

Interactions between the promotion of prosocial and pro-self values, and entrepreneurial social identities in shaping value creation aims and passion

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Abstract

Purpose – Due to the different logic of economic or entrepreneurial, and social value creation, hybrid entrepreneurs (entrepreneurs whose organization is committed to create both entrepreneurial and social values) often make compromises at the expense of economic rationality or social value creation. The purpose of this paper is to examine how entrepreneurial social identities interact with the promotion of pro-self and prosocial values to influence hybrid entrepreneurs' choice of predominant values to create and their entrepreneurial passion.

Design/methodology/approach – To answer the research questions, we designed an experiment using an established priming protocol to temporarily increase the saliency of prosocial and pro-self cultural values. In the experiment, students ($n = 203$) with no entrepreneurial experience chose a hybrid venture to join its founding team in three conditions: neutral (control group, $n = 72$), social priming ($n = 65$) and commercial priming ($n = 66$).

Findings – The results indicate that behavioral choices on the type of the predominant value to create are linked to entrepreneurial social identities. The temporary increase in the saliency of prosocial or pro-self cultural values does not affect the predominant value to create through hybrid entrepreneurial venturing, but influences how passionately entrepreneurs act.

Research limitations/implications – The results are based on the behavior of university students who did not risk losing income because of their behavioral choice and could not opt out of entrepreneurship. Even if university students resemble the population of interest, field studies could contribute to the examination of the research questions of this explorative study and corroborate the results. Future studies should examine if, when and how the promotion of prosocial and pro-self cultural values may change entrepreneurs' social identities and primary value creation aims.

Originality/value – The entrepreneurship literature rarely takes into consideration that the effects of cultural values might fluctuate along entrepreneurs' personality traits and identities. This paper examines how entrepreneurial social identities and the temporary promotion of prosocial, and pro-self values interact to influence value creation choices during hybrid entrepreneurial venturing.

Keywords Entrepreneurial social identity, Prosocial values, Pro-self values, Cultural values, Hybrid entrepreneurial venturing

Paper type Research paper

Introduction

Whereas the primary goal of commercial entrepreneurial venturing is to maximize profit and shareholder value, i.e. entrepreneurial value, most entrepreneurs also aim to pursue prosocial goals and create social values (Manolopoulos *et al.*, 2022; Markman *et al.*, 2019; Zahra and Wright, 2016). However, the degree to which entrepreneurs are committed to create social values varies largely (Brieger *et al.*, 2021). By hybrid entrepreneurial ventures, we understand

(Information about the authors can be found at the end of this article.)

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any entrepreneurial organization seeking to create social values next to financial or entrepreneurial values. As hybrid entrepreneurial ventures alleviate social problems that entrepreneurs prioritizing financial and other entrepreneurial goals solely fail to tackle, the stimulation of the creation of social values by entrepreneurs is an important policy aspiration in many countries (Lin-Hi and Müller, 2013; Morsing and Perrini, 2009).

Although, shared values are possible to create (Kramer and Porter, 2011), due to the different logic of the entrepreneurial and social value creation processes, win-win decisions are arguably rare and compromises often must be made at the expense of economic rationality or social value creation (e.g. Gulati, 2022). Still, we face many open questions about how contextual and individual factors interact to influence the choice of the type of value to create in situations when there is a trade-off between the production of social and entrepreneurial values (Battilana and Lee, 2014; Murnieks *et al.*, 2019; Wagenschwanz, 2020).

Numerous theoretical and empirical studies recognize that entrepreneurial phenomena depend on both individual and contextual factors. As for the contextual factors, the concept of entrepreneurial ecosystem reflects the complex system in which ventures form and entrepreneurs act (e.g. Acs *et al.*, 2014). The entrepreneurial ecosystem can be shaped by ensuring an appropriate institutional framework, such as entrepreneurial, individualistic or collectivist cultural values, to increase entrepreneurial behavior and the creation of specific values (Acs *et al.*, 2014; Wurth *et al.*, 2022). Studies indicate, for example, that collectivist cultural values boost social entrepreneurship (e.g. Pinillos and Reyes, 2011). However, a limitation of this line of research is that it rarely takes into consideration that the effects of specific cultural values might fluctuate along entrepreneurs' personality traits and identities (Dacin *et al.*, 2011; Van de Ven *et al.*, 2007; Wagenschwanz, 2020).

As for the individual factors, in the context of entrepreneurship, identity is often used to explain entrepreneurial behaviors that cannot be grounded in economic rationality (e.g. Gruber and MacMillan, 2017; Fauchart and Gruber, 2011). Fauchart and Gruber (2011) delineated three distinct entrepreneurial social identities that are likely to relate to observable behavioral differences; Darwinian (self-centred), Communitarian (community oriented) and Missionary (thinking at the level of the whole society). These three types of entrepreneurs differ in the intended end-user of the values created by them and the mechanisms applied to reach their goals. However, the authors recognize that most entrepreneurs are hybrid and their organizations pursue Darwinian, missionary and communitarian goals parallelly. Thus, prosocial and pro-self cultural values along with entrepreneurs' social identity may simultaneously influence the primary value they choose to create when founding and managing a hybrid venture. Still, we do not have information on how and when temporal contextual changes in the saliency of cultural values influence entrepreneurs' value creation aims.

Therefore, in this study, we examine how the promotion of prosocial and pro-self values, and entrepreneurial social identities interact to influence the choice of the type of the predominant value to create. Policy tools aimed at boosting social value creation are primarily based on soft law instruments, such as showing positive examples, legitimizing social causes, transferring morale commitments and norms (e.g. Bacq and Eddleston, 2018; Pathak and Muralidharan, 2020). Thus, on the one hand, policy actions may cause changes by increasing the saliency of specific cultural values to motivate entrepreneurs to act accordingly. On the other hand, the potential effect of policy actions may be swayed by entrepreneurs' social identity, or alternatively, policy actions can exercise their influence via shaping entrepreneurs' social identity.

Additionally, we examine how passionately hybrid entrepreneurs act after choosing the predominant value to create. Entrepreneurial passion is considered a key aspect of resilience, successful founding and running of ventures (Landström and Mason, 2016; Shane *et al.*, 2020). Therefore, we also examine how passionately the different individuals

intend to create values in specific cultural environments. Entrepreneurial passion is not only based on feelings but linked to role identity (e.g. [Cardon et al., 2017](#)) and the fit between identity and some contextual factors was shown to influence entrepreneurial passion ([Schulte-Holthaus and Kuckertz, 2023](#)). Still, the relationships between founder passion, entrepreneurial social identities and the fit between social identity and cultural values stay unclear and was suggested to be studied by researchers ([Murnieks et al., 2019](#); [Wagenschwanz, 2020](#)). Examining the contextual antecedents of entrepreneurial passion was also proposed ([Lee and Herrmann, 2021](#); [Newman et al., 2021](#)).

In sum, this explorative study not only investigates how the interactions between cultural values and entrepreneurial social identities effect the value creation aims when there is a trade-off between the social and entrepreneurial value creation potential of a hybrid entrepreneurial venturing but also examines the related entrepreneurial passion.

Theory and hypotheses

When studying entrepreneurs' internal motivations and drivers of social value creation, researchers often refer to entrepreneurs' social identity. Entrepreneurial social identity is defined based on how entrepreneurs interpret their experiences and behavioral options considering the archetypic behavior of the group they identify with ([Fauchart and Gruber, 2011](#)). Communitarian founders see their activities as founders as an essential catalyst for the development of the community. They feel that they contribute to the community with their innovative products and value the support they receive from community members. Missionary founders consider their firm a powerful agent of change in society. They pursue their political visions and advance social or environmental causes to establish a better world. Darwinian founders are associated with traditional business-oriented meanings. Darwinians financially tend to outperform Communitarians and Missionaries ([Brändle et al., 2019](#); [Chen et al., 2021](#); [Fauchart et al., 2019](#)) as they have a solid and primary motive of making profits and accumulating personal wealth. However, numerous founders hold hybrid identities. [Fauchart and Gruber \(2011\)](#) mention that considering the increasing demand placed on commercial ventures to produce social values, an increase in the number of entrepreneurs with hybrid identity is expected. A hybrid identity may cause tension within an individual and create dilemmas on how much to stress entrepreneurial value creation, whether to make prosocial or pro-self decisions when, for example, choosing a supplier or a new employee ([Sieger et al., 2016](#)).

Next to individual differences, contextual factors may also influence entrepreneurial phenomena. Entrepreneurial value creation is considered a result of multidimensional interactions between communities of independent actors and both informal and formal institutions within a given territory (e.g. [Acs and Lappi, 2021](#)). As for the informal institutions, according to [Davidsson \(1995\)](#), a supportive culture would enhance the social legitimacy of the entrepreneurial carrier, positive attitude toward entrepreneurship and entrepreneurial thinking and personality characteristics. Findings also indicate that informal institutions play a crucial role in social value creation and have a differential effect on the social and entrepreneurial value creation aims of entrepreneurs. Whereas cultures supporting solidarity do not back commercial entrepreneurship, social enterprises flourish in welfare states amid post-materialistic, prosocial cultural values cherishing solidarity and caring ([Estrin et al., 2016](#); [Stephan et al., 2015](#); [Stephan and Folmer, 2017](#)). Some authors proposed that redistributive welfare states and post-materialistic cultures signal to individuals that it is desirable and a good thing to create social values. In fact, cultural values are likely to affect personal values ([Berger, 1991](#); [Schwartz, 1994](#)). Thus, the social identity of entrepreneurs may be affected by cultural norms. However, personal values are not always reflected in actual behavior as culture may moderate the relationship between values and behavior by imposing norms ([Sagiv and Roccas, 2021](#)).

The above theoretical investigation suggests two pathways through which cultural values may affect the primary value creation aim of hybrid entrepreneurs. First, the temporal increase in the saliency of prosocial or pro-self cultural values may moderate the effect of entrepreneurs' social identity on the creation of specific values. Second, the cultural environment may influence the predominant entrepreneurial identity. Therefore, our first two research questions are:

- RQ1.* Does the increase of the temporal saliency (priming) of prosocial or pro-self cultural values affect the impact of founders' social identity on the choice of the predominant value to create? This would mean that priming would moderate the effect of founders' social identity on entrepreneurial value creation choices.
- RQ2.* Does the increase in the saliency of prosocial/pro-self cultural values influence founders' intention to primarily create social or entrepreneurial values through the changes in entrepreneurs' social identity? This would mean that founders' social identity mediates the effect of cultural values on entrepreneurial value creation choices.

Additionally, we will examine the variations in founder passion across the social identities and the salient cultural values. Entrepreneurial passion is considered key to entrepreneurial success as it increases entrepreneurs' commitments and dedication toward their venture, their persistence and engagements in their actions (Drnovsek *et al.*, 2016; Vallerand *et al.*, 2003). Higher passion was linked to increased investor interest, founding (Cardon *et al.*, 2017; Landström and Mason, 2016; Shane *et al.*, 2020) and venture success (Newman *et al.*, 2021; Santos and Cardon, 2019). First, entrepreneurial passion was defined as the totality of feelings, emotions, enthusiasm and energy (Pollack *et al.*, 2012). Later, passion was extended with the dimension of identity centrality and assessed along the different entrepreneurial roles, e.g. founding or innovation (Cardon *et al.*, 2013; Murnieks *et al.*, 2012). Thus, it is reasonable to suppose that individuals higher in any entrepreneurial social identity will be more passionate about their hybrid entrepreneurial projects (see also Murnieks *et al.*, 2019). Research shows, for example, that entrepreneurs may be passionate not only about commercial entrepreneurship but also about social missions, and passion positively associates with social entrepreneurial intention (Cardon *et al.*, 2017; Chandra *et al.*, 2021).

However, entrepreneurial passion may be influenced by external factors as well. In work and entrepreneurial contexts, the compatibility between people and their environment is often examined through the lenses of the person-environment fit theory (PE fit; e.g. Markman and Baron, 2003; Vleugels *et al.*, 2023). The PE fit theory suggests that individuals are happy and content if there is a congruence between their needs and abilities, and what their environment provides and requires (Edwards *et al.*, 1998; Kristof-Brown and Guay, 2011). The needs-supplies dimension of PE concerns the degree to which the external environment satisfies the needs of individuals acting in the environment. The demands-abilities content dimension relates to the degree to which individual abilities comply with the demands of the environment. Perceived misfit puts psychological, physical and behavioral strains – such as dissatisfaction, stress or anxiety – on individuals whereas fit leads to positive results (Edwards and Shipp, 2007), such as entrepreneurial passion (Schulte-Holthaus and Kuckertz, 2023). Among the contextual factors, institutional support (Ahsan *et al.*, 2021) and life context (Schulte-Holthaus and Kuckertz, 2023) were shown to influence entrepreneurial passion. Still, little is known about the interactions between the promotion of prosocial and pro-self values, and entrepreneurs' social identity in shaping entrepreneurial passion (Chandra *et al.*, 2021). Therefore, we are looking to answer the following research question:

- RQ3.* Does the environment moderate the effect of founders' social identity on founder passion?

Methods

Experimental method was proposed by researchers to be used more frequently to study entrepreneurial phenomena (e.g. [Stevenson et al., 2020](#)). To answer our research questions, we designed an experiment using an established priming protocol to temporarily increase the saliency of prosocial and pro-self cultural values. Priming became a popular experimental technique to temporarily increase the accessibility of specific values in memory. The effects of priming of values are explained by the instinctive rise in the accessibility of mental concepts related to the primed value. Priming was shown to affect the perception of self and behavioral choices in relation to the primed values ([Kawakami et al., 2003](#)).

In our experiment, students ($n = 203$) with no entrepreneurial experience chose a hybrid venture to join its founding team in three conditions: neutral (control group, $n = 72$), social priming ($n = 65$) and commercial priming ($n = 66$). According to [Hsu et al. \(2017\)](#), student samples are likely to be appropriate when students resemble the population of interest, the manipulation is expected to be confounded by students' professional experience, and the experimental design is grounded in a broad theory. Thus, university students following courses in management and entrepreneurship but having no entrepreneurial experience fit to represent first-time founders, the population of interest (see also [Frederiks et al., 2019](#)).

Participants filled out the online material in the computer room of the University in 2022 November. All participating students were chosen by convenience sampling and attended a course in statistics at the University. The participation was voluntary and as an incentive, participants received points toward their statistics course grade based on their performance (see the calculation of points below). The experiment was run before students started the collection of points from other sources. Thus, students did not know if they would need the extra points to pass the course.

All experimental procedures performed in this study were in accordance with the 1964 Helsinki Declaration and its later amendments. The research ethics committee of the University of the authors approved the experiment.

Experimental material and procedure

Before starting the procedure, subjects completed a questionnaire with basic demographic questions and read the instruction. In the instruction, participants were informed that, in the experiment, they have to select the start-up they find the most desirable to join its founding team and participate in its everyday management to create values. They were also let know that the aim of the experiment is to know what motivates people to choose specific ventures and how people feel about their choices.

About the experiment procedure, they were informed that first, they should solve a language task. As a language task, participants completed a scrambled-sentence task adapted from [Costin \(1969\)](#) and [Bargh and Chartrand \(2000\)](#) to prime social value creation and thinking (social condition (SC)), entrepreneurial value creation or commercial entrepreneurial thinking (commercial condition (CC)), or nothing (control condition (CoC)). The language task involved 25 sets of five words each in each condition. By choosing four words in any set, a sentence could be formed. Participants' task was to form and write down a sentence from each set of words. In the neutral condition, the task contained 25 sets of scrambled neutral words. In the commercial condition, 10 sets contained words related to the theme of pecuniary gain, self-interest and competition (e.g. gain, success, competition, increase, cash, win, income) and the other 15 sets contained only neutral words. In the social condition, 10 sets contained words linked to social value creation (e.g. donate, share, together, fair, communal, volunteer, commonweal) and the other 15 sets contained neutral words. Participants were randomly assigned to one condition.

Next, participants opened a page with an information matrix containing 16 pieces of information about three ventures. Both the columns and the rows of the information matrix were displayed in a random order for each subject. The 16 pieces of information presented can be grouped into three categories: six pieces of neutral information (fillers), four pieces of information concerning the social and four pieces of information concerning the entrepreneurial value creation potential of the ventures. The neutral pieces of information were the same for all ventures (e.g. average age of the founding team). Thus, the difference between the three ventures arises solely from their entrepreneurial and social value creation potential. All four pieces of information on social value creation were positive for one venture, but less positive in the case of the other two ventures (hereinafter predominantly social hybrid venture (PSHV or venture A). Entrepreneurial values were all positive in the case of another venture but inferior in the case of the other two ventures (hereinafter predominantly commercial hybrid venture (PCHV) or venture B). Thus, as compared to any other ventures, one venture was inferior in its social or entrepreneurial value creation potential and did not have better perspectives in creating other values either (hereinafter venture C). The option of C venture was included in the experiment to see if subjects understood the task and were engaged in creating values. As only two participants have chosen option C, we excluded them from the analysis.

To give a clear signal to participants, all pieces of a specific type of information (entrepreneurial or social values) were either positive or less positive in the case of each venture. The wording of less positive (two times acceptable and two times not significant) and positive (two times good and two times outstanding) qualities was balanced across the types of information. [Table 1](#) contains the information presented to the participants, grouped by the type of information.

Table 1 The information matrix

Information type	Information pieces	Venture A	Venture B	Venture C
Neutral information	Average age of the founding team	35–40 years	35–40 years	35–40 years
	External investors: yes, if there is at least one investor	Yes	Yes	Yes
	Entrepreneurial experience: yes, if at least one of the members of the founding team has entrepreneurial experience	Yes	Yes	Yes
	Large city: yes, if the start-up will be based in a large city	Yes	Yes	Yes
	Year of the formal foundation	2021	2021	2021
	Industry	Financial and management consulting	Financial and management consulting	Financial and management consulting
Social value creation	Projected number of employees in one year	3–6	3–6	3–6
	Legal form	Limited liability company	Limited liability company	Limited liability company
	Occupational health and safety	Good	Acceptable	Acceptable
	Family friendly workplace	Outstanding	Needs improvement	Needs improvement
Entrepreneurial value creation	Support of non-profit organizations	Good	Acceptable	Acceptable
	Employees' participation in the decision-making processes	Outstanding	Needs improvement	Needs improvement
	Expected growth in the number of employees in the next three years	Acceptable	Good	Acceptable
	Return on sales in the first year	Needs improvement	Outstanding	Needs improvement
Entrepreneurial value creation	Expected market share increase in the next two year	Acceptable	Good	Acceptable
	Return on assets in the first year	Needs improvement	Outstanding	Needs improvement

Note: The rows and columns of the matrix were presented in a randomized order to each participant

Source: Authors' own work

Participants had two minutes to read the information matrix and decide on the venture to choose. Under the information matrix, participants had to choose one option out of the three ventures by clicking a box next to the name of the chosen venture. In the post-test phase, participants evaluated their social identity (Sieger et al., 2016) and their feelings about the foundation of their new venture (Cardon et al., 2017).

In the beginning of the experiment, participants were informed that they would get one point toward their course grade for their participation and could earn two additional points if they complete the task successfully and maximize their value creation potential. Therefore, participants choosing option C or not making a choice did not get extra points. All other participants got two extra points.

Data and analyses

The data of 203 full-time students with no entrepreneurial experience was analyzed. As participants were about the same age ($M = 20.23$, $SD = 1.218$) and full-time students of the department of business and economics, gender ($F = 63.1\%$, $M = 26.9\%$) was the only covariate used in our models.

The Darwinian (DSI $\alpha = 0.774$), communitarian (CSI $\alpha = 0.833$) and missionary (MSI $\alpha = 0.868$) social identities were each measured on a six item-scale developed by Sieger et al. (2016). Founder passion (FP $\alpha = 0.736$), was evaluated by the four items of Cardon et al. (2017). We asked subjects to indicate whether they agree with the statements on a seven-point Likert scale from one (completely disagree) to seven (fully agree). The descriptive statistics of the continuous measures are in Table 2.

The choice of the predominant value was a binary variable: participants chose to join the founder team of either venture A (46.8%) or venture B (53.2%) (the two participants choosing option C were excluded from the analysis).

Results

The saliency of pro-self and prosocial values did not influence the behavioral choice (Pearson Chi-Square = 2.106, $p = 0.349$) (Table 3).

ANOVA showed that the condition did not influence the entrepreneurial social identities either (DSI $F = 0.397$, $p = 0.673$; CSI $F = 0.067$, $p = 0.935$; MSI $F = 0.561$, $p = 0.571$) (Table 4).

In general, individuals high in Darwinian social identity were more likely to choose the PCHV ($B = 0.501$, $p = 0.008$), whereas individuals high in communitarian social identity ($B = -0.345$, $p = 0.026$) tended to join the founder team of the PSHV. Missionary social identity was not coupled with preferences for the type of value created ($B = -0.154$, $p = 0.253$). The extended models (basic models extended with an interaction effect between the social identity and experimental condition to test the moderation effect of the condition) show that the environment did not influence the above relationships between entrepreneurs' social identities and the type of the predominant value to create (Table 5).

Table 2 Descriptive statistics of the continuous variables

	Minimum	Maximum	Mean	SD	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	SE	Statistic	SE
FP	2.000	7.000	5.543	0.978	-0.597	0.171	0.179	0.340
DSI	3.333	7.000	5.584	0.806	-0.405	0.171	-0.068	0.340
CSI	2.167	7.000	5.263	0.975	-0.513	0.171	-0.024	0.340
MSI	2.000	7.000	5.122	1.099	-0.217	0.171	-0.522	0.340

Notes: FP = founder passion; DSI = Darwinian social identity; CSI = communitarian social identity; MSI = missionary social identity

Source: Authors' own work

Table 3 Choice of venture by condition

	<i>PSHV</i>	<i>PCHV</i>	<i>Total</i>
Count social condition (SC)	30	35	65
% within SC	46.2%	53.8%	100.0%
Count commercial condition (CC)	36	30	66
% within CC	54.5%	45.5%	100.0%
Count control condition (CoC)	42	30	72
% within CoC	58.3%	41.7%	100.0%
Count total	108	95	203
% within total	53.2%	46.8%	100.0%

Notes: PSHV = predominantly social hybrid venture; PCHV = predominantly commercial hybrid venture

Source: Authors' own work

Table 4 Descriptive statistics of the social identities by condition

	<i>N</i>	<i>Mean</i>	<i>SD</i>
<i>Darwinian social identity</i>			
Social condition	65	5.610	0.894
Commercial condition	66	5.512	0.779
Control condition	72	5.627	0.753
Total	203	5.584	0.806
<i>Communitarian social identity</i>			
Social condition	65	5.298	0.985
Commercial condition	66	5.238	0.877
Control condition	72	5.253	1.060
Total	203	5.263	0.975
<i>Missionary social identity</i>			
Social condition	65	5.105	1.134
Commercial condition	66	5.027	1.059
Control condition	72	5.224	1.109
Total	203	5.122	1.099

Source: Authors' own work

Thus, we can answer our first two research questions. Based on the results, it seems that the temporal saliency of prosocial and pro-self values does not influence entrepreneurs' social identity and the value to focus on. The choice of predominant value is driven by entrepreneurs' social identity in such a way that Darwinian social identity is positively linked to the preference of entrepreneurial values and communitarian social identity positively associates with choosing to concentrate on the creation of social values.

In the next step, we examined whether founder passion is linked to social identity and the relationship between social identities and passion is moderated by the condition. Darwinian social identity was positively linked to founder passion ($B = 0.469, p = 0.000$) and the saliency of values did not moderate its effect. According to the extended CSI model, communitarian social identity did not have a main effect on passion ($B = 0.146, p = 0.139$) but in the commercial ($B = 0.325, p = 0.042$) and social ($B = 0.351, p = 0.019$) conditions, it positively associated with passion. Missionary social identity was coupled with passion ($B = 0.196, p = 0.001$) only when the possible moderation effect of the contextual factors was ignored (Table 6).

Thus, it seems that the role of the temporary saliency of prosocial and pro-self cultural cues in the relationship between founder passion and social identities varies by social identity. Whereas missionary social identity does not shape passion considerably, Darwinian social identity is equally coupled with higher passion in any environment, and communitarian social identity exercise its positive effect on passion only when at least the creation of one

Table 5 The likelihood of founding a hybrid venture concentrating on entrepreneurial or social value creation in the different conditions

	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.
(Intercept)	-2,125	0,051	-3,163	0,120	2,429	0,005	2,030	0,117	1,442	0,051	1,209	0,312
Female	-0,538	0,077	-0,507	0,100	-0,424	0,165	-0,396	0,199	-0,465	0,127	-0,461	0,130
Social Condition ^a (SC)	-0,521	0,143	0,589	0,825	-0,500	0,156	-0,713	0,709	-0,525	0,133	0,152	0,928
Commercial Condition ^a (CC)	-0,092	0,794	1,738	0,522	-0,155	0,658	1,660	0,435	-0,176	0,614	-0,171	0,920
DSI	0,501	0,008	0,683	0,055								
SC * DSI ^b			-0,198	0,673								
CC * DSI ^b			-0,330	0,497								
CSI					-0,345	0,026	-0,273	0,248				
SC * CSI ^c							0,041	0,908				
CC * CSI ^c							-0,343	0,386				
MSI									-0,154	0,252	-0,111	0,620
SC * MSI ^d											-0,131	0,681
CC * MSI ^d											0,001	0,998
Omnibus test likelihood ratio Chi-Square	12,915	0,012	13,383	0,037	10,533	0,032	11,581	0,072	6,718	0,152	6,940	0,326

Notes: DSI = Darwinian social identity; CSI = communitarian social identity; MSI = missionary social identity; ^areference group is that of the control condition (ConC); ^breference group is DSI*ConC; ^creference group is CSI*ConC; ^dreference group is MSI*ConC; Basic and extended models

Source: Authors' own work

Table 6 The effect of entrepreneurs' social identity and the condition on founder passion

	<i>B</i>	<i>Sig.</i>	<i>B</i>	<i>Sig.</i>	<i>B</i>	<i>Sig.</i>	<i>B</i>	<i>Sig.</i>	<i>B</i>	<i>Sig.</i>	<i>B</i>	<i>Sig.</i>
(Intercept)	3.132	0.000	4.060	0.000	4.078	0.000	5.127	0.000	4.824	0.000	5.016	0.000
Female	0.091	0.476	0.064	0.614	-0.053	0.689	-0.099	0.452	-0.027	0.847	-0.030	0.829
SC ^a	-0.399	0.008	-2.305	0.027	-0.424	0.006	-2.274	0.005	-0.385	0.015	-0.887	0.238
CC ^a	-0.430	0.004	-0.978	0.375	-0.475	0.002	-2.179	0.011	-0.442	0.005	-0.508	0.508
DSI	0.469	0.000	0.307	0.026								
SC * DSI ^b			0.339	0.065								
CC * DSI ^b			0.096	0.624								
SCI					0.340	0.000	0.146	0.139				
SC * CSI ^c							0.351	0.019				
CC * CSI ^c							0.325	0.042				
MSI									0.196	0.001	0.159	0.110
SC * MSI ^d											0.097	0.494
CC * MSI ^d											0.012	0.936
Omnibus test likelihood ratio Chi-Square	44.974	0	48.680	0	35.589	0	42.318	0	20.396	0	20.939	0.020

Notes: DSI = Darwinian social identity; CSI = communitarian social identity; MSI = missionary social identity; ^areference group is control condition (CoC); ^breference group is DSI*CoC; ^creference group is CSI*CoC; ^dreference group is MSI*CoC. Basic and extended models

Source: Authors' own work

type of value is promoted by the environmental cues. To answer our third research question, we can say that the saliency of prosocial or pro-self cues only moderates the relationship between CSI and founder passion.

Although we did not formulate any research question on the effect of condition on passion, it is worth noting that the condition had a main effect on passion in almost all models. ANOVA reinforced that making the prosocial or pro-self values more salient generated less passion ($F = 5.13$, $p = 0.007$, SC M = 5.421 (SD = 0.1), CC M = 5.348 (SD = 1.07), CoC M = 5.83 (SD = 0.835)). The results of the Bonferotti post-hoc test are in [Table 7](#).

Discussion and conclusion

In line with previous results (e.g. [Fauchart and Gruber, 2011](#)), we have found that Darwinian social identity is positively linked to the preference for entrepreneurial values whereas higher communitarian social identity is coupled with focusing on social value creation. Our results also show that when accounting for individual differences in value creation aims, not the environmental cues but the individual agency drives the type of the predominant value chosen to create. This result suggests a limited potential for short-term policy actions based on soft law instruments to enhance entrepreneurs' social value creation by promoting social

Table 7 Bonferotti post hoc test results

<i>A</i>	<i>Mean difference</i>	<i>SE</i>	<i>Sig.</i>
<i>Social condition (SC)</i>			
CC	0.0733	0.1675	0.6621
CoC	-0.4080	0.1640	0.0137
<i>Commercial condition (CC)</i>			
SC	-0.0733	0.1675	0.6621
CoC	-0.4810	0.1633	0.0036
<i>Control condition (CoC)</i>			
SC	0.4080	0.1640	0.0137
CC	0.4810	0.1633	0.0036

Source: Authors' own work

commitments. The implication is that lasting changes will be difficult to achieve by temporarily targeting entrepreneurs with reminders of the value of prosocial behavior. However, some studies indicate that when social dilemmas arise, the effect of cultural values on behavior seems to depend on the extent to which culture generates normative behavioral expectations (e.g. [De Kwaadsteniet et al., 2006](#)). Thus, long-term policy interventions targeting a larger audience and aiming to influence cultural values and entrepreneurial social identities may more efficiently contribute to the social value creation of entrepreneurs. Future studies should examine if, when and how the promotion of prosocial and pro-self cultural cues may change entrepreneurs' social identity and primary value creation aims by creating behavioral norms or moderate the effect of social identities on behavioral choices related to value creation.

Our results further indicate that, regardless of the type of the promoted value, Darwinian social identity is positively linked to higher entrepreneurial passion. Thus, Darwinians can be considered the archetype of entrepreneurs. The PE fit theory suggests that Darwinians may perceive any cultural environment as suitable for realizing their aims through entrepreneurship.

Communitarian social identity is linked to higher passion only under social and commercial conditions, whereas missionary social identity does not seem to affect passion. Given that missionary identity was not linked to behavioral choices in our experiment, these results suggest that the mission itself may hold much greater importance for individuals with a strong missionary social identity than realizing the mission through entrepreneurship or focusing on social values. Therefore, future studies should examine how the different social identities relate to feelings about and identify with being an entrepreneur, the core of entrepreneurship. The heightened passion related to higher communitarian social identity in the commercial and social conditions may stem from hybrid identities. Future research could focus on the different types of hybrid entrepreneurs by grouping individuals based on all three social identity scales ([Sieger et al., 2016](#)).

We did not formulate any research question about the main effect of the condition on passion. Still, it is worth noting that the priming of pro-self or prosocial values is coupled with decreased founder passion. As the decreased passion can be compensated by high Darwinian or communitarian social identities, it seems probable that some participants did not see entrepreneurship or any of the offered venture option fitting the primed cultural value. Maybe subjects low in passion would have opt out of entrepreneurship or would have created a different venture. Since decreased passion can be compensated by high Darwinian or communitarian social identities, it seems likely that some participants did not perceive entrepreneurship or any of the offered venture options as aligning with the primed cultural value. It's possible that participants low in passion might have opted out of entrepreneurship or chosen to create a different type of venture..

We also have to mention the limitations of this study. First, the results are based on the behavior of university students attending courses in business and economics. Second, subjects did not risk losing income because of their behavioral choice. Third, participants could not opt out of entrepreneurship. Thus, even if we studied the behavior of potential first-time founders and therefore, university students resemble the population of interest ([Grégoire et al., 2019](#); [Hsu et al., 2017](#)), field studies could further contribute to the examination of the research questions of this explorative study and corroborate the results. In addition, future research should concentrate on shared values.

In sum, we found that the temporary increase in the saliency of prosocial or pro-self values does not change the value creation aim of entrepreneurs with different social identities, but influences how passionately they act.

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