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Article

Do Peer Effects Influence the Intention of Students to Participate in Entrepreneurship and Innovation Activities? Evidence from Nanjing Agricultural University, China

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Abstract

In China, entrepreneurship education and innovation activities are regarded as essential directions of higher education reform. Many studies explore the relationship in the existing literature, but from the individual, family, school, and society. As far peer group is concerned, the studies remained sparse especially in the context of China. To address the gap, the current study explores the relationship between peer effect and students' intention to participate in entrepreneurship and innovation activities using 1066 undergraduate students from Nanjing Agricultural University, China. The study employed ordinary least square (OLS) regression and revealed that college students' social networks have more substantial and irreplaceable effects on other students. Moreover, the current study also employed mediation analysis with the fact that it is believed that peer effect can influence college students' intention through example effect (by setting an example of excellent students for other students) and knowledge spillover effect (transmitting the information regarding new opportunities associated with entrepreneurship and innovation). In conclusion, the outcome reveals that peer effect significantly improves the students' intention to participate in entrepreneurship and innovation activities. The example effect and knowledge spillover effect significantly mediate the relationship. The overall findings provide guidelines for institutions to strengthen the activities for peers acquainted at the university to cultivate their practical abilities and boost their intention towards participation in entrepreneurship and innovation activities.

Keywords

Peer effect; example effect; knowledge spillover effect; entrepreneurship and innovation activities participation; China

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In China, it is emphasized by the general secretary of the communist party that colleges and universities should focus on practice-oriented education to boost talent and better understanding among students regarding the situations prevailing in the society and at the national level and enable them to cope the meager situation confronted by them. In this vein, practice-oriented education is acknowledged as a significant factor in enhancing students' knowledge and cognitive ability (Jones & English, 2004). Many scholars used various teaching theories to analyze practice-oriented teaching in the existing literature, such as "knowledge-ability interpenetration", integration of production, learning and research, knowledge horizon, etc. In existing studies, there exists two schools of thought among people; some might think that practical education is not real. Others may believe that practical education is more important as it makes students understand better by teaching effectively. For instance, practical teaching in experiments and real-life projects enables students to retain the knowledge in their minds for an extended period compared to theoretical learning, which stays only short. Practical teaching is also believed to help students prepare for their life after education and make them more appealing towards allied business activities (William, 2018). But still, most of the colleges and universities prefer theoretical-based teaching over practice, knowledge transfer over ability cultivation and selective education over popularization education.

In this study, we emphasized China as the education systems in China also directed their attention to cultivating the students' practical ability. In this regard, the Ministry of Science and Technology and the Ministry of Education of China in 2019 emphasized entrepreneurship and innovation education. They accentuated that universities should build platforms for entrepreneurship education and devote themselves to cultivating entrepreneurship and innovation abilities among college students. Entrepreneurship education is emphasized due to the requirements to make students deal efficiently with the modern work and living environment. Different researchers define entrepreneurship education in different ways such as according to Kourilsky (1995), entrepreneurship is the “opportunity recognition, marshaling of resources in the presence of risk, and building a business venture,” while Bechard and Toulouse (1998) defined entrepreneurship as “a collection of formalized teachings that informs, trains, and educates anyone interested in business creation, or small business development”. At a broader level, Gibb (2002) defined entrepreneurship education not only as “an entrepreneurial person” who may convert into self-employed or an owner of the enterprise, but also a person who can trail entrepreneurship and innovation as an employee and be a person who reveals “enterprising behavior” In this sense, entrepreneurship is related to contemporary professional concepts (Van Gelderen et al., 2008) that highlight elasticity to manage the labor market in the modern world.

Though many efforts have been made to improve entrepreneurship and innovation education in Chinese institutions, college students' participation in entrepreneurship and innovation activities is still not up to the mark. It is attributed to several factors such as the lack of innovation and entrepreneurship education system, poor curriculum design, the lack of teachers, and an imperfect evaluation system (Ma & Bai, 2015). It is proposed that the strategies be student-centered to fully tap their potential of innovation and cultivate their innovative talents (Jia-hua & Xu-dong, 2010; Xiaohui, 2015). Further, it is also hypothesized that peer effect can enhance students' entrepreneurship and innovation abilities. The students under the peer effect can instruct each other (Vardardottir, 2013). According to the recognition theory, it is believed that mutual recognition by students can increase the sense of identity and encourage performing and solving the issues efficiently. This phenomenon is called as peer effect (Meng & Zhang, 2020). It is believed that peer groups can generate a social multiplier effect because the factors that affect an individual can indirectly affect their peers (Entorf & Lauk, 2008). Peers acquainted at a university affect one’s decision to involve in entrepreneurship as they are well placed and able to relocate updated information about the entrepreneurial opportunities (Kacperczyk, 2013; Katz et al., 1955; Katz & Shapiro, 1985; Rogers et al., 1983). Peer groups also lead to improving the academic performance is unveiled by many studies, as it tends to establish distinctive values, environment for learning and functional mechanisms, which influence not only their actions but also influence their behavior in a

favorable manner (Brady et al., 2017; Griffith & Rask, 2014; Lu & Anderson, 2015; Marotta, 2017). Though most scholars believed that peers with good academic scores positively influence individual academic scores (Hoxby, 2000; Kang, 2007; Williams & Zimmerman, 2003), others reveal minimal or even adverse effects (Angrist & Lang, 2004).

In the context of China, compared with academic performance, the Chinese education system pays more attention to the cultivation of students' practical ability. In this regard, innovation and entrepreneurship education as an essential part of practical education has been given greater attention, emphasizing the students' intention to participate in entrepreneurship and innovation activities. In boosting college students' entrepreneurial intention, several studies focused on students' personality and family characteristics, the capital and faculty invested by the university, and the innovation and entrepreneurship talent training to explore the phenomenon (Liqun, 2019; Wang, 2017). However, the literature is sparse as far as the peer effect on entrepreneurship and innovation is concerned. So, to fill this gap, the current study explores the role of peer effect on students' intention to participate in entrepreneurship and innovation activities. As it is anticipated that peer effects can bring long-term repercussions beyond institutions. Moreover, unlike the previous studies, the current study explores the relationship by taking example effect and knowledge spillover effect as the mediatory variables. The current study uses data collected from the College of Economics and management department of Nanjing Agricultural University, China, to meet the study objective.

The remaining structure of the study is as follows: the following sections, 2nd & 3rd, reviews the literature and proposes the conceptual framework with hypotheses for testing. The 4th section provides the data sources, participants and empirical estimations employed in the study. The results and discussion are illustrated in section 5th. The Last section, 6^{th,} concludes the study with proper policy implications.

Literature Review

This section unveils the previous efforts of the scholars exploring the relationship between the variables employed in the current study. This section comprises two strands; the first strand covers the studies exploring the relationship between entrepreneur education and students' entrepreneur participation. The second strand covers the studies exploring the effect of peer groups on the outcome variable, such as academic performance or entrepreneurship intention.

In the literature regarding entrepreneurial intentions, the previous studies emphasized the personality traits of individuals, suggesting that personality traits stimulate their decision-making towards initiation of a business (Nelson, 1977). Later, researchers and scholars focused on other demographic variables such as age, gender, education level, etc. (BarNir et al., 2011; Martin et al., 2013). Afterward, researchers progressively switched towards cognitive theory to explore the individual entrepreneurial difference's impact on entrepreneurial activity (Achchuthan & Kandaiya, 2013). Likewise, many other researchers focused on entrepreneurial education and improved career choice and personal skills (Bae et al., 2014). Hattab (2014), in his study, verified that entrepreneurship education raises the attitude of individuals towards entrepreneurial intentions. Further, entrepreneurship education in networking and coaching activities improves the students' entrepreneurship intention, is proven by Küttim et al. (2014). Likewise, Donnellon et al. (2014) also established that entrepreneurial education help students to build an entrepreneur identity. Rideout and Gray (2013) consider that entrepreneurship education in universities is an all-inclusive practice-oriented activity that delivers entrepreneurial knowledge, arouses entrepreneurial consciousness among students, and boosts other abilities. Liñán et al. (2011) emphasize that entrepreneurship education is a significant feature in raising entrepreneurial attitudes among potential entrepreneurs. Solesvik (2013) also believes that entrepreneurship education promotes entrepreneurial competence among students.

Moving towards the peer group, it has been found that knowledge transfer among peers also leads to the improvement of innovation and entrepreneurship ability (Weiren, 2017). Lépine and Estevan (2021) also revealed that peer effect has a more significant impact on peer behavior than academic performance. The study of Li and Wu (2019) emphasized teamwork. It asserted that entrepreneurial education would be more likely to develop individuals' entrepreneurial cognition and emotion when team cooperation is high. Coleman (1964) conducted a large-scale survey of about 600,000 students from 4,000 schools in another study. He reported the importance of peers in educational research for the first time, finding that apart from family background, peers had the most considerable effects on students' performance (DU & YUAN, 2016). Harris and Pinker (1998) believed that peers are the most important determinant of children's growth.

Zimmer and Toma (2000) also stated the influence of the characteristics of the composition of students within the class on the individual performance of students. In short, academia generally agrees that peer effect has a positive impact on students' academic performance. In addition, Zheng (2015) believes that peer effect is inseparable from social interaction. Many other researchers explored this phenomenon from different perspectives; for instance, Xiaoyi (1994), from the psychological perspective, found that men are more likely to be influenced by their peers in smoking and drinking behaviors than women. Qiang (2014) has studied the influence of the obesity of peers on adolescent body weight from the perspective of economics and has found that the effect is more evident among people of the same gender.

A few studies have found contradictory findings, such as Yang (2009) studied the peer effect on academic performance from the perspective of pedagogy and concluded that peer ability has no significant impact on the standardized mathematics performance of junior high school students. Arcidiacono and Nicholson (2005) found minimal effects of peer effects on individual scores. Angrist and Lang (2004) found that peer scores had no apparent influence on individual scores by using the data from Boston University. In the meantime, the influence of peer effects is not found stable, and there is increasing evidence that peer effects fluctuate by various factors such as the ability of student, gender, race, and socioeconomic status (YANG et al., 2017).

Many other studies explored the phenomenon in the existing literature, such as Lu and Shi (2015) found that students' contact with leaders in related fields could increase their interests and aspirations through role models regarding innovative training of top-notch talents. Wang and Hu (2019), based on the perspective of discipline-specialty-industry chain, have found that the discipline-specialty synergy mechanism has a positive effect on the cultivation of innovative talents, and university-industry collaboration has a moderating effect on the two. Likewise, Ying-qi et al. (2018) have constructed a "learning-acting-building" education and practice system for innovation and entrepreneurship in Chinese universities based on entrepreneurial thought and action theory. Shu-ran et al. (2019) also exhibited this phenomenon in Canada. They introduced the essential idea of industry-education integration from three aspects: government, enterprises, colleges, and universities based on the cultivation programs of innovative talents of industry-education integration. Based on the "industry-learning-research", Wu and Yuan (2019) proposed an in-depth entrepreneurship education, establishment of a good learning platform and improved incentive mechanism.

Keeping the above literature, the role of peers in enhancing the students' intention to participate in entrepreneurship and innovation education is noticeably less studied in the literature; minimal research investigates the underlying mechanism of peer effects such as, example effect and a knowledge spillover effect on students' entrepreneurial intentions. As per the authors' knowledge, only a handful of studies explored the phenomenon (Frakes & Wasserman, 2021; Hoxby, 2000; Wang et al., 2017). So, to further broaden the existing literature, the current study empirically explores the nexus between peer effect and students' participation in entrepreneurship and innovation activities by taking example effect and knowledge spillover effect as the mediator.

Conceptual Framework and Hypothesis development

Entrepreneurship and innovation activities are the crucial factors that mold college students' intention and enable them to participate in various extracurricular lives. Still, it depends on various factors such as students' characteristics, family background, school education, social environment. So based on the available literature, the current study opted for several factors: performance ranking, organization participation, family's registered permanent residence, parents' educational background, relatives' and friends' entrepreneurship engagement, competition experience, media information, etc., for empirical analysis. As mentioned above, the peer group is one of the main factors influencing students' behavior, so it is hypothesized that peer group's participation in entrepreneurship and innovation may affect other students' intention in the following two ways.

Direct influence of peer effect

Peer effect is a pedagogic term coined in 2013, and it is defined as a process in which social interaction in the group affects others' behavior, willingness, and ability. In the higher education system, peers usually include roommates, classmates, members of associations and other members belonging to the same group. It has been by many studies that peer effect can change the individual behaviors such as the peer effect in weight loss studies is found significant and improvement in academic performance of adolescents is found significant (Cao, 2013; Liang & He, 2017; Qiang, 2014; Yuan et al., 2018). Thus, it is hypothesized that the peer's participation in entrepreneurship and innovation activities influences other individual's behavior and strengthens their intention to participate in entrepreneurship and innovation activities. Thus, H1 is proposed as follows.

H1: Peer effect directly impacts college students' intention to participate in entrepreneurship and innovation activities, as shown below in figure 1.

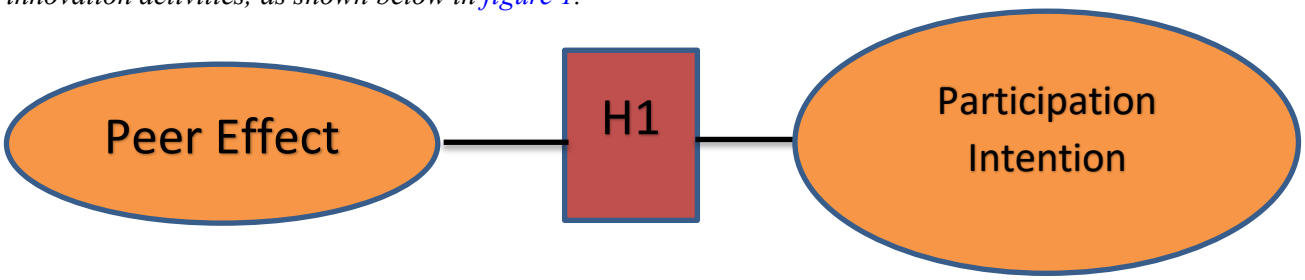

Figure 1. Mechanism diagram of hypothesis 1

Indirect effects of example effect and the knowledge spillover effect

Following the literature concerning the mechanism of peer effect, this study further explores the college students' intention to participate in entrepreneurship and innovation activities from the perspective of example effect and knowledge spillover effect. Example effect refers to a series of role model effects that arise due to the interaction of individuals with progressive figures, and their thoughts and behaviors consciously or subconsciously come closer to the progressive figures (Boxun & Mingli, 2016). In this study, progressive figures refer to the outstanding contestant who participated in the entrepreneurship and innovation activities and secured good results in the competitions at the national level, such as "Internet plus" and "Challenge Cup". Through observation, it is also found that such excellent students frequently participate in the school and the university's public lectures, share their experience of practical research and competition, and have greater appeal among their peers.

Further, the knowledge spillover effect refers to the transference of unconscious knowledge, in which learners utilize and digest the spilled knowledge to promote their development (Cao et al., 2016). This paper defines the knowledge spillover effect as the additional knowledge learned through communication with peers. For example, the communication and mutual knowledge sharing between students of different majors may

broaden the vision and opportunities for students. However, entrepreneurship and innovation activities involve multi-disciplinary and highly integrated fields; thus, it requires participants to have a rich and substantial cognitive category and interdisciplinary knowledge, which is expected to be possible by the knowledge spillover effect.

Thus, it is hypothesized that two significant mechanisms of peer effect, such as example effect and knowledge spillover effect strengthen individuals' intention to participate in entrepreneurship and innovation activities. According to the example effect, students get inspiration from the successful students around them while knowledge spillover effect exchanges the knowledge from different majors and grades among students and lead them to participate in entrepreneurship and innovation activities. Thus, H2 is proposed as follows:

H2: Example effect and knowledge spillover effect have an intermediary role between peer effect and college students' intention to participate in entrepreneurship and innovation activities, as shown in figure 2.

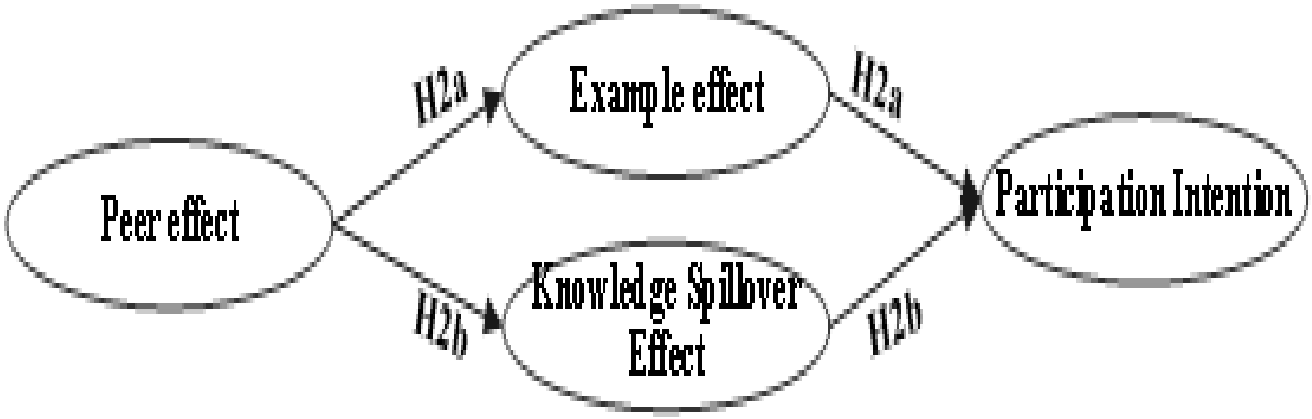

Figure 2. Mechanism diagram of hypothesis 2

Method

Data sources and participants

To meet the study objective, the current study gathered data from students at Nanjing Agricultural University, China. There is neither an evaluation system nor database that focuses on students' innovation and entrepreneurship ability nor detailed data on peer effect evaluation. Thus, a random sample of 1066 undergraduates from the School of Economics and Management were chosen, and data were collected online using "Campushoy" App in March 2021. The language used in the questionnaire was Chinese. The students were asked to answer the questionnaire voluntarily and objectively. Furthermore, the questionnaires were anonymous. It is found that about 268 students that account for 25.14% of the total sample are already engaged in entrepreneurship and innovation activities.

Study variables

The study variables in the questionnaire include students' basic information, students' participation in entrepreneurship and innovation activities and information regarding peer effect, example effect, knowledge spillover effect and willingness to participate in entrepreneurship and innovation activities (as shown in table 1). The first part of the questionnaire comprised basic personal and family information. The second part evaluates students' participation in entrepreneurship and innovation activities from the three dimensions such as family, school and social influence. The third part covers the key variables' information, such as peer effect, example effect, and knowledge spillover effect. The detailed description of variables with their measurement and descriptive statistics are illustrated in table 1.

Table 1. *Variables definition with descriptive statistics*

Variable	*Definition*	*Mean*	*SD*
Participation intention	Intention to participate in the activities related to entrepreneurship and innovation (three major competitions, independent entrepreneurship, etc.)? (1 = Very reluctant; 2 = Fairly reluctant; 3 = Neither reluctant nor willing; 4 = Fairly willing; 5 = Very willing)	3.319	1.204
Peer effects	Peers have a positive impact on other individuals' willingness to participate in entrepreneurship and innovation. (1 = Very reluctant; 2 = Fairly reluctant; 3 = Neither reluctant nor willing; 4 = Fairly willing; 5 = Very willing)	3.521	1.105
Example effect	Individuals gradually exert a subtle influence on each other through contact with entrepreneurial peer groups and participation in activities. In this process, peer groups serve as an example model, and individuals can learn about the possibility of entrepreneurship and build up confidence. (1 = Very reluctant; 2 = Fairly reluctant; 3 = Neither reluctant nor willing; 4 = Fairly willing; 5 = Very willing)	3.494	1.149
Knowledge spillover effect	Communication with entrepreneurs of different majors and grades in the peer group can expand the social networks, enrich entrepreneurial knowledge and skills, and act as knowledge spillover. (1 = Very reluctant; 2 = Fairly reluctant; 3 = Neither reluctant nor willing; 4 = Fairly willing; 5 = Very willing)	3.562	1.103
Gender	0 = Male; 1 = Female	0.747	0.435
Grade	1 = Freshman; 2 = Sophomore; 3 = Junior; 4 = Senior	2.501	1.150
Scores ranking	0 = Other; 1 =Top 70%; 2 = Top 50%; 3 = Top 30%; 4 = Top 10%	1.950	1.401
Number of students organizations	Number of student organizations and clubs are you in? (/)	1.306	0.964
Working experience	Served as a student cadre or the backbone of a community (1 = yes; 0 = no)	0.568	0.496
Family Registered permanent residence	1 = city; 0 = country	0.654	0.476
Annual household income	0=less than 50,000RMB; 1=5~100,000RMB; 2=10~200,000BMB; 3=more than 200,000RMB	1.380	1.023
Father's education	0 = Primary school and below; 1 = Junior high school; 2 = Technical secondary school (high school); 3 = College; 4 = bachelor's degree; 5= Master and Doctoral degree or above	2.438	1.335
Mother's education	0 = Primary school and below; 1 = Junior high school; 2 = Technical secondary school (high school); 3 = College; 4 = bachelor's degree; 5= Master and Doctoral degree or above	2.166	1.356
Relatives' business	Any of your relatives started their own business (1 = Yes; 0 = No)	0.500	0.500
Employment prospects	Optimistic about employment prospects of your major (1 = Yes; 0 = No)	0.728	0.445
Elective courses	Number of elective courses on innovation and entrepreneurship, attended (/)	1.056	0.907
Participation in lectures, forums and workshops	Number of Innovation and entrepreneurship-related lectures, forums and training workshops, attended (/)	0.974	0.988
Communication with tutors	Conversation with tutors who teach you entrepreneurship and innovation in your school (1 = Yes; 0 = No)	0.248	0.609
Experience of competitions	Participation in entrepreneurship and innovation competitions (i.e., "Challenge Cup", "Internet plus", etc.) organized by the university (1 = Yes; 0 = No)	0.334	0.644
Media information	Information source about innovation and entrepreneurship from public media (official accounts, websites, news, etc.)? (1 =Yes; 0 = No)	0.598	0.491

Source: Online Survey (March 2021)

Data Analysis

Regression analysis

Firstly, cross-section data analysis model was constructed to determine the direct effect of peer effect on college students' intention to participate in entrepreneurship and innovation, as shown in eq. 1

$$Intention_i = \beta_0 + \beta_1 * PeerEffect_i + \alpha Z_{it} + \varepsilon_{it} \quad (1)$$

Where $Intention$ is the dummy variable of college students' intention to participate in entrepreneurship and innovation activities, with the value ranging from 1 to 5 representing the degree of intention stepwise and $PeerEffect_i$ is also a dummy variable representing peer effect, with the value ranging from 1 to 5. The larger the value is, the more pronounced the peer effect is. Z_{it} is a series of control variables, including individual, family, school, and social factors, such as grade ranking, the registered permanent residence of family, the entrepreneurial experience of relatives and friends, times of communication with tutors, access to media information, etc. ε_{it} represents the random disturbance term.

Mediation analysis model

The study further employed mediation analysis to analyze whether example effect and knowledge spillover effect has mediating property and to what extent it plays a mediating role by structuring the following equation:

$$Intention_i = c * PeerEffect_i + e_1 \quad (2)$$

$$ExampleEffect_i = a * PeerEffect_i + e_2 \quad (3)$$

$$KnSpillEffect_i = a * PeerEffect_i + e_2 \quad (4)$$

$$Intention_i = c' * PeerEffect_i + b * ExampleEffect_i + e_3 \quad (5)$$

$$Intention_i = c' * PeerEffect_i + b * KnSpillEffect_i + e_3 \quad (6)$$

Where $Intention_i$、$ExampleEffect_i$、$KnSpillEffect_i$、$PeerEffect_i$, are the dummy variables of willingness to participate in entrepreneurship and innovation activities. In equation (2), the coefficient c of $PeerEffect_i$ represents the total effect of variable peer effect on the willingness to participate in entrepreneurship and innovation. In equations (5) and (6), the coefficient c' of $PeerEffect_i$ represents the direct effect. After adding mediating variables $ExampleEffect_i$, and $KnSpillEffect_i$, the product of the coefficients, a and b represent the indirect effect. Thus, an econometric model is employed to explore whether peer effect influences college students' willingness to participate in entrepreneurship and innovation activities through example effect and knowledge spillover effect, that is, to test whether the coefficients above are of statistical significance.

Results

The study proposed that by building a rich case base, students can understand the current forms of social innovation and entrepreneurship to stimulate their potential for innovation and entrepreneurship. In simple words, regression results after controlling age, grades and family economy reveal that the influence of peer effect on college students' intention to participate in entrepreneurship and innovation activities is 0.86. It proves that peer effect can improve college students' willingness to participate in entrepreneurship and innovation activities.

Table 2. *OLS regression results*

Variable	*Participation Intention*
Scores ranking	0.49*** (0.011)
Number of student organizations	0.03 (0.016)
Whether or not to serve as the backbone of student cadres associations	-0.15 (0.03)
Family registered permanent residence	0.15 (0.036)
Annual household income	-0.08 (0.016)
Father's education	0.38** (0.017)
Mother's education	0.15 (0.017)
Relatives' business	0.72** (0.03)
Employment prospects	1.14*** (0.033)
Elective courses	1.02*** (0.019)
Participation in lectures, forums and workshops	0.23 (0.018)
Communication with tutors	0.11 (0.028)
Experience of competitions	0.65** (0.027)
Peer effect	0.86*** (0.033)
Media Information	2.08*** (0.031)
Constant term	2.46*** (0.05)
R^2	0.158

*Note = *** p<.01, ** p<.05, * p<.1*
Source: Authors computation

Mediation analysis results

The mediation analysis results are shown in Tables 3 and 4. Table 3 reports the results when the example effect is taken as a mediating variable. The findings reveal that the coefficients of the example effect in models (5) and (6) are found positively significant at 1% level, indicating that the example effect significantly improves the college students' participation intention. In models ③ and ④, the peer effect significantly affects the example effect, indicating that the peer effect can fully explain the example effect. Thus, it is apparent that the example effect mediates the relationship between peer effect and college students' intention to participate in entrepreneurship and innovation activities. The mediation test infers that the excellent students who participate in entrepreneurship and innovation activities have a strong appeal in their peer group. Their excellent performance in entrepreneurship and innovation activities can arouse the interest of other students and provide a psychological basis for them to imitate. In addition, close indoctrination acts as a driving force and makes other students easily affected by peers' behavior in personal development. For most students, the exemplary deeds of outstanding students generally play a driving and leading role. At the same time, benefiting from communication with peers of different academic backgrounds can arouse new thoughts and inspirations beyond their professional fields, and further stimulates their creativity and promotes their achievements in innovation and entrepreneurship.

Many previous studies exhibited the same findings (Ding & Lehrer, 2007; Marotta, 2017; Wang & Hu, 2019). In short, after controlling the grade, gender, example effect and knowledge spillover effect, the mediation results unveil that the direct peer effect on student's participation intention is 5.73 at a 1% significance level, which is highly significant and strongly supports hypothesis 1.

Table 3. *Mediation analysis results of example effect*

Variable	*Participation intention*		*Example effect*		*Participation intention*	
	①	②	③	④	⑤	⑥
Peer effect	5.73*** (0.032)	5.36*** (0.031)	7.82*** (0.024)	7.81*** (0.024)	1.44*** (0.046)	1.41*** (0.045)
Example effect	—	—	—	—	4.61*** (0.048)	4.25*** (0.047)
Grade	—	-2.15*** (0.03)	—	-0.06 (0.023)	—	-2.14*** (0.03)
Gender	—	-0.16 (0.079)	—	0.15 (0.06)	—	-0.18 (0.078)
Constant term	13.01*** (0.117)	19.85*** (0.158)	7.41*** (0.087)	7.47*** (0.12)	11.94*** (0.122)	18.8*** (0.16)
R^2	0.277	0.318	0.565	0.565	0.285	0.326
F-test	324.797 (0.000)	131.632 (0.000)	1101.062 (0.000)	366.244 (0,000)	168.899 (0.000)	102.236 (0.000)

*Note: *** p<0.01, ** p<0.05, * p<0.1*
Source: Authors computation

Moving forward towards the knowledge spillover effect, as the mediating variable, the results in table 4 show that the knowledge spillover effect meets the mediation conditions and positively affects students' intention to participate. So, it entails that peer effect can improve the intention of college students to participate in entrepreneurship and innovation activities through the knowledge spillover effect. The results infer that in communication and contact with peer groups, individual college students will intentionally or unintentionally acquire others' thoughts and ideas, broaden their understanding, and vision, and further integrate the professional knowledge to improve their creativity. This process of contacting and communicating to acquire new knowledge may be spontaneous and conscious, but it is unconscious most time, that is, to passively accept knowledge spillover. Knowledge spillover can significantly influence at a low cost and even snowballs among students, promoting the qualitative leap of entrepreneurship and innovation education.

Table 4. *Mediation analysis results of Knowledge Spillover Effect*

Variable	*Participation intention*		*Knowledge spillover effect*		*Participation intention*	
	①	②	③	④	⑤	⑥
Peer effect	5.73*** (0.032)	5.36*** (0.031)	7.51*** (0.023)	7.55*** (0.023)	1.16** (0.048)	1.28*** (0.047)
Example effect	—	—	—	—	4.86*** (0.048)	4.39*** (0.047)
Grade	—	-2.15*** (0.03)	—	0.21 (0.022)	—	-2.18*** (0.03)
Gender	—	-0.16 (0.079)	—	0.39 (0.057)	—	-0.21 (0.078)
Constant term	13.01*** (0.117)	19.85*** (0.158)	9.19*** (0.083)	8.23*** (0.115)	11.94*** (0.125)	18.8*** (0.162)
R^2	0.277	0.318	0.566	0.567	0.282	0.324
F-test	324.797 (0.000)	131.632 (0.000)	1105.776 (0.000)	368.855 (0,000)	166.200 (0.000)	101.338 (0.000)

*Note: *** p<0.01, ** p<0.05, * p<0.1*
Source: Authors' computation

The overall findings reveal that peer effect has a profound, significant influence on college students' intention to participate in entrepreneurship and innovation activities through two ways, namely example effect and knowledge spillover effect. The results reflect that the outstanding students and their communication with other students from different majors can significantly boost their participation in entrepreneurship and innovation activities. It reflects the peer's role as exemplary models for others. It proposes that regularly inviting outstanding peer groups to give lectures on entrepreneurship and innovation can help students' access relevant information, enhance their thinking, and build up their confidence in innovation and entrepreneurship.

Discussion

The ordinary least square (OLS) regression is employed to explore the influence of individual, family, school and social factors on college students' intention to participate in entrepreneurship and innovation activities. The OLS results are reported in Table 2. Firstly, the impact of grade ranking on intention is significantly positive at the individual level, indicating that students with substantial learning abilities are subjectively more willing and intend to participate in entrepreneurship and innovation activities. It is probably because students with good performance tend to have more access to competition resources and are already capable. Secondly, the influence of the fathers' education on the students' intention is significantly positive at the family level. In contrast, the mothers' education is not found significantly positive, indicating that the fathers have a greater influence on college students' behavior. The students whose fathers have higher educational levels are more intended to participate in entrepreneurship and innovation activities.

In addition, the entrepreneurial behavior of relatives and friends can also motivate students to participate in entrepreneurship and innovation activities to a certain extent. Thirdly, at the school level, the more promising their majors are, the more innovative and entrepreneurial courses they tend to choose, the more competitions they tend to participate in, the more motivated students will be inclined to participate in entrepreneurship and entrepreneurship activities. A previous study by Lv et al. (2021) also exhibited that entrepreneurship guidance by teachers, entrepreneurial support in a practical manner, and involvement of students in business plan competition can improve entrepreneurial intention. Zhang et al. (2014) also proposed that competition-based business plans and practice-based entrepreneurial projects can increase entrepreneurial ability, arouse entrepreneurial consciousness, and augment entrepreneurial enthusiasm. In contrast, Chen et al. (2015) unveiled that entrepreneurship education has not improved intention as starting a business seemed difficult.

The results of peer effect are also found significant on students' intention to participate in entrepreneurship and innovation activities. The results are analogous with the previous findings (Katz et al., 1955; Katz & Shapiro, 1985; Rogers et al., 1983). Lastly, at the social level, it is found that media information plays a vital role in boosting the encouragement in students and enables them to participate. The results correspond well with the study of Wu and Song (2019), who also revealed the noteworthy part of social media. In alignment with the study of Gunkel (2017), the findings propose to build innovative and entrepreneurship information related platforms by using electronic media coupled with animation and video technology. In this vein, extensive channels such as micro-blog, We Chat, and Tik Tok can actively attract students to participate in entrepreneurship and innovation education.

In simple words, it is apparent that the individual, family, school, and social education of college students plays an important role in innovation and entrepreneurship by building a four-in-one education system, i.e., training system for "all members". In 2017, the State Council issued the opinions on strengthening and improving ideological and political work in Colleges and Universities under the notion of "Three Wide Education", which means the effective combination of the whole staff, whole process and all-around education. Among these, whole-staff education includes students' peer group, family, school, and social education. The

empirical findings reveal that at the individual level, the willingness to participate in innovation and entrepreneurship is highly correlated with the ranking of academic performance and employment prospects of the major. It is very significant at the 1% level.

Thus, the outcome of this study proposes that students' recognition concerning their major should be considered, and their understanding regarding employment prospects of their majors should be improved. At the family level, education, innovation, and entrepreneurship intention are significantly related to the father's education level and whether the family participates in entrepreneurship. In terms of school education, participation in entrepreneurship and innovation courses and competitions can promote students' participation in entrepreneurship and innovation activities to a certain extent. The results parallel the recent study of Luis-Rico et al. (2020), who proposed that education and curriculum reform should be promoted to improve entrepreneurial intention. The findings propose that teachers with relevant experience should be invited to build a professional guidance team and actively offer courses related to entrepreneurship and innovation. Likewise, Arranz et al. (2017) proposed that universities encourage action-based learning and strengthen independent learning systems to promote entrepreneurial competence among students.

Conclusion and Recommendations

Entrepreneurship and innovation education significantly influences the students' entrepreneurial intention. Entrepreneurship education imparts theoretical-based knowledge and shares efficacious experiences, which nurture entrepreneurial aptitude among students. Additionally, it can persuade students to improve their self-confidence and abilities (Lackéus, 2015; Watson et al., 2018). Many of the countries have announced strategies and actions to support entrepreneurship education, especially at universities, to promote economic development. In China, several efforts have been taken to cultivate entrepreneurship and innovation abilities among college students. To empirically explore the phenomenon in the context of China, the current study used the data of 1066 undergraduates of Nanjing Agricultural University.

The findings also reveal that peer effect significantly influences students' intention to participate in entrepreneurship and innovation activities. Moreover, the current study also argued that peer effect could influence college student's intention by example effect and knowledge spillover effect. So, to explore this phenomenon, the current study employed the mediation analysis and expectedly found that the example effect, i.e., an excellent student's example for other students and knowledge spillover effects, i.e., knowledge sharing by communicating with each other, influences the students' entrepreneurship and innovation intention favorably.

Based on the empirical findings, the current study proposes that schools and colleges should hold exchange meetings and seminars among different departments to promote rapid and accurate information of not only from their department but also from other departments. In this way, students' cross-discipline knowledge can quickly be disseminated, and students' professionalism in other majors can be cultivated. Professionalism in other majors can broaden students' thinking and vision, improve their ability, and stimulate innovative thinking for entrepreneurship and innovation. Therefore, schools should set up additional credits for elective courses of different majors and build a "compulsory major + other major" teaching system to enrich students' knowledge system and gain spillover effect.

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References

Achchuthan, S., & Kandaiya, S. (2013). Entrepreneurial intention among undergraduates: Review of literature. *Sivarajah, K., & Achchuthan, S.(2013). Entrepreneurial Intention among Undergraduates: Review of Literature. European Journal of Business and Management*, *5*(5), 172-186. https://core.ac.uk/download/pdf/234624613.pdf

Angrist, J. D., & Lang, K. (2004). Does school integration generate peer effects? Evidence from Boston's Metco Program. *American Economic Review*, *94*(5), 1613-1634. https://doi.org/10.1257/0002828043052169

Arcidiacono, P., & Nicholson, S. (2005). Peer effects in medical school. *Journal of Public Economics*, *89*(2-3), 327-350. https://doi.org/10.1016/j.jpubeco.2003.10.006

Arranz, N., Ubierna, F., Arroyabe, M. F., Perez, C., & Fdez. de Arroyabe, J. (2017). The effect of curricular and extracurricular activities on university students' entrepreneurial intention and competences. *Studies in Higher Education*, *42*(11), 1979-2008. https://doi.org/10.1080/03075079.2015.1130030

Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). The relationship between entrepreneurship education and entrepreneurial intentions: A meta–analytic review. *Entrepreneurship theory and practice*, *38*(2), 217-254. https://doi.org/10.1111%2Fetap.12095

BarNir, A., Watson, W. E., & Hutchins, H. M. (2011). Mediation and moderated mediation in the relationship among role models, self-efficacy, entrepreneurial career intention, and gender. *Journal of Applied Social Psychology*, *41*(2), 270-297. https://psycnet.apa.org/doi/10.1111/j.1559-1816.2010.00713.x

Bechard, J.-P., & Toulouse, J.-M. (1998). Validation of a didactic model for the analysis of training objectives in entrepreneurship. *Journal of business venturing*, *13*(4), 317-332. https://econpapers.repec.org/RePEc:eee:jbvent:v:13:y:1998:i:4:p:317-332

Boxun, S., & Mingli, C. (2016). The development of 'Internet celebrity' and its role model effect on teenagers. *China Youth Study*(11), 24-30.

Brady, R. R., Insler, M. A., & Rahman, A. S. (2017). Bad company: Understanding negative peer effects in college achievement. *European Economic Review*, *98*, 144-168. https://doi.org/10.1016/j.euroecorev.2017.06.013

Cao, Y. (2013). How do Mainland Immigrant Students Affect the Academic Achievement of Natives in Hong Kong? An Empirical Study on lmmigrant Peer Effect. *Education & Economy*(4), 47-55.

Cao, Y., Jiang, Z., Sun, H., & RUAN, X. (2016). Knowledge spillovers, innovative intention and innovative capacity: The empirical study of strategic emerging enterprise. *Studies in Science of Science*, *34*(1), 89-98. https://en.cnki.com.cn/Article_en/CJFDTotal-KXYJ201601011.htm

Chen, S.-C., Hsiao, H.-C., Chang, J.-C., Chou, C.-M., Chen, C.-P., & Shen, C.-H. (2015). Can the entrepreneurship course improve the entrepreneurial intentions of students? *International Entrepreneurship and Management Journal*, *11*(3), 557-569. https://doi.org/10.1007/s11365-013-0293-0

Ding, W., & Lehrer, S. F. (2007). Do peers affect student achievement in China's secondary schools? *The Review of Economics and Statistics*, *89*(2), 300-312. https://doi.org/10.1162/rest.89.2.300

Donnellon, A., Ollila, S., & Middleton, K. W. (2014). Constructing entrepreneurial identity in entrepreneurship education. *The International Journal of Management Education*, *12*(3), 490-499. https://doi.org/10.1016/j.ijme.2014.05.004

DU, Y.-h., & YUAN, Y.-z. (2016). The Review of the Research on Peer Effect in Education: Concept, Model and Method. *China Economics of Education Review*, *1*(3), 77-91. https://en.cnki.com.cn/Article_en/CJFDTotal-JYJP201603006.htm

Entorf, H., & Lauk, M. (2008). Peer effects, social multipliers and migrants at school: An international comparison. *Journal of Ethnic and Migration Studies*, *34*(4), 633-654. https://doi.org/10.1080/13691830801961639

Frakes, M. D., & Wasserman, M. F. (2021). Knowledge spillovers, peer effects, and telecommuting: Evidence from the US Patent Office. *Journal of Public Economics*, *198*, 104425. https://doi.org/10.1016/j.jpubeco.2021.104425

Gibb, A. (2002). In pursuit of a new 'enterprise'and 'entrepreneurship'paradigm for learning: creative destruction, new values, new ways of doing things and new combinations of knowledge. *International journal of management reviews*, *4*(3), 233-269. http://dx.doi.org/10.1111/1468-2370.00086

Griffith, A. L., & Rask, K. N. (2014). Peer effects in higher education: A look at heterogeneous impacts. *Economics of Education Review*, *39*, 65-77. https://doi.org/10.1016/j.econedurev.2014.01.003

Gunkel, D. J. (2017). Rage against the machine: Rethinking education in the face of technological unemployment. In *Surviving the machine age* (pp. 147-162). Springer. https://doi.org/https://doi.org/10.1007/978-3-319-51165-8_10

Harris, J. R., & Pinker, J. F. P. P. S. (1998). *The Nurture Assumption: Why Children Turn Out the Way They Do*. Free Press. https://books.google.com.pk/books?id=WKgoAAAAYAAJ

Hattab, H. W. (2014). Impact of entrepreneurship education on entrepreneurial intentions of university students in Egypt. *The Journal of Entrepreneurship*, *23*(1), 1-18. https://doi.org/10.1177%2F0971355713513346

Hoxby, C. M. (2000). *Peer effects in the classroom: Learning from gender and race variation* National Bureau of Economic Research Cambridge, Mass., USA]. https://www.nber.org/system/files/working_papers/w7867/w7867.pdf

Jia-hua, L., & Xu-dong, L. (2010). Integrate innovation and entrepreneurship education into the talent training system of colleges and universities. *China Higher Education*(12), 9-11.

Jones, C., & English, J. (2004). A contemporary approach to entrepreneurship education. *Education+ Training*, *46*(8/9), 416-423. https://doi.org/10.1108/00400910410569533

Kacperczyk, A. J. (2013). Social influence and entrepreneurship: The effect of university peers on entrepreneurial entry. *Organization Science*, *24*(3), 664-683. https://doi.org/10.1287/orsc.1120.0773

Kang, C. (2007). Classroom peer effects and academic achievement: Quasi-randomization evidence from South Korea. *Journal of Urban Economics*, *61*(3), 458-495. https://doi.org/10.1016/j.jue.2006.07.006

Katz, E., Lazarsfeld, P. F., Roper, E., & Research, C. U. B. o. A. S. (1955). *Personal Influence: The Part Played by People in the Flow of Mass Communications*. Free Press. https://books.google.com.pk/books?id=PgWxAAAAIAAJ

Katz, M. L., & Shapiro, C. (1985). Network externalities, competition, and compatibility. *The American economic review*, *75*(3), 424-440. https://ideas.repec.org/a/aea/aecrev/v75y1985i3p424-40.html

Kourilsky, M. L. (1995). Entrepreneurship Education: Opportunity in Search of Curriculum. 1-18. https://eric.ed.gov/?id=ED389347

Küttim, M., Kallaste, M., Venesaar, U., & Kiis, A. (2014). Entrepreneurship education at university level and students' entrepreneurial intentions. *Procedia-Social and Behavioral Sciences*, *110*, 658-668. https://doi.org/10.1016/j.sbspro.2013.12.910

Lackéus, M. (2015). Entrepreneurship in education: What, why, when, how. *Background paper*, 1-45. https://www.oecd.org/cfe/leed/BGP_Entrepreneurship-in-Education.pdf

Lépine, A., & Estevan, F. (2021). Do Ability Peer Effects Matter for Academic and Labor Market Outcomes? *Labour Economics*, *71*, 102022. https://doi.org/10.1016/j.labeco.2021.102022

Li, L., & Wu, D. (2019). Entrepreneurial education and students' entrepreneurial intention: does team cooperation matter? *Journal of Global Entrepreneurship Research*, *9*(1), 1-13. https://doi.org/10.1186/s40497-019-0157-3

Liang, Y., & He, Q. (2017). Roommates' Peer Effects on Undergraduate Students' Academic Achievement. *Education & Economy*(4), 83-88.

Liñán, F., Rodríguez-Cohard, J. C., & Rueda-Cantuche, J. M. (2011). Factors affecting entrepreneurial intention levels: a role for education. *International Entrepreneurship and Management Journal*, *7*(2), 195-218. https://doi.org/10.1007/s11365-010-0154-z

Liqun, W. (2019). Research on the Current Situation and Promotion Strategies of College Students' Innovative Entrepreneurship Ability. *Soochow University*.

Lu, F., & Anderson, M. L. (2015). Peer effects in microenvironments: The benefits of homogeneous classroom groups. *Journal of Labor Economics*, *33*(1), 91-122. https://doi.org/10.1086/677392

Lu, Y., & Shi, J. (2015). Analysis on the Educational Factors Regarding Academic Aspiration and Interest in the Cultivation of Top-notch Innovative Personnel. *Educational Research*, *36*(5), 38-47.

Luis-Rico, I., Escolar-Llamazares, M.-C., la Torre-Cruz, D., Jiménez, A., Herrero, Á., Palmero-Cámara, C., & Jiménez-Eguizábal, A. (2020). Entrepreneurial interest and entrepreneurial competence among Spanish youth: An analysis with artificial neural networks. *Sustainability*, *12*(4), 1-17. https://doi.org/10.3390/su12041351

Lv, Y., Chen, Y., Sha, Y., HUANG, Y., & Huang, L. (2021). How Entrepreneurship Education at Universities Influences Entrepreneurial Intention: Mediating Effect Based on Entrepreneurial Competence. *Frontiers in Psychology*, *12*, 1-12. https://doi.org/10.3389/fpsyg.2021.655868

Ma, Y., & Bai, Z. (2015). Research and practice mode of China's innovation and entrepreneurship education. *Tsinghua Journal of Education*, *36*(6), 99-103.

Marotta, L. (2017). Peer effects in early schooling: Evidence from Brazilian primary schools. *International Journal of Educational Research*, *82*, 110-123. https://doi.org/10.1016/j.ijer.2017.01.008

Martin, B. C., McNally, J. J., & Kay, M. J. (2013). Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes. *Journal of business venturing*, *28*(2), 211-224. https://doi.org/10.1016/j.jbusvent.2012.03.002

Meng, X., & Zhang, L. (2020). From Recognition to Identification: A Study on innovation of Social Practice Education System in Colleges and Universities. *Higher Education Exploration*(5), 114-119.

Nelson, R. E. (1977). Entrepreneurship education in developing countries. *Asian Survey*, *17*(9), 880-885. https://doi.org/10.2307/2643595

Qiang, L. (2014). The influence of peer motivation on body weight of Chinese rural migrant adolescents. *Chinese Rural Economy*(3), 73-84.

Rideout, E. C., & Gray, D. O. (2013). Does entrepreneurship education really work? A review and methodological critique of the empirical literature on the effects of university-based entrepreneurship education. *Journal of small business management*, *51*(3), 329-351. http://dx.doi.org/10.1111%2Fjsbm.12021

Rogers, E. M., Roger, G., Press, F., & Company, M. (1983). *Diffusion of Innovations*. Free Press. https://books.google.com.pk/books?id=cFxPAAAAMAAJ

Shu-ran, Y., Yang, Y., & Chong-xu, B. (2019). Research on Cultivating Innovative Talents of Industry-education Integration in Canada. *Modern Educational Technology*, *29*(1), 120-126.

Solesvik, M. Z. (2013). Entrepreneurial motivations and intentions: investigating the role of education major. *Education+ Training*, *55*(3), 253-271. https://doi.org/10.1108/00400911311309314

Van Gelderen, M., Brand, M., Van Praag, M., Bodewes, W., Poutsma, E., & Van Gils, A. (2008). Explaining entrepreneurial intentions by means of the theory of planned behaviour. *Career development international*, *13*(6), 538-559. https://doi.org/10.1108/13620430810901688

Vardardottir, A. (2013). Peer effects and academic achievement: a regression discontinuity approach. *Economics of Education Review*, *36*, 108-121. https://doi.org/10.1016/j.econedurev.2013.06.011

Wang, K., & Hu, C. (2019). An Empirical Analysis of the Mechanisms Affecting Innovative Talents Cultivation Performance in the Background of "Double World-Class" University Construction. *Educational Research*, *40*(2), 85-93.

Wang, X. (2017). College Students' Entrepreneurial Innovation Ability Cultivation Mechanism Research. *University of Science and Technology of China*. http://www.baidu.com/link?url=_LwTxlcZYTm44sLGTHW6Q8QRW_TpOT_yKzLW7D0mvue

Wang, X., Luo, R., Zhang, L., & Rozelle, S. (2017). The education gap of China's migrant children and rural counterparts. *The Journal of Development Studies*, *53*(11), 1865-1881. https://doi.org/10.1080/00220388.2016.1274395

Watson, K., McGowan, P., & Cunningham, J. A. (2018). An exploration of the Business Plan Competition as a methodology for effective nascent entrepreneurial learning. *International Journal of Entrepreneurial Behavior & Research*, *24*(1), 121-146. https://doi.org/10.1108/IJEBR-05-2017-0158

Weiren, D. (2017). The Study on the Effects of Social Network of Economic and Management Student's Innovation and Entrepreneurial Ability. *Shanxi University of Finance and Economics*.

William, d. L. (2018). *The importance of practical education and professional experience in securing roles*. Retrieved 22/11/2021 from https://www.itproportal.com/features/the-importance-of-practical-education-and-professional-experience-in-securing-roles/

Williams, G. C., & Zimmerman, D. J. (2003). Peer effects in higher education. *Williams Project on the Economics of Higher Education*, *39*(2), 65-77. https://doi.org/10.3386/w9501

Wu, X., & Yuan, L. (2019). The cultivation of postgraduate innovative talents in American research universities: Foundation experience and enlightenments. *Journal of Higher Education*, *40*(6), 102-109. https://en.cnki.com.cn/Article_en/CJFDTotal-HIGH201906016.htm

Wu, Y., & Song, D. (2019). Gratifications for social media use in entrepreneurship courses: learners' perspective. *Frontiers in Psychology*, *10*, 1-12. https://doi.org/10.3389/fpsyg.2019.01270

Xiaohui, Y. (2015). Entrepreneurship Education and the lnnovative Talent Cultivation in Colleges and Universities of China. *China Higher Education Research*(1), 39-44.

Xiaoyi, F. (1994). The Relationship of Peer's Normal Pressure and Direct Pressure with Adolescents' Substance Use. *Acta Psychologica Sinica*, *26*(3), 240-246. http://journal.psych.ac.cn/acps/EN/

Yang, P. (2009). Peer Characteristics and Student Achievement: A Multilevel Analysis. *Peking University Education Review*(4), 50-64.

YANG, W. B., FENG, B., & Zi-jia. (2017). Peer effect: Will peer group shape college students' entrepreneurial intention? *Studies in Science of Science*, *35*(4), 593-599.

Ying-qi, L., Su-xiu, L., & Ze-yuan, S. (2018). Innovation on the Theory and Practice of Innovation and Entrepreneurship Education in Chinese Universities. *Modern Educational Technology*, *28*(6), 108-114.

Yuan, Z., Min, S., & Xiang, C. (2018). lmpacts of Peer Effects on Academic Performance in Rural Primary Schools in China. *Education & Economy*, *34*(1), 65-73. https://www.ccap.pku.edu.cn/docs/2019-12/20191210151607707793.pdf

Zhang, Y., Duysters, G., & Cloodt, M. (2014). The role of entrepreneurship education as a predictor of university students' entrepreneurial intention. *International Entrepreneurship and Management Journal*, *10*(3), 623-641. https://doi.org/10.1007/s11365-012-0246-z

Zheng, L. (2015). The community effect and peer effect in education: Methods, evidence and policy implications. *Journal of Educational Studies 11*(5), 99-110.

Zimmer, R. W., & Toma, E. F. (2000). Peer effects in private and public schools across countries. *Journal of Policy Analysis and Management: The Journal of the Association for Public Policy Analysis and Management*, *19*(1), 75-92. https://doi.org/10.1002/(SICI)1520-6688(200024)19:1%3C75::AID-PAM5%3E3.0.CO;2-W