The Impact of University Sustainability Agenda on the Development of Founder Identity in Different National Cultures

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RESEARCH MOTIVATION

➢ Entrepreneurial activity as a driver of economic development and growth (Audretsch, Keilbach, & Lehmann, 2006; Bosma et al., 2018).

➢ However, there is a growing prominence of *the social role of entrepreneurship* (McMullen & Warnick, 2016; Zahra & Wright, 2016) -> There is a need for more diverse *social identities* ('*who I am*' and '*what I do*') among those individuals who start their own business (Fauchart & Gruber, 2011).

➢ According to the *embeddedness theory*, different types of contexts significantly shape the decision-making process and behavior of entrepreneurs (Anderson & Miller, 2003; Müller & Korsgaard, 2018; Parkinson et al., 2020; Shirokova, Tsukanova, & Morris, 2018). However, the exact mechanism has yet to be unpacked. Given that the embeddedness is multifaceted (Wigren-Kristoferson et al., 2022), it is still unclear how the factors of different levels work together.

Research question: *How does national culture impact the development of social identity of young entrepreneurs? How does a university sustainability agenda mediate this relationship?*

KEY DEFINITIONS

➢ *Social identity* is an individual's sense of self which is critical to beliefs, feelings, values, and actions in all social contexts, including new firm creation (Fauchart & Gruber, 2011)

Social Identity Type	**Characteristics**
Darwinian	Profit-orientation, focusing on the competition with other firms and their own economic self-interest
Communitarian	Offering employment opportunities for local residents, keeping local capital in the communities, providing a local investment option for shareholders, etc.
Missionary	Engaging in political and social activism on a global scale, pursuing ecological responsibility and transparency in its operations, etc.

KEY DEFINITIONS

➢ *National culture* is a set of assumptions, values, and beliefs that are shared between members of a specific group (Hofstede, 1991)

National Culture	Characteristics
Performance Orientated	Aimed at reflecting the extent to which a social agent values reward, high standards, taking initiative, increase in performance (Abu-Jarad et al., 2010)
Humane Orientated	The society rewards individuals for being altruistic, generous, caring; it values informal relationships, local traditions, mentoring, individualized considerations, etc. (Abu-Jarad et al., 2010)
Future Orientated	Focuses on the temporal orientation of the majority of people in society and tends to have a longer strategic orientation, long-term success, planning, etc (Abu-Jarad et al., 2010)

KEY DEFINITIONS

➢ Since adoption of 17 Sustainable Development Goals (SDGs) by the UN in 2015, higher education institutions have played an important role in the effort to attain these goals (Purcell et al., 2019).

University agenda	Characteristics
Focus on Innovation	University is focused on the development of research, technology, innovation, and entrepreneurship
Focus on Collaboration	University is focused on the collaboration with local authorities/firms to provide employment for all students
Focus on Green Practices	University is focused on the development of sustainable and green practices to mitigate climate change

THEORETICAL FRAMEWORK & HYPOTHESES

➢ *Social identity perspective (*Fauchart & Gruber, 2011*) and cultural embeddedness theory* (Granovetter, 1985)

National culture influences the cognition of entrepreneurs, their motivation, passion, and behavior (Greenman, 2013). It plays a double role, either constraining their cognition and action, or enabling new forms of thinking and behavior (Thornton, Ocasio, & Lounsbury 2012). In this study, we refer to the constraining role by suggesting that dominant values and beliefs shape the evolvement of specific social identity types among entrepreneurs:

H1a: Performance-oriented national culture is positively related to the Darwinian social identity of entrepreneurs

H1b: Humane-oriented national culture is positively related to the Communitarian social identity of entrepreneurs

H1c: Future-oriented national culture is positively related to the Missionary social identity of entrepreneurs

THEORETICAL FRAMEWORK & HYPOTHESES

➤ ***Embeddedness as a multifaceted phenomenon*** (Wigren-Kristoferson et al., 2022)

A properly adjusted and maintained educational system and environment within an institution has a vital role to play when it comes to fostering and acquiring the traits that are essential for aspiring new business founders. So, the university environment, that can be represented by specific educational frameworks or strategic agendas, may serve as an explanation of the relationship between national culture and the social identity of student entrepreneurs:

H2a: The university focus on innovation mediates the relationship between Performance Orientation and Darwinian social identity type.

H2b: The university focus on collaboration mediates the relationship between Humane Orientation and Communitarian social identity type.

H2c: The university focus on green practices mediates the relationship between Future Orientation and Missionary social identity type.

THEORETICAL MODEL
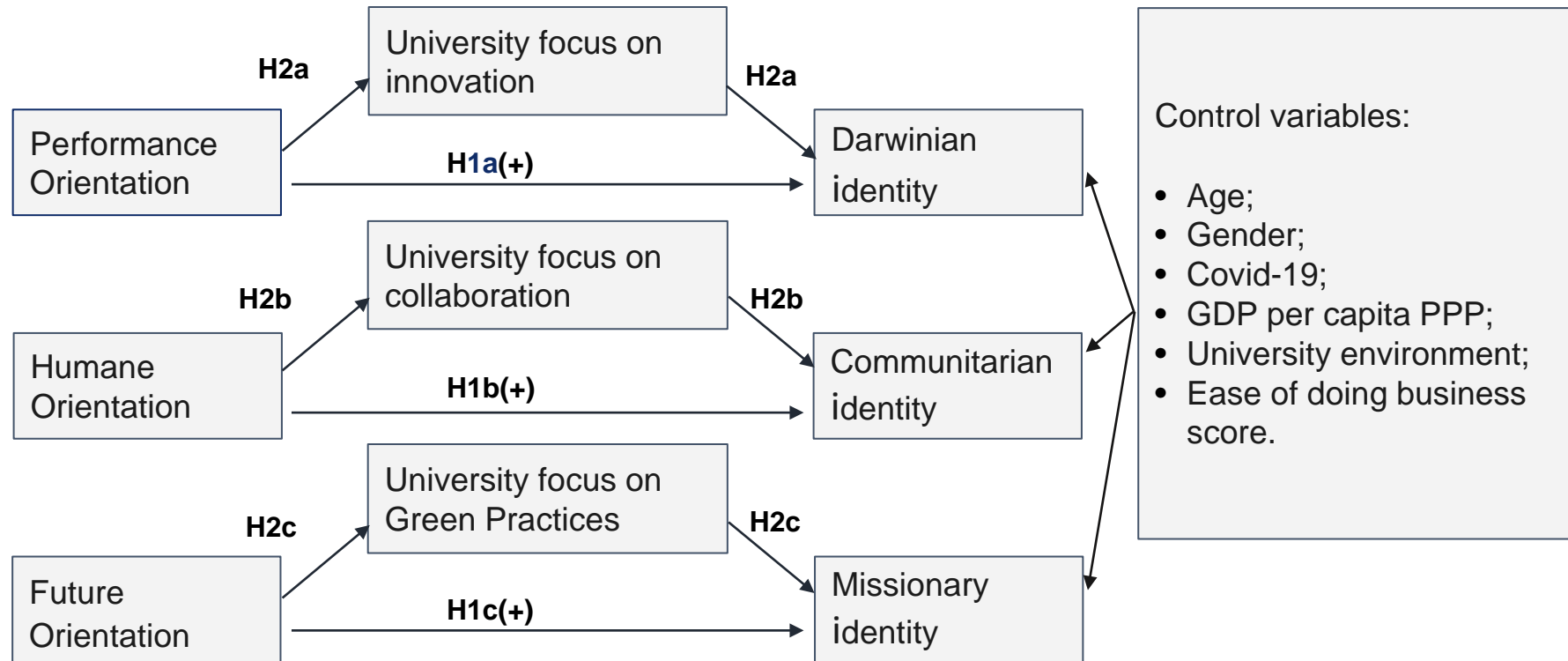
DATA & METHOD

➢ **Global University Entrepreneurial Spirit Students' Survey (GUESSS).** Data were collected in 2021 using an online survey. A total of 267,366 students from 58 countries completed the survey. A subsample of active business founders was selected.

- DVs: founder social identity scale (Sieger et al., 2016)

- Mediators: university sustainability agenda scale

- Controls: age of the founder; gender of the founder; COVID-19 (affected business), university environment

➢ **Globe project**. For 32 countries from 58 of those participated in GUESSS survey the estimation of the national culture orientations were found -> *the final sample included 6,571 observations from 32 countries*

- IVs: dimensions of national culture

➢ **International Monetary Fund Open Data, The World Bank indicators** (control variables).

- Controls: GDP per capita, constant prices, purchasing power parity (2018-2020), Ease of doing business (2020)

➢ **Method:** Regression analysis (hierarchical linear modeling HLM); Baron and Kenny approach (for testing mediation)
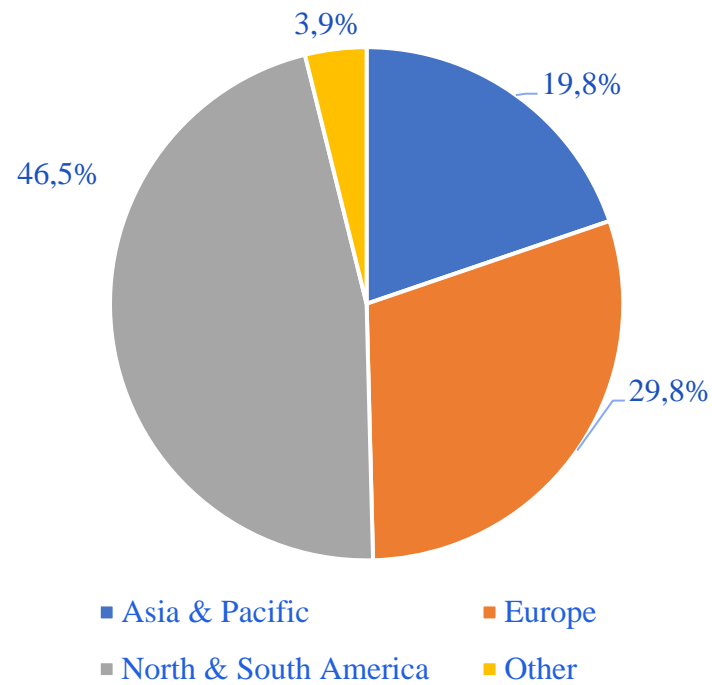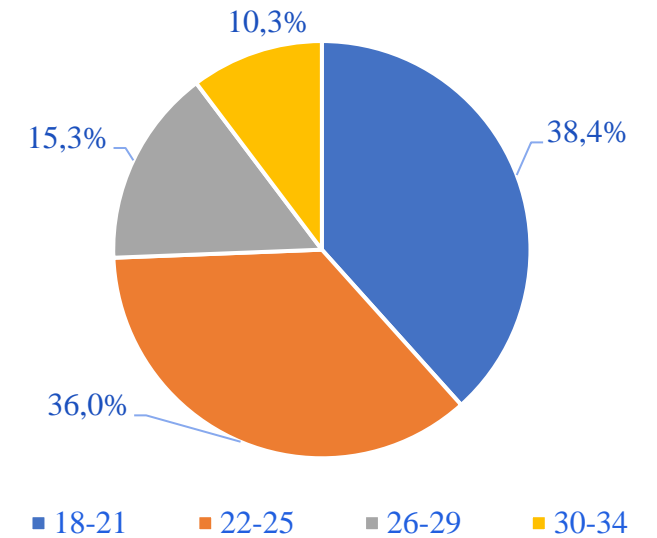
DESCRIPTIVE STATISTICS
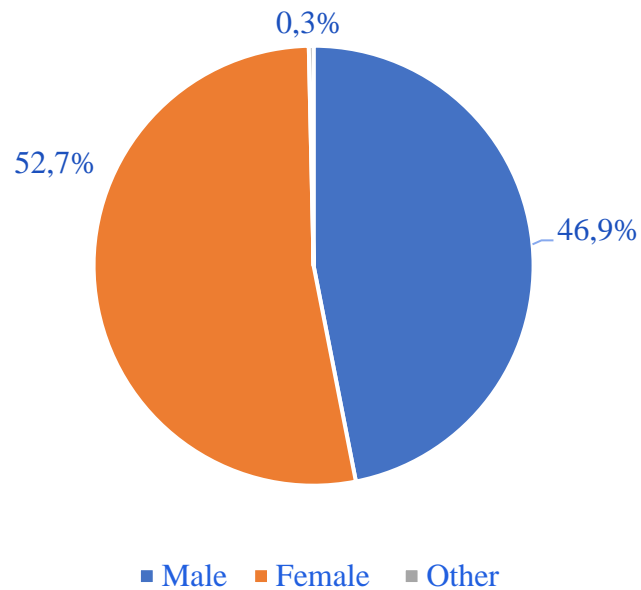
RESULTS

Hypotheses	All countries	High income countries	Middle income countries	Low income countries
H1a: Performance-oriented national culture is positively related to the Darwinian social identity of entrepreneurs – REJECTED	-0.096*** [0.000]	-0.855*** [0.000]	0.005 [0.853]	0.14* [0.033]
H1b: Humane-oriented national culture is positively related to the Communitarian social identity of entrepreneurs – REJECTED	-0.175*** [0.000]	-1.573*** [0.000]	-0.074 [0.195]	-0.163 [0.064]
H1c: Future-oriented national culture is positively related to the Missionary social identity of entrepreneurs – SUPPORTED	0.114** [0.005]	-0.592*** [0.000]	0.071 [0.175]	0.757*** [0.000]

* - <0,05 ; ** - <0,01; *** - <0,001

RESULTS

Mediation Predictors	Baron and Kenny approach	RIT (Indirect effect / Total effect)	RID (Indirect effect / Direct effect)
H2a: The university focus on innovation mediates the relationship between Performance Orientation and Darwinian social identity type – **SUPPORTED**	Complete mediation	39%	The mediated effect is 0,6 times as large as direct effect
H2b: The university focus on collaboration mediates the relationship between Humane Orientation and Communitarian social identity type – **PARTIALLY SUPPORTED**	Partial mediation	14%	The mediated effect is 0,2 times as large as direct effect
H2c: The university focus on green practices mediates the relationship between Future Orientation and Missionary social identity type – **PARTIALLY SUPPORTED**	Partial mediation	15%	The mediated effect is 0,2 times as large as direct effect

* - <0,05 ; ** - <0,01; *** - <0,001

DISCUSSION

Expected findings:

- Future Orientation and Missionary social identity type development are positively related.

- For countries with GDP lower than $20,000, the relevant cultural values matter for Darwinian and Missionary identity types

- Innovation agenda completely mediates the relationship between Performance Orientation and Darwinian identity.

Unexpected findings:

- The interdependence between cultural dimensions and social identity development is relatively weak.

- Cultural dimensions negatively affect social identity type development in countries with GDP higher than $40,000. Possible reason: rich countries are less influenced by cultural values and more by economic factors; in rich countries where in general people have a good quality of life the entrepreneurial identity is not highly developed.

DISCUSSION

Theoretical contribution:

➢ To the embeddedness stream of research:

- the study confirms the role of university sustainability agenda as a mechanism of transforming national culture into individual values and believes related to entrepreneurial activity of young entrepreneurs;

- performance oriented values penetrate institutions a lot and navigate their activity and priorities and behavior of their members;

- the study suggests that the economic environment is a better indicator of social identity development of young entrepreneurs than the cultural environment, but for Missionaries cultural values matter.

Practical implications:

➢ The focus on innovation agenda is the most effective in terms of development of entrepreneurial identity among students. It could be at the core of university entrepreneurial environment as it shows the strongest influence on the development of Darwinian entrepreneurial identity.

DISCUSSION

➢ **Limitations:**

- self-reported data;

- limited number of countries represented in the final sample;

- limited number of cultural dimensions.

➢ **Future research:**

- gendered specifics of the social identity development;

- development of a more coherent methodological approach regarding university sustainability agenda (analysis of the websites, main activities, etc.).

Appendix 1

HLM regression model output for *Darwinian social identity* type

	High GDP per capita countries darwinian	Medium GDP per capita countries darwinian	Low GDP per capita countries darwinian	All countries darwinian
gender	-0.167**	-0.0968**	-0.148***	-0.102***
	(0.0552)	(0.0346)	(0.0338)	(0.0230)
age2	-0.000124	-0.0000525	-0.0000309	-0.000215***
	(0.000165)	(0.0000863)	(0.0000912)	(0.0000588)
covid	0.133*	0.00872	-0.0454	0.0390
	(0.0601)	(0.0359)	(0.0358)	(0.0237)
university_env	0.163***	0.0876***	0.111***	0.127***
	(0.0190)	(0.0141)	(0.0154)	(0.00932)
innovation_agenda	0.115***	0.0971***	0.136***	0.114***
	(0.0218)	(0.0166)	(0.0189)	(0.0112)
performance_orientation	-0.855***	0.00509	0.141*	-0.0955***
	(0.0880)	(0.0274)	(0.0658)	(0.0253)
doing_business	-0.0895***	-0.0456***	-0.00415	-0.0212***
	(0.00708)	(0.00499)	(0.00298)	(0.00173)
_cons	15.97***	7.977***	3.907***	6.544***
	(0.802)	(0.458)	(0.491)	(0.238)
N	2027	3580	3614	9221
R^2	0.264	0.115	0.105	0.134

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix 2

HLM regression model output for *Communitarian social identity* type

	High GDP per capita countries	Medium GDP per capita countries	Low GDP per capita countries	All countries
	communitarian	communitarian	communitarian	communitarian
gender	-0.00664	0.0696	-0.100**	0.00562
	(0.0580)	(0.0398)	(0.0363)	(0.0250)
age2	0.000124	0.000388***	0.000612***	0.000347***
	(0.000174)	(0.0000986)	(0.0000903)	(0.0000628)
covid	0.163**	0.132**	0.108**	0.147***
	(0.0630)	(0.0415)	(0.0374)	(0.0258)
university_env	0.187***	0.116***	0.127***	0.162***
	(0.0180)	(0.0149)	(0.0158)	(0.00929)
collaboration_agenda	0.0251	0.0866***	0.125***	0.0644***
	(0.0169)	(0.0154)	(0.0153)	(0.00938)
humane_orientation	-1.573***	0.0738	-0.163	-0.175***
	(0.156)	(0.0570)	(0.0880)	(0.0433)
doing_business	-0.0565***	-0.0649***	-0.00475	-0.0145***
	(0.00751)	(0.00627)	(0.00308)	(0.00167)
_cons	17.17***	8.428***	5.122***	6.037***
	(0.977)	(0.455)	(0.502)	(0.265)
N	1987	3523	3589	9099
R^2	0.192	0.131	0.116	0.114

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix 3

HLM regression model output for
Missionary social identity type

	High GDP per capita countries	Medium GDP per capita countries	Low GDP per capita countries	All countries
	missionary	missionary	missionary	missionary
gender	0.0501	0.0279	-0.0769*	0.00916
	(0.0635)	(0.0433)	(0.0387)	(0.0270)
age2	-0.000302	0.000425***	0.000371***	0.000206**
	(0.000193)	(0.000108)	(0.0000932)	(0.0000677)
covid	0.203**	0.131**	0.00396	0.108***
	(0.0688)	(0.0457)	(0.0399)	(0.0280)
university_env	0.213***	0.140***	0.141***	0.176***
	(0.0203)	(0.0165)	(0.0169)	(0.0103)
green_agenda	0.0905***	0.143***	0.121***	0.113***
	(0.0201)	(0.0171)	(0.0171)	(0.0106)
future_orientation	-0.592***	0.0711	0.757***	0.114**
	(0.122)	(0.0525)	(0.161)	(0.0408)
doing_business	-0.113***	-0.0511***	-0.00405	-0.0213***
	(0.0107)	(0.00601)	(0.00346)	(0.00217)
_cons	15.75***	6.867***	-0.0116	4.647***
	(1.354)	(0.562)	(1.000)	(0.343)
N	1963	3501	3546	9010
R^2	0.202	0.152	0.112	0.150

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$