

Modeling the Influences of Social Capital on Formation of Student Entrepreneurial Character

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Abstract

The values of social capital can be utilized in the context of shaping the entrepreneurial character and can be integrated into the learning process. The purpose of this research is to find out the structural equation modeling that illustrates the role of social capital in the formation of the student entrepreneurial character in the educational process. This research is explanatory research adopting the quantitative approach, along with the survey method to report the measurement of social capital on the entrepreneurial character of students. The population in this study were all the fourth and sixth semester students of the Academic Year 2017/2018 at the University of AMIKOM Yogyakarta. The samples taken from this research population used the stratified cluster random sampling technique. The number of samples in this research was 360 respondents. The results showed that social capital had a path coefficient with the entrepreneurial character of 0.77 shows a positive number and is quite high. This research concludes that social capital has a significant influence on the students' entrepreneurial character with a p-value ≥ 0.05 , and a p-value of 0.17863. Social capital owned by the campus is utilized by the students well, it will support the formation of the entrepreneurial character.

Keywords

Social capital, entrepreneurial character, entrepreneurship education.

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Introduction

Education is a means of preparing human resources who play an important role in providing skills for the community to achieve optimal potential. Education carried out must be designed to develop the ability to build networks, collaborate, work together, and build trust and share knowledge or information for students (Hermino & Arifin, 2020; Agboola & Tsai, 2012). Entrepreneurship education aims to equip students to become successful entrepreneurs in the future. An important role of entrepreneurs in the development of entrepreneurial potential is needed for economic growth by identifying and understanding the values and value systems that influence attitudes and behavior (Uy, 2011). Entrepreneurship education as the development of the potential abilities of students includes knowledge, attitudes, and entrepreneurial skills that play an important role in independence (Ahmed, Chandran, & Klobas, 2017; Hutasuhut, Irwansyah, Rahmadsyah, & Aditia, 2020). In entrepreneurship studies, the character becomes very important to be formed before the business itself. To be a characterized entrepreneur, it takes a long time. Some studies show a significant influence between the characteristics of entrepreneurship and the business environment on business success (Setyawati et al., 2013).

The entrepreneurship education process is rooted in the formation and development of social capital competencies. Social capital is the values of goodness in positive reciprocal cooperative relationships, individually or in a group, which shape the personality and character of the community in achieving well-being. Social capital in character education is the values of goodness in a positive reciprocal cooperative relationship among learners, teachers, academicians, families, and society, which embody the personality and character of students in achieving educational goals.

The results of the research (Uy, 2011) confirmed that cultural factors, such as personal values, influence or even lead to economic development. The definition of entrepreneurship evolved from personal characteristics to aspects of organization and culture (Klamer, 2011). Cultural entrepreneurship is a new character in the cultural sector, namely figures who are entrepreneurs in realizing cultural values. Another theory adds that interaction enables people to build trust and cooperation, to commit

themselves to knit social ties. This research discusses the formation of social capital through the development of human resources created through increased education and/or social inclusion (Dinda, 2014).

Social capital plays a role in encouraging the growth and internationalization of small and medium enterprises (SMEs) in developing markets. Social capital has the potential benefits associated with networking, trust, information and communication exchanges, social cohesion, and political empowerment (Turley, 2017). Anderson's research results (2014) emphasize that individuals can only utilize social capital within a particular network by becoming part of that network, both directly and indirectly, by utilizing wider social relationships in which their bonds are embedded (Kim & Aldrich, 2005). Social capital can only be developed through social interaction. Someone will get access to other resources with social capital in the network.

Social capital can also be developed through educational institutions. Educational institutions not only provide scientific lessons, but serve the rules, norms, and values so as to establish a good social capital. This is not only through educational institutions at the primary and secondary levels but also through higher education institutions. In addition to mastering science and technology, education is also assigned to create values oriented to the dimensions of professionalism, honesty, integrity, freedom of opinion, equality of position, and ethical attitudes. Advanced and high-quality educational institutions are caused by the culture of social capital that is applied in all components involved in the educational activity. Higher education, as one of the leading mediators and facilitators in building the nation's young generation, has an obligation to teach, educate, train, and motivate the students so that they become a generation that is independent, creative, innovative, and able to create various job opportunities (Turley, 2017). In this case, social capital can be empowered for entrepreneurship education and the formation of the entrepreneurial character of the students.

A person who can become a successful entrepreneur is highly determined by the extent of human capital and social capital he admits, especially in an increasingly complex and rapidly changing environment. Human capital in entrepreneurs includes the ability to acquire vision, confidence, knowledge, ambition, charisma, and

skills/experience, and social capital that contributes to the success of entrepreneurs is the association they pertain, the trust of the organization and between personal, mediating networks, and users and information spreaders (Westlund & Bolton, 2003). Higher education possesses a greater contribution to the entrepreneurial culture.

An action learning approach that concentrates on developing a realistic business idea can build and strengthen networks that form the basis of social capital. The education carried out again is to be designed to develop the ability to build networks, cooperate, synergize, and build trust and share knowledge or information for students. Entrepreneurship education as an educational effort to realize successful entrepreneurs need to be organized with the orientation and utilization of social capital. The entrepreneurship education process is systematically directed at the formation and development of social capital competencies which include: mastery of values, norms, ability to develop trust, ability to build networks, and ability to manage information and/or knowledge. Research results in Paltasingh (2012), that entrepreneurship education is very impulsive since it encourages innovation, encourages job creation, and increases global competitiveness.

The utilization of social capital can be applied to all processes of learning activities, both intracurricular and extracurricular included in the higher education' culture. The learning implementation aspect is designed to prioritize the cooperation of the organizers with the educators or technical speakers and other involved parties, and the implementation of the learning process is carried out using a group-based and experience-based approach. The utilization of social capital has proven to be very supportive and strengthens character education through the inculcation of character values and models that are carried out integrally and reciprocally by all academicians, parents, and society (Anderson, 2014). The aspects of social capital that are utilized in character education are cooperation and collective action, information and communication, groups and networks, trust and solidarity, social cohesion and inclusion, and empowerment. For the purposes of analysis with conceptual path diagrams and reference studies as described above, a research question can be formulated whether the social capital has a positive influence on the entrepreneurial character of students.

Methodology

Research Goal

The purpose of this research is to find the structural equation modeling that illustrates the role of social capital in the formation of the student entrepreneurial character in the educational process. This research applies a quantitative approach with a survey method to explain the measurement of social capital on the entrepreneurial character of students.

The population in this study were all the fourth dan sixth-semester students of the 2017/2018 Academic Year, at Universitas AMIKOM Yogyakarta. The sample recruited from the population of this study was used the stratified cluster random sampling technique because the population consisted of two levels, namely Semester 4 and Semester 6, as well as overshadowing several study programs that would be divided into several clumps. The subjects were the fourth and sixth-semester students. Samples in this study were 360 respondents.

The data were collected from questionnaires. Results of the Aiken Index Coefficient of Instrument Validity was 0.79, instrument reliability is determined based on Cronbach's alpha coefficient. The reliability of the instrument was 0.86. The questionnaires aimed to get a description of social capital and the entrepreneurial character of students. The social capital in this research included collective action and collaboration, trust and solidarity, groups and networks, information and communication, social cohesion and inclusion, and empowerment. Entrepreneurial character is a trait or characteristic inherent in an entrepreneur, consisting of (1) encouragement for achievement; (2) a sense of responsibility; (3) attitude towards risk; (4) self-confidence; (5) using feedback; (6) long-term orientation; (7) managerial abilities and skills; and (8) attitude towards money. Alternative answers were adjusted to the Likert Scale, made into five alternative answers. Each response would be given a score between 1 and 5 which can be explained as follows: Score 5 for *Always* (SL) answer, Score 4 for *Often* (SR) answer, Score 3 for *Sometimes* (KD) answer, Score 2 for *Rarely* (JR) answer, and Score 1 for *Never* (TP) answer. The blueprint of the social capital measurement instrument can be seen in Table 1 below:

Table 1. Blueprint of Social Capital Measurement Instrument

Indicator	Aspect	Instrument Item
Collective action and cooperation,	1. Social interaction among students on campus.	1
	2. Relationships among senior and junior students.	2
	3. Students' ability in group discussions.	3
	4. Relationships among campus residents.	4
Trust and solidarity,	1. Students' trust in their friends.	5, 6, 7, 8, 9, 10, 11
	2. Students' trust in lecturers, chancellors, deans, and other campus residents.	12, 13, 14
	3. Students' trust in organizational leaders on their campus.	15
	4. Students' trust in the campus.	16,17
	5. Society's trust in the students' environment of the campus according to students' perceptions.	18
	6. Parents' trust in the campus according to students' perceptions.	19
	7. Students' solidarity in their groups on campus.	20
	8. The feeling of belonging to each other in the community.	21
Group and network,	1. Students' involvement in organizations on campus such as Student Board or extra-curricular organizations.	22, 23, 24, 25, 26,27, 28, 29, 30, 31, 32
	2. The campus facilitates the organizations on the campus.	33
	3. The campus holds leadership training for students regularly.	34
	4. The election of organizational leaders is carried out democratically.	35, 36,
	5. Networking with organizations on other campuses.	37
Information and communication,	1. Facilities and infrastructures are available on campus.	38, 39, 40
	2. Information distribution.	41
	3. Difficulty level to obtain information.	42, 43, 44
Social inclusion and cohesion,	1. Togetherness or closeness that is owned by the campus' environment.	45
	2. Students' ability to respect their friends' opinions.	46
	3. Respect ethnic, religious, racial, and intergroup differences.	47, 48
	4. The campus facilitates students' differences.	49
	5. The campus accommodates the interests of all students.	50

Empowerment	1. Students' participation in the communities' activities on the campus.	51
	2. Students' participation in every decision-making.	52, 53
	3. Their involvement in the institutions in their environment.	54

The research instrument that measures the student's entrepreneurial character is shown in Table 2 below.

Table 2. Blueprint of Students Entrepreneurial Character Measurement Instrument

Indicator	Aspect	Instrument Item
Encouragement for achievement	1. Always want to excel.	1
	2. Target and profit-oriented.	2
	3. Trying to surpass others (competitiveness).	3 4
	4. Do something that has not been done by others (innovation).	
Responsibility	1. Thorough	5
	2. Diligent	6
	3. Effective	7
	4. Hard work	8, 9, 10
	5. Enthusiastic	11, 12
Attitude towards risk	1. Able to take risks.	13,14
	2. Likes challenges and is aggressive.	15, 16, 17
Self-confidence	1. Certain	18
	2. Independent	19
	3. Be honest	20
	4. Optimistic	21, 22
Using feedback	1. Willingness to accept criticism from others.	23
	2. Respecting others' opinions.	24
	3. Making evaluation as a step forward improvement.	25
	4. Accepting others' negative assessments for the works that have been carried out.	26
	5. Willing to make other people a reference in making decisions.	27
Long-term orientation	1. Thinking further ahead.	28
	2. Having wishes that must be achieved.	
	3. Having an optimistic attitude in achieving wishes.	29
	4. Knowing the steps that must be taken to achieve the wishes.	30
	5. Having a feeling that the activities carried out will affect the results.	31
Managerial abilities and skills		32
	1. Planning business activities.	33
	2. Independence.	34

	3. Accuracy in doing a job.	35
	4. Cooperating in groups.	36
	5. Evaluating the process of all works.	37
Attitude towards money	1. How to get money.	38
	2. Attitude in spending money.	39
	3. Saving culture.	40
	4. How to manage finances.	41
	5. Job activities that make money.	42

The data were analyzed using the quantitative descriptive, using SEM. The stages of SEM analysis itself must go through at least five stages (Latan, 2013), namely: 1) model specification; 2) model identification; 3) model estimation; 4) model evaluation; 5) model modification or re-specification.

Findings

This study determines the effect of social capital in shaping the entrepreneurial character of University AMIKOM Yogyakarta. The empirical findings regarding the research results are as described below. The influence of the Social Capital on the Students’ Entrepreneurial Character. The results of the full model analysis of the LISREL calculation results are shown below.

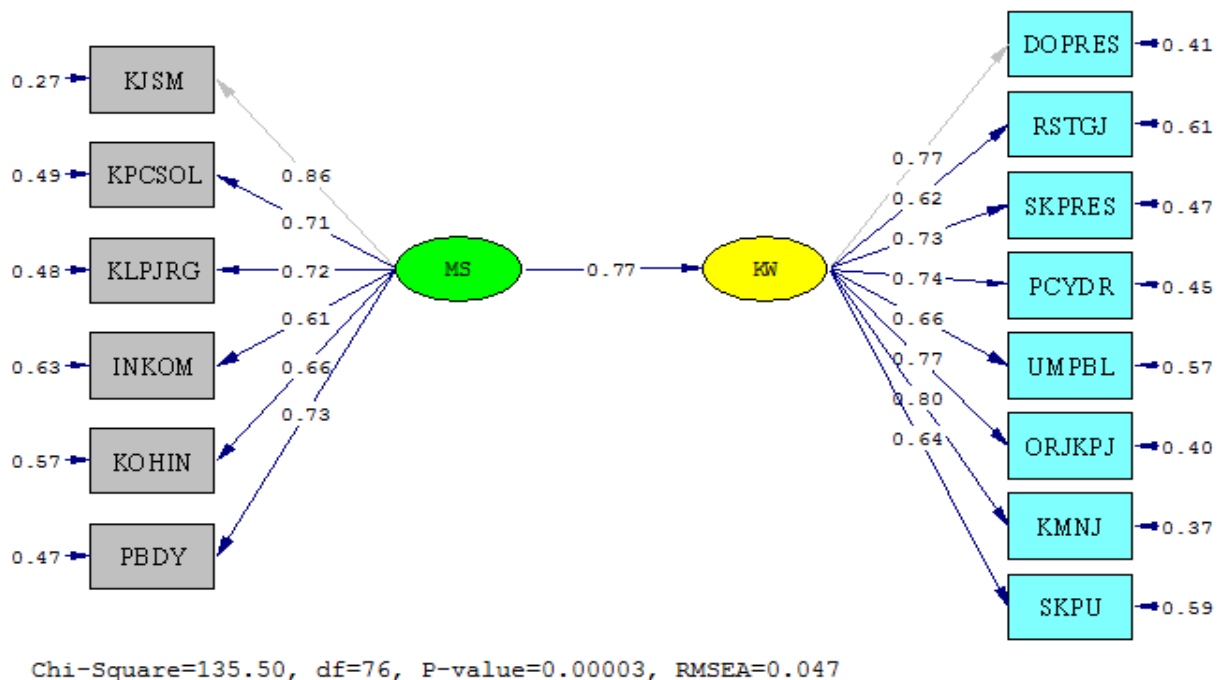


Figure 1. The Test Results of the Stage-1 Full Model

Information: KJSM = Collective Action and cooperation; KPCSOL = Trust and solidarity; KLPJRG = Group and network, INKOM = Information and communication, KOHIN = Social inclusion and cohesion; PBDY = Empowerment; DOPRES = Encouragement for achievement; RSTGJ = Responsibility; SKPRES = Attitude towards risk, PCYDR = Self-confidence; UMPBL = Using feedback; ORJKPJ = Long-term orientation; KMNJ = Managerial ability and skills; SKPU = Attitude towards money.

By using the low chi-square indicator (near zero), the Fit Model of P-Value > 0.05, RMSEA < 0.08; Figure 1 shows that the variable relationship of the Social Capital (MS) to the Students' Entrepreneurial Character (KW) indicates a model that is not yet fit. Furthermore, with the recommendation of the model recommended by the LISREL system (modification indices), the fit model can be obtained after having been modified according to the following recommendations:

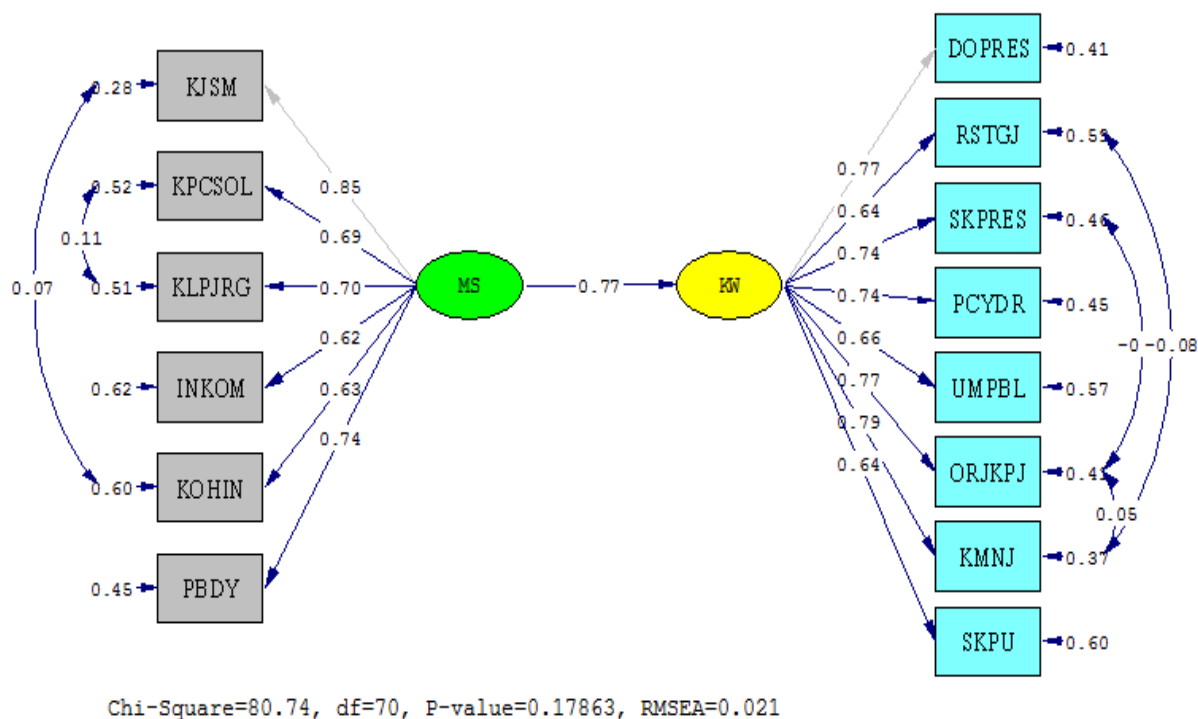


Figure 2. The Test Results of the Model Modification

The modifications recommended by the LISREL program produce a model that obtained the chi square value of 66.81 or lower than the initial model, p-value 0.17863 > 0.05, and RMSEA 0.021 < 0.08, which indicates that the model built is fit. The details of the fit model test results can be seen in Table 3.

Table 3. Test Results of Fit Model

Fit Value Indicator	Coefficient	Interpretation
Chi-Square	80.74	The chi-square value < 2 x df shows the fit model
P-Value	0.17863	More than 0,05 means the data is identical with the model
Root Mean Square Error of Approximation (RMSEA)	0.021	If the value ranges from 0.08 to 0.1 then the model has a fit error estimate
Goodness of Fit Index (GFI)	0.97	Greater than 0.9 means the fit model is good
Adjusted Goodness of Fit Index (AGFI)	0.95	The model is good if it has a PGFI value that is far greater than 0.6
Expected Cross Validation Index (ECVI)	0.42	The model ECVI value that is lower than the ECVI obtained on the Saturated and Independence models indicates that the model is good.
ECVI for Saturated Model	0.58	
ECVI for Independence Model	19.12	
Model AIC	150.74	The value of the AIC model is smaller than the Saturated and Independence AIC values, then the model is fit
Saturated AIC	210.00	
Independence AIC	6863.35	
Model CAIC	321.75	The CAIC model value is smaller than the Saturated CAIC and Independence CAIC values, then the model is fit
Saturated CAIC	723.04	
Independence CAIC	6931.76	
Normed Fit Index (NFI)	0,99	NFI value is greater than 0.9 then the model is fit
Comparative Fit Index (CFI)	1.00	CFI value is greater than 0.9 then the model is fit
Incremental Fit Index (IFI)	1.00	IFI value is greater than 0.9 then the model is fit
Relative Fit Index (RFI)	0.98	RFI value is greater than 0.9 then the model is fit

Source: (Joreskog & Sorbon, 1993; Hair, 2006)

After analyzing the structural model, the obtained calculation results can be used to test the hypothesis. All hypotheses will use the path coefficient and the significance value p-value ≥ 0.05 .

Discussion

From the results of the analysis, the data that has been presented previously provide the answers to the problems of this research. The research problem that has been answered is the social capital in shaping the students' entrepreneurial character of Universitas AMIKOM Yogyakarta. The theoretical model built in the research paradigm is supported by empirical data, although there are components that have been developed. There are fixed variable indicators, but some are changing too. In the first phase test, a confirmatory factor analysis model of Social Capital measurement was carried out on the Students' Entrepreneurial Character. The measurement models that are built based on theory are tested for compatibility with the empirical data. As a result, all dimensions are supported by the empirical data; however, there are a number of indicators that are not supported by the empirical data, so changes in the indicator components must be made. The indicators that have been redesigned according to the results of the analysis, then included in the next-stage test to get a fit model.

The relationship of the Social Capital on the Students' Entrepreneurial Characteristics from the fit model test results (figure 2). It can be seen that the Social Capital variable, formed from Cooperation is 0.85, Trust and Solidarity is 0.69, Group and Network is 0.70, Information and Communication is 0.62, Social Inclusion and Cohesion is 0.63, and Empowerment is 0.74. The Social Capital has a path coefficient with an Entrepreneurial Character of 0.77. This number shows a positive number and is quite high. This means that if the Social Capital owned by the campus is well-utilized by the students, it will support the formation of entrepreneurial character. The analysis results to determine the influence significance can be seen from the $p\text{-value} \geq .05$, the $p\text{-value}$ of 0.17863. This means that the $p\text{-value} \geq 0.05$ ($0.17863 > 0.05$) means that Social Capital has a significant influence on the students' entrepreneurial character. The hypothesis test results show that the path coefficient is positive and significant, so that the H_{a1} which states the Social Capital, including Cooperation, Trust and Solidarity, Groups and Networks, Information and Communication, Social Inclusion and Cohesion, and Empowerment, has a positive influence on the formation of the students' entrepreneurial character, is accepted.

Community-level social processes, where the level of social trust, connected organizational membership, and organizational membership, are the indicators that influence entrepreneurship (Seok Woo Kwon, Heflin & Ruef, 2013). Social capital is a useful concept for understanding educational attainment. Students who interact with colleagues with high abilities can have a significant effect on academic performance (Hasan & Bagde, 2013). The role of social capital in entrepreneurship development has been discussed in various pieces of literature. Entrepreneurial activity is determined altogether by social capital at the individual level, and social capital at the state level to obtain entrepreneurial opportunities (Seok-Woo Kwon & Arenius, 2010). Empowerment of existing social capital can be utilized to solve social problems by using entrepreneurial principles to organize, create, and manage an effort to achieve social goals.

A positive relationship between entrepreneurial network activity and initial entrepreneurial success is also stated by Santarelli & Tran (2013). The membership in organizations connected to a larger community is associated with the higher level of entrepreneurship, however, the membership in isolated organizations that have no connection to a larger community is associated with the lower level of entrepreneurship (Seok Woo Kwon, Heflin & Ruef, 2013). Bourdieu (1993) describes, the social capital that is formed through contact and group membership –in which through the accumulation of exchanges, obligations, and shared identities— provides actual and potential support and access to valuable resources.

Entrepreneurs who play an active role in building diverse social networks at the startup stage because it will have a positive impact on the internal cognitive innovation model in the form of new business creation. (Yang Xu, 2011). Hunter (2004) finds that entrepreneurs have a habit of gathering valuable information, experience, or skills through their participation in the formal education system. The education carried out is designed to develop the ability to build networks, cooperate, synergize, and build trust, and also share knowledge or information for the students and general public. Entrepreneurship education, as an educational effort to realize successful entrepreneurs, needs to be organized with the orientation and utilization of social capital. The entrepreneurship education process is directed at the formation and development of

social capital competencies which include: mastery of values, norms, ability to develop trust, ability to build networks, and ability to manage information and/or knowledge.

Social capital utilization can be applied to all processes of learning activities, both intracurricular and extracurricular, including in-school cultures. The learning implementation aspect is designed to prioritize the collaboration of the organizers with the educators or technical informants, and other parties involved, as well as the implementation of the learning process carried out using a group and experience-based approach. Social capital utilization has proven to be very supportive and strengthens character education through the inculcation of character values and models that are carried out integrally, and reciprocally by all academicians, parents, and the community. The social capital aspects which are utilized in character education are collaboration and collective action, information and communication, groups and networks, trust and solidarity, social cohesion, and inclusion.

Conclusion

The results of the full model test with SEM show a significant influence of social capital on the formation of students' entrepreneurial character. The results of the hypothesis test indicate a positive and significant influence of social capital on the formation of students' entrepreneurial character. Several suggestions for this research are: The social capital utilization can be applied to all processes of learning activities, both intracurricular and extracurricular, including in school/campus cultures. The social capital aspects that are utilized in character education are collaboration and collective action, information and communication, groups and networks, trust and solidarity, social cohesion and inclusion, and also empowerment. The education carried out must be designed to develop the ability to build networks, work together, synergize, and build trust, and also share knowledge or information with students. Entrepreneurship education, as an educational effort to realize successful entrepreneurs, needs to be organized with the orientation and utilization of social capital. The entrepreneurship education process is directed at the formation and development of social capital

competencies which include: mastery of values, norms, ability to develop trust, ability to build networks, and ability to manage information and/or knowledge.

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