	0.26	0.23	0.18	0.23	0.15	0.07	0.34	0.0	0.29

Figure 3 Subtopics for «Diversity & Inclusion» and their industry relevance; the scores correspond to the «similarity» between the embeddings of row and column concepts, as measured by cosine similarity. For better readability, they are scaled to the [0, 1] interval, with 0 used for the least similar concept pairs (e. g. Neurodiversity / Utilities) and 1 used for the most similar concept pairs (LGBTQ+ / Fashion).

Based on an existing ESG topic that has been classified in frameworks such as the SDGs or other ESG standards, dynamic topic classification allows for a more fine-grained development and definition of relevant subtopics that provide further guidance and insights.

While Diversity & Inclusion is a standard and known ESG topic, dynamic topic classification also identifies themes that are not yet overtly covered in the common ESG frameworks. For example, since 2020, there is a constant increase of attention to employee

wellbeing and the Future of Work. The algorithm identifies the following topics and weights them by industry relevance:

	IT	Fashion	Agriculture	Education	Utilities	Financials	Materials	Real Estate	Automotive	Industrials	Consumer Energy	Staples	Healthcare	Telco
Absenteeism	0.82	0.42	0.51	0.42	0.43	0.48	0.41	0.34	0.46	0.2	0.25	0.58	0.45	0.07
Burnout	0.8	0.5	0.34	0.42	0.46	0.56	0.46	0.21	0.3	0.3	0.33	0.32	0.63	0.01
Remote Work	0.75	0.89	0.55	0.52	0.53	0.36	0.67	0.65	0.54	0.59	0.51	0.28	0.41	0.43
Work-from-anywhere	0.64	0.99	0.73	0.58	0.43	0.48	0.59	0.49	0.64	0.44	0.46	0.44	0.3	0.44
Flexitime	0.91	0.68	0.19	0.71	0.4	0.62	0.22	0.48	0.31	0.54	0.37	0.46	0.44	0.64
Hybrid Workplace	0.63	0.69	0.92	0.38	0.85	0.42	0.41	0.63	0.69	0.49	0.67	0.32	0.13	0.28
Work Life Balance	0.58	0.82	0.37	0.51	0.29	0.24	0.24	0.16	0.0	0.35	0.27	0.42	0.08	0.23

Figure 4 Subtopics for the topic«Future of Work»and their industry relevance; the scores correspond to the «similarity» between the embeddings of row and column concepts, as measured by cosine similarity. For better readability, they are scaled to the [0, 1] interval, with 0 used for the least similar concept pairs (e. g. Work-Life Balance / Fashion) and values near 1 used for the most similar concept pairs (e. g. Work-from-anywhere / Fashion).

The Future of Work as a recent and developing ESG topic is linked with its subtopics such as Remote Work, Burnout, Work-from-anywhere and a Hybrid Workplace.

Exploring topics that are not yet covered in ESG frameworks allows for the integration of new topics that enter the ESG domain due to an increase of its relevance and for the anticipation of evolving business risks and value criteria.

5. DISCUSSION

Using existing ESG frameworks and unstructured text data sources, the dynamic topic classification detects more than 80 topics that are relevant in the data sample. By contrast, most of the considered frameworks contain up to seven high-level HC topics. A dynamic topic classification is more fine-grained and thus can not only be used for reporting and assessment, but also provides concrete guidance for actual HC measures and research. It is also dynamic in the sense that the scope and weightings of the topics

are continuously updated based on the data. Using such a dynamic classification, we construct two matrices that show the associations and relevance of two HC topics, namely Diversity and Inclusion and the Future of Work, with main industries. Both matrices can be used by stakeholders to understand the relevance of specific HC issues to companies in given industries. Additionally, the industry matrices can also be used by companies to understand the HC issues on which they should be acting in the first place. Finally, the paper shows a replicable, transparent approach to the data-driven discovery of HC topics, which can be used continuously to monitor the domain and extend or adjust the classifications.

6. VALUE, IMPLICATIONS AND FUTURE RESEARCH

The implications of HC as a non-financial value driver are not only influencing corporate strategies and communications but also financial investors to consider additional metrics and concepts in the valuation of companies. Sollosy et al. (2016) call HC «a strategic asset whose time has come to be recognized on organizations' financial statements» (Sollosy et al. 2016, p. 1). However, the concept of HC is still contested. ESG delivers new opportunities to access HC with ESG frameworks and unstructured data sources. Such a holistic approach can have great implications on the understanding of HC as an intangible and sustainable value driver and on the understanding of corporate value creation from a human-focused perspective that also puts human behavior and values in the center of corporate activities.

Future research can apply a dynamic topic classification for analyzing ESG topics other than HC. Apart from analyzing industry relevance, the relevance of geographies and languages can be further included in further research approaches. The strategic management domain, ESG researchers, and practitioners can benefit from research approaches that go beyond the analysis of corporate ESG disclosures by integrating additional data sources and by considering a stakeholder view.

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12. SUSTAINING THE MENTAL HEALTH OF UNIVERSITY STUDENTS DURING THE COVID-19 PANDEMIC

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Abstract: This paper aims to contribute to SDG 3 (good health and well-being) in Higher Education by analysing the antecedents of burnout for University students during the Covid-19 pandemic. With a sample of 153 students, we investigate the effects of fears related to Covid-19 (Health Fears and Academic Fears) and the effects of academic expectations on three dimensions of burnout - Exhaustion, Cynicism, and Efficacy. For this purpose, we test a conceptual model with structural equations modelling. Results indicate that Health Fears are negatively associated with expectations of International Mobility and Social Interactions, and positively associated with Exhaustion. Academic Fears are positively associated with expectations of Social Interactions and Quality of Edu-

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cation. The expectation of Quality of Education is positively associated with Efficacy and negatively associated with Exhaustion and Cynicism. Finally, the expectation of Political Engagement and Citizenship is positively associated with Exhaustion and Cynicism. Overall, the model explains 37.8% of the variance of Efficacy, 19.4% of Cynicism, and 11.9% of Exhaustion.

Keywords: Higher education, Covid-19, Burnout, Expectations, University students

1. INTRODUCTION

Since the beginning of the current pandemic context, in March 2020, Universities have faced significant constraints and new challenges in their endeavours towards sustainable development and the common good. Crawford and Cifuentes-Faura (2022) conducted a systematic review of manuscripts that discuss sustainability in higher education during the pandemic context. The results indicate that there was a focus on SDG 4 (inclusive and equitable quality education), SDG 8 (decent work and economic growth), and SDG 9 (industry, innovation, and infrastructure). The absence of SDG 3 (good health and well-being) is surprising, given that many studies have widely reported the negative consequences of the pandemic context for the mental health of University students (Cao et al., 2020; Rudenstine et al., 2021; Savage et al., 2020; Zolotov et al., 2020),

Due to the Covid-19 pandemic, in the academic year 2019-2020 students had additional and unprecedented sources of stress. Fears of contracting the disease and fears related to the sudden need to adapt to online classes made the academic year extremely challenging. This paper analyses the effects of these health fears and academic fears on students' levels of burnout at the end of the 2019-2020 academic year. We will also analyse the role of academic expectations as an antecedent to burnout. For these expectations, we will not only consider topics traditionally related to University life, such as acquiring a solid knowledge in a particular field of

studies and participating in social activities, but also topics related to the general interest of society, such as participating in activities that contribute to solving the problems of contemporary society.

With these analyses, we aim to contribute to the identification of ways to prevent burnout and, consequently, to enhance the mental health of University students in a sustainable way. Further than contributing to SDG 3 (health and well-being) in Higher Education, we also aim to contribute to an understanding of Higher Education as a common good, based on the principles of general interest and cooperation (Ejarque & Campos, 2020; Felber et al., 2019).

This paper is organized as follows. After this introduction, section 2 presents a literature review on burnout and expectations of University students, as well as the fears caused by the Covid-19 pandemic. At the end of this section, the research model and the hypotheses are presented. Section 3 describes the method of the empirical study, including the sample characteristics and the instruments used, and section 4 presents the results of the statistical analysis of the research model. Finally, section 5 outlines the main contributions of the study, its limitations, and some possible avenues for future research.

2. LITERATURE REVIEW

2.1 Burnout of University students

Burnout syndrome is a prolonged response over time to chronic interpersonal stressors at work (Maslach, 1993). The work of Schaufeli et al. (2002) is a reference to the study of burnout in University students. The authors confirmed a three-factor structure of burnout, including the dimensions of Exhaustion, Cynicism, and (Reduced) Efficacy. While Exhaustion is measured with items related to fatigue, Cynicism reflects indifference or a distant attitude towards academic work, and Efficacy encompasses feelings of inability regarding social and non-social aspects of academic

accomplishments. Burnout syndrome in Higher Education has been associated with serious negative consequences for students' academic results and mental health. Previous research has indicated that burnout may lead to lower academic performance (Lin & Huang, 2014; Madigan & Curran, 2021), withdrawal intentions and dropout (López-Aguilar & Álvarez-Pérez, 2021; Williams et al., 2018), and even suicidal ideas (Galan et al., 2014).

Given the potential negative impacts of students' burnout, identifying its antecedent factors became a major concern for researchers. This study also attempts to investigate antecedent factors of burnout, focusing on the under-researched topic of academic expectations. Expectations have been widely recognized as a relevant factor for the adaptation of students to University life, as well as for their academic performance and dropout intentions (Brattesani et al., 1984; Casanova et al., 2019; Cole et al., 2009; Helland et al., 2002; Kinnunen et al., 2018). While there is some evidence indicating that expectations are related to burnout (Bloom et al., 1988; Cordes & Dougherty, 1993; Maslach et al., 2001; Thomas et al., 2019), we were unable to find studies investigating the link between expectations and burnout for the particular case of University students.

2.2 Expectations of University Students

Although the concept of academic expectations is sometimes restricted to the belief in the ability of the individual to succeed academically (Brattesani et al., 1984; Levi et al., 2014), there is growing evidence of its multidimensionality (Borghi et al., 2016; Casanova et al., 2019; Diniz et al., 2018). Acknowledging the multidimensionality of academic expectations, Diniz et al. (2018) define them as «motivations and cognitions, such as students' perceptions, aspirations, and desires, related to their learning experiences and development». Following Deaño et al. (2015), they consider seven dimensions: 1) Training for Employment (expectations regarding

the preparation for the transition into the labour market and the future career); 2) Personal and Social Development (expectations related to the development of personal traits such as autonomy and responsibility); 3) Student Mobility (aspirations to participate in international exchange programs or international internships); 4) Political Engagement and Citizenship (aspiration to participate in volunteer work or to contribute to society); 5) Social Pressure (desire to live up to the expectations of family and friends); 6) Quality of Education (expectations regarding the scientific content of the studies, and desire to participate in research activities); and 7) Social Interactions (desire to participate in social events as well as in leisure and extracurricular activities). This seven-dimension model has been widely tested in Portugal and Spain (Araújo et al., 2015; Casanova et al., 2019; Deaño et al., 2015; Diniz et al., 2018; Gil et al., 2013).

2.3 University students fears related to the pandemic situations

Since the declaration of Covid-19 pandemic in March 2020, University students around the globe had to abruptly transition from on-campus classes to online classes. Remote learning limited the social connections with professors and other students, and also entailed new problems, since not all students had access to good wi-fi connection, a performant computer, or a quiet place to work from home. As a consequence, students had not only to deal with the fear of contracting the disease, but also the fear of negative effects for their academic learning and academic results. For academic fear, research indicate that students fear that they will learn less and that their academic record will be affected (Gil Villa et al., 2020; Zolotov et al., 2020), ultimately leading to academic delay or failing the academic year (Aucejo et al., 2020; Hossain et al., 2021).

2.4 Research model and hypotheses

Previous studies have noted that fears related to Covid-19 are associated with negative effects for University students' mental-health, namely in what concerns anxiety and depression (Chen et al., 2021; Yang et al., 2021). A possible reason for this is that these fears cause tension and a sense of helplessness (Chen et al., 2021; Saricali et al., 2020). In light of this evidence, we propose:

H1: Fears related to Covid-19 will be positively associated with burnout levels of University students.

Research has shown that fear is significantly related to the way in which situations are appraised, distorting risk perceptions and enhancing the perception of situations as threatening (Espinola et al., 2016; Turska & Stepień-Lampa, 2021). Consequently, it stands to reason to argue that the higher the fears related to Covid-19, the more negatively students will assess their academic situation. Thus, we propose:

H2: Fears related to Covid-19 will be negatively associated with positive academic expectations of University students.

Previous research indicates that positive expectations are associated with higher levels of well-being for students, by helping them to activate strategies to cope with stress and to activate social support (Jackson & Wilton, 2017; Pancer et al., 2000; Taylor & Aspinwall, 1996). It is therefore arguable that positive expectations may play a role in reducing burnout. Thus, we propose:

H3: Positive academic expectations of University students will be negatively associated with burnout

Figure 1 depicts the research model and the relationships under study.

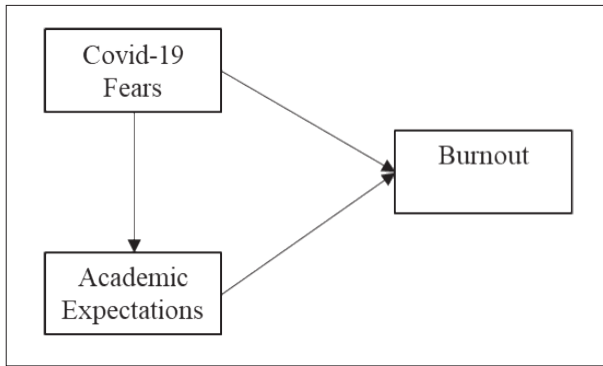


Figure 1 Research Model

3. METHOD

To collect data, we sent an e-mail to undergraduate students of the Lisbon School of Economics and Management, which is part of the University of Lisbon in Portugal. The e-mail provided information on the study and invited students to participate through a link to the Qualtrics platform, which remained active during May 2020.

3.1 Participants

In total, 153 students participated in the study, of which 64,1% are female and 35,9% male. Almost all participants are full time-students (97,4%), and only 2,6% also work. As far as the previous education path is concerned, the majority of participants (86,9%) attended secondary education in public (state-owned) schools, while only 13,1% were enrolled in private schools.

3.2 Instrument

The instrument used included four measures:

- Covid-19 Health Fear – we used the Fear of Coronavirus-19 Scale developed by Ahorsu et al. (2020), originally composed of seven items.
- Covid-19 Academic Fears – we developed a measure of academic fears related to Covid-19 for the purpose of this study. Based on the fears identified by previous studies (e.g., Gil Villa et al., 2020; Zolotov et al., 2020), the questionnaire had 3 items related to fears of learning less, of having worse results, and of failing the academic year.
- Academic Expectations – To measure academic expectations we used the version of the Questionnaire of Academic Perceptions – Expectations (QPA-Exp) by Almeida et al. (2012), with 42 items measuring the seven dimensions of Diniz et al. (2018) which we mentioned previously.
- Burnout - To measure burnout we used the Maslach Burnout Inventory – Student Survey (MBI-SS), by Maslach et al. (1996). We acquired a license from MindGarden, Inc to use this instrument legally.

4. RESULTS

To test the model under study, we use structural equation modelling (SEM), with partial least square analysis (PLS). PLS is particularly recommended for exploratory research with small samples since it provides reliable estimates in situations where covariance-based models fail (Henseler et al., 2014). The software used was Smart PLS version 3.0 (Ringle et al., 2015).

4.1 Measurement models

Initial analysis with PLS showed some problems of reliability for the Social Pressure scale and discriminant validity for the Training for Employment scale and the Personal and Social Development scale. Consequently, these three scales were excluded from the final model. In the remaining scales, items with low loadings (<0.5) were also excluded. Reliability tests included the analysis of Cronbach's Alpha and composite reliability, for which the threshold is 0.7 (Hair et al., 2017). For all the constructs in the model, Cronbach's Alpha and composite reliability are above 0.8.

Validity tests included an assessment of both convergent validity and discriminant validity. For convergent validity, two assessments were undertaken. First, we analysed the Average Variance Extracted (AVE), for which the threshold is 0.5 (Hair et al., 2017; Henseler et al., 2009). For all the constructs in the model, the AVE is above 0.5. Second, we analysed bootstrap t-statistics of the indicators' standardized loadings. They were all found to be significant at the one percent significance level ($t > 3.29$; $p < 0.001$), thus indicating a high convergent validity (Hair et al., 2017).

Subsequently, we used Fornell and Larcker's (1981) criterion to analyse discriminant validity. This criterion consists of comparing the square root of the AVE with the correlation for each pair of latent variables. The results indicate that each latent variable shares more variance with its own measurement than with other constructs, providing evidence of discriminant validity.

4.2 Structural model

We used bootstrapping and pseudo t-tests to analyse the significance of the path coefficients (Henseler et al., 2009). Of the twenty-six direct relationships under study, only ten were significant (Table 1).

TABLE 1 Significant direct effects

		β	t test	p-	f 2
H1	Health Fear --> Exhaustion	0.238	2.664	0.008	0.064
H2	Health Fear--> International Mobility	-0.195	2.152	0.031	0.040
H2	Health Fear--> Social Interactions.	-0.255	2.886	0.004	0.073
H2	Academic Fear --> Social Interactions	0.266	2.321	0.020	0.080
H2	Academic Fear --> Quality of Education	0.222	1.998	0.046	0.052
H3	Quality of Education .--> Efficacy	0.615	10.455	0.000	0.608
H3	Quality of Education--> Exhaustion	-0.366	2.768	0.006	0.068
H3	Quality of Education--> Cynicism	-0.608	4.543	0.000	0.209
H3	Political Engagement and Citizenship --> Exhaustion	0.310	2.046	0.041	0.050
H3	Political Engagement and Citizenship --> Cynicism	0.290	2.007	0.045	0.047

As far as the relationship between Covid fears and the dimensions of burnout is concerned, only the positive relationship between Health Fear and Exhaustion is significant ($\beta = 0.238, p = 0.008$). Thus, H1 is only partially validated.

Four relationships between Covid fears and Expectations are significant: the negative relationship between Health Fear and the two variables International Mobility ($\beta = -0.195, p = 0.031$) and Social Interactions ($\beta = -0.255, p = 0.004$), as well as the positive relationship between Academic Fear and the two variables of Social Interactions ($\beta = 0.266, p = 0.020$) and Quality of Education ($\beta = 0.222, p = 0.046$). H2 is also only partially validated.

Analysing the relationship between Expectations and Burnout dimensions, it appears that the variable Quality of Education has a significant relationship with the three dimensions of burnout, while the variable Political Engagement and Citizenship only has a significant relationship with the dimensions of Cynicism and Exhaustion. Quality of Education has a negative relationship with Exhaustion ($\beta = -0.366, p < 0.001$) and Cynicism ($\beta = -0.608, p = 0.006$), and a positive relationship with Efficacy ($\beta = -0.615, p$

<0.001). In turn, the variable Expectations of Political Engagement and Citizenship has a positive relationship with Exhaustion ($\beta = 0.310, p = 0.041$) and Cynicism ($\beta = 0.290, p = 0.045$). In light of these results, H3 is only partially validated. Figure 2 shows the final model, depicting the significant relationships.

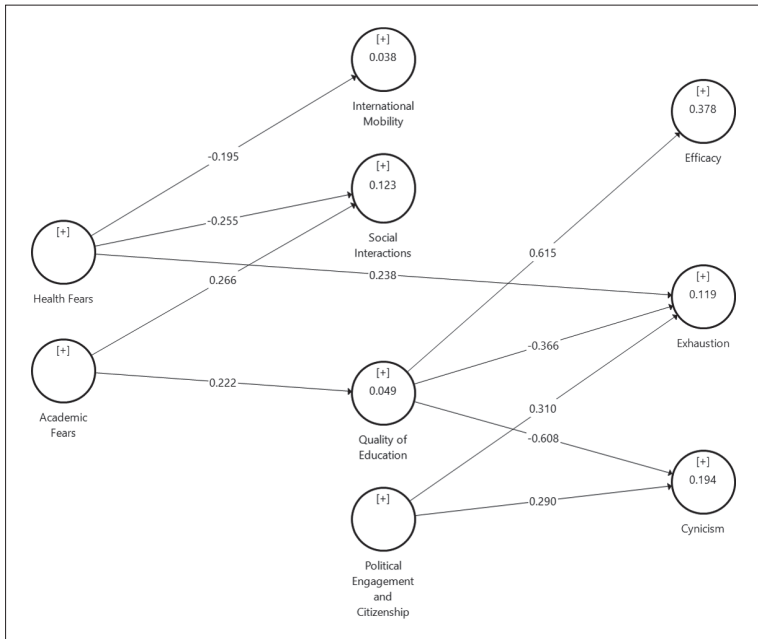


Figure 2 Final Structural Model

Besides the bootstrapping t-test of the path coefficients, we also analysed their effect sizes (f^2). According to Cohen (1988), a value of 0.02 for f^2 indicates a weak effect, 0.15 a moderate effect and 0.35 a large effect. Therefore, it appears that all the effects are weak, except for the relationship between Quality of Education and Cynicism, where the effect is moderate ($f^2 = 0.209$), and between Quality of Education and Efficacy, where the effect is large ($f^2 = 0.608$).

In order to assess the explanatory power of the model, we analysed the coefficient of determination (R^2) of the endogenous constructs. The model explains 37.8% of Efficacy, 11.9% of Exhaustion, and 19.4% of Cynicism. Finally, we used blindfolding to calculate Stone-Geiser's Q^2 . Since in all cases the values of Q^2 are above zero, the model is considered to have predictive relevance (Hair et al., 2017).

5. DISCUSSION AND CONCLUSION

This paper presents some contributions regarding the antecedents of burnout for University students during the Covid-19 pandemic. By analysing the joint and the differentiated effect of fears related to Covid-19 and the academic expectations, it was possible to have a more detailed view of the effects of these variables on burnout. Firstly, while Covid fears mainly have negative effects for the expectations of Social Interactions and International Mobility, these expectations have no effects on burnout dimensions. It is possible that this is due to the fact that the limitations on Social Interactions and International Mobility are seen as being merely temporary and thus are not a source of worry for students.

The expectations variables that directly impact burnout are Quality of Education and Political Engagement and Citizenship. While higher expectations of Quality of Education contribute to decrease burnout, higher expectations of Political Engagement and Citizenship contribute to increase burnout. It is understandable that when students have higher expectation for Quality of Education they feel that their time and efforts are put to good use, have better prospects for their future and consequently feel less tension and less burnout. The relationship between Political Engagement and Citizenship and burnout is surprising and requires further research. We can only suggest that it is possible that this expectation enhances burnout because students with higher Political Engagement and Citizenship expectations feel more tense because they are not able

to contribute to society in the current context. They may also feel that their studies have no connection with the general interest of society in such a challenging situation.

This study has several limitations, the most obvious being the small sample size, where only first-year students were included, as well as the fact that data were collected in only one University, where all students were from the same study area (Economics and Management). Also, the study was undertaken during the early stage of the pandemic (May 2020) and the relationships among variables may be different in more recent stages. On the other hand, the study does not include individual disposition variables (e.g., locus of control) and academic context variables (e.g., workload) which may act as moderators in the relationships under study. Lastly, the use of a quantitative method did not allow for the interpretation of the results obtained. Follow-up interviews would have been particularly helpful for understanding the unexpected results concerning the expectations of Political Engagement and Citizenship.

For future studies we suggest the use of broader and more diversified samples, and the comparison of results in post-pandemic contexts. The inclusion of individual and contextual variables and the use of a mixed-method approach would also enrich the current knowledge of antecedents of burnout for University students and thus contribute to SDG 3 (good health and well-being) in Higher Education. A detailed exploration of the role of expectations of Political Engagement and Citizenship may also contribute to an understanding of Higher Education as a common good, based on the principles of general interest and cooperation.

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The “II Economy for the Common Good International Conference 2022”, under the slogan “Connecting Sustainability Organizational Models with SDGs”, aimed at bringing together those scholars working on topics related to the ECG and other sustainability approaches. It provided a platform for a critical review, a resonance space, and a platform for networking. To do so, the conference included 8 tracks, namely: (1) Principles, Antecedents, Methodologies and Foundations of ECG; (2) Embedding Sustainability into Strategic Management Processes; (3) Sustainable Human Resource Management; (4) Sustainability Strategies; (5) Sustainability and SDGs in Higher Education; (6) Sustainability and SDGs, Impact Measurement and Non-Financial Reporting in SMEs; (7) The Political Relevance of Alternative Sustainability Frameworks; and (8) Sustainability, AI, Digitalization and Innovation.

As a result, the present book comprises the main works, based on the received submissions, presented during the II ECGIC 2022 held in March 2022 at the University of Valencia. Thus, this scientific book allows analysing several topics such as sustainable development, corporate sustainability, social responsibility, and SDGs. Therefore, being of great interest to both academia and practitioners related to sustainability and corporate social responsibility fields.

