

ACADEMICS' WILLINGNESS TO PARTICIPATE IN AN OPEN INNOVATION HEALTH CARE ECOSYSTEM PLATFORM OUTSIDE THEIR QUALIFICATIONS AND WORKING EXPERIENCE (FOLLOW UP STUDY)

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INTRODUCTION

Building an open innovation health care ecosystem platform can involve a local or global approach (Chesbrough et al., 2014).

Through knowledge transfer (Bacon et al., 2019), inter-organizational relationships (Radziwon, Bogers, 2019), research opportunities (West, Bogers, 2017), effects on entrepreneurship (Nambisan et al., 2018) and connecting corporations and communities (Gupta et al., 2017), there could be an amazing potential for open innovation health care ecosystem platforms.

METHOD

Academics' responses to the standardized questionnaire were analyzed using the **statistical software IBM SPSS 28.0**. Possible answers in the questionnaire were "yes" and "no" and items therefore nominally scaled. Absolute and relative frequencies of "yes" answers were reported as N (%) for each discipline and averaged across groups.

A logistic regression was performed with discipline of the academics, willingness to participate for (a) one year, or (b) more than one year, language barrier as an obstacle for participation, acceptance of a group leader, and either money or fun as a motivating factor to predicting the willingness to participate in a project outside the own qualification (= criterion).

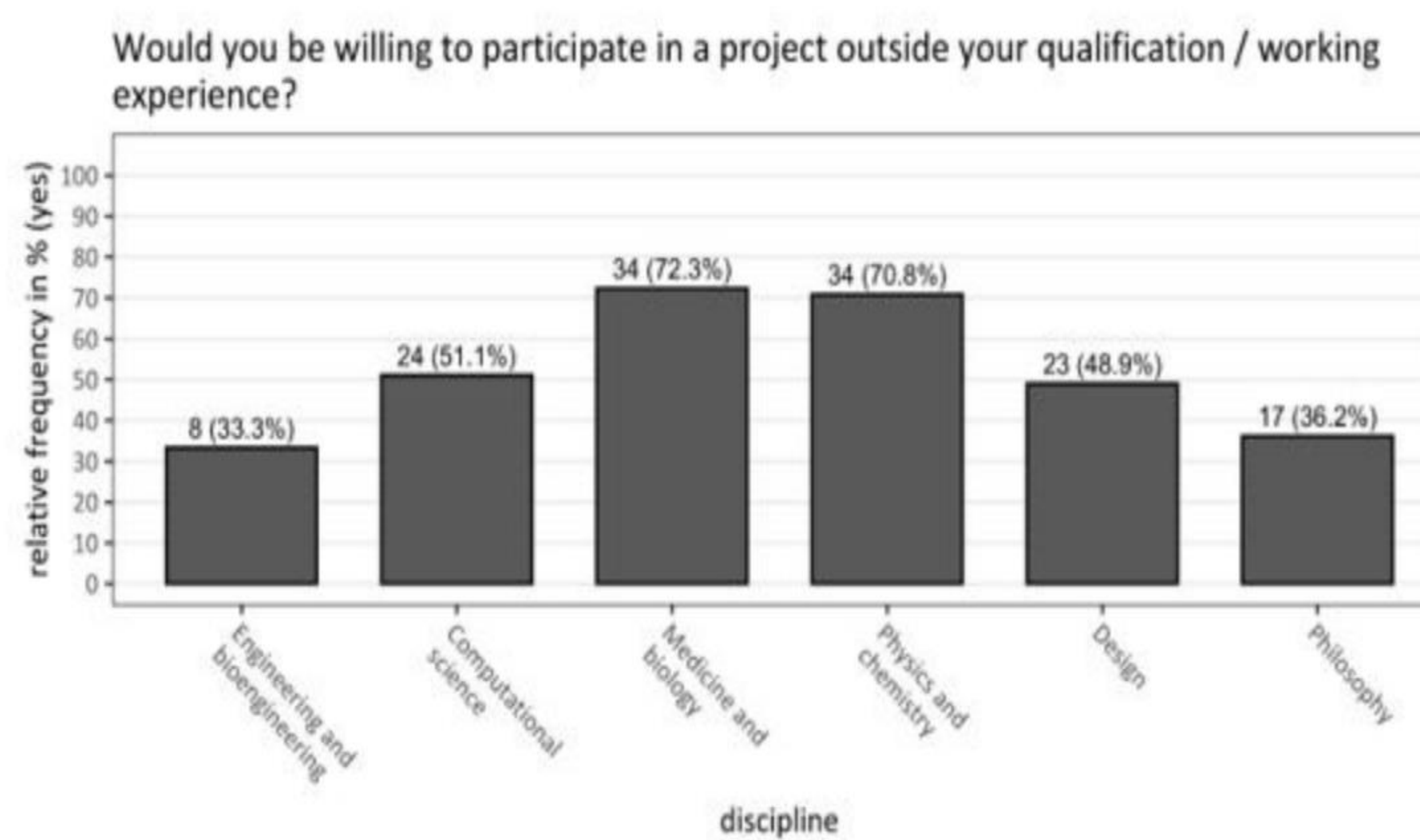
Different model selection algorithms were tested, including a forced entry and stepwise backward algorithm. The most suitable model was defined via a minimal -2LL deviance statistic in combination to a maximum of explained variance via Nagelkerkes R².

RESULTS

260 participants were included of which **140 (53.8%)** were willing to participate in an open innovation health care platform project outside their comfort zone. Logistic Regression revealed that only the academic discipline predicted participation significantly: Academics from the medical or biological field were 4.43times more likely to participate in a project outside their comfort zone if compared to philosophers (OR = 4.43 [1.72 – 11.42], p = 0.002).

	N (%) willing to participate	OR [95%-CI]	Wald's Statistic
Disciplines			
Reference = Philosophy	17/47 (36.2%)		
Engineering and Bioengineering	8/24 (33.3%)	0.85 [0.29 – 2.52]	p = 0.767
Computational Science	24/47 (51.1%)	1.64 [0.68 – 3.96]	p = 0.267
Medicine and Biology	34/47 (72.3%)	4.43 [1.72 – 11.42]	p = 0.002
Physics and Chemistry	34/48 (70.8%)	4.33 [1.78 – 10.55]	p = 0.001
Design	23/48 (48.9%)	1.73 [0.72 – 4.18]	p = 0.224
Participate for one year (yes)	124/260 (47.7%)	1.07 [0.63 – 1.82]	p = 0.806
Participate longer than one year (yes)	54/260 (20.8%)	0.88 [0.45 – 1.71]	p = 0.701
Language Barrier (yes)	165/260 (63.5%)	0.86 [0.48 – 1.52]	p = 0.596
Accept the group leader (yes)	177/260 (68.1%)	0.82 [0.44 – 1.53]	p = 0.531
Money as a motivation factor (yes)	48/260 (18.46%)	1.10 [0.56 – 2.16]	p = 0.788
Fun as a motivating factor (yes)	196/260 (75.4%)	0.91 [0.50 – 1.67]	p = 0.765

Nagelkerkes R² = 11.9%, Modell test: X²(5) = 24.30, p = 0.012



Similar results were found for academics from physics and chemistry which were 4.33 times more likely to participate compared to philosophers (4.33 [1.78 – 10.55], p = 0.001). No other discipline or predictor showed significant effects (see table x for all effects of the logistic regression and descriptive statistics regarding the willingness to participate for each predictor).

The regression model explained 11.9% of the variance and was significantly better than the baseline model (X² (5) = 24.30, p = 0.012).

CONCLUSIONS

Academic discipline was the most important predictor for participation in an open innovation health care platform project outside of their own qualification.

Academics from Medicine and Biology, as well as from Physics and Chemistry were significantly more likely to participate compared to philosophers. Language barrier, duration of participation, group leader acceptance or motivating factors as money or fun did not predict participation.

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