



The Role of Social Capital in Shaping Export Capability: The Influence of Education and Empowerment on Export Clinic MSMEs in Surakarta

Nadya Kurniawati¹, Yuyun Sunesti², LV Ratna Devi Sakuntalawati³

¹²³Universitas Sebelas Maret, Indonesia

Correspondent: nadyakurniawati85@gmail.com

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ABSTRACT: MSMEs (Micro, Small and Medium Enterprise) are vital to Indonesia's economy, driving employment, income, and poverty reduction. However, their global expansion potential remains underutilized due to challenges in accessing international markets, highlighting the need for strategies to boost their export capabilities and competitiveness. This study analyses the influence of education level, empowerment, and social capital on the export performance of MSMEs participating in Surakarta's Export Clinic Technical Guidance program. This study used a quantitative approach with a descriptive research design and path analysis to test the influence of variables. The research sample consisted of 60 MSME actors involved in the export clinic program in Surakarta. The analysis results indicate an indirect relationship between education level and MSME export capability through social capital, and there is an indirect relationship between empowerment level and export capability through social capital, with a better understanding of the global market and marketing techniques that support their competitiveness. Findings show that education provides a better understanding of the global market and marketing techniques that support their competitiveness. Empowerment of MSMEs through training and mentoring has been shown to increase self-confidence and technical skills, which are important in facing export challenges. Social capital, which includes networks and relationships with external parties, is important in expanding access to international markets. These findings suggest that combining these factors can strengthen the export capability of MSMEs in Surakarta.

Keywords: Education, Empowerment, Social Capital, Export Performance, UMKM, Export Clinic



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INTRODUCTION

MSMEs contribute around 61% of Indonesia's Gross Domestic Product (GDP) in 2023 compared to previous years. This growth reflects the role of MSMEs as the backbone of the national economy, especially in creating jobs and empowering local communities with labour absorption

of up to 97% ([Coordinating Ministry for Economic Affairs of the Republic of Indonesia, 2024](#)). Ironically, the largest sector in Indonesia still has a low export value. The contribution of MSMEs to national exports only reaches 15%, much lower than that of Malaysia and Thailand, fellow ASEAN countries ([Secretariat of Indonesian Chamber of Commerce and Industry, 2024](#)). The findings of Husein's research (2024) stated that many MSMEs have been unable to export due to a lack of understanding of export procedures and regulations and not having clear legality.

The export capability of MSMEs is greatly influenced by many factors, one of which is the level of education. The level of education in Indonesia shows significant development because it is influenced by various government policies and programs aimed at improving the quality of education. The government has launched programs to improve educational infrastructure and teacher training to support improving education ([Alawi, 2024; Faradiba, 2024](#)). The government also provides School Operational Assistance (BOS) and Education Scholarships (Bidikmisi) to equalise education and improve the quality of education services ([Kemendikbud.go.id 2020; Kemendikbud.go.id 2021](#)). The actual condition of the education of MSME actors is that their education level and skills are low. Often, they only have an education up to the high school level ([Achmad et al., 2023](#)). MSMEs are still unable to understand the procedures and regulations related to exports, which are very complicated and numerous due to low levels of formal education (Sahara, 2024).

In addition to formal education, education can be in the form of empowerment. Empowerment is implemented in the form of informal education. Empowerment of MSMEs is one of the main focuses of the Indonesian government in order to increase competitiveness and export capabilities. Various efforts have been made to support MSMEs, such as training and assistance in innovation and product quality, marketing, and technical knowledge of exports (regulations, product standardisation, licensing, etc.) to suit the global market's needs ([Febriyantoro et al., 2019](#)). If traced from the research findings, the issue raised by [Kashmiri and Sufiandi \(2021\)](#) states that the guidance provided by the government in increasing the competitiveness of MSME products is still not optimal. The research findings of [Kumalasari and Trisnawati \(2023\)](#) indicate that although training and education have been provided, many MSME actors do not apply this knowledge in daily practice, affecting their business performance.

Education, or empowerment provided by the Government to MSMEs in formal and informal education, not only focuses on economic and social aspects. MSME actors who have higher education receive empowerment from the government and are members of the export clinic community, which are resources that can collaborate, build trust, and gain access to information and resources that are important for success in the international market. Resources like this are resources that have social capital. Social capital plays a vital role in increasing the export capabilities of MSMEs. The findings of [Ferine et al. \(2023\)](#) show that social capital provides MSME competitiveness through more effective collaboration and sharing of relevant information. In fact, according to [Bahtiar \(2023\)](#), the current condition is that many MSMEs cannot utilise existing social networks to increase their export capacity. MSMEs are often trapped in unproductive social relationships, which prevent them from establishing broader and more strategic cooperation.

Given MSMEs' critical role in Indonesia's economy, this research is urgent and relevant, contributing 61% to the GDP and absorbing 97% of the labour force. Despite this, their export contribution remains low at just 15%, far behind regional peers. Factors such as limited formal education, lack of understanding of export procedures, and insufficient government empowerment programs contribute to this gap. Additionally, many MSMEs struggle to leverage social capital, essential for enhancing export capabilities. By examining the interplay between education, empowerment, and social capital, this study aims to identify an indirect effect of the level of education on the Level of MSME export capability through the level of empowerment and an indirect effect of the level of empowerment on export capability through social capital.

The theoretical basis of this study utilizes three key social capital theories to examine export capabilities, specifically through the variables of education, empowerment, and social capital. These frameworks offer distinct perspectives on how social networks and relationships can influence individual and community-level outcomes, thereby impacting export potential. Drawing on these theories, the study assesses how social capital and empowerment enhance export performance. The theoretical basis of this study draws on three key social capital theories

James Coleman's theory emphasizes the role of social networks and trust in fostering cooperation and collective action. Coleman explains the role of social networks, trust, norms, and reciprocity in achieving common goals. Coleman states that the relationship between the roles of the components of social capital functions differently, depending on the context, such as education, family, work, and many others. Furthermore, Coleman explains that in the context of education, higher levels of education encourage the development of social networks because of the communal relationships created between teachers, schools, parents, students and other external parties. In turn, education increases trust, collaboration, and shared norms of value, all of which are important elements of social capital ([Coleman, 1988](#)). The relationship between education and social capital in MSMEs is reflected in the ability of entrepreneurs to develop international networks, establish cooperation with export partners, and understand global regulations and standards. Higher levels of education increase entrepreneurs' ability to understand international market dynamics and build more effective business strategies ([Nahapiet & Ghoshal, 1998](#)).

Besides the Coleman theory that focuses on their specific aspect, [Putnam \(1993\)](#) developed the theory of social capital, which explains that social networks, norms, and trust play an important role in creating a cohesive society. Putnam states that social capital is a feature of a social organisation that facilitates coordination and cooperation to achieve goals. Putnam highlights active participation and views that social capital is reflected in active participation. Active participation strengthens existing networks and strengthens the social capital of a group or community. According to Putnam, active participation in this social network can strengthen social cohesion and increase collective efficiency in society, which can be formed through involvement in the community. Social capital in the context of MSME exports is not only limited to trust and relationships between individuals but also includes access in the form of active participation in institutional resources such as government support, information on trade policies, and international market opportunities.

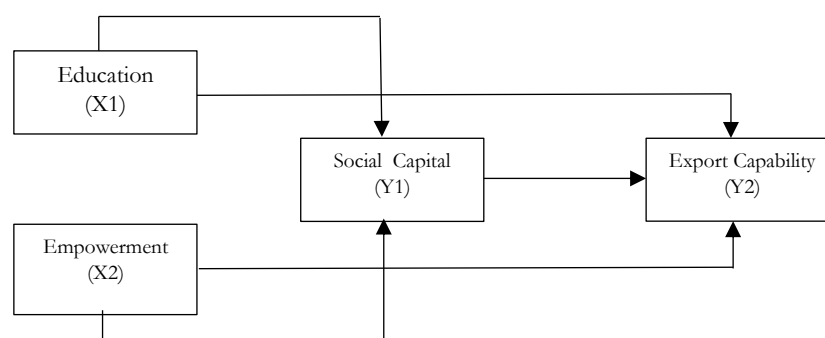
At the same time, Pierre Bourdieu's perspective highlights the role of social capital in shaping power dynamics and access to resources. Bourdieu believes that social capital is a resource that individuals have because they are part of a particular social network or group that functions as a resource that allows someone to gain power, status, or economic advantage. Bourdieu emphasises social networks that can provide individuals with access to existing resources that can be used for personal and collective gain ([Hannaway & Richardson, 1987](#)). In the context of export MSMEs, social networks owned by MSMEs can help them access resources. A good social network lets MSME owners obtain important information about international markets, consumption trends, and export regulations. Social networks owned by export MSMEs facilitate collaboration between MSMEs and various parties, such as the government, non-governmental organisations, and other industry players, as well as fellow MSMEs in the export guidance clinic community. Actors can collaborate in the export technical guidance clinic for personal interests, namely the ability to export.

Hypothesis Development

The export capability of MSMEs will be maximised if the education of business actors is high, as seen from the last level of formal education completed. In addition, if the empowerment of MSMEs by institutions is carried out optimally. These two variables affect the export capability of MSMEs and are also influenced by the social capital and business strategy variables.

The level of education and empowerment of MSMEs by institutions support the existence of social capital. The level of education plays an important role in the development of social capital. Higher education provides the knowledge and skills to enter, understand and utilise social networks. Individuals with a high level of education have access to information, resources, opportunities, and the ability to communicate and collaborate, all of which can strengthen their social capital. The level of empowerment also contributes to social capital. In a competitive business ecosystem, institutional support, such as training, mentoring, access to financing, and market information provision, helps MSMEs expand their networks and build relationships with various stakeholders such as suppliers, customers, government, and other organisations. This empowerment program can strengthen the social capital of MSMEs by expanding the network of relationships that are useful in accessing information, resources, and new business opportunities. The following hypotheses are formed: (1) there is an indirect effect of the level of education on the Level of MSME export capability through the level of empowerment, (2) there is an indirect effect of the level of empowerment on the level of export capability through the level of social capital.

Figure 1. Theoretical Framework



METHOD

This study uses quantitative methods with descriptive statistics and path analysis to see the influence of variables such as education, empowerment, social capital, and ability levels. The sampling technique in this study is census sampling, which takes the entire population to become research respondents, namely 60 MSMEs that are members of the Export Clinic Community in Surakarta City. Data collection techniques are carried out through questionnaires distributed via Google Forms.

Research Variables and Operational Definitions

Testing of the theoretical model in this study consists of several forms of relationships between variables, which include the following five research variables:

Exogenous variables are variables that influence or cause changes in dependent variables ([Sugiyono, 2018](#)). Exogenous variables are independent variables. Exogenous variables in this study are:

- Level of education
- Level of Empowerment of MSMEs

Endogenous variables are variables that are influenced or result from independent variables. Endogenous variables can be dependent variables and can also be intervening variables. Intervening variables cause the relationship between independent and dependent variables ([Sugiyono, 2018](#)). The endogenous variables in this study are:

- Social Capital
- Export Capability Level

The following is a more detailed explanation of the research variables and operational definitions:

Table 1. Conceptual and Operational Definitions

No.	Variables	Concept Definition	Operational Definition
1.	Level of education	The level of formal education that has been taken or achieved	Last completed formal education level: Elementary School, Middle School, High School, Diploma 3, Bachelor's Degree, Master's Degree, Doctorate
2.	Level of Empowerment of MSMEs	Efforts to provide financial assistance, capacity building, market access facilitation, regulatory support, encourage technological innovation, infrastructure development, training, partnerships, digital transformation, and promote inclusive growth.	<ol style="list-style-type: none"> 1. Efforts to provide financial assistance 2. Efforts to develop capacity 3. Efforts to provide market access facilities 4. Efforts to provide regulatory support, 5. Efforts to encourage technological innovation 6. Efforts to develop infrastructure, 7. Efforts to provide training, 8. Efforts to establish partnerships, 9. Efforts to transform digitally, 10. Efforts to promote inclusive growth
3.	Level of Social Capital	Social network ownership, participation in networks, reciprocity, trust, norms governing interactions, values, and proactive actions facilitate cooperation, which MSMEs utilise to access resources, information, and support that enhance export efforts.	<ol style="list-style-type: none"> 1. Ownership of social networks to enhance export efforts 2. Ownership of participation in networks to enhance export efforts 3. Reciprocal ownership to enhance export efforts 4. Ownership of trust to increase export efforts 5. Ownership of proactive measures that facilitate collaboration, which MSMEs utilise to access resources that enhance export efforts. 6. Ownership of proactive measures that facilitate collaboration, which MSMEs utilise to access information that enhances export efforts. 7. Own proactive measures that facilitate collaboration, which

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No.	Variables	Concept Definition	Operational Definition
			MSMEs utilise to access support that enhances export efforts.
4	Export Capability Level of MSMEs	The ability to identify opportunities in overseas markets, adapt to changing market conditions, and utilise internal and external resources to improve their export performance, the ability to master international market knowledge, the ability to navigate export regulations and procedures, the ability to manage export risks, product development that complies with international standards, and the utilisation of networks and resources to support export activities.	<ol style="list-style-type: none"> 1. Ability to identify opportunities in foreign markets 2. Ability to adapt to changing market conditions. 3. Ability to utilise internal resources to improve export performance 4. Ability to utilise external resources to improve export performance. 5. Ability to master international market knowledge. 6. Ability to navigate export regulations and procedures. 7. Ability to develop products that meet international standards 8. Ability to manage export risks 9. Ability to utilise networks to support export activities. 10. Ability to utilise resources to support export activities

This study uses primary and secondary data. Primary data was obtained from a questionnaire distributed via a Google form.

Validity and Reliability

In research, validity and reliability are crucial in ensuring the results' quality and accuracy. [Dahlan \(2014\)](#) emphasizes that these two aspects must be carefully considered to guarantee that the instruments used in research provide accurate and consistent data. Validity refers to how well an instrument measures what it is intended to measure. Reliability refers to the consistency of an instrument's measurements. An instrument is reliable if it produces stable and consistent results over time or across different subjects. This study involves variables measured by several indicators. Validity and reliability are attributes of an instrument. An instrument is said to be valid if the instrument is indeed supposed to be used as a measure of the object to be measured. The instrument's validity can be shown by the correlation between indicator items using the correlation coefficient. An instrument is reliable if it provides the same measurement results when used to measure the same object at different times or measure several identical objects more or less simultaneously. An instrument of a concept is reliable if it has a Cronbach Alpha statistic of at least 0.70. However, some researchers require this value to be at least 0.50 ([Dahlan, 2014](#)).

Table 2. Validity of the Empowerment Level Variable Instrument

Question	rhitung	Sign (2 tails)	α	Decision
1	0.960	0,000	0.05	Valid
2	0.949	0,000	0.05	Valid
3	0.971	0,000	0.05	Valid
4	0.957	0,000	0.05	Valid
5	0.977	0,000	0.05	Valid
6	0.966	0,000	0.05	Valid
7	0.980	0,000	0.05	Valid
8	0.967	0,000	0.05	Valid
9	0.941	0,000	0.05	Valid
10	0.961	0,000	0.05	Valid

Source : Primary data

Table 3. Validity of Social Capital Level Instrument

Question	rhitung	ign (2 tailed)	α	Decision
1	0.951	0,000	0.05	Valid
2	0.943	0,000	0.05	Valid
3	0.893	0,000	0.05	Valid
4	0.929	0,000	0.05	Valid
5	0.957	0,000	0.05	Valid
6	0.948	0,000	0.05	Valid
7	0.727	0,000	0.05	Valid
8	0.942	0,000	0.05	Valid
9	0.947	0,000	0.05	Valid

Source : Primary data

Table 4. Validity of Export Capability Level Instrument.

Question	rhitung	ign (2 tailed)	α	Decision
1	0.939	0,000	0.05	Valid
2	0.954	0,000	0.05	Valid
3	0.952	0,000	0.05	Valid
4	0.960	0,000	0.05	Valid
5	0.957	0,000	0.05	Valid
6	0.962	0,000	0.05	Valid
7	0.894	0,000	0.05	Valid
8	0.956	0,000	0.05	Valid
9	0.947	0,000	0.05	Valid

Source : Primary data

Table 5. Reliability Test of Research Instruments

No	Variables	Cronbach	Critical Value	Decision
1	Level of Empowerment	0.991	0.80	Reliable
2	Level of Social Capital	0.976	0.80	Reliable
3	Export Capability Level	0.987	0.80	Reliable

Source : Primary data

RESULT AND DISCUSSION

This section presents the research results, focusing on how education, empowerment, social capital, and export ability influence the export performance of SMEs in Surakarta. The analysis draws on data gathered from the MSMEs Export Clinic in Surakarta to assess the impact of these variables on their capacity to engage in and expand export activities. By interpreting the findings, this section aims to provide a deeper understanding of the factors that enable or hinder the growth of SMEs in international markets, offering insights that can guide future strategies for enhancing export potential in the region.

Descriptive Statistical Analysis

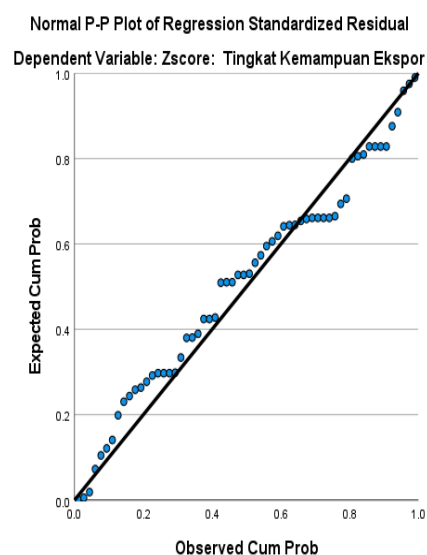
The education level of MSMEs in the program is predominantly high, with 100% of respondents categorized as having a high education level (D3, S1, S2, or S3). This suggests that the program attracts MSMEs with a higher knowledge and understanding, ready to manage their businesses professionally, particularly in the export sector. Regarding empowerment, the majority (50%) of MSMEs report a moderate level of empowerment, indicating that, while the government's support has been beneficial, there is still room for improvement in the effectiveness and distribution of assistance. Financial aid, capacity building, market access, and regulatory support have been valuable but inconsistently received across respondents.

Social capital among MSMEs is also predominantly high, with 50% of respondents indicating strong community involvement and support. This is reflected in their active participation in local meetings, collaboration within the community, and proactive efforts to access business resources and information. Lastly, export capabilities are moderate, with the majority (45%) of MSMEs falling into this category. Although some have high export potential, most still face challenges in maximizing their capabilities. Key indicators such as market adaptability, product development, and network utilization show promise, but continued efforts are needed to enhance export performance.

Classical Assumption Test

Data Normality Test

Figure 2. Data Normality Assumption Test Graph



The data normality assumption test results show that the data is spread around the diagonal line and follows the direction of the diagonal line. Hence, the regression model meets the normality assumption.

Heteroscedasticity Test (Glesjer Test)

The results of the heteroscedasticity test, using the Glejser test with the help of SPSS 25.0, show that the significance value is > 0.05 , so there are no symptoms of heteroscedasticity. A good regression model does not experience symptoms of heteroscedasticity.

Autocorrelation Test

The results of the autocorrelation test using the run test with the help of SPSS 25.0 show that the significance (Asym. Sig) > 0.05 means there is no autocorrelation. A good regression model is free from autocorrelation.

Multicollinearity Test

Multicollinearity detection occurs in independent variables if the correlation between independent variables is very high or approaches 1. The results of calculating the correlation between independent variables with the help of the SPSS program are as follows:

1. The correlation between the education level and social capital variables is 0.446.
2. The correlation between the education level and export capability variables is 0.511.
3. The correlation between the empowerment level variable and the social capital variable is 0.848.
4. The correlation between the empowerment level variable and the export capability level variable is 0.838.

5. The correlation between the social capital variable and the level of export capability is 0.653.

The correlation calculation results between independent variables are not very high or close to 1. So, there is no multicollinearity between independent variables. A good regression model does not have multicollinearity.

Indirect Effect of Education Level on Export Capability Level

The level of export capability is not only directly influenced (direct effect) by the level of education but is also indirectly influenced through the level of social capital (indirect effect), influenced by the correlation between the level of education and the level of empowerment (correlated effect) and influenced by unexplained variables (spurious effect) by hypothesised causal relationships. To find out how significant the influence (path coefficient) is, it is necessary to estimate the path coefficients obtained from 2 Sub-Structure models from the path diagram structure of the Export Capability Level model. The sub-structure model diagrams are as follows:

Figure 3. Substructure Model I

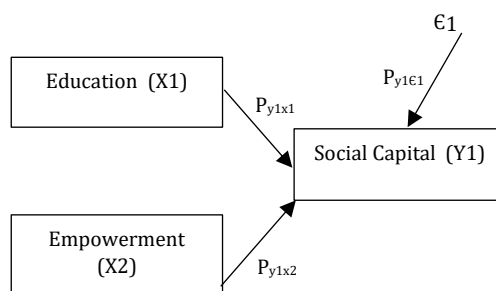
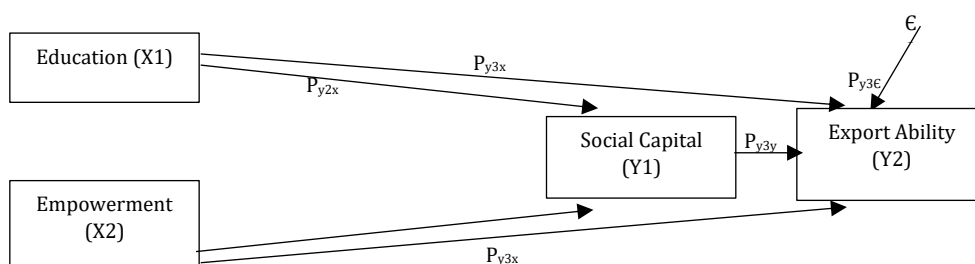


Figure 4. Sub Structure Model II



Based on the results of the regression calculations on Sub Structure I and II models, the path coefficient estimates are as follows:

Table. 6 Path Coefficient Estimates

Track	Path Coefficient
Social Capital Level –Education Level (y1x1) ρ	0.010
Level of Social Capital – Level of Empowerment (y1x2) ρ	0.979
Export Capability Level – Social Capital Level (y2y1) ρ	0.153
Export Capability Level – Education Level (y2x1) ρ	0.052
Export Capability Level – Empowerment Level (y2x2) ρ	0.787

Source : Primary data

The Influence of Education Level on Export Capability Level

The results of the path coefficient estimation are used to determine the magnitude of the path coefficient caused by the direct effect, indirect effect, correlated effect, and spurious effect. To determine the path coefficient (r') or Total Effect or Level of Education with the level of export capability, the correlation calculation results between the level of education and the level of empowerment are needed. The results of the correlation calculation are 0.676. The calculation of the path coefficient of the level of export capability with the Level of education caused by the direct effect, indirect effect, correlated effect on the level of empowerment and spurious effect are as follows:

$$\begin{aligned}
 r'_{y2x1} &= \rho_{y2x1} + (\rho_{y2y1})(\rho_{y1x1}) + (\rho_{y2y1})(\rho_{y1x2})(r_{x1x2}) + (\rho_{y2x2})(r_{x1x2}) \\
 &= 0.052 + (0.153)(0.010) + (0.153)(0.979)(0.676) + (0.787)(0.676) \\
 &= 0.052 + 0.001 + 0.101 + 0.532 = 0.686
 \end{aligned}$$

The path coefficient result of 0.686 shows that if there is a change in the value of 1 (one) unit at the Education Level, through the Empowerment Level and the Social Capital Level, it causes a change in the value of 0.686 units at the Export Ability Level. To determine the strength of the influence, the interpretation guidelines for the correlation coefficient proposed by Sugiyono (1999) are used.

Table 7. Guidelines for Interpreting Correlation Coefficients

Coefficient Interval	Relationship level
0.00 – 0.199	Very low
0.20 – 0.399	Low
0.40 – 0.599	Currently
0.60 – 0.799	Strong
0.80 – 1,000	Very strong

Source : Sugiyono, 1999

Guidelines for interpreting the level of correlation coefficient relationships used to interpret the strength or weakness of path coefficients are essentially simple corrected correlation coefficients between an independent variable and a dependent variable (Supardi, 2016). Based on the interpretation of the correlation coefficient in Table 7, then: $r'_{y2x1} = 0.686$ has a strong level of influence. There is a change in the magnitude of the path coefficient of Education Level on Export Ability Level caused by direct influence, indirect influence, correlation influence and the influence of other unexplained variables in the model structure of 0.843. The hypotheses tested are:

H_0 = There is no influence of education level on export capability level

H_a = There is an influence of education level on export capability level

Table correlation coefficient ($N = 60$; $\text{sig}=0.05$) = 0.254

$r'_{y2x1} = 0.686$. $r'_{y2x1} > r_{\text{table}}$. $0.686 > 0.254$

So H_0 is rejected, and H_a is accepted.

Decision:

Because H_a is accepted, it is stated that the level of education influences export capability. The magnitude of the education level's influence on the level of export capability through social capital caused by direct, indirect, correlated, and spurious effects is 0.686.

The above results reflect the sufficient export capabilities of MSMEs. MSMEs Export Technical Guidance Clinic has a series of export capabilities obtained from both external and internal parties. MSMEs have taken advantage of the opportunity by joining the Export Clinic Technical Guidance Clinic and have been given a series of training courses related to exports, export markets, product legality, and certification on how to find export shares. Various export trainings provide individual reinforcement that MSMEs use to bring their businesses to the international arena. Apart from knowledge, MSMEs are also quite capable of implementing export regulations and standardisation, such as having a Business Identification Number (NIB), Taxpayer Identification Number (NPWP), Trade Business License (SIUP) and documents and certifications that apply in the destination country. MSMEs have been capable of meeting standards such as packaging, product quality and packaging. These various efforts are certainly influenced by higher education; this is reflected in the study results. The education possessed by MSMEs is categorised as high, with a dominance of graduates in both S1, S2, and S3. Higher levels of formal education provide a basis for MSME actors to develop better knowledge and skills, especially in understanding international markets, export products and global market marketing strategies.

The impact that affects the export capability is not only limited to the level of education but is also closely related to the development of social capital owned by MSMEs. In the Export Technical Guidance Clinic context, MSMEs have joined and formed a community with other business actors, accompanied by active support from the UPTD IKM Center of Surakarta City. Joining the community, providing MSMEs with social capital in the form of resources such as training, export information flows, various capital assistance, and getting support also supports fellow business actors in the community. Not only having qualified social capital, but MSMEs also foster social networks and trust with various parties, manifested in the presence and active participation in various activities. Export efforts not only stop at the level of education and social capital but are

significantly contributed to by business strategies. The high level of education owned by MSMEs and the qualified social capital owned by MSMEs bring a better business climate. MSMEs will have a good business strategy with a high level of education achieved and good social capital owned. In the UMKM Technical Guidance Export Clinic, UMKM has a series of business strategies that have been owned in its business efforts. Based on the study results, UMKM has been able to innovate, adjust products to export market goals, diversify products, and access international market information.

The Influence of Empowerment Level on Export Capability Level

To find out the path coefficient (r') or Total Effect or Level of Empowerment with the Level of Export Ability, the results of the correlation calculation between the Level of Education and the Level of Empowerment are needed. The result of the correlation calculation is 0.676. The calculation of the path coefficient of the Level of Export Ability with the Level of Empowerment caused by the direct effect, indirect effect, correlated effect on the Level of Education and spurious effect is as follows:

$$\begin{aligned}r'_{y2x2} &= \rho_{y2x2} + (\rho_{y2y1})(\rho_{y1x2}) + (\rho_{y2y1})(\rho_{y1x1})(r_{x1x2}) + (\rho_{y2x1})(r_{x1x2}) \\&= 0.787 + (0.153)(0.979) + (0.153)(0.010)(0.676) + (0.052)(0.676) \\&= 0.787 + 0.149 + 0.001 + 0.035 = 0.97\end{aligned}$$

The path coefficient result of 0.97 shows that if there is a change in the value of 1 (one) unit at the empowerment level, through the education level and the social capital level, this will result in a change in the value of 0.97 units at the export capability level. The guidelines for interpreting the level of correlation coefficient relationships used to interpret the strength or weakness of the path coefficient are essentially simple corrected correlation coefficients between an independent variable and a dependent variable. (Supardi, 2016). Based on the interpretation of the correlation coefficient in Table 7, $r'_{y2x2} = 0.97$ has a robust level of influence. There is a change in the magnitude of the path coefficient of the Level of Empowerment towards the Level of Export Capability caused by direct influence, indirect influence, correlation influence and the influence of other unexplained variables in the model structure of 0.97. The hypotheses tested are:

H_0 = There is no influence of the level of empowerment on the level of export capability

H_a = There is an influence of the level of empowerment on the level of export capability

Table correlation coefficient ($N = 60$; $\text{sig}=0.05$) = 0.254

$r'_{y2x2} = 0.97$. $r'_{y2x2} > r_{\text{table}}$. $0.97 > 0.254$

So H_0 is rejected, and H_a is accepted.

Decision:

Because H_a is accepted, it is stated that the level of empowerment influences export capability. In contrast, the magnitude of the influence of the level of empowerment on the level of export capability through social capital is caused by direct effect, indirect effect, correlated effect, and spurious effect is 0.97.

The above results reflect the government's exemplary level of empowerment of MSMEs. In the context of this study, the UPTD Management of the Surakarta City MSME Center under the auspices of the Surakarta City DINKOPUKMPERIN provides various interventions and assistance to MSMEs that are members of the Export Clinic Technical Guidance Clinic. Not only training but various interventions such as financial assistance, facilitation of market access in business matching activities, supporting various activities, and discussions to strengthen the social capital owned by MSMEs. This is reflected in the increasing social network owned by MSMEs, high active participation in various efforts, and firm trust and reciprocity between MSMEs and fellow business actors who are members of the Export Technical Guidance Clinic. This government intervention also affects the business strategy owned by MSMEs. Various training, assistance and facilitation impact the preparation of better strategies, where MSMEs can innovate, adapt to the export market and take advantage of various existing business opportunities.

The discussion will now focus on the indirect effects of education and empowerment on export ability, mediated through social capital. Specifically, we will explore how higher levels of education contribute to improved export performance by enhancing social capital, such as stronger networks and trust within business communities. This indirect effect is greater than the direct effect between the level of education and export capability ($0.686 > 0.052$). These results indicate that the effect of the level of education on the level of export capability is through the level of social capital.

[Coleman's theory \(1998\)](#) explains that education provides good social network development, where a higher school environment creates beneficial communal relationships, such as teachers, parents, and students, even with parties outside the school. High social education provides better social encouragement in relationships. This is reflected in the UMKM Technical Guidance Export Clinic, where UMKM has a high level of education, resulting in various beneficial relationships for their business, starting from getting the opportunity to participate in various training, getting capital assistance, mentoring to facilitation by the government and getting support from fellow UMKM actors who are members of the Export Clinic Technical Guidance Community as social capital in achieving export capabilities. This is reflected in the findings of the UMKM Technical Guidance Export Clinic, where MSMEs with higher education levels (D3, S1, S2, S3) benefit from enhanced social capital. These MSMEs gain access to training, capital assistance, mentoring, and government support, all of which contribute to their business growth and export capabilities. The high level of education enables MSMEs to leverage these networks, directly supporting their success in the export sector. Thus, the research supports Coleman's theory by showing that education strengthens social ties, which in turn boosts business performance.

Furthermore, [Bourdieu's Theory \(1986\)](#) states that the social capital a person owns is the result of their inclusion in a social network in a particular group and that social capital. Bourdieu emphasises the social network that provides individuals access to various existing resources, which can be utilised for personal or collective gain. The social capital currently owned by MSME actors (new knowledge of exports, export regulations and standardisation, capital assistance, government assistance, and support from fellow MSME actors) results from including MSMEs in the MSME Export Clinic Technical Guidance Community. Being included in the community provides MSME actors with various information related to the export market, inspiration for innovation and

creativity, open discussions between MSME actors and technical training in the export sector with expert practitioners facilitated by the government. These encouragements lead MSME actors to understand, comprehend, and be able to carry out export efforts to maximise the business they have. The research findings show that MSMEs involved in the Export Clinic Technical Guidance program gain social capital through their participation in the community. This involvement gives them access to new export knowledge, capital assistance, technical training, and support from fellow MSMEs. These resources help MSMEs enhance their export capabilities and maximize their business potential, aligning with Bourdieu's theory about the role of social networks in accessing resources for collective benefit.

So, when MSME actors have higher education, they are more accessible to reaching social networks and resources that suit their business needs. Social networks and resources owned by MSMEs (understanding and technical knowledge obtained from training by the government, various assistance, support and information flow from fellow MSME export actors' communities) become provisions that will produce export capabilities owned by MSMEs in bringing MSME products in Surakarta City to the international arena more optimally.

Additionally, we will examine how empowerment initiatives influence export capacity, with social capital playing a pivotal role in facilitating connections, knowledge-sharing, and collaboration within international markets. This analysis aims to shed light on the critical pathways through which education and empowerment can indirectly enhance the export potential of SMEs, highlighting the essential role of social capital in this process. The indirect effect is greater than the direct effect ($0.97 > 0.787$); this shows the influence of the level of empowerment on the level of export capability through social capital.

[Putnam's theory \(2000\)](#) highlights active participation in social capital. A person's social capital is reflected in a person's active participation in existing social networks, strengthening cohesion and providing individual and collective efficiency. [Putnam \(2000\)](#) emphasised that active participation is formed through involvement in the community. The social capital owned by MSME actors is currently reflected in their participation in the empowerment carried out by the UPTD Sentra IKM under the auspices of DINKOPUKMERIN Surakarta City. In this empowerment, a Technical Guidance Export Clinic was formed, accommodating MSME actors and allowing them to be one step ahead in entering the export market. The participation of MSME actors becomes an active participation. Active participation will provide knowledge and understanding of the export market and networks, such as relations with the government. These stakeholders provide export assistance and facilitation, as well as support and trust from fellow MSME actors in the Export Technical Guidance Clinic community to jointly realise exports with the social capital that has been successfully achieved. The research supports this theory, as MSMEs' active participation in the Technical Guidance Export Clinic program under UPTD Sentra IKM provides them with knowledge, export market insights, and connections with key stakeholders like the government. This participation fosters trust and collaboration among MSMEs, enhancing their social capital and helping them advance in the export market. Thus, the findings align with Putnam's theory by showing how active involvement in a community network boosts social capital and supports MSME growth.

Furthermore, [Bourdieu's Theory \(1986\)](#) states that the social capital a person owns is the result of their inclusion in a social network in a particular group and that social capital. Bourdieu emphasises the social network that provides individuals access to various existing resources, which can be utilised for personal or collective gain. The social capital currently owned by MSME actors (new knowledge of exports, export regulations and standardisation, capital assistance, government assistance, and support from fellow MSME actors) results from MSMEs' inclusion in the MSME Export Clinic Technical Guidance Community. Being included in the community provides MSME actors with various information related to the export market, inspiration for innovation and creativity, open discussions between MSME actors and technical training in the export sector with expert practitioners facilitated by the government. These encouragements lead MSME actors to understand, comprehend, and be able to carry out export efforts to maximise the business they have. The research findings align with this theory. MSMEs in the Export Clinic Technical Guidance program benefit from their community inclusion, access to export knowledge, capital assistance, government support, and networking opportunities. This social capital enables MSMEs to enhance their export capabilities, as evidenced by training, market insights, and collaborative efforts with peers and experts. Thus, the study supports Bourdieu's theory by demonstrating how participation in a social network fosters access to resources that promote business growth.

So, MSME actors have good social capital when they join and actively participate in the empowerment carried out by the government, implemented in the Export Clinic Technical Guidance Clinic by the UPT Management of the IKM Center under the auspices of the Surakarta City DINKOPUKMPERIN. Good social capital is reflected in the social network and resources owned by MSMEs (understanding and technical knowledge obtained from training by the government, various assistance, support and information flow from fellow MSME export actors) as provisions in producing export capabilities owned by MSMEs in bringing MSME products in Surakarta City to the international arena more optimally.

CONCLUSION

The key findings of this study reveal important insights into the relationships between education, empowerment, social capital, and export ability. The education level of MSMEs is high, while empowerment is at a medium level. Social capital is high, and export ability is classified as medium. The study shows an indirect effect of 0.686 between education and export ability, mediated through social capital and business strategies. Similarly, the indirect effect between empowerment and export ability is 0.97, supported by direct and indirect pathways.

Based on these findings, the researcher suggests two key recommendations: First, the government should enhance the empowerment process by ensuring the equitable distribution of resources, alongside monitoring and evaluation, to maintain sustainability. Second, MSMEs should actively engage with the MSME Export Clinic Technical Guidance, utilizing the available resources to optimize their business potential and strengthen their export efforts.

This study is limited by its focus on MSMEs in Surakarta, which may not fully represent the broader population of MSMEs in other regions. Additionally, the study relies on self-reported data, which may be subject to biases or inaccuracies. Future research could expand the sample size, include a longitudinal perspective, and use objective measures to assess the effectiveness of empowerment initiatives and export performance.

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