Article

The Effects of an Entrepreneurial Project on the Career-Choice Readiness, Metacognition, and Growth Mindset of Secondary Students

Maxi Eileen Brausch-Böger *[ID] and Manuel Förster

TUM School of Social Sciences & Technology, Department of Educational Sciences, Assistant Professorship of Business and Economics Education, Technical University of Munich, 80333 München, Germany; manuel.foerster@tum.de
* Correspondence: maxi.brausch@tum.de

Abstract: The present study evaluated the effect of a four-day entrepreneurial project on the career-choice readiness of secondary school students. The hypotheses underlying this study state that participation in a school startup project increases the students' career-choice readiness, growth mindset, and metacognition. Based on the literature, it is also assumed that a positive correlation exists between metacognition, growth mindset, and career-choice readiness. The present study examined a student entrepreneurship program by conducting a pre–post design. School classes developed and implemented business ideas with qualified coaches within the program based on a comprehensive didactic approach. Data from each group of participants were collected at two measurement time points. The results demonstrated that the values for all constructs increased in the post-test after participating in the entrepreneurial intervention. Furthermore, the findings indicate that a growth mindset is related to career-choice readiness and mediates the relationship between career-choice readiness and metacognition. Moreover, metacognition additionally favors a growth mindset. Based on the findings, entrepreneurial projects at schools are helpful for vocational orientation and should be extended by cooperating with external organizations and partners.

Keywords: entrepreneurship education; entrepreneurial projects; secondary education; metacognition; growth mindset; career-choice readiness

1. Introduction

In an ever-changing world of work opportunities, with countless options for professional training and apprenticeships and great pressure to perform, many students face a major challenge when choosing a career [1]. Although career orientation is known to be a milestone for the future of the young generation from an educational, individual, and economic perspective, students often feel underprepared for their career choices [2–4]. Several businesses and educational institutions have begun introducing entrepreneurial initiatives, particularly those involving student startups, to enhance skills such as action orientation. This approach is intended to better prepare students for career decisions [5].

We also know that entrepreneurship education can foster more generic abilities like metacognition and growth mindset in schools, which are crucial for developing a career choice [6]. Moreover, cognitive and emotional competencies can be enhanced by strategically aligning teaching approaches with the essence of entrepreneurial projects [7]. The impact on skills and competencies reaches far beyond the classroom. They serve as a basis for entrepreneurial learning and, in doing so, pave the way for the nurturing of metacognition, a growth mindset, and career-choice readiness [8–10].

Both metacognition and a growth mindset have been scientifically shown to enhance students' reflection and self-efficacy skills [11,12], which can contribute to developing entrepreneurial intentions, and thus, impact career-choice readiness [13,14]. It is also

important to recognize the significance of developing entrepreneurial skills at a young age. This includes focusing on the non-cognitive aspects of learning rather than just specific materials as a foundation for cultivating innovative and problem-solving abilities in students [15]. Therefore, further investigation into the effects of student entrepreneurial projects in early secondary education is crucial to stimulating entrepreneurial behavior among students [16,17].

This study aims to investigate the impact of participation in a school startup project on the career-choice readiness of secondary students while also examining the roles of metacognition and a growth mindset in this context. We will provide recommendations based on our findings, considering scientific and educational perspectives. Our research will explore how the intervention can enhance these three variables and examine potential correlations between metacognition, a growth mindset, and career-choice readiness. There remains a gap in understanding the effects of student entrepreneurial projects, particularly in secondary schools. We will define the connections between career-choice readiness, metacognition, and growth mindset in the context of an entrepreneurial project. Additionally, we will assess the impact of the underlying program on these variables, formulating research models and hypotheses based on existing evidence.

2. Theoretical Framework, Context of the Study, and Research Hypotheses

2.1. Entrepreneurial Projects and Career-Choice Readiness

Career-choice readiness is pivotal for young individuals, particularly recent graduates, as they contemplate their future career paths [18]. It denotes a person's capacity and willingness to navigate the various developmental tasks associated with career decision-making. Essentially, it signifies how confident an individual feels about possessing the necessary knowledge and skills to make informed career choices [19]. This construct encompasses four key elements: career decidedness, career planning, career exploration, and vocational identity [20]. Building upon this definition, Marciniak et al. [21] analyzed existing models, theories, definitions, and measurement tools in career research, culminating in developing a more contemporary concept of career-choice readiness. The evolved concept integrates motivation, knowledge, competencies, and activities as its defining dimensions. Motivation refers to the emotional disposition towards one's career choices, such as confidence and clarity. Knowledge and competencies encompass the cognitive understanding and practical skills needed to cultivate occupational expertise and soft skills. Lastly, activities entail concrete actions that facilitate effective career decision-making, such as self-exploration and planning. This conceptually advanced model considers the intricacies and challenges of today's dynamic job market, making it a fitting framework for the present study [21].

In entrepreneurial projects in education, students spend a certain amount of time working on the foundation and development of a business idea. Such projects can be embedded in different contexts and cover social, business, or cultural entrepreneurship topics [22]. The present study refers to an entrepreneurial project as a project-oriented initiative aimed at students in entrepreneurship education. The influence of entrepreneurial programs like student startup projects on career-choice readiness remains an emerging area of research [23–25]. Existing studies are mainly conducted within university contexts and often focus on entrepreneurship education rather than career guidance [26,27]. However, there is a consensus that these programs foster the development of essential soft and transversal skills, including creativity, initiative, and decision-making capabilities [22]. Research also points out improvements in communication, collaboration, and teamwork skills due to these programs [28,29], which are crucial for identifying career opportunities and attaining career-choice readiness [30,31]. Furthermore, entrepreneurship education goes beyond conventional teaching methods, reshaping attitudes and beliefs toward entrepreneurship [32]. This underscores the significance of entrepreneurship education in equipping individuals with the skills and entrepreneurial mindset essential for future career success [31]. Central to this approach is the pedagogical concept of a student startup project, which prioritizes experiential learning. This method enhances cognitive and non-cognitive

skills and improves career-choice readiness, organizational acumen, and interpersonal competencies [8,31,33,34].

The underlying entrepreneurial project is a student startup program by a German educational association, which will be explained in more detail in the methods section. Over four days, students develop business ideas with experienced coaches, focusing on experiential learning and personal responsibility. It emphasizes diverse participant qualities, structured guidance, multiple problem-solving methods, and real-world applications based on design thinking [35]. The program also supports student growth by leveraging their competencies and interests, with trained coaches facilitating entrepreneurial and personal development [36]. The previous evaluation showed that the program significantly improved participants' self-efficacy, problem-solving abilities, creativity, self-confidence, future outlook, and entrepreneurial spirit [37].

2.2. Entrepreneurial Projects, Metacognition, and Growth Mindset

Metacognition refers to the ability to reflect on one's thought processes and decisions [38]. Entrepreneurial education encourages metacognitive development by necessitating students to think critically and reflect on their actions when facing new challenges, making group work a particularly effective platform for teaching metacognition [39]. Research has also established a strong link between metacognition and soft skills, emphasizing the importance of being aware of one's learning process to optimize learning outcomes and entrepreneurial performance [40,41].

A growth mindset involves believing in one's ability to develop and build upon personal characteristics. It is crucial to motivate individuals to tackle challenges, utilize available resources, and confront risks and weaknesses [42]. Growth mindsets encourage self-knowledge and self-reflection, which overlap with metacognitive skills [43]. Furthermore, a growth mindset can enhance vocational orientation, which aligns with career-choice readiness and can be nurtured through entrepreneurial and project-based learning [44].

Entrepreneurship education and entrepreneurial learning cultivate these skills by emphasizing creative thinking, problem-solving, self-efficacy, self-confidence, and communication [9,10,27,31,45]. Furthermore, they have been associated with improving students' fundamental business knowledge and skills [33,46], suggesting that they can enhance metacognition and foster a growth mindset.

In light of the above, participation in a student startup project is anticipated to positively influence career-choice readiness by enhancing action orientation. It may lead to career success, better decision-making, planning, exploration, and vocational identity [7,8,19,36,47,48]. Simultaneously, it is expected to enhance metacognition by fostering critical thinking and learning processes [9,45,48–50] and promote a growth mindset by developing crucial skills for personal and career growth [9,10,27,31,45]. In summary, the study's hypotheses are as follows:

Hypothesis 1a (H1a). *Participation in the school startup project increases participants' metacognition.*

Hypothesis 1b (H1b). *Participation in the school startup project leads to a more developed growth mindset among participants.*

Hypothesis 1c (H1c). *Participation in the school startup project leads to better career-choice readiness among participants.*

### 2.3. Metacognition, Growth Mindset, and Career-Choice Readiness

Metacognition and a growth mindset are anticipated to influence career-choice readiness. Previous research found a significant relationship between metacognition and career decisions, with higher metacognitive skills correlating to increased occupational determination, an important aspect of career-choice readiness [12]. Furthermore, a growth

mindset enhances entrepreneurial self-efficacy and task persistence, which are essential for career decisions [11]. Both constructs support self-regulatory learning processes like self-exploration, goal-setting, and planning [50–52], contributing to career-choice readiness [19]. Research suggests that these factors foster cognitive processes and informed choices, which are crucial for career decision-making [40,41,50,53] and are necessary for recognizing career opportunities [12,54]. Therefore, we hypothesize the following:

Hypothesis 2a (H2a). *Metacognition positively relates to career-choice readiness.*

Hypothesis 2b (H2b). *A growth mindset positively relates to career-choice readiness.*

We summarize the expected relationships in Figure 1.
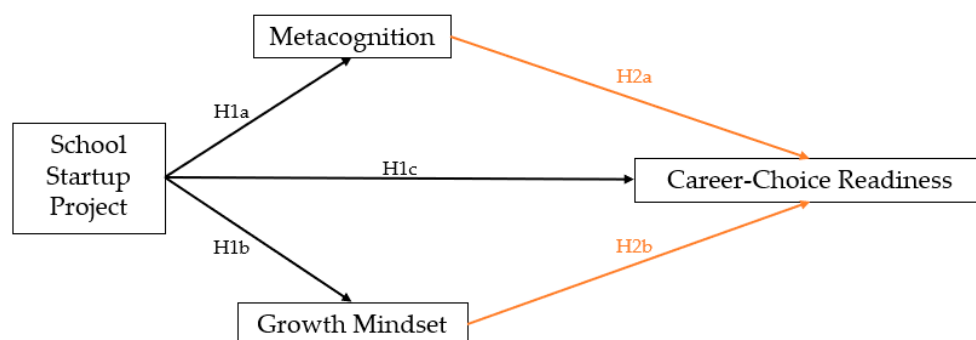
Figure 1. Research model.

3. Methodology

3.1. Overview of Research Design

The research method of this study is a single-group pre–post design, a standard evaluation tool for training and education [55,56]. Data from the group of participants were collected at two measurement time points (n = 54 in the pre-test, n = 42 in the post-test). The organization regularly conducts interventions at participating schools but they need to be evaluated more. This study was allowed to accompany the project scientifically after consultation with the selected schools. The data collection was carried out over several weeks in April and May 2022 with students from northern German district schools. District schools or comprehensive schools provide a flexible education system where students can pursue vocational training post-9th or -10th grade or continue their studies until the 13th year to qualify for university entrance. The system accommodates additional opportunities, such as an exchange year abroad. Participants were selected by enrolling those students who registered for this four-day entrepreneurial intervention during the relevant period.

Participation in the pre-test and post-test was anonymous, and participants were not assigned a personal code. Consequently, while all students took part in the pre-test, it is unclear who participated in the post-test. Nevertheless, everyone who participated in the post-test also participated in the pre-test, and thus, completed the intervention. The pre-test was answered before the project's official start, the post-test after the official end, and more precisely, after a final presentation. Data for this study were gathered through online surveys administered by coaches who had briefed students on survey procedures beforehand.

3.2. Participants and Context

At the time of the survey, the students were in the 9th or 11th grade, and their average age was 16.6. Participants were selected by enrolling those students who participated in this four-day entrepreneurial project during the relevant period, which took place at schools in various settings. The age and grade distribution between the pre-test and post-test are quite similar. Table 1 shows the demographic distribution of the participants.

Table 1. Demographic distribution of participants.

Demographics		Pre-Test		Post-Test	
		Frequency	Percentage	Frequency	Percentage
Age		54		42	
	M	16.6		16.6	
	SD	1.19		1.11	
Grade	9th	12	22.2%	10	23.8%
	11th	42	77.8%	32	76.2%
Gender	f	23	42.6%	25	59.5%
	m	29	53.7%	16	38.1%
	o	2	3.7%	1	2.4%

As mentioned, the program under investigation is designed to last four days and focus on a different topic daily. The individual modules build upon each other and lead to a business idea's independent development and realization. The program, conducted primarily at non-school locations, is about discovering self-efficacy and potential, learning projects and self-management, and intrinsically motivated development and activation. Two certified coaches work with the students to develop and implement business ideas according to the 17 Sustainable Development Goals (SDGs). The SDGs, adopted by the UN in 2015 and outlined in the 2030 UN Agenda, represent a critical call to action for all nations to enhance human well-being. These goals, e.g., zero hunger (SDG 2) or quality education (SDG 4), include initiatives to foster economic growth, ensure global peace, and reduce poverty [57]. In this project, the SDGs provide a framework, encouraging students to create their own sustainable business ideas based on their personal interests.

The coaches also act as advisors, guides, and moderators, following a comprehensive didactic approach to stimulating entrepreneurial initiatives. It also aims to support participants using their competencies, skills, and interests by involving trained coaches who assist the students in exploring new approaches and embracing challenges. The project syllabus is shown in Table 2.

Table 2. Project syllabus.

Day	Focus	Description
1	Creativity and Inspiration	• Students are introduced to entrepreneurship and get to know each other. • They use various brainstorming methods to stimulate creative thinking.
2	Individual Competence and Experience	• Students engage with entrepreneurial ways of thinking and acting. • They examine and discuss these in direct conversations with founders and entrepreneurs.
3	Development of Business Ideas	• Students develop 25 ideas based on personal interests, resources, and competencies. • They select the most feasible idea and start the concrete planning of a business plan.
4	Sales and Entrepreneurial Coaching	• Coaches help students implement their ideas and teach them sales techniques and strategies. • Afterward, the students spend four hours with their small businesses, offering the prepared products or services to genuine customers, selling them, and earning real money. • Finally, they detail their experience and present their impressions to an audience.

The first day focuses on creativity and inspiration. The participants are first introduced to entrepreneurship, and all participants get to know each other. Various brainstorming

methods and creativity exercises are used to stimulate creative thinking. Students explore, discover, and leverage their competence, experience, creativity skills, and potential on the second day. They engage with entrepreneurial ways of thinking and acting, and then, examine and discuss these in direct conversation with founders and entrepreneurs. On the third day, each participant develops 25 ideas based on personal interests, resources, and competencies. On this basis, they then select their favorite idea, either alone or in a team, scrutinize it for feasibility, and engage in planning before presenting the outcome as the business idea to be realized, including a business plan and preparing an agenda or program plan. Afterward, the students organize production, marketing measures, and preparation of the business idea for the following day on their own, without the support of the coaches. On the last day, coaches help students implement their ideas and teach them sales techniques and strategies (e.g., What is a targeted customer approach? How can you pitch your idea best?) before the participants spend four hours with their small businesses, offering the prepared products or services to customers, selling them, and earning real money. Sales venues are usually shopping streets or malls in their district. Finally, they detail their experiences and present them to an audience. The students receive a diploma for participation and can keep the money they have earned from selling the products or services.

3.3. Data Collection and Operationalization

The study used an online self-evaluation questionnaire as an empirical data collection tool, incorporating established research instruments. This questionnaire encompassed demographic questions related to age, gender, and grade level, along with specific sections: metacognition (eight items), growth mindset (six items), and career-choice readiness (six items). Respondents used a 4-point rating scale for their answers.

Metacognition was assessed using the Metacognitive Awareness Inventory (MAI), initially developed by Schraw and Dennison [58]. The MAI evaluates metacognition based on two categories: knowledge of cognition and regulation of cognition, which include metacognitive experiences. To create the questionnaire, eight items were selected from the MAI to provide an overview of the participants' metacognitive abilities. The Growth Mindset Scale, developed by Chen and colleagues [59], explored the relationship between growth mindset in students and teachers. This scale condenses growth mindset into six dimensions: motivation, attitude, grit, challenge, adversity, and positive mindset, derived through exploratory factor analysis. For the study, one item was selected from each subcategory, except for challenges, where two items were chosen. Finally, six items from the Career Resources Questionnaire—Adolescent Version (CRQ-A) were integrated into the questionnaire [21]. The CRQ-A is an adaptation of the CRQ, specifically designed for young individuals nearing the end of their schooling. It encompasses knowledge and skills (including occupational expertise, job market knowledge, and soft skills), motivational career resources, environmental career resources, and career management activities. Due to the study's focus, environmental factors from the CRQ-A were excluded. Instead, two items from the knowledge and skills, motivation, and activities sections were included as per the study's objectives.

Cronbach's alpha values for the subscales and the overall scale can be rated as good to very good [60] and indicate a high level of internal consistency of the items; thus, they are reliable instruments. The only scale that merely achieved an acceptable Cronbach's alpha was the growth mindset in the pre-test. In the post-test, the value of 0.88 was good, as shown in Table 3.

Table 3. Cronbach's alpha values.

Subscale	Items	α (Pre-Test)	α (Post-Test)
Metacognition e.g., "I understand my intellectual strengths and weaknesses" [56]	8	0.73	0.84
Growth Mindset e.g., "I'd like to constantly accept challenges to improve myself" [57]	6	0.64	0.88
Career-Choice Readiness e.g., "I am certain that I have the necessary knowledge and skills for my desired occupation".	6	0.72	0.81
Total	20	0.84	0.93

3.4. Data Analysis

The statistical analysis followed a three-step procedure. First, we conducted three t-tests with independent samples to compare the mean differences in metacognition, growth mindset, and career-choice readiness before and after the treatment. We tested for statistical significance, enabling group comparisons of different sizes. The statistical prerequisites for the variable scaling and testing for outliers are provided. The data were normally distributed according to the Shapiro–Wilk test ($p > 0.05$). The variance homogeneity was tested using Levene's test, according to which the equality of variances can be assumed ($p > 0.05$). Afterwards, we used a Pearson moment correlation coefficient to assess the correlations between metacognition, growth mindset, and career-choice readiness. The statistical requirements of metric-scaled variables, diagnosis of outliers, linearity, and bivariate normal distribution were met. The Pearson correlation was run with the post-test data. Finally, a mediator analysis was run to explore connections between metacognition, growth mindset, and career readiness in more depth. Initially, a partial correlation analysis was run, with results validated through mediation analysis using the Hayes PROCESS macro for SPSS [61].

4. Results

4.1. Differences in Pre- and Post-Test Values (H1)

To test H1, *t*-tests with independent samples were used to determine the significance of the differences between the pre-and post-tests. As the results indicate in Table 4, there was a statistically significant difference between the respective pre- and post-tests in metacognition ($t = -2.31$, $p = 0.02$, $d = 0.40$), but not in growth mindset ($t = -0.89$, $p = 0.38$, $d = 0.17$) or career-choice readiness ($t = -0.93$, $p = 0.35$, $d = 0.18$). The difference in metacognition in the pre-post-test comparison was thus significant, and the effect size $d = 0.40$ indicates a medium effect [62]. In contrast, the differences in growth mindset and career-choice readiness were insignificant and small.

Table 4. Pre- and post-test means, standard derivation, and *t*-test results.

	Pre-Test		Post-Test					
Dimension	*M*	*SD*	*M*	*SD*	*M*	*t*	*p*-Value	*d*
Metacognition	3.06	0.46	3.26	0.51	0.21	−2.31	0.02 *	0.40
Knowledge	3.20	0.47	3.36	0.54	0.17			
Regulation	2.90	0.59	3.22	0.55	0.32			
Growth Mindset	3.16	0.45	3.25	0.65	0.08	−0.89	0.38	0.17
Career-Choice Readiness	3.14	0.54	3.24	0.59	0.11	−0.93	0.35	0.18
Knowledge and Skills	3.07	0.67	3.21	0.60	0.14			
Motivation	3.05	0.73	3.22	0.83	0.17			
Activities	3.28	0.67	3.29	0.75	0.01			

Note: Significance level: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

4.2. Correlation and Mediator Analysis

We used a Pearson moment correlation coefficient in the first step to assess H2. A partial correlation analysis and a process mediator analysis were carried out to examine the individual correlations and effects in more detail. The correlation coefficients for the post-test values were all significant, and each above $r = 0.60$, so they all showed a highly positive correlation. The intercorrelation between metacognition and career-choice readiness (($r = 0.64$) ($p < 0.01$)) and between growth mindset and career-choice readiness (($r = 0.70$) ($p < 0.01$)) showed a relatively high positive relationship. Also, the findings indicate a relatively highly positive correlation between metacognition and growth mindset (($r = 0.73$) ($p < 0.01$)), as shown in Table 5.

Table 5. Pearson correlation snalysis results (post-test values).

Variables	*M*	*SD*	1	2	3
1. Metacognition	3.26	0.53	-		
2. Growth Mindset	3.23	0.67	0.73 **	-	
3. Career-Choice Readiness	3.25	0.59	0.64 **	0.70 **	-

Note: Significance level: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Based on the results of the correlation analysis, we also employed a partial correlation analysis to assess the influence of growth mindset and metacognition on career-choice readiness, as shown in Table 6. By controlling for metacognition, we confirmed that growth mindset still is significantly correlated with career-choice readiness (($r = 0.45$) ($p < 0.01$)). However, after controlling for growth mindset, there is no significant link between metacognition and career-choice readiness (($r = 0.26$) ($p > 0.05$)). These findings suggest that growth mindset potentially mediates the relationship between metacognition and career-choice readiness.

Table 6. Partial correlation (post-test values).

Variables	*r*	*p*
Controlling for Growth Mindset: Metacognition and Career-Choice Readiness	0.26	0.11
Controlling for Metacognition: Growth Mindset and Career-Choice Readiness	0.45 **	0.005

Note: Significance level: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

The partial correlation results suggest that a growth mindset could mediate between metacognition and career-choice readiness. Our study aimed to test the impact of metacognition and growth mindset on career-choice readiness, exploring whether a growth mindset mediates the metacognition–career-choice readiness link. Figure 2 illustrates paths "a", "b", and "c", representing regression coefficients, and thus, the correlations between metacognition (X), growth mindset (M), and career-choice readiness (Y), and between X and Y, respectively. Path "c" represents the total effect of X on Y, and the direct effect of X on Y is shown as path "c" [61]. The results indicate a positive and significant relationship between metacognition and growth mindset (ß = 0.92, SE = 0.12, $t = 7.75$, $p < 0.001$), as well as a significant positive effect of growth mindset on career-choice readiness (ß = 0.44, SE = 0.14, $t = 3.24$, $p < 0.05$). Regarding metacognition's impact on career-choice readiness, the total effect (ß = 0.71, SE = 0.12, $t = 6.11$, $p < 0.001$) is likely positive. However, when controlling for growth mindset, the direct effect (c′) becomes non-significant (ß = 0.31, SE = 0.18, $t = 1.74$, $p > 0.05$) and decreases from ß = 0.71 to ß = 0.31. This confirms the results of the partial correlation, indicating that there is no significant direct relationship between metacognition and career-choice readiness in our model.
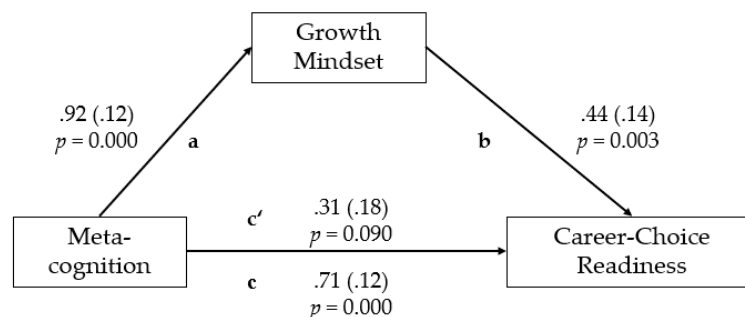
a = Direct Effect of Metacognition on Growth Mindset
b = Direct Effect of Growth Mindset on Career Choice Readiness
c′= Direct Effect of Metacognition on Career Choice Readiness
c = Total Effect of Metacognition on Career Choice Readiness (a*b + c′)

Figure 2. Path diagram.

5. Discussion

The four-day school startup project investigated was designed to stimulate entrepreneurial initiative and career-choice readiness. While pre- and post-tests showed an expected rise in metacognition, growth mindset, and career-choice readiness, only metacognition significantly increased. The design of the 4-day training, especially exploring, discovering (day 2–3), and reflecting (day 4) on individual competencies within the project, also impacted participant metacognition. This aligns with the project's emphasis on fostering critical and creative thinking skills, promoting metacognitive development as a prerequisite for vocational decisions [12]. Moreover, this program might enhance students' metacognitive awareness due to the decision-making process, especially on day 3 [63], which can impact students' career development in the long term [64].

Students needed to adapt to unfamiliar and challenging situations, and thus, had the opportunity to evaluate and reflect on their thinking processes, at least on a short-term basis, which might explain the moderate increase in the post-test results.

However, the differences in growth mindset and career-choice readiness were not statistically significant, potentially due to the intervention's brief timespan and the extensive range of tasks. The complexity of developing 25 business ideas quickly may have diminished the focus on individual interests and competencies, reducing the potential impact on growth mindset and career-choice readiness. Extending the program's duration could allow for a deeper exploration of each discipline and goal, leading to more pronounced effects in the future.

This study also examined the relationships between metacognition, career-choice readiness, and growth mindset. Strong positive correlations were observed among these factors, as indicated by high Pearson correlation coefficients. A mediation analysis revealed that a growth mindset primarily mediates the relationship between metacognition and career-choice readiness, suggesting no direct effect between the former two. The findings indicate that a growth mindset could influence the application of metacognitive skills in career decision-making. Emphasizing a growth mindset is crucial, as it can be dynamic but is a relatively stable construct over time, impacting how interventions affect career-choice readiness [42,65]. Studies have shown that interventions focusing on a growth mindset can boost students' confidence in their entrepreneurial abilities and determination to succeed. These improvements lead to better academic performance, a stronger vocational interest [11], and career-decision self-efficacy [66]. However, despite improved metacognitive skills, the intervention did not significantly change career-choice readiness among participants, highlighting the need for a growth mindset's mediating role.

The current program serves as a foundation for initial professional orientation, yet there is room for enhancement to stimulate career-choice readiness further. Future iterations of the program should not only focus on the variety of education and training opportunities

available to foster student knowledge and skills in their chosen vocational fields but also expand on methods to improve the success of entrepreneurial interventions. This could include applying different teaching methods and introducing additional strategies to promote constructs such as metacognition and a growth mindset. Integrating career education into the curriculum, providing access to labor market information, facilitating interactions with real-world employers, and offering personalized guidance are crucial steps in this direction [67].

The underlying program can be enhanced by implementing sessions for feedback, including peer evaluations or mentorship. Mentors provide essential guidance as interactions with actual entrepreneurs can significantly develop students' skills in entrepreneurship [68]. Since entrepreneurs are already integrated into the program from day 2, their involvement could be extended to include mentorship roles, enhancing entrepreneurial skills, and encouraging deeper self-reflection, analysis, and awareness among students [69]. Engaging with external stakeholders also sharpens oral communication, project management, and critical thinking [7,22,46]. Furthermore, group counseling sessions could support students' growth mindset, aiding them in recognizing their strengths and fostering a positive sense of self [70].

In entrepreneurship education, feedback sessions are crucial for tailoring teaching to meet students' needs and support their entrepreneurial journey [71]. Such sessions, especially peer feedback, drive motivation and creativity and encourage a broader perspective on project development [68,71]. The program asks students to pick the top 25 ideas for a business plan on day 3, with coaching provided up to this point. On the last day, students present their experience to an audience, where peer feedback can encourage them to reflect on what went particularly well and where they had their biggest challenges.

Introducing peer feedback here might enrich this experience, encouraging reflective thinking and enhancing entrepreneurial learning [72]. Research has indicated that process-focused peer feedback can nurture a growth mindset [73]. Using feedback to reassess, reflect, and modify objectives can effectively evaluate student progress, tapping into metacognitive processes [9].

To further bridge the gap to their professional future, the program should integrate concrete career prospects and plans more thoroughly, encouraging students to apply their learning in real-life situations and consider how their potential careers could contribute to society. This involves assessing students' career orientation and aspirations by asking reflective questions about their future career paths and the societal impact of their work.

In summary, the program should continue to refine career orientation and concrete aspirations by integrating feedback and mentoring sessions, offering comprehensive training in soft skills to promote an entrepreneurial mindset. These enhancements will improve students' awareness of their abilities and competence and ensure they are well prepared for their professional futures, fostering a comprehensive approach to career readiness and entrepreneurial success. Furthermore, it can enhance metacognition and cultivate a growth mindset by incorporating strategies encouraging students to engage in critical thinking and reflection. Based on our results, an increase in metacognition can lead to an even higher growth mindset and finally impact students' career-choice readiness. Promoting such cognitive skills and mindsets is expected to deepen students' understanding of their learning processes and career development, facilitating a more profound and informed approach to navigating their career paths and achieving long-term success.

6. Limitations

The study faced limitations, including a lack of data on participants' general motivations linked to growth mindset and metacognition [74,75]. The questionnaire was designed to be as brief and comprehensible as possible, omitting details on career intentions and background, affecting entrepreneurial mindset and career-choice readiness insights [6,23]. A lack of a control group [76] and the one-time learning setting of the project affected the reliability and generalizability of the results. Furthermore, there were fewer participants,

and the pre- and post-test data could not be matched due to missing participant codes. The relatively small sample size and the focus on district schools limit the generalizability of the study. However, our research aims not to offer valid conclusions on entrepreneurship education at a secondary school level but to provide insight to obtain an idea of the expected effects of such an intervention. So far, there is little research on entrepreneurship education in lower and upper secondary education. So, despite the small sample, we were able to provide some evidence of what can be achieved with such an implementation.

A more robust research methodology is recommended to strengthen these results, including introducing a comparison group for a more accurate assessment of the program's effects. This approach would help investigate the direct impact of the intervention on the outcomes observed in the post-test analysis [69]. According to results by Czerwenka and Ehmke [37], the underlying intervention can have lasting effects on the occupational attitudes of participants. Future research should explore larger samples and apply longitudinal methods to assess the lasting impact of entrepreneurial projects in diverse educational settings. This approach will allow for a deeper analysis of the interventions' effects. Employing mixed methods [77] could provide a more comprehensive understanding of the outcomes and mechanisms involved. Also, future research should include more variables like prior knowledge, professional experiences, career role models, socioeconomic status, and family background, which influence vocational development and mindset [78–83].

7. Conclusions

Many students leave school without orientation or proper qualifications and initially fail to find a suitable occupation [84–86]. This issue can be attributed, in part, to the fact that career orientation initiatives are often implemented without a solid foundation in research [86]. This study has successfully established a model for scientifically evaluating career orientation initiatives, highlighting the critical need to prove their effectiveness. To address the problem of a lack of career orientation among secondary students in an efficient and targeted way in the future, a scientific basis is needed that serves as a starting point for further research and practical implementations. This study has established a link between science and practice, thus contributing to this immature body of research.

Students should better understand their interests, skills, objectives, and job market demands. This study emphasizes the need to broaden entrepreneurial education into earlier educational stages, highlighting the effectiveness of school startup projects in enhancing metacognition. Our results also indicate a strong interconnection between metacognition and growth mindset, as well as between growth mindset and career-choice readiness. However, the current model did not determine a direct link between metacognition and career-choice readiness. While such projects significantly improve metacognition, their direct impact on career-choice readiness needs further exploration.

Initiating school startup projects with a didactic approach that emphasizes creative and critical thinking and encourages students to explore, discover, and reflect on their entrepreneurial and creative abilities can equip them with various valuable skills [22]. Structuring entrepreneurial interventions like the underlying school startup project will likely enhance students' metacognitive knowledge and regulation, potentially fostering the development of a growth mindset and improving career-choice readiness. Based on these findings, expanding such projects in the same or a similar format to other regions in Germany or abroad through collaboration with external organizations and partners can promote vocational guidance.

There is a need for better integration of the program content with students' vocational interests and a more engaging and supportive learning environment, with future programs recommended to incorporate career guidance and training elements [22,69,86]. Fostering a growth mindset and metacognition is critical in helping students navigate their career paths [64,70]. The research also points out that students need more direction, attributed to the absence of career orientation initiatives in German secondary education systems [86,87]. To address this, the study recommends expanding such entrepreneurial projects by in-

corporating real-life experiences like internships and mentoring programs [11,88,89] and calling for governmental support in providing adequate funding and curriculum space for practical career guidance.

References

1. Oztemel, K. An investigation of career indecision level of high school students: Relationships with personal indecisiveness and anxiety. *Online J. Couns. Educ.* **2013**, *2*, 46–58.
2. DiBenedetto, C.A.; Willis, V.C. Post-secondary Students' Perceptions of Career Readiness Skills. *J. Agric. Educ.* **2020**, *61*, 44–59. [CrossRef]
3. Horrillo, S.J.; Smith, M.H.; Wilkins, T.R.; Diaz Carrasco, C.P.; Caeton, N.W.; McIntyre, D.; Schmitt-McQuitty, L. A Positive Youth Development Approach to College and Career Readiness. *J. Youth Dev.* **2021**, *16*, 74–99. [CrossRef]
4. Hurrelmann, K.; Köcher, R.; Sommer, M. Die McDonald's Ausbildungsstu-die 2019. IfD Allensbach. Available online: https://karriere.mcdonalds.de/docroot/jobboerse-mcd-career-blossom/assets/documents/McD_Ausbildungsstudie_2019.pdf (accessed on 24 January 2024).
5. Penning, I. *Schülerfirmen und Berufliche Orientierung. Berufliche Orientierung in der Schule: Gegenstand der ökonomischen Bildung*; Schröder, R., Ed.; Springer: Wiesbaden, Germany, 2020; pp. 221–234. ISBN 978-3-658-24197-1.
6. Marques, C.S.; Ferreira, J.J.; Gomes, D.N.; Gouveia Rodrigues, R. Entrepreneurship education. *Educ. + Tran.* **2012**, *54*, 657–672. [CrossRef]
7. Mawson, S.; Casulli, L.; Simmons, E.L. A Competence Development Approach for Entrepreneurial Mindset in Entrepreneurship Education. *Entrep. Educ. Pedagog.* **2022**, *6*, 481–501. [CrossRef]
8. Lackéus, M. Entrepreneurship in Education: What, Why, When, How. Background. 2015. Available online: https://www.oecd.org/cfe/leed/BGP_Entrepreneurship-in-Education.pdf (accessed on 24 January 2024).
9. Ustav, S. How Entrepreneurship Education Can be Developed Knowing the Power of Metacognition. *Res. Econ. Bus. Cent. East. Eur.* **2016**, *8*, 85–109.
10. Shahin, M.; Ilic, O.; Gonsalvez, C.; Whittle, J. The impact of a STEM-based entrepreneurship program on the entrepreneurial intention of secondary school female students. *Int. Entrep. Manag. J.* **2021**, *17*, 1867–1898. [CrossRef]
11. Burnette, J.L.; Pollack, J.M.; Forsyth, R.B.; Hoyt, C.L.; Babij, A.D.; Thomas, F.N.; Coy, A.E. A Growth Mindset Intervention: Enhancing Students' Entrepreneurial Self-Efficacy and Career Development. *Entrep. Theory Pr.* **2019**, *44*, 878–908. [CrossRef]
12. Symes, B.A.; Stewart, J.B. The Relationship Between Metacognition and Vocational Indecision. *Can. J. Couns. Psychother.* **2007**, *33*, 195–211. Available online: https://cjc-rcc.ucalgary.ca/article/view/58624 (accessed on 25 January 2024).
13. Liguori, E.; Winkler, C.; Vanevenhoven, J.; Winkel, D.; James, M. Entrepreneurship as a career choice: Intentions, attitudes, and outcome expectations. *J. Small Bus. Entrep.* **2019**, *32*, 311–331. [CrossRef]
14. Liguori, E.W.; Bendickson, J.S.; McDowell, W.C. Revisiting entrepreneurial intentions: A social cognitive career theory approach. *Int. Entrep. Manag. J.* **2017**, *14*, 67–78. [CrossRef]
15. Seikkula-Leino, J.; Håkansson Lindqvist, M.; Jónsdóttir, S.R.; Ólafsdóttir, S.M.; Verma, P. Developing Entrepreneurial Society: Have We Ignored the Opportunities of Preschool Education? *Educ. Sci.* **2023**, *13*, 736. [CrossRef]

16. Martínez-Gregorio, S.; Badenes-Ribera, L.; Oliver, A. Effect of entrepreneurship education on entrepreneurship intention and related outcomes in educational contexts: A meta-analysis. *Int. J. Manag. Educ.* **2021**, *19*, 100545. [CrossRef]

17. Belchior, R.F.; Lyons, R. Explaining entrepreneurial intentions, nascent entrepreneurial behavior and new business creation with social cognitive career theory–a 5-year longitudinal analysis. *Int. Entrep. Manag. J.* **2021**, *17*, 1945–1972. [CrossRef]

18. Chua, L.W.; Milfont, T.L.; Jose, P.E. Coping Skills Help Explain How Future-Oriented Adolescents Accrue Greater Well-Being Over Time. *J. Youth Adolesc.* **2014**, *44*, 2028–2041. [CrossRef] [PubMed]

19. Hirschi, A.; Läge, D. Increasing the career choice readiness of young adolescents: An evaluation study. *Int. J. Educ. Vocat. Guid.* **2008**, *8*, 95–110. [CrossRef]

20. Hirschi, A.; Läge, D. The Relation of Secondary Students' Career-Choice Readiness to a Six-Phase Model of Career Decision Making. *J. Career Dev.* **2007**, *34*, 164–191. [CrossRef]

21. Marciniak, J.; Hirschi, A.; Johnston, C.S.; Haenggli, M. Measuring Career Preparedness Among Adolescents: Development and Validation of the Career Resources Questionnaire—Adolescent Version. *J. Career Assess.* **2020**, *29*, 164–180. [CrossRef]

22. Fernandes, S.; Regueiro, A.; Magalhães, M.; Dinis-Carvalho, J.; Costa-Lobo, C. Developing Transferrable Skills Through Entrepreneurship Projects: Student's Experiences and Challenges. In *INTED2017 Proceedings*; Gómez Chova, L., López Martínez, A., Candel Torres, I., Eds.; IATED: Valencia, Spain, 2017; pp. 935–945.

23. Peterman, N.E.; Kennedy, J. Enterprise Education: Influencing Students' Perceptions of Entrepreneurship. *Entrep. Theory Pr.* **2003**, *28*, 129–144. [CrossRef]

24. Rodrigues, R.G.; Dinis, A.; Paço, A.D.; Ferreira, J.J.; Raposo, M. The effect of an entrepreneurial training programme on entrepreneurial traits and intention of secondary students. In *Entrepreneurship—Born, Made and Educated*; Burger-Helmchen, T., Ed.; InTech: London, UK, 2012. [CrossRef]

25. Sánchez, J.C. The Impact of an Entrepreneurship Education Program on Entrepreneurial Competencies and Intention. *J. Small Bus. Manag.* **2013**, *51*, 447–465. [CrossRef]

26. Bell, R.; Bell, H. An enterprise opportunity for entrepreneurial students. *Educ. + Train.* **2016**, *58*, 751–765. [CrossRef]

27. Marchand, J.; Hermens, A.; Sood, S. Student Entrepreneurship: A Research Agenda. *Int. J. Organ. Innov.* **2015**, *8*, 266.

28. Costello, C.; Neck, H.; Dziobek, K. Entrepreneurs of All Kinds: Elements of the Entrepreneurs Inside Experience. Available online: https://www.stuart-hall.com/wordpress/wp-content/uploads/2011/12/ELab-Elements-Ent-Exp.pdf (accessed on 24 January 2024).

29. Krawczyk-Bryłka, B.; Stankiewicz, K.; Ziemiański, P.; Tomczak, M.T. Effective Collaboration of Entrepreneurial Teams—Implications for Entrepreneurial Education. *Educ. Sci.* **2020**, *10*, 364. [CrossRef]

30. Rina, L.; Murtini, W.; Indriayu, M. Entrepreneurship Education: Is It Important for Middle School Students? *Din. Pendidik.* **2019**, *14*, 47–59. [CrossRef]

31. Rodriguez, S.; Lieber, H. Relationship Between Entrepreneurship Education, Entrepreneurial Mindset, and Career Readiness in Secondary Students. *J. Exp. Educ.* **2020**, *43*, 277–298. [CrossRef]

32. Kakouris, A.; Liargovas, P. On the About/For/Through Framework of Entrepreneurship Education: A Critical Analysis. *Entrep. Educ. Pedagog.* **2020**, *4*, 396–421. [CrossRef]

33. Smith, K.; Rogers-Draycott, M.C.; Bozward, D. Full curriculum-based venture creation programmes: Current knowledge and research challenges. *Int. J. Entrep. Behav. Res.* **2022**, *28*, 1106–1127. [CrossRef]

34. Stamboulis, Y.; Barlas, A. Entrepreneurship education impact on student attitudes. *Int. J. Manag. Educ.* **2014**, *12*, 365–373. [CrossRef]

35. Meinel, C.; Leifer, L.; Plattner, H. *Design Thinking*; Springer: Berlin/Heidelberg, Germany, 2011.

36. Jordan, S.; Gessnitzer, S.; Kauffeld, S. Effects of a group coaching for the vocational orientation of secondary school pupils. *Int. J. Theory, Res. Pr.* **2016**, *9*, 143–157. [CrossRef]

37. Czerwenka, K.; Ehmke, T. *Bildungsinitiative Futurepreneur: Evaluationsbericht 2017 (Unpublished Report)*; Institute of Educational Sciences, Leuphana University Luneburg: Luneburg, Germany. Available online: https://www.futurepreneur.de/programme/wirkung/ (accessed on 24 January 2024).

38. Flavell, J.H. Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry. *Am. Psychol.* **1979**, *34*, 906–911. [CrossRef]

39. Dignath, C.; Buettner, G.; Langfeldt, H.-P. How can primary school students learn self-regulated learning strategies most effectively? *Educ. Res. Rev.* **2008**, *3*, 101–129. [CrossRef]

40. Ku, K.Y.L.; Ho, I.T. Metacognitive strategies that enhance critical thinking. *Metacognition Learn.* **2010**, *5*, 251–267. [CrossRef]

41. Magno, C. The role of metacognitive skills in developing critical thinking. *Metacognition Learn.* **2010**, *5*, 137–156. [CrossRef]

42. Dweck, C.S. Mindsets: Developing Talent through a Growth Mindset. Available online: https://www.growthmindsetinstitute.org/wp-content/uploads/2018/07/OlympCoachMag_Win-09_Vol-21_Mindset_Carol-Dweck-6.pdf (accessed on 24 January 2024).

43. Yeager, D.S.; Walton, G.M. Social-Psychological Interventions in Education. *Rev. Educ. Res.* **2011**, *81*, 267–301. [CrossRef]

44. Santoso, R.T.P.B.; Priyanto, S.H.; Junaedi, I.W.R.; Santoso, D.S.S.; Sunaryanto, L.T. Project-Based Entrepreneurial Learning (PBEL): A Blended Model for Startup Creations at Higher Education Institutions. *J. Innov. Entrep.* **2023**, *12*, 1–22. [CrossRef]

45. Kuckertz, A. Why we think we teach entrepreneurship - and why we should really teach it. *J. Entrep. Educ.* **2021**, *24*. Available online: https://www.researchgate.net/publication/350372871_Why_we_think_we_teach_entrepreneurship_-_and_why_we_should_really_teach_it (accessed on 24 January 2024).
46. Riklin, B. Betriebswirtschaftliche Allgemeinbildung und Entrepreneurship Education am Gymnasium: Die Auswirkungen einer Entrepreneurship Education auf Betriebswirtschaftliche Kompetenzen von Gymnasiastinnen und Gymnasiasten. Available online: https://www.zora.uzh.ch/id/eprint/206489/1/RIKLIN_BEDA_ALEXANDER_Dissertation.pdf (accessed on 24 January 2024).
47. Babarović, T.; Dević, I.; Blažev, M. The effects of middle-school career intervention on students' career readiness. *Int. J. Educ. Vocat. Guid.* **2019**, *20*, 429–450. [CrossRef]
48. Sandi-Urena, S.; Cooper, M.M.; Stevens, R.H. Enhancement of Metacognition Use and Awareness by Means of a Collaborative Intervention. *Int. J. Sci. Educ.* **2010**, *33*, 323–340. [CrossRef]
49. Wheadon, J.D.; Duval-Couetil, N. Business Plan Development Activities as a Pedagogical Tool in Entrepreneurship Education. *J. Eng. Entrep.* **2014**, *5*, 31–48. [CrossRef]
50. Winkler, C.; Fust, A.; Jenert, T. From entrepreneurial experience to expertise: A self-regulated learning perspective. *J. Small Bus. Manag.* **2021**, *61*, 2071–2096. [CrossRef]
51. Zimmerman, B.J.; Schunk, D.H. *Self-Regulated Learning and Academic Achievement*; Routledge: London, UK, 2001; ISBN 978-0-805-83561-8.
52. Zimmerman, B.J.; Moylan, A.R. Self-regulation: Where metacognition and motivation intersect. In *Handbook of Metacognition in Education*; Hacker, D.J., Dunlosky, J., Graesser, A.C., Eds.; Routledge: London, UK, 2009; pp. 299–315. ISBN 0-203-87642-3.
53. Miller, C.J.; Smith, S.N.; Pugatch, M. Experimental and quasi-experimental designs in implementation research. *Psychiatry Res.* **2019**, *283*, 112452. [CrossRef] [PubMed]
54. Zeidner, M.; Boekaerts, M.; Pintrich, P.R. *Self-Regulation. Handbook of Self-Regulation*; Elsevier: Amsterdam, The Netherlands, 2000; pp. 749–768. ISBN 978-0-12-109890-2.
55. Blas, E.S. Pre-experimental designs in psychology and education: A conceptual review. *Liberabit* **2013**, *19*, 133–141.
56. Alessandri, G.; Zuffianò, A.; Perinelli, E. Evaluating Intervention Programs with a Pretest-Posttest Design: A Structural Equation Modeling Approach. *Front. Psychol.* **2017**, *8*, 223. [CrossRef] [PubMed]
57. Russell-Bennett, R.; Rosenbaum, M.S.; Fisk, R.P.; Raciti, M.M. SDG editorial: Improving life on planet earth–a call to action for service research to achieve the sustainable development goals (SDGs). *J. Serv. Mark.* **2023**, *38*, 145–152. [CrossRef]
58. Schraw, G.; Dennison, R.S. Assessing Metacognitive Awareness. *Contemp. Educ. Psychol.* **1994**, *19*, 460–475. [CrossRef]
59. Chen, S.; Ding, Y.; Liu, X. Development of the growth mindset scale: Evidence of structural validity, measurement model, direct and indirect effects in Chinese samples. *Curr. Psychol.* **2021**, *42*, 1712–1726. [CrossRef]
60. Streiner, D.L. Starting at the beginning: An introduction to coefficient alpha and internal consistency. *J. Pers. Assess.* **2003**, *80*, 99–103. [CrossRef] [PubMed]
61. Hayes, A.F. *Introduction to Mediation, Moderation, and Conditional Process Analysis. A Regression-Based Approach*, 3rd ed.; Methodology in the Social Sciences; The Guilford Press: New York, NY, USA; London, UK, 2022; ISBN 978-1-462-54903-0.
62. Cohen, J. *Statistical Power Analysis for the Behavioral Sciences*; Routledge: London, UK, 2013. [CrossRef]
63. Batha, K.; Carroll, M. Metacognitive training aids decision making. *Aust. J. Psychol.* **2007**, *59*, 64–69. [CrossRef]
64. Kosine, N.; Steger, M.; Duncan, S. Purpose-Centered Career Development: A Strengths-Based Approach to Finding Meaning and Purpose in Careers. *Prof. Sch. Couns.* **2008**, *12*, 133–136. [CrossRef]
65. Dweck, C.S. The Journey to Children's Mindsets-and Beyond. *Child Dev. Perspect.* **2017**, *11*, 139–144. [CrossRef]
66. Park, K.O.; Go, E.H.; Lee, C.S. Moderated Mediating Model of Growth Mindset in the Relationship between Self-Esteem, Gratitude and Career Decision Self-Efficacy. *Spec. Edu.* **2022**, *1*, 2964–2972.
67. Dodd, V.; Hanson, J.; Hooley, T. Increasing students' career readiness through career guidance: Measuring the impact with a validated measure. *Br. J. Guid. Couns.* **2021**, *50*, 260–272. [CrossRef]
68. Wenninger, H. Student Assessment of Venture Creation Courses in Entrepreneurship Higher Education—An Interdisciplinary Literature Review and Practical Case Analysis. *Entrep. Educ. Pedagog.* **2018**, *2*, 58–81. [CrossRef]
69. Bocoș, M.; Mara, D.; Roman, A.; Rad, D.; Crișan, C.; Balaș, E.; Mara, E.-L.; Neacșu, M.-G.; Costache Colareza, C.; Ioana, T.; et al. Mentoring and metacognition—Interferences and interdependencies. *J. Infrastruct. Policy Dev.* **2023**, *8*. [CrossRef]
70. Zhao, H.; Zhang, M.; Li, Y.; Wang, Z. The Relationship between a Growth Mindset and Junior High School Students' Meaning in Life: A Serial Mediation Model. *Behav. Sci.* **2023**, *13*, 189. [CrossRef] [PubMed]
71. Warhuus, J.P.; Blenker, P.; Elmholdt, S.T. Feedback and assessment in higher-education, practice-based entrepreneurship courses. *Ind. High. Educ.* **2018**, *32*, 23–32. [CrossRef]
72. Færgemann, H.M. How to Accelerate Learning in Entrepreneurship Education through Explicit Feedback Strategies? In Proceedings of the 3E Conference-ECSB Entrepreneurship Education Conference Leeds, Leeds, UK, 1–13 May 2016; Available online: https://www.researchgate.net/publication/339780462_How_to_Accelerate_Learning_in_Entrepreneurship_Education_through_Explicit_Feedback_Strategies (accessed on 24 January 2024).
73. Zhang, J.; Kuusisto, E.; Nokelainen, P.; Tirri, K. Peer Feedback Reflects the Mindset and Academic Motivation of Learners. *Front. Psychol.* **2020**, *11*, 1701. [CrossRef] [PubMed]
74. Ng, B. The Neuroscience of Growth Mindset and Intrinsic Motivation. *Brain Sci.* **2018**, *8*, 20. [CrossRef] [PubMed]

75. Efklides, A. Interactions of Metacognition With Motivation and Affect in Self-Regulated Learning: The MASRL Model. *Educ. Psychol.* **2011**, *46*, 6–25. [CrossRef]

76. Levy, Y.; Ellis, T.J. A Guide for Novice Researchers on Experimental and Quasi-Experimental Studies in Information Systems Research. *Interdiscip. J. Inf. Knowl. Manag.* **2011**, *6*, 151–161. [CrossRef]

77. Creswell, J.W.; Plano Clark, V.L. *Designing and Conducting Mixed Methods Research*, 3rd ed.; SAGE: Los Angeles, CA, USA, 2017; ISBN 978-1-412-97517-9.

78. Creed, P.A.; Patton, W. Differences in Career Attitude and Career Knowledge for High School Students with and without Paid Work Experience. *Int. J. Educ. Vocat. Guid.* **2003**, *3*, 21–33. [CrossRef]

79. Flouri, E.; Buchanan, A. The Role of Work-Related Skills and Career Role Models in Adolescent Career Maturity. *Career Dev. Q.* **2002**, *51*, 36–43. [CrossRef]

80. Patton, W.; Creed, P.A. Developmental Issues in Career Maturity and Career Decision Status. *Career Dev. Q.* **2001**, *49*, 336–351. [CrossRef]

81. Sulistiani, W.; Handoyo, S. Career Adaptability: The Influence of Readiness and Adaptation Success in the Education Context: A Literature Review. In Proceedings of the 3rd ASEAN Conference on Psychology, Counselling, and Humanities, Malang, Indonesia, 21–22 October 2017; Atlantis Press: Amsterdam, The Netherlands, 2018; pp. 159–169. [CrossRef]

82. Olugbola, S.A. Exploring entrepreneurial readiness of youth and startup success components: Entrepreneurship training as a moderator. *J. Innov. Knowl.* **2017**, *2*, 155–171. [CrossRef]

83. Claro, S.; Loeb, S. Students with Growth Mindset Learn More in School: Evidence from California's CORE School Districts. 2019. Available online: https://files.eric.ed.gov/fulltext/ED600488.pdf (accessed on 24 January 2024).

84. Kulcsár, V.; Dobrean, A.; Gati, I. Challenges and difficulties in career decision making: Their causes, and their effects on the process and the decision. *J. Vocat. Behav.* **2019**, *116*, 103346. [CrossRef]

85. Levels, M.; van der Velden, R.; Di Stasio, V. From school to fitting work. *Acta Sociol.* **2014**, *57*, 341–361. [CrossRef]

86. Kayser, H.; Ziegler, B. Erkenntnisse zur Gestaltung der Berufsorientierung Jugendlicher an Sekundarschulen – Ergebnisse einer integrativen Review und ihre Implikationen. *Z. Berufsund Wirtsch.* **2014**, *110*, 216–234. [CrossRef]

87. Hirschi, A. Career-choice readiness in adolescence: Developmental trajectories and individual differences. *J. Vocat. Behav.* **2011**, *79*, 340–348. [CrossRef]

88. Gamboa, V.; Paixão, M.P.; Da Silva, J.T.; Taveira, M.d.C. Career Goals and Internship Quality Among VET Students. *J. Career Dev.* **2020**, *48*, 910–925. [CrossRef]

89. Quiroga-Garza, M.E.; Flores-Marín, D.L.; Cantú-Hernández, R.R.; Eraña Rojas, I.E.; López Cabrera, M.V. Effects of a vocational program on professional orientation. *Heliyon* **2020**, *6*, e03860. [CrossRef]