



Self-assessment of Entrepreneurial Competences by Students Pre- and Post-Covid-19: Increased Self-Image as Future Entrepreneurs and the Overcoming of Gender Influence

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Abstract

Keywords

- *Entrepreneurial Competences*
- *Gender influence on self-image*
- *Self-assessment of competences*
- *Self-perception change during Covid-19 time*

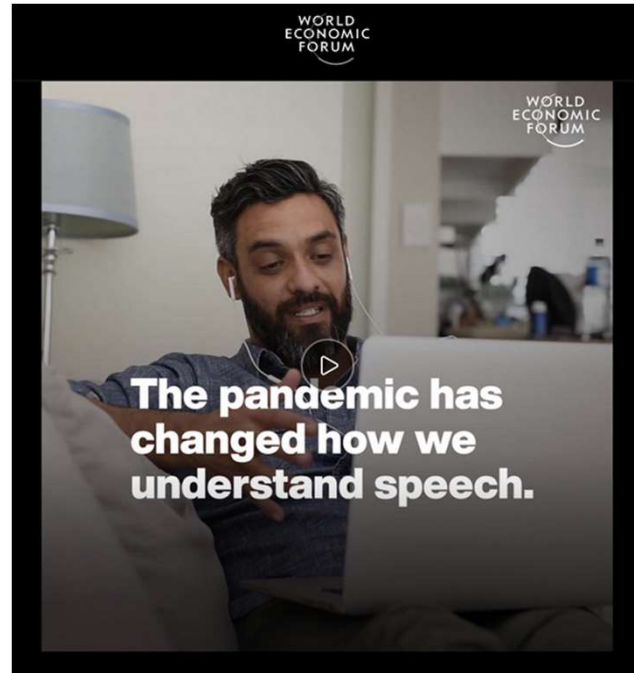
Covid-19 is an unprecedented health crisis that has severely disrupted the world. Young people, especially students, have changed their habits about sports and social gatherings, and experienced new ways of learning both through online learning platforms and remote courses.

A sample of more than 1.400 Italian university students was surveyed to highlight students' self-perceived entrepreneurial competences, as well as their self-image of being an entrepreneur in the future. Using a substantial dataset, this study helps to track changes and trends in students' self-perceptions and assess whether the pandemic had a positive or negative impact on their self-image as entrepreneurs. A portion of the Covid-19 timeline, from its onset in earlier months of 2020 until the end of the year, is considered with the aim of understanding how students' self-perceptions and aspirations are affected by external crises like Covid-19, and to prospectively inform strategies to support and empower the next generation of entrepreneurs



Scenario

The onset of Covid-19 on early months of 2020 has challenged many of our common understandings in both private and public life. Even the onset has changed the way we think and act in many different areas of our lives, including health, economics, social interactions, and politics





Research Objectives

- To investigate the underlying mechanism in the job world that strengthen some competences associated with the entrepreneurial world and to evaluate which of these competences are self-perceived as more important by students and why. For example, the ability to identify opportunities and take calculated risks, creative thinking, teamwork, leadership, self-motivation are skills that are often closely associated with entrepreneurship,
- To identify common traits or differences in the above-mentioned competences as self-perceived by male and female students respectively,
- To measure the impact of the Covid-19 pandemic on entrepreneurial competences and self-image, assessing whether post-Covid-19 students have reinforced or, conversely, decreased their pre-Covid-19 self-image of being an entrepreneur in 5 years/10 years.





Research Hypotheses

- H1: males in the post-Covid-19 period are expected to perceive they have more or less the same competences in the EC-scale as before the pandemic;
- H2: students have experienced similar trends in pre- and post-COVID-19 times, changing their self-perception and self-image in the two periods;
- H3: females in general show lower self-perception in the EC-scale, but their self-image of being an entrepreneur in 5 years/10 years interestingly increased.



Methods and Instruments

A sample of university students from 2 universities located in the North and Center of Italy, was surveyed using the Mindsets and Entrepreneurial Competences Questionnaire. This questionnaire measures students' self-perceived entrepreneurial competences, as well as their self-image of being an entrepreneur in 5 years/10 years. The sample included the following:

- 1.438 university students,
- 83.9% women and 16.2% men,
- an average age of 21.92 years (with a standard deviation of 3.77).

The sections of the questionnaire for respondents are detailed as follows:

- male sub-group (Pre / Post -COVID-19; N= 233 (16.2%),
- female sub-group (Pre / Post -COVID-19; N= 1206) (83.9%).





Methods and Instruments

Through a Likert scale (1 = 'not at all', 2 = 'little'; 3 = 'more or less'; 4 = 'much' and 5 = 'very much') enabling respondents to express their:

- *Self-perceived entrepreneurial competences* on a list of 18 (Planning, Organization, Management, Accountancy, Reporting, Analytics, Communication, Leadership, Evaluation, Delegation, Identification of strengths, Identification of weaknesses, Risk taking, Initiative, Autonomy, Innovation in personal and social life, Identification of targets, Forecasting) and EC-Scale
- *Self-image of being an entrepreneur* in 5 years and in 10 years



Results

Self-image of competences and future aspirations by male subgroup (Pre / Post- Covid-19; N=233)

Self-perceived COMPETENCES	Pre-Covid-19 Mean S.D.	Post-Covid-19 Mean S.D.	pvalue	Sig Anova
i) Planning	3,74 ,921	3,69 ,979	,686	
ii) Organisational	3,72 ,859	3,69 ,951	,834	
iii) Management	3,56 ,812	3,60 ,859	,735	
iv) Accountancy	3,09 ,844	3,04 1,064	,637	
v) Reporting	2,97 ,847	2,89 1,042	,567	
vi) Analytical	3,71 ,907	3,40 ,947	,012	Sig
vii) Communication	3,82 ,984	3,80 ,933	,850	
viii) Leadership	3,44 1,058	3,56 ,903	,352	
iv) Evaluation	3,76 ,792	3,82 ,747	,600	
x) Delegation	3,27 ,867	3,29 ,890	,890	
xi) Strengthens' individuation's	3,73 ,854	3,76 ,886	,764	
xii) Weaknesses' individuation's	3,77 ,891	3,87 ,847	,395	
xiii) Risk taking	3,41 ,980	3,48 ,865	,534	
xiv) Initiative	3,59 ,951	3,69 ,951	,435	
xv) Autonomy	3,77 ,827	3,81 1,021	,746	
xvi) Own personal and social life's innovation	3,63 ,880	3,69 1,023	,613	
xvii) Targets' achievement's determination	4,03 ,833	4,04 ,769	,929	
xviii) Forecasting	3,56 ,887	3,39 ,878	,135	
EC-Scale	3,59 ,517	3,58 ,535	,939	



Results

Self-image of competences and future aspirations by female sub-group (Pre / Post- Covid-19; N=1206)

Self-perceived COMPETENCES	Pre-Covid-19 Mean S.D.	Post-Covid-19 Mean S.D.	pvalue	Sig Anova
i) Planning	3,58 ,846	4,02 ,884	,000	Sig
ii) Organisational	3,71 ,887	4,08 ,887	,000	Sig
iii) Management	3,36 ,828	3,82 ,861	,000	
iv) Accountancy	2,92 ,795	2,91 ,960	,749	
v) Reporting	2,86 ,801	2,88 ,998	,687	
vi) Analytical	3,21 ,861	3,20 ,967	,856	
vii) Communication	3,73 ,887	3,85 ,893	,014	Sig
viii) Leadership	3,22 1,017	3,34 1,052	,051	
iv) Evaluation	3,49 ,771	3,68 ,767	,000	Sig
x) Delegation	3,10 ,815	3,18 ,935	,109	
xi) Strengthens' individuation's	3,45 ,874	3,53 ,938	,111	
xii) Weaknesses' individuation's	3,72 ,794	4,00 ,790	,000	Sig
xiii) Risk taking	3,39 ,902	3,27 ,912	,026	Sig
xiv) Initiative	3,50 ,936	3,62 1,006	,027	Sig
xv) Autonomy	3,73 ,868	3,98 ,866	,000	sig
xvi) Own personal and social life's innovation	3,59 ,872	3,61 ,924	,792	
xvii) Targets' achievement's determination	3,90 ,861	4,14 ,866	,000	Sig
xviii) Forecasting	3,31 ,859	3,35 ,952	,511	
EC-Scale	3,43 ,509	3,58 ,530	,000	Sig



Results

*Self-image of being an entrepreneur
by male sub-group (Pre / Post- Covid-19; N=233)*

Self-image of being an entrepreneur	Pre-Covid-19 Mean S.D.	Post-Covid-19 Mean S.D.	pvalue	Sig Anova
in 5 years	3,04 1,174	2,83 1,136	,189	
in 10 years	3,45 1,166	3,55 1,205	,507	

Results

*Self-image of being an entrepreneur
by female sub-group (Pre / Post- Covid-19; N= 1206)*

Self-image of being an entrepreneur	Pre-Covid-19 Mean S.D.	Post-Covid-19 Mean S.D.	pvalue	Sig Anova
in 5 years	2,62 1,229	2,54 1,245	,274	
in 10 years	3,00 1,260	3,20 1,338	,008	Sig



Results

- *according to H1* male students in the post-Covid-19 perceive they have roughly the same competences in the overall EC-scale as before
- *according to H2*, students have experienced differently pre- and post-COVID-19 times, but the male sub-group showed similar trends of self-image of being an entrepreneur in 5 years/10 years in both pre- and post-Covid-19 surveys. This suggests that, for males, there was no significant difference in self-image before and after the pandemic. Therefore, our findings *do not fully support H2*
- our findings are *partially confirming H3*, because although females in general show lower self-confidence, their self-image of being an entrepreneur in 5 years/10 years interestingly increased





Values and implications

Our research sheds light on the importance of considering gender-specific factors when examining students' entrepreneurial self-perception and provides insights into how external events, such as the pandemic, can impact these perceptions. These findings have implications for entrepreneurship education (EE) and gender-inclusive entrepreneurial support programs.

Self-perceived entrepreneurial competences and the self-image of being an entrepreneur in 5 years/10 years by students are sensible to gender differences, but we find rather unusual increasing trends in the post-Covid-19 respect to pre-Covid-19.





Values and implications

Female sub-group has higher self-image in relation to “Planning” and “Management skills,” as well in relation to “Initiative,” “Own personal and social life’s innovation,” and “Forecasting” both in pre- and post-Covid-19.

These findings indicate that, in the post-Covid-19 time, female students have exhibited increased self-confidence and self-image in several competences and qualities are essential for entrepreneurship. This suggests that the pandemic may have had a positive influence on their entrepreneurial aspirations and self-perception in certain areas.





Values and implications

While structural inequalities may indeed affect our findings, it is noteworthy that the empowerment of female students is increasing worldwide- As a result, women are demonstrating a stronger ability to innovate their individual and networked social life's as well as a heightened determination to achieve their goals.





Concluding remarks

Overall, the pandemic has prompted students (particularly female) to reevaluate their career goals and priorities, leading some to develop a stronger desire to be entrepreneurs in response to the crisis.

In the future, we set out to inquire about the positive role models who successfully navigated challenges and continued to thrive as entrepreneurs during the pandemic, as they could have inspired students to view entrepreneurship as a viable and resilient career path.

Understanding the factors contributing to this increased self-image can inform strategies to support and empower the next generation of entrepreneurs in a post-pandemic world.



Thank you for your attention!



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