

Online appendix for

Block, J., Brandstetter, C., Zaggl, M. (2025). Maker motives and entrepreneurial opportunity evaluation in academic makerspaces. *Small Business Economics*.

Table 2
Descriptive statistics and pairwise correlations

Variables	M.	S.D.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
(1) Opportunity attractiveness (cat.)	3.29	1.27																									
(2) Age (ordinal categories)	2.50	1.00	-0.01																								
(3) Female (d)	0.19		0.10	-0.14																							
(4) Migration background (d)	0.18		-0.06	-0.11	0.10																						
(5) Children (d)	0.15		-0.10	0.51	-0.10	0.06																					
(6) Married (d)	0.41		-0.03	0.28	0.14	0.16	0.46																				
(7) Student (d)	0.50		-0.05	0.45	0.02	0.14	-0.34	-0.27																			
(8) Employment risk-taking (cat.)	7.13	2.30	0.10	-0.14	-0.08	-0.08	0.01	0.11	0.07																		
(9) Financial risk-taking (cat.)	5.66	2.64	0.10	0.12	-0.21	-0.01	-0.01	-0.06	0.04	0.58																	
(10) Experience as maker (yrs.)	4.04	3.38	0.22	0.33	-0.24	-0.03	0.27	0.17	-0.40	-0.11	-0.03																
(11) Number of prototypes	3.49	1.43	0.11	0.11	-0.23	-0.02	0.12	0.06	-0.17	0.03	0.05	0.64															
(12) Time in makerspace/week (h.)	5.70	4.79	-0.11	0.02	-0.13	-0.06	0.09	-0.14	-0.12	0.07	0.08	0.30	0.36														
(13) Entrepreneurial network (d)	0.33		0.00	-0.08	-0.08	-0.03	0.04	0.13	0.03	0.23	0.09	-0.15	0.05	0.00													
(14) Experience as entrepreneur (d)	0.10		0.02	0.14	0.02	-0.15	0.20	0.06	-0.33	0.15	0.16	0.01	0.03	0.16	0.12												
(15) Entrepreneurial interest (cat.)	3.27	1.13	0.17	-0.22	-0.09	-0.02	-0.17	-0.10	-0.03	0.42	0.35	-0.02	0.10	0.21	0.21	0.11											
(16) Venture idea exists (d)	0.68		0.07	0.06	-0.02	0.13	0.10	-0.04	-0.03	0.21	0.24	0.10	-0.01	0.18	0.11	-0.03	0.44										
(17) Use of makerspace: hobby (d)	0.63		0.08	0.12	-0.22	-0.08	-0.01	-0.11	-0.00	0.05	-0.04	0.22	0.13	0.03	-0.06	-0.04	0.08	0.12									
(18) Use of makerspace: job (d)	0.24		-0.01	0.10	-0.02	0.04	0.05	0.13	0.22	-0.05	0.02	0.21	0.22	0.11	-0.05	-0.18	-0.02	0.10	-0.01								
(19) Use of makerspace: venture (d)	0.17		0.02	0.05	0.01	0.02	0.12	0.10	0.20	0.13	0.20	-0.04	0.06	0.21	0.14	0.47	0.33	0.04	0.01	0.00							
(20) Covid 19 impact (ord. cat.)	2.69	1.06	0.15	-0.10	0.06	0.03	0.06	-0.01	-0.11	-0.07	-0.07	0.00	-0.00	0.17	-0.06	-0.04	0.11	-0.05	-0.08	0.05	0.04						
(21) Education: STEM (d)	0.61		-0.08	-0.20	-0.24	0.08	-0.12	0.09	0.20	0.03	0.10	0.04	0.12	0.04	0.11	-0.22	0.07	0.10	0.03	0.08	-0.12	0.03					
(22) Education: IT (d)	0.38		0.21	-0.10	0.12	0.04	0.00	-0.15	0.03	0.13	0.11	0.02	0.08	0.06	-0.03	0.09	0.11	-0.06	0.12	-0.16	-0.02	-0.06	-0.29				
(23) Education: econ/business (d)	0.16		0.04	0.07	0.08	0.05	0.09	0.06	0.06	0.10	0.15	-0.13	-0.12	0.15	0.13	0.18	0.01	0.05	-0.06	-0.24	0.15	0.02	-0.16	0.17			
(24) Makerspace is large (d)	0.47		0.19	-0.04	0.08	-0.11	0.01	-0.18	-0.07	0.20	0.05	-0.14	-0.14	-0.06	0.11	0.16	0.21	0.13	0.09	-0.33	0.12	0.04	0.06	0.14	-0.25		
(25) Makerspace open to public (d)	0.13		0.08	0.07	0.02	0.09	0.07	0.18	-0.27	-0.12	-0.11	0.19	-0.05	-0.02	-0.06	0.08	-0.08	0.09	0.22	-0.07	0.15	-0.12	-0.19	-0.01	-0.05	-0.12	
(26) Makerspace has entr. educ. (d)	0.56		0.09	0.05	0.10	-0.20	0.09	-0.05	-0.08	0.21	0.12	-0.12	-0.05	0.09	0.13	0.14	0.13	0.08	-0.03	-0.03	0.08	0.04	0.15	-0.10	-0.16	0.66	-0.44

Notes: All bold correlation coefficients are significant at $p < 0.05$. M.=Mean; S.D.=Standard Deviation. N=144; d=dummy variable; cat.= categories; yrs.=years; h.=hours

Figure 1
Academic makers with entrepreneurial ideas

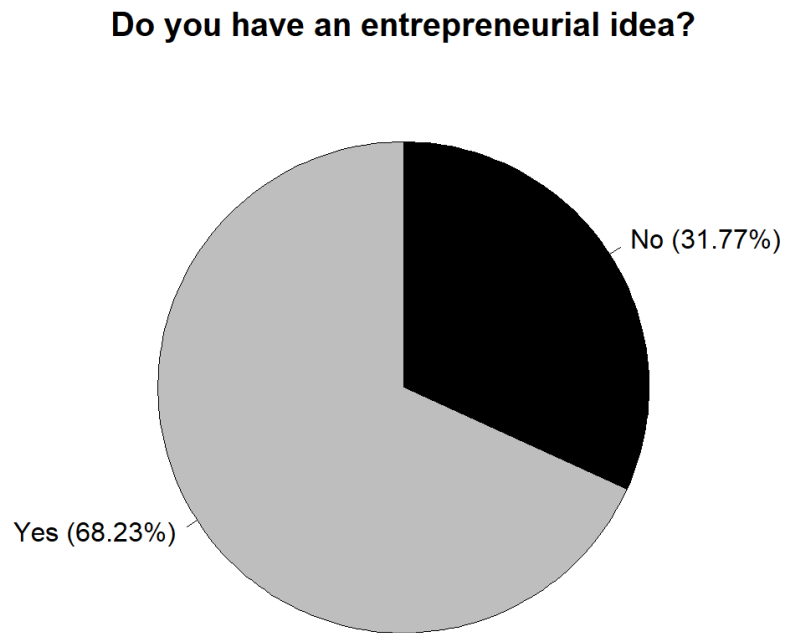


Figure 2
Entrepreneurial interest of academic makers

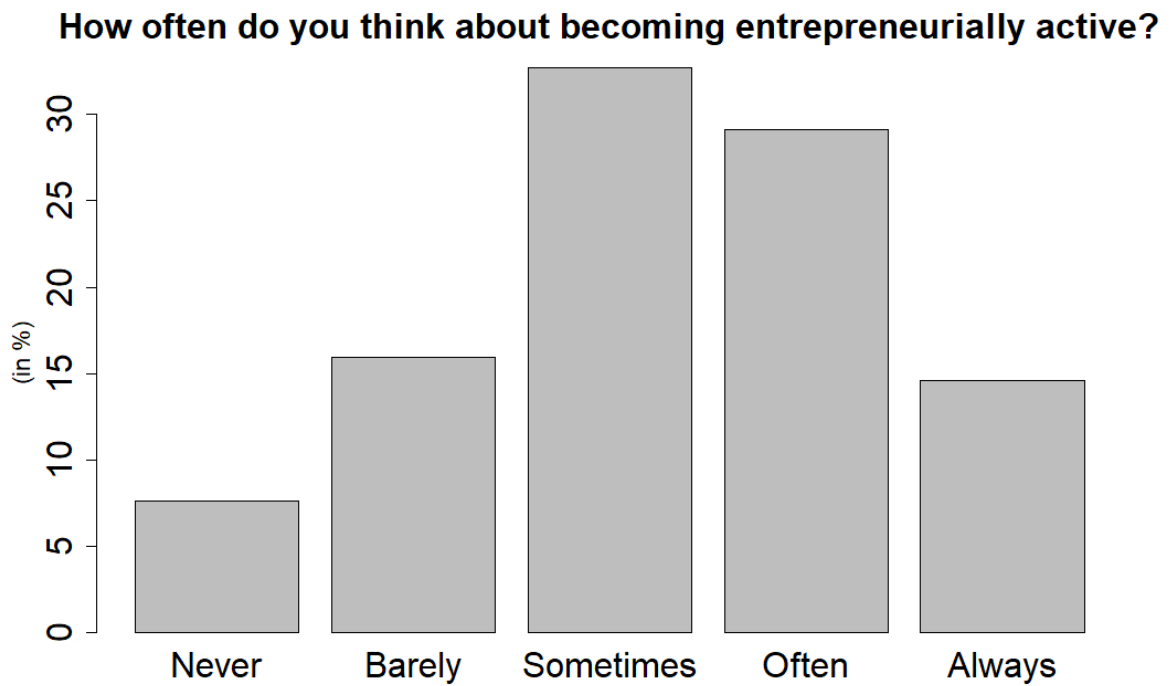


Table 6

Conjoint scenario description

Scenario
<i>In the context of your hobby, you work on a project as a maker and have developed a prototype of a possible product. Your immediate environment shows a positive reaction to the prototype. This leads to the possibility of an entrepreneurial opportunity. The financial risk is low. The entrepreneurial opportunities differ with regard to the following five characteristics:</i>

Table 7

Conjoint selection decision example

How attractive is this entrepreneurial opportunity for you personally?
 (on a scale from 1 (not at all attractive) to 5 (very attractive))

Market Potential:	Low
Technical Demand:	Low
Project Team:	Technical Project Partner
Social Impact:	Medium
Formal Protection Rights:	Definitely Possible

Table 8
Operationalization of control and moderator variables used in the regressions

Variable	Operationalization
Demographics	
Age	Age of the respondent
Female	Binary variable; respondent is female or not (0=no, 1=yes)
Migration background	Binary variable; respondent has a migration background or not (0=no, 1=yes)
Children	Binary variable; respondent has children or not (0=no, 1=yes)
Married	Binary variable; respondent is married or living in a partnership (0=no, 1=yes)
Student	Binary variable; respondent is student (1) or not (0)
Employment risk-taking	Degree of risk-taking regarding employment matters, ranging from 1=not at all to 11=very high risk-taking (Dohmen et al. 2011)
Financial risk-taking	Degree of risk-taking regarding financial matters, ranging from 1=not at all to 11=very high risk-taking (Dohmen et al. 2011)
Field of education	Field of education of the respondent (STEM, IT, Econ/Business)
Maker characteristics	
Experience as maker	Number of years the respondent has experience as a maker
Number of prototypes	Number of physical prototypes or products the respondent had created during their maker activities, ranging from 1=0 to 5= 4 or more (Halbinger 2018)
Time in makerspace/week	Number of hours spent for making-related activities per week, ranging from 1= less than 1 hour to 9=more than 14 hours (Hausberg & Spaeth 2020)
Covid-19 impact	Degree of covid-19 impact on making-related activities of the respondent ranging from 1=very negative to 5=very positive
Use of makerspace: hobby	Binary variable; respondent uses makerspace for hobby reasons (0=no, 1=yes)
Use of makerspace: job	Binary variable; respondent uses makerspace for job reasons (0=no, 1=yes)
Use of makerspace: venture	Binary variable; respondent uses makerspace for entrepreneurship reasons (0=no, 1=yes)
Maker motivation *	27 items regarding the individual motivation to engage in maker activities, ranging from 1=not important at all to 5=very important (adapted from Carter 2013)
Entrepreneurship characteristics	
Entrepreneurial network	Availability of a supportive personal network for starting a business (0=no, 1=yes)
Experience as entrepreneur	Binary variable; respondent has started a business in the past or not (0=no, 1=yes) (Halbinger 2018)
Entrepreneurial interest	How often do you think of becoming entrepreneurially active? 1=never to 5=always (Wilson et al. 2017)
Venture idea exists	Binary variable; respondent has a concrete entrepreneurial idea in mind or not (0=no, 1=yes) (Liñán & Chen 2009)
Makerspace characteristics	
Makerspace is large	Binary variable; makerspace is large (0=no, 1=yes)
Makerspace open to public	Binary variable; makerspace is open to the public (0=no, 1=yes)
Makerspace has entr. educ.	Binary variable; makerspace has entrepreneurship education program (0=no, 1=yes)

* not used in the regression

Table 9
Demographics of participants

Variable	Mean	Variable	Mean
Demographics		Formal education	
Female	19%	Secondary schools	3%
Age (years)	Between 21 and 30	A-level	26%
Married	41%	Apprenticeship	13%
Children (yes)	15%	Bachelor degree	28%
Migration background	18%	Master (or higher)	29%
Positions		Field of education (multiple options possible)	
Student	50%	STEM	61%
Employed (full-time)	27%	IT	38%
Employed (part-time)	10%	Econ/Business	16%
Entrepreneur	10%	Craftmanship	9%
Other	3%	Design/Architecture	9%
		Social sciences	4%
		Other	18%