

THE MEDIATING AND MODERATING EFFECT ON SMES' PERFORMANCE: DOES RELIGIOSITY MATTER?

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Abstract

Small and medium enterprises (SMEs) are entities managed and controlled by the owners. The performance of the owners strongly reflects the business performance of the SMEs. That is also the way of looking into the study aiming at analyzing the performance of SMEs from an Islamic perspective, which can be viewed from the owners' religiosity and financial behaviour. This framework is still rarely found in shari'a economics literature. This also involves further consideration of the need for Islamic values on the performance of small businesses in countries with Muslim-majority. Using a survey research design, 238 small business owners and managers participated in responding to a self-registered questionnaire research instrument. Using PLS-SEM, the research instrument has been tested for its validity and reliability and the variable's influence. The result proves that religiosity does not directly affect the performance of SMEs but indirectly influences the performance through financial behaviour. It means that religiosity forms good financial behaviour, and then the financial behaviour increases business performance. This study also finds that gender moderates the effect of religiosity on the behaviour of SME owners or managers. Furthermore, business age reduces the effect of financial behaviour on performance. The results of this study warn that old businesses should not make SMEs owners feel comfortable and resistant to change unless they fail to gain good business performance.

Keywords: *Religiosity; Financial behaviour; SMEs' performance; Mediation, Moderation*

Abstrak

Usaha Kecil dan Menengah (UKM) merupakan suatu badan usaha yang seluruhnya dikelola dan dikendalikan oleh pemiliknya sendiri. Kinerja pemilik mencerminkan kinerja bisnis UKM. Hal ini merupakan dasar kajian ini yang bertujuan untuk menganalisis kinerja UKM dari perspektif Islam yang dapat dilihat dari religiusitas pemilik dan perilaku keuangan mereka. Kajian ini masih jarang ditemukan dalam literatur



ekonomi syariah. Hal ini juga memerlukan pertimbangan lebih lanjut mengenai perlunya nilai-nilai Islam terhadap kinerja usaha kecil di negara-negara yang mayoritas penduduknya beragama Islam. Dengan menggunakan desain penelitian survei, 238 pemilik dan manajer usaha kecil telah berpartisipasi dalam merespon instrumen kuesioner penelitian. Dengan menggunakan PLS-SEM, instrumen penelitian telah diuji validitas dan reliabilitasnya serta pengaruh variabelnya. Hasil penelitian menunjukkan bahwa religiusitas tidak berpengaruh langsung terhadap kinerja UKM, namun berpengaruh tidak langsung terhadap kinerja melalui perilaku keuangan. Artinya religiusitas membentuk perilaku keuangan yang baik, kemudian perilaku keuangan yang baik ini akan meningkatkan kinerja usaha. Penelitian ini juga menemukan bahwa *gender* memoderasi pengaruh religiusitas terhadap perilaku pemilik atau pengelola UKM. Selain itu, usia bisnis mengurangi pengaruh perilaku keuangan terhadap kinerja. Hasil penelitian ini menjelaskan bahwa bisnis yang sudah lama tidak seharusnya membuat pemilik UKM merasa nyaman dan menolak perubahan, namun mereka harus lebih cermat agar tidak mengalami kegagalan dalam meraih kinerja bisnis yang baik.

Kata kunci: Religiusitas; Perilaku Keuangan; Kinerja UMKM; Mediasi; Moderasi

INTRODUCTION

Small and medium enterprises (SMEs) development in Indonesia has been considered a strong aspect of economic growth. This is because SMEs are the backbone of a national economic system which helps overcome the problem of inequality and provides employment, entrepreneurship and business. Entrepreneurship is a contextual activity dependent on cultural, social, and lifestyle factors (Ratten, 2020). Islam as a religion has given great attention to entrepreneurship and business (Ramadani et al., 2015) as taught in Al-Qur'an Surah Al-Jumuah verse 10

"And when the prayer is ended, disperse in the land and seek Allah's favour, and remember Allah much, that you may succeed. (Quran 62:10)"

It means Muslims should make efforts to earn for their life besides praying. After doing the obligation of "*hablumminallah*", such as "*shalat*," Muslims should also do "*hablumminannas*" for "*mualamalah*." So, Muslims should work or run a business. Surprisingly, Ayob and Saiyed (2020) found that Muslim populations are negatively associated with the rate of new business activities, including the formal type of entrepreneurship. Further analysis reveals that Muslim entrepreneurship is driven by necessity, not opportunity.



Recently, awareness of the Islamic economy driven by the increase of the market of Muslim customers has been rising. Entrepreneurs develop products to respond to demand. Given these trends, reflecting on the interaction between Islam and entrepreneurship becomes particularly pertinent (Gümüşay, 2016). Many use "entrepreneur" and "small business owner" synonymously. While they may have much in common, there are significant differences between the entrepreneurial venture and the small business (Vargas-hernández, José and Sariolghalam, 2010).

SMEs performance is important and explains how well an organization runs (Hoque and Awang, 2019). SMEs need to be able to identify whether the business is running well; the revenue and customers are increasing from time to time. Entrepreneurs, usually also the business owners, manage SMEs operational activities. There is limited knowledge about possible associations among entrepreneurs and entrepreneurial behaviours (Kusa et al., 2021). This study tries to answer the extent of religiosity and behaviour as determinants of SME performance. Some previous studies have found that religiosity and financial behaviour of entrepreneurs affect business performance in many ways. Some studies are still conceptual and need empirical evidence. (Gümüşay, 2016; Ramadani et al., 2015; Zulkiffli and Perera, 2011). This study proposes religiosity and behaviour as being critical to better performance in an organization since Muslims should implement Islamic values in doing business.

Studies concerning religiosity and its impact on the perception of products or brands (Ramadani et al., 2015; Zulkiffli and Perera, 2011). Anyhow, it has been limited to studies considering the role of religion in shaping the entrepreneurial performance Wong et al. (2018). This research is important since it provides empirical results on the effect of religiosity on SMEs' performance, especially for the East Java area, which is known as the basis of the big Islam community. It is important to explore to what extent business as one of Islamic ways or '*ibadah*' is affected by owner religiosity and behaviour.

Often, the business performance of SMEs is affected by who runs them in terms of whether they are female or male (Loewenthal et al., 2002; Schnabel, 2015). Besides, the owners of SMEs often feel less prudent in handling their business when the businesses have been running for quite a long time (Love et al.; Laforet, 2013). They think the business has been settled, so the management is less professional (Kim, 2022). These moderating aspects are considered the novelty of this study since these two aspects are often considered in reality but not studied in the frame of religiosity and business performance. Considering this logic, this research



also examines the moderating role of gender on the relationship between religiosity and financial behaviour and the moderating effect of business age on the relationship between financial behaviour and performance.

The topic of religion has gone relatively unnoticed in the entrepreneurship literature (Li et al., 2019), and this study is a step towards fitting out. Thus, this study examines the influence of an entrepreneur's religious belief on their business performance. This study also extends the literature on gender studies and women entrepreneurship by studying the moderating effect of gender on the effects of entrepreneurs' religious beliefs on financial behaviour.

LITERATURE REVIEW

Small Enterprises Performance

Business performance is "the operational ability to satisfy the desires of the company's major shareholders (Zulkifli and Perera, 2011). Jorgenson (2015) established that performance should be calculated regarding sales and the competitive cost of delivering a service. SMEs performance is the result of the operating process. Performance can also be the standard of success or failure in achieving the goals set (Pramestiningrum and Iramani, 2020). Regular indicators used in measuring business performance are profit, return on investment (ROI), turnover or number of customers, design quality, or product improvement (Zulkifli and Perera, 2011).

In SMEs context, sometimes it is difficult to measure the performance quantifiably. SMEs are often reluctant to publicly reveal their financial performance, and scholars have deliberated on the need for subjective measures in evaluating business performance. Previous studies employed subjective measurement by perception-based questionnaires to evaluate SMEs' performance. Zulkifli and Perera (2011) suggest that subjective evaluations are appropriate alternatives to objective measurement under validity issues. Stam et al. (2014), Pulka et al. (2021), Adomako and Ahsan (2022), and Mulyana and Hendar (2023) also use Growth measures, including the subjective or perceived growth in sales, profit, employment, and market share as performance indicators of SMEs. Thus, this research uses a non-quantitative approach to measure SMEs performance including: 1) Increasing profit growth; 2) growth of the number of customers; 3) Growth of sales revenue.

SMEs performance level measures were identified using the rating measures based on managers' perceptions of how the organization performs on various performance indicators relative to its competitors based on a five-point *Likert* scale, ranging from "much worse than competitors" to "much better than competitors."



Religiosity

Religiosity has been defined and approached differently across academic disciplines (Alfi and Yusuf, 2022) as a multifaceted concept with multiple dimensions. Religion is like the elephant in the room: impossible to overlook, yet largely ignored (Gümüşay, 2016) and widely regarded as a social force that shapes entrepreneurship and business (EB) activity, behaviour, and practice (Kumar et al., 2022). The various definitions explained by researchers show no shared definition of 'religiosity,' which depends on how it is interpreted in their fields of study. Religiosity is more directed at appreciating the quality and attitude of a person's life based on religious values that become beliefs (Amaliah et al., 2015). The level of religiosity can be assessed on an individual's commitment to his/her religion and expressed by attitudes as well as behaviour (Muslichah and Sanusi, 2019).

Alfi and Yusuf (2022) also stated that religiosity is the degree of belief in religious values and the daily practices of faith. Religiosity construct measurement has many opinions (see (Gümüşay, 2016; Khraim, 2010). This study also adopts these two indicators of religiosity and adapts to SMEs context.

This study focuses on Islamic religiosity and somehow needs more exploration of its effect on economic activity. In Islam teaching, seeking revenue for living is part of worship, and nine out of ten doors of "rizq" (wealth) are running business/trading. Islam is conducive to entrepreneurship (Audretsch et al., 2007). Thus, Islam encourages SMEs to pursue the "rizq." Thus, Muslims are expected to work for a living (Davis, 2015), especially as an entrepreneur or business owner, and that activity should run consistent with God's will and has moral value.

Religiosity is a personal matter. In the context of SMEs, religiosity is attached to managers or owners who run the business and direct the employees based on the religious teachings they adhere to. That is, measuring the religiosity of SME owners and seeing its effect on performance is still relevant.

Financial Behaviour

Financial behaviour is the capability of a person or entity to do planning, budgeting, checking, managing, controlling, evaluating, and storing funds daily and use that information to make financial decisions for individuals and companies (Pramedi and Asandimitra, 2021). Behaviour generally leads to personal. As stated above, measuring SMEs can be seen from the owner; the financial behaviour of the SME owner can be considered



as the behaviour of the SME itself. Wong et al. (2018) showed that their individual personality and foibles affected the owners' financial practices. Nevertheless, it is necessary to pay attention to the measurement of behaviour. If the study is about personal financial behaviour, then the question is about personal finance, such as paying personal debt on time, insurance, investment, and pension funds. Otherwise, since this study investigates SME owners' behaviour toward his/her business, the measurement is about his/her financial behaviour in running the business. Here, behavioural data, which reflect the dynamic financing behaviour of SMEs, are sometimes overlooked by some studies, which limits performance (Zhang et al., 2022).

Individuals or entities with responsible financial behaviour tend to be effective in using their money, such as making budgets, saving money, and controlling spending and investing (Susanti et al., 2018). In the SME context, this ability is also related to how to plan business finance, record financial reports, have expertise in calculating profit, evaluating business improvements, calculating interest on debt, and preparing regular budgets.

HYPOTHESES

Religiosity and its effect on SMEs performance

The issue of religiosity and how it leads to firm performance has been discussed over time. Religiosity can affect individual choices in entrepreneurial activities (Audretsch et al., 2007). Religious entrepreneurs will treat the world from a religious point of view and integrate religion into their business. Such entrepreneurs tend to comply with rules and codes of ethics. Religious entrepreneurs are inclined to be more ethical and honest (Du and Zeng, 2019) and more responsible in investment behaviour (Li et al., 2019) to lead to good performance. Religious entrepreneurs will have good manners for customers. Prophet Muhammad (peace be upon him) is the best example of being an honest and customer-oriented entrepreneur. In return, it will increase the number of customers and company revenues and profits. Some researchers have also confirmed that religion affects managerial actions in the corporation.

There is still a rare study about the effect of religious beliefs on SME performance. Desiyanti and Kassim (2020) prove that religiosity strengthens business performance. Desiyanti and Kassim (2020) place religiosity as a moderator in their research. On the other hand, Alharbi et al. (2022) used religiosity as a determinant of performance. Therefore, more research is needed to determine the exact effect of Islamic religiosity on SME performance. Hence, the following hypotheses were formulated.

H1. Religiosity affects SMEs' performance



Financial behaviour and its effect on the Performance of SMEs

The belief that work is worship and a part of God's commands drives SMEs owner to do their best. The ability of SMEs to generate profits is highly dependent on a financial strategy in which decisions are made by the owner, starting from budgeting to working capital management and decisions to save or invest. If the financial capability of a business is low or bad financial behaviour will have a bad impact in the future. On the other hand, good financial behaviour will lead to high competitiveness and positively impact SMEs performance. Gusman et al. (2021) proven that financial behaviour significantly affects SMEs performance, but Purwidiанти et al. (2022) could not prove the relationship yet.

H2. Financial behaviour affect on performance

Religiosity affect financial behaviour

According planned behaviour theory, religiosity can be treated as a subjective norm which assumed affect to behaviour. Personal perspectives, life events and future outlook shape the goals and perceptions of small business owners, and influence financial decision, therefore, small firms are an extension of their objectives (Wong et al., 2018).

Thus, financial behaviour can also be influenced by the religiosity of the manager. Religiosity influences personal financial behaviour (Hess, 2012) in performing various activities, including working (Amaliah et al., 2015). In the context of SMEs which is a reflection of the owner, logically, this relationship is relevant for SMEs. Religious individuals are more ethically inclined and risk averse (Hess, 2012). Religious teachings in religiosity give direction to goodness, so business activities are also done honestly and ethically and present quality products that will support increased performance. The effect of religiosity still need to explore since Alharbi et al.(2022) found that there is no significant effect of Islamic religiosity on financial attitude (behaviour) but affecting the awareness.

Contrary to this finding, Lu and Wu (2020) found that entrepreneurs with religious beliefs have higher accounting performance. Guiso et al. (2003) stated that religious denominations and practice are associated with good economic attitudes of individuals and organizations. In other case, Li et al (2019) show that entrepreneurial firms with religious owners invest more in social responsibility, and those with more socially responsible investment pay a lower cost of debt. It is mean that religiosity lead to the good behaviour.

H3. Religiosity affects performance through good financial behaviour.



Moderating effect of Gender

The research of Loewenthal et al. (2002) explains that female is more religious. Western studies also found that this trend does not extend to non-Christian groups (Schnabel, 2015). This study also examines whether gender strengthens the influence of religiosity on financial behaviour. Male and female entrepreneurs may differ in management style due to their attitude, behaviour, biological and cultural upbringing, and psychological differences. Hence, gender plays a vital role in firm performance (Hoque and Awang, 2019). In some case, by performing religious activities, women entrepreneur get access to money to support business growth (Ogundana et al., 2021). Female entrepreneurs fundamentally have special attitudes towards risk and growth whereas, higher religiosity tend to avoid risk (Hess, 2012).

Furthermore, female (feminine or personal) entrepreneurs are described as emotional, cooperative, harmonizing, caring, preserving the relationship, empathetic (Hoque and Awang, 2019). Therefore we need to investigate whether gender affects the relationship between religiosity and financial behaviour differently. Some studies on gender strengthen the influence of decisions (Rosyidah and Lestari, 2013) and the responsible investment behaviour (Li et al., 2019).

H4. Gender has moderating effect on the relationship between religiosity and financial behaviour

Moderating effect of Age of Business

The length of businesses in an industry shows their sustainability. The longer the business run, the higher the sustainability of the business will be. This study examines the moderating effect of the business age on the relationship between financial behaviour and performance. The argument proposed is that financial behaviour will be better along the age of business. Age reflect the experience so it can be expected to lead to better performance. However, some previous studies need more evidence. Love et al. (2016) found that that age somewhat negative impact on performance and Laforet (2013) found that age has not significant effect on performance, while Kim (2022) found that the year of establishment showed a moderating effect on technical and non-financial performance. Thus, there are some inconsistent results on age of business and its moderating role of performance.

H5. Age of business has moderating effect on the relationship between financial behaviour and performance

Referring to the description above Figure 1 shows the research framework of this study.

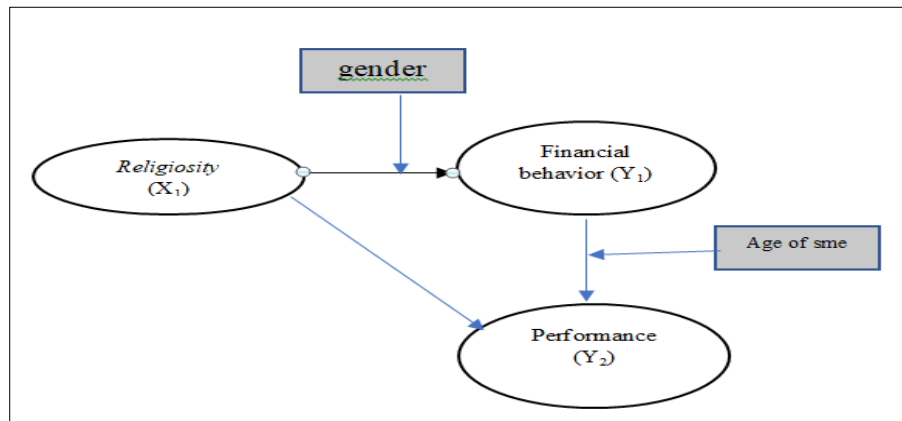


Figure 1: research framework
Source: Author's Analysis (2023)

METHOD

The endogenous variable of this research is the performance of SMEs and financial behaviour as mediating variable. The exogenous variable is religiosity. The moderating variables are gender and age of SMEs. The performance measurement is adopted from the study of Zulkiffli and Perera (2011). Financial behaviour constructs are measured using Likert scale from 1: never, 5: always otherwise for religiosity and performance, from 1: strongly disagree, 5 : strongly agree. All items are shown in Appendix A. The questionnaires were self-administered by the owners/managers of small businesses with the assistance of our research assistants.

This study employs a survey research design. The questionnaire or the research instrument was used to generate data since a questionnaire has a higher degree of objectivity (Saidi et al., 2021). Using a two-stage sampling technique: First, selecting area using a purpose sampling technique so East Java area chosen as area selected since it is a second larger Islamic area in Indonesia. Second, filtering data only SMEs which run more than 2 years or has employee more than 4 persons. This prove that the SMEs run and managed seriously.

We distributed questionnaires to responden by convenience sampling. based on Hair et al., (2019) PLS-SEM can certainly be used with smaller samples otherwise, Reinartz et al. (2009) proposed a minimum sample size of 100 is required when employing PLS-SEM. To minimize possible complications from a small sample size, 238 are operated as data sample. Due to the variety in the characteristics of the small enterprises in focus, the sample size was further focusing on food and beverage industry.

RESULT AND DISCUSSION

Demographic data at Table 1 show the number of male and female SMEs owner as respondents. Composition ratio between genders are relatively balanced. Regarding the age of business, the data show the business were running well.

Tabel 1. Profile and Respondents' Demographics

Demographic	Gender	
	Frequency	%
female	114	47.90%
male	124	52.10%
	Age Of Firm	
	Frequency	%
2 - 4.99 years	92	39.66%
5 - 7.99 years	95	40.95%
More than 8 years	45	19.40%

Source: Data Processed (2023)

Measurement Model Evaluation

The beginning analyses assess the measurement model to ensure the instruments are valid and reliable. The validity test involves examining the indicator loadings. Loadings factor above 0.708 are recommended, as the construct explains more than 50% of the indicator's variance (Hair et al., 2019). The loading factor of 0.6 is still acceptable for exploratory research. Furthermore, assessing internal consistency reliability using composite reliability score. Higher values generally indicate higher levels of reliability. The rule of thumb is Composite reliability higher than 0.70, Cronbach's Alpha and Rho A also Average variance extracted (AVE) higher than 0.50. and lastly, convergent validity is run to measure the extent to which the construct converges to explain the variance of its items (Hair et al., 2019). For this test, there were cross loading test, Fornell Larcker Criterion (square root of AVE) and Heterotrait Monotrait Ratio (HTMT) that should be lower than 0.90. Table 2. shows that the loading factor of each item are acceptable (0.619-0,818). All the score of reliability is also higher than the requirement. So the instrument meets the internal consistency reliability.

Table 2. Construct validity and Reliability Results

Construct	No Items	Item Loading	Cronbach's Alpha	Composite Reliability (Rho_A)	Average Variance Extracted Ave
Performance	3	0.765-0.818	0.689	0.689	0.616
Behaviour	8	0.623-0.808	0.811	0.828	0.568
Religiosity	7	0.619-0.797	0.808	0.809	0.635

Source: Data Processed (2023)



Table 3 shows the convergent validity including Fornier Larcker Criterion (square root of AVE) and HTMT. The table shows that HTMT below 0.9 indicates the construct has discriminant validity. Fornell Larcker criterion evaluates all cross loading also shows that correlation between item and construct higher than correlation between items with other construct. In a summary, all item are valid and reliable so the measurement model assessment is satisfactory. Table 4 shows the average of 238 respondents' responses on every measured variable. First, the average of variable performance was very high in terms of profit growth (item1), number of consumer growth (item2) and revenue growth (item3).

The Second variable is financial behaviour which consists of 8 items. In average it also reaches the highest score (4,40 of 5). All items are valid except item 6 representing the calculating profit. So this item is deleted. This means that SMEs are very good at managing budget, cash management, and evaluating business performance. They are weak in calculating financial expense. The third construct is religiosity which consists of seven items. As a construct, respondents' average response is very high (4.40 of 5). The highest score is item 5 (4,56 of 5). This means that the highest measurement of religiosity represented by doing good deeds, effort and "rizq" will be provided by Allah.

Table 3. Fornier Larcker and HTMT

	age of smes	behaviour	gender	Performance	religiosity
age of smes		0.241	0.006	0.357	0.070
behaviour	0.223	0.754	0.082	0.724	0.688
gender	-0.006	-0.062		0.139	0.038
performance	0.299	0.563	0.114	0.785	0.561
religiosity	0.061	0.573	-0.010	0.414	0.797

Source: Data Processed (2023); *Note.* The bold numbers in the diagonal are the square root of AVE for each construct. Above the diagonal are the HTMT values. Below the diagonal are correlations between construct. Age and gender are manifest variables so do not require testing model measurements

Table 4. The Summary of Respondents Responses

Description	Average Score	Category
average performance construct (3 items)	4.35	Very high
average financial behaviour construct (8 items)	4.40	Very good
average Religiosity construct (7 items)	4.40	Very high

Source: Data Processed (2023)



Structural Model Evaluation

To find the predictive power of the structural model R^2 value for each endogenous latent variable should be measure (Hair Jr et al., 2014). The greater the value, the better the predictor model explains variance. Table 5 shows that the R^2 of the performance is 0.375 (37,5%), and behaviour is 0.339 (33,9%). This scores are relatively low (Hair Jr et al., 2014) and the Q^2 predicts higher than 0. So the model has predictive relevance but in a low level (Hair et al., 2019). Furthermore, this also means that the model's ability to explain SMEs performance is 37.5% and the rest (62.5%) is affected by other variables not included in the model.

Table 6 shows that religiosity affects financial behaviour ($\beta=0.607$; $t=10.897$; $p\text{-value}=0.000$) and financial behaviour affects performance ($\beta=0.568$; $t=8.454$; $p\text{-value}=0.000$). However, religiosity does not directly affect performance ($\beta=0.052$; $t=0.617$; $p\text{-value}=0.537$). Hence, H2 and H3 are accepted while H1 is not. In terms of mediating effects of financial behaviour. Findings reveals that religiosity has a significant indirect effect on SMEs performance, which confirms that financial behaviour mediates the relationship between religiosity and SMEs performance ($\beta=0.345$; $t= 7.265$; $p\text{-value}=0.000$). Since religiosity does not directly affect SMEs performance, financial behaviour is a full mediation variable. This finding is similar as Alharbi et al. (2022) which found that financial awareness and attitude could mediate Islamic religiosity on performance.

The effect testing with confidence interval level, with 95% confidence interval, the influence of behaviour on performance lies between 0.426 to 0.692. When SMEs behaviour is increased by various activities, such as training or learning on financial subject, performance will increase by 0.692

Table 6 also shows the moderating effect of gender on the relationship between religiosity and behaviour ($\beta=0.215$; $t=2.034$; $p\text{-value}=0.042$) meaning that H4 is accepted. This result implicitly supports the Islamic value explaining that men and women have the same opportunity and challenge in running business equally. Islam provides equal rights to men and women on some activity including business. It may relate to personal character. Table 6 also shows the moderating effect of age of business on the relationship between financial behaviour and performance in negative direction ($\beta=-0.126$; $t=2.006$; $p\text{-value}=0.045$). This means the longer the age, the weaker effect of behaviour on performance



Table 5. Explanatory Power

	R ²	R ² adjusted	Q ² predict
Behaviour	0.339	0.330	0.308
Performance	0.375	0.364	0.168

Source: Data Processed (2023)

Table 6. Hypotheses Testing Result

	β	t- stats	p- values	confidence interval		result
				2,50%	97,5%	
Direct effect						
behaviour -> performance	0.568	8,454	0.000	0.426	0.692	supported
religiosity -> behaviour	0.607	10,897	0.000	0.498	0.716	supported
religiosity -> performance	0.052	0.617	0.537	-0.109	0.224	Not supported
Mediating effect:						
religiosity -> behaviour -> performance	0.345	7.265	0.000	0.263	0.448	supported
Moderating effect						
age of smes x behaviour -> performance	-0.126	2.006	0.045	-0.273	-0.025	supported
gender x religiosity -> behaviour	0.215	2.034	0.042	-0.003	0.414	supported

Source: Data Processed (2023)

DISCUSSION

Religiosity does not affect performance directly. It means that every change in religiosity has no direct effect on performance. This result is logic. Performance needs operational activity and process to get economic results. Religiosity is still a commitment and the results cannot be assessed except by personal rituals that have not gathered economic performance yet. This result does not support previous study by Lu and Wu (2020) explaining that entrepreneurs with religious beliefs have higher accounting performance. This result indicates the need of mediating variable to affect performance.

Based on the data, financial behaviour has a positive effect on performance. Increasing financial behaviour drives better performance. This study assesses financial behaviour as the actual behaviour of SMEs to plan business finance, record financial reports, calculate profit, evaluate business improvements, calculate interest on debt and prepare regular budgets. This activity could be a basic needs so that business is well controlled. Thus, if SMEs want to increase their performance, they can do it by doing good financial behaviour such as planning business finance, recording financial transactions, calculating profit, evaluating business improvements, and preparing regular budgets.



This result is consistent with the research conducted by Gusman et al. (2021) finding that financial behaviour significantly affects SMEs' performance. This research result also supports the previous study by Purwidiyanti et al., (2022).

Religiosity is an important element because it can influence individual in terms of cognitive and behaviour and shapes their beliefs, knowledge, and attitudes (Rehman & Shabbir, 2010), cognitive and behaviour (Muslichah & Sanusi, 2019) or responsibility (Li et al., 2019). This study proves that religiosity significantly affects financial behaviour. It means that every change in religiosity impacts the increased value of behaviour.

In *muamalah* (social relationships), religion directs business in good governance, honesty and customer orientation. The Muslims' belief in Allah and the prophet Muhammad leads them to run their business with positive financial behaviour, which will support the increasing performance. This refers to a verse of Al Quran saying "do good deeds and efforts, then 'rizq' will be provided by Allah". Believing in this verse, Muslim will not have excessive worry about their business, the revenue and the sustainability as long as they do their best. Anyhow, this result is different from Alharbi et al.,(2022) which found that there is no mediating effect of financial attitude on the relationship between Islamic religiosity and SMEs performance.

Gender has moderating effect on the relationship between religiosity and financial behaviour. It is due to that women are considered more religious than men (Loewenthal et al., 2002) even other research shows different result. Apart from that, regardless of gender, when Muslims do business they need to heed the teachings of Islam. By Islamic religiosity, business can be managed more ethically and prudently (Hess, 2012), better governance and care to society. This result supports Hoque and Awang (2019) and similar to Rosyidah and Lestari (2013) and Li et al.(2019).

Furthermore, the age of business has moderating effect on the relationship between financial behaviour and performance but on negative way. This means that the longer the business has been, the weaker effect of behaviour on performance. Most of SMEs in this study (40,1%) have been in operation for 5-7,99 years and about 19,4% are for than 8 years.

Previous arguments stating various moderating effect of the business age on the performance. Logically, financial behaviour should be better along with a business's age. Business age reflects the experience, leading to better performance expectation. The research result shows the opposite logic: the longer the business age, the stronger tendency to be trapped on comfort zone so the business growth is slower and resistant to change.

This result is similar to the finding that firm age harms the extent of SMEs' international activities (Love et al., 2016) and innovation (Mabenge et



al., 2022). This is consistent with arguments related to the liability of aging (Love et al., 2016). However, this result is different from that of Kim (2022) that found that year of establishment showed a positive moderating effect on technical and non-financial performance.

CONCLUSION

This study examines the influence of religiosity and financial behaviour on SMEs performance. The statistical analyses reveal that religiosity directly does not drive the performance of SMEs or indirectly through financial behaviour. East Java's respondents have a high religiosity score but not enough to improve their business's performance. It needs good financial behaviour such as managing budget, cash management, and evaluating business performance, otherwise, they need more concern on the lack of calculating financial expense. The study also find that gender significantly has moderating effect on the relationship between religiosity and behaviour of SMEs owners or managers. In other words, religious women entrepreneurs are more likely to get better financial behaviour due to their characteristics. The interesting finding is that age of business lowers the effect of behaviour on performance. Most of the SMEs in this study are in 5-7,99 year run. If the business seems stable but does not grow, the owner should be alert that it may need some new touch or breakthrough to avoid decreasing business. This study's results highlight critical concerns and guide small businesses so that time should not make SMEs owner feel in comfort zone unless they will left behind.

This results has important implications on the policy makers in supporting Islamic entrepreneurship to achieve sustainable economic development by providing education program for entrepreneurs.

REFERENCE

- Adomako, S., and Ahsan, M. (2022). Entrepreneurial passion and SMEs' performance: Moderating effects of financial resource availability and resource flexibility. *Journal of Business Research*, 144, 122–135.
- Alfi, C. F., and Yusuf, S. N. S. (2022). Religiosity and Saving Behaviour: a Preliminary Investigation Among Muslim Students in Indonesia. *Journal of Islamic Monetary Economics and Finance*, 8(1), 25–48. <https://doi.org/10.21098/jimf.v8i1.1440>
- Alharbi, R. K., Yahya, S. Bin, and Kassim, S. (2022). Impact of religiosity and branding on SMEs performance: does financial literacy play a role? *Journal of Islamic Marketing*, 13(12), 2717–2741. <https://doi.org/10.1108/JIMA-08-2019-0162>



- Amaliah, I., Aspiranti, T., and Purnamasari, P. (2015). The impact of the values of Islamic religiosity to Islamic job satisfaction in Tasikmalaya West Java, Indonesia, Industrial Centre. *Procedia-Social and Behavioural Sciences*, 211, 984–991.
- Audretsch, D. B., Boente, W., and Jagannadha Pawan Tamvada. (2007). *Religion and entrepreneurship* (Jena Economic Research Papers No. 2007,075, Friedrich Schiller University Jena and Max Planck Institute of Economics, Jena).
- Ayob, A. H., and Saiyed, A. A. (2020). Islam, institutions and entrepreneurship: evidence from Muslim populations across nations. *International Journal of Islamic and Middle Eastern Finance and Management*, 13(4), 635–653. <https://doi.org/10.1108/IMEFM-11-2019-0472>
- Davis, M. (2015). Entrepreneurship from an Islamic Perspective. *Journal of Business Ethics*, 130(1), 199–208. <https://doi.org/10.1007/s10551-014-2223-7>
- Du, X., and Zeng, Q. (2019). Bringing religion back in: Religious entrepreneurs, entrepreneurial gender, and bank loans in Chinese family firms. *Asian Review of Accounting*, 27(4), 508–545. <https://doi.org/10.1108/ARA-04-2018-0097>
- Gümüşay, A. A. (2016). *Entrepreneurship from an Islamic Perspective*. August 2015. <https://doi.org/10.1007/s10551-014-2223-7>
- Gusman, N., Soekarno, S., and Mirzanti, I. R. (2021). The Impact of Founder's Financial Behaviour Traits and Literacy on SMEs Performance: Empirical Evidence from SMEs in Indonesia. *Jurnal Keuangan Dan Perbankan*, 25(3), 671–687.
- Hair, J. F., Risher, J. J., Sarstedt, M., and Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hair Jr, J. F., Sarstedt, M., Hopkins, L., and Kuppelwieser, V. G. (2014). Explanatory power. *European Business Review*, 26(2), 106–121. [https://doi.org/DOI 10.1108/EBR-10-2013-0128](https://doi.org/DOI%2010.1108/EBR-10-2013-0128)
- Hess, D. W. (2012). The Impact of Religiosity on Personal Financial Decisions. *Journal of Religion and Society*, 14, 1–13.
- Hoque, A., and Awang, Z. (2019). Does gender difference play moderating role in the relationship between entrepreneurial marketing and Bangladeshi SME performance? *Accounting*, 5(1), 35–52.
- Jorgenson, E. (2015). Why value creation is the foundation of business: Eric Jorgenson. *Evergreen, Business*, 1–8.
- Khraim, H. (2010). Measuring Religiosity in Consumer Research From an Islamic Perspective. *Journal of Economic and Administrative Sciences*, 26(1), 52–78. <https://doi.org/10.1108/10264116201000003>
- Kim, S.-S. (2022). Influential indicators and measurements of mediating and moderating roles on SME performance. *International Journal of Knowledge Management (IJKM)*, 18(1), 1–18.



- Kumar, S., Sahoo, S., Lim, W. M., and Dana, L.-P. (2022). Religion as a social shaping force in entrepreneurship and business: Insights from a technology-empowered systematic literature review. *Technological Forecasting and Social Change*, 175, 121393.
- Kusa, R., Duda, J., and Suder, M. (2021). Explaining SME performance with fsQCA: The role of entrepreneurial orientation, entrepreneur motivation, and opportunity perception. *Journal of Innovation and Knowledge*, 6(4), 234–245.
- Laforet, S. (2013). Organizational innovation outcomes in SMEs: Effects of age, size, and sector. *Journal of World Business*, 48(4), 490–502. <https://doi.org/https://doi.org/10.1016/j.jwb.2012.09.005>
- Li, C., Xu, Y., Gill, A., Haider, Z. A., and Wang, Y. (2019). Religious beliefs, socially responsible investment, and cost of debt: Evidence from entrepreneurial firms in India. *Emerging Markets Review*, 38, 102–114.
- Loewenthal, K. M., MacLeod, A. K., and Cinnirella, M. (2002). Are women more religious than men? Gender differences in religious activity among different religious groups in the UK. *Personality and Individual Differences*, 32(1), 133–139.
- Love, J. H., Roper, S., and Zhou, Y. (2016). Experience, age and exporting performance in UK SMEs. *International Business Review*, 25(4), 806–819. <https://doi.org/https://doi.org/10.1016/j.ibusrev.2015.10.001>
- Lu, L., and Wu, Y. (2020). Does religion enhance firm performance? Evidence from private firms in China. *China Economic Review*, 62, 101480.
- Mabenge, B. K., Ngorora-Madzimure, G. P. K., and Makanyeza, C. (2022). Dimensions of innovation and their effects on the performance of small and medium enterprises: the moderating role of firm's age and size. *Journal of Small Business and Entrepreneurship*, 34(6), 684–708. <https://doi.org/10.1080/08276331.2020.1725727>
- Mulyana, M., and Hendar, H. (2023). Market and entrepreneurial orientation on business performance: role of networks innovation agility. *Journal of Small Business and Entrepreneurship*, 35(6), 944–960. <https://doi.org/10.1080/08276331.2020.1855025>
- Muslichah, I., and Sanusi, S. (2019). The effect of religiosity and financial literacy on intention to use Islamic banking products. *Asian Journal of Islamic Management (AJIM)*, 1(2), 85–92. <https://doi.org/10.20885/ajim.vol1.iss2.art2>
- Ogundana, O. M., Simba, A., Dana, L.-P., and Liguori, E. (2021). Women entrepreneurship in developing economies: A gender-based growth model. *Journal of Small Business Management*, 59(sup1), S42–S72. <https://doi.org/10.1080/00472778.2021.1938098>
- Pramedi, A. D., and Asandimitra, N. (2021). Pengaruh financial literacy, financial knowledge, financial attitude, income dan financial self efficacy terhadap financial management behaviour entrepreneur lulusan perguruan tinggi di surabaya. *Jurnal Ilmu Manajemen*, 9(2), 572–586.



- Pramestiningrum, D. R., and Iramani, I. (2020). Pengaruh literasi keuangan, financial capital, kebijakan pemerintah terhadap kinerja usaha pada usaha kecil dan menengah di Jawa Timur. *Journal of Business and Banking*, 9(2), 279. <https://doi.org/10.14414/jbb.v9i2.1750>
- Pulka, B. M., Ramli, A., and Mohamad, A. (2021). Entrepreneurial competencies, entrepreneurial orientation, entrepreneurial network, government business support and SMEs performance. The moderating role of the external environment. *Journal of Small Business and Enterprise Development*, 28(4), 586–618. <https://doi.org/10.1108/JSBED-12-2018-0390>
- Purwidiati, W., Tubastuvi, N., Darmawan, A., and Rahmawati, I. Y. (2022). Does Financial Behaviour Mediate The Relationship Between Financial Literacy and Financial Experience Towards Financial Performance of Small Businesses? *International Conference on Sustainable Innovation Track Accounting and Management Sciences (ICOSIAMS 2021)*, 235–241.
- Ramadani, V., Dana, L. P., Ratten, V., and Tahiri, S. (2015). The context of Islamic entrepreneurship and business: concept, principles and perspectives. *International Journal of Business and Globalisation*, 15(3), 244. <https://doi.org/10.1504/IJBG.2015.071906>
- Ratten, V. (2020). Cultural, lifestyle, and social entrepreneurship. *Journal of Small Business and Entrepreneurship*, 34(1), 1–8. <https://doi.org/10.1080/08276331.2020.1789933>
- Rehman, A., and Shabbir, M. S. (2010). The relationship between religiosity and new product adoption. *Journal of Islamic Marketing*, 1(1), 63–69. <https://doi.org/10.1108/17590831011026231>
- Reinartz, W., Haenlein, M., and Henseler, J. (2009). An empirical comparison of the efficacy of covariance-based and variance-based SEM. *International Journal of Research in Marketing*, 26(4), 332–344.
- Rosyidah, S. M., and Lestari, W. (2013). Religiusitas dan Persepsi Risiko dalam Pengambilan Keputusan Investasi pada Perspektif Gender. *Journal of Business and Banking*, 3(2), 189–200.
- Saidi, A. A., Ayodele, M. S., and Maxwell, W. P. (2021). Firm level strategy and value creation in small businesses: The nigerian experience. *Gadjah Mada International Journal of Business*, 23(2), 193–214. <https://doi.org/10.22146/gamaijb.62427>
- Schnabel, L. (2015). How religious are American women and men? Gender differences and similarities. *Journal for the Scientific Study of Religion*, 54(3), 616–622.
- Stam, W., Arzlanian, S., and Elfring, T. (2014). Social capital of entrepreneurs and small firm performance: A meta-analysis of contextual and methodological moderators. *Journal of Business Venturing*, 29(1), 152–173. <https://doi.org/10.1016/j.jbusvent.2013.01.002>
- Susanti, A., Ismunawan,, Pardi,, and Ardyan, E. (2018). Tingkat Pendidikan, Literasi Keuangan, dan Perencanaan Keuangan terhadap Perilaku Keuangan UMKM di Surakarta. *Telaah Bisnis*, 18(1), 45–56.



<https://doi.org/10.35917/tb.v18i1.93>

Vargas-hernández, José, M. R. N., and Sariolghalam, N. (2010). An Exploration of the Affects of Islamic Culture on Entrepreneurial Behaviours in Muslim Countries. *Asian Social Science*, 6(5), 120–128. <https://doi.org/10.5539/ass.v6n5p120>

Wong, A., Holmes, S., and Schaper, M. T. (2018). How do small business owners actually make their financial decisions? Understanding SME financial behaviour using a case-based approach. *Small Enterprise Research*, 25(1), 36–51.

<https://doi.org/10.1080/13215906.2018.1428909>

Zhang, W., Yan, S., Li, J., Tian, X., and Yoshida, T. (2022). Credit risk prediction of SMEs in supply chain finance by fusing demographic and behavioural data. *Transportation Research Part E: Logistics and Transportation Review*, 158, 102611.

Zulkiffli, S. N. A., and Perera, N. (2011). *A literature analysis on business performance for SMES - subjective or objective measures ?*

Appendix A.

The item of questionnaire

KU 01. Increased profit compared to last year

KU 02. Increase in consumers compared to last year

KU 03. Increase in sales revenue compared to last year

PK 01. Record and evaluate income and expenses

PK 02. Set aside funds for unexpected expenses

PK 03. Pay monthly bills or obligations on time

PK 04. Calculate the financial cost on debt

PK 05. Prepare a financial budget

PK 06. Calculate the profit rate

PK 07. Manage the cash book

PK 08. Evaluate business improvement

RL 01. Believe in God has arranged sustenance

RL 02. Stay away from what is prohibited by religion

RL 03. Understand religious teachings according to the Al-Qur'an and Hadith

RL 04. By doing worship, my heart becomes calmer

RL 05. By doing good deeds, Allah will make my business and sustenance easier

RL 06. Believe that Muslims are not allowed to receive interest/usury

RL 07. Pay zakat according to the Islamic rules