

The importance of moral norms in constructing extended theory of planned behaviour: A Study of food-based SMES in urban agricultural community

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Abstract. Growth and development in big cities often cannot be separated from the phenomenon of environmental quality degradation such as flooding and the availability of clean water, so a sustainable development program is needed that involves community participation, including SMEs. Their role in running a sustainable business, especially in the case of urban farm communities in relation to the moral norms between them, is important to study. Previous research has indeed studied moral norms in forming pro-environmental behavior, but this research has not tried to study them in the context of a society that was deliberately formed to foster environmental values, such as an urban agricultural community. This research intended to test the effect of moral norms, along with attitudes, subjective norms, and perceived behavioral control on sustainable business behavior. This research was a quantitative approach toward the food MSME population at the Urban Agricultural Society of Surabaya (UASS). Sampling used a purposive sampling technique. Research data was obtained from questionnaires distributed to 177 participants. The findings revealed that attitude, moral norm, and subjective norm all had a direct impact on intention but not perceived behavioral control.

1 Introduction

As a result of its economic growth, Surabaya, Indonesia's second-biggest metropolitan area, has a significant impact on environmental deterioration [1]. Waste is one of its many causes, and it is the most damaging to the environment. Flooding and solid waste generated by businesses and households are recurring challenges in the city [2]. Surabaya is prone to floods due to its high population, which is caused by subsidence of the land [3], and its location adjacent to the Brantas River [4]. This hypothesis is in line with Miller and Hutchins [5], who found the urban phenomena of population development in large cities as a result of increased floods and clean water availability. A sustainable development program is required to address

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all existing and potential challenges. Sustainability is a development concept that aims to accomplish economic, social, and environmental goals [6, 7]. Attempts to establish a decent or sustainable city, according to Margolin [8], can occur at three levels: micro (individual activities), group, and organization (encompassing government, international, and corporate). Furthermore, the notion of sustainability may be found in a wide range of studies, such as visions of a sustainable future, local implementation of the transition to sustainability, public perception, and participatory method development to aid the transition [9]. As a consequence, it is evident that people contribute to initiatives toward sustainable development, either individually or collectively. This study emphasized the third role of sustainable development: SMEs' goals to run a sustainable business.

This study was conducted on SMEs in the Surabaya Urban Agricultural Society (UASS). The UASS is similar to the Urban Agriculture Community, which functions to integrate big city food supply with more environmentally friendly modes and is capable of "feeding the city" by integrating multiple resources, networks, and opportunities while contributing to the enhancement of community welfare [10]. Urban agriculture can also be used to mitigate flooding and ensure clean water security [11]. Surabaya is currently constructing a Big Biopore Infiltration Hole (BBIH), which was initially designed to tackle flooding and later functioned as the catfish cultivation area aside from its original function. This means that the UASS started to establish an urban farm as a means of developing UA [12]. Furthermore, SMEs were chosen as subjects for this study due to their significant environmental impact, which cannot be overstated [13]. Although it has a significant influence on environmental studies, this issue is not new and should not be regarded as novel [14].

This study employed Caldera et al. [15], natural resource-based view (NRBV) as a theoretical basis as well as Aboelmaged SMEs [16] and Andersen [17] to examine green manufacturing practices. Furthermore, in order to examine factors of sustainable practice in SMEs, this study referred to Ghazilla et al. [18] as well as other similar studies as the theoretical frameworks. This decision was in line with Caldera et al. [15] who state that quantitative sustainable practices analysis is more often carried out through the Analytical hierarchy process approach. Moreover, despite its rarity to implement the Theory of Planned Behavior (TPB) as a framework in SMEs this implementation was commonly found in other research based on environmentally friendly behavior [19]. In their research, Singh et al. [19] include religiosity as a predictor of ethical attitudes and judgments in the development of TPB to examine sustainable intentions in family businesses. Investigating certain cases related to ethics such as cheating, shoplifting, and lying should consider the issue of norms [20]. Hare et al. (2018) mention that conserving ethical actions (moral beliefs, attitudes, intuitions, and norms regarding other species) can be adapted to support the cooperation between human beings and non-human beings [21]. Further, Ghasemi & Kyle [22] also mention that conserving wildlife is a moral obligation for human beings. Similarly, Latombe et al. [23] detail the values in conservation behavior from various ethical perspectives, including Anthropocentrism which views humans as the only species that holds a moral position. They also mention the perspective of Ecocentrism which views that a value system that considers species, their collections, and functions, as well as the wider ecosystem, is a direct moral obligation concern [23].

Sustainable efforts are also part of the ethical behavior of human conservation towards the environment and the species in it. This responsibility (moral aspect) is often neglected in pro-environmental behavior research/study [24]. Thus, Culiberg et al. behavior [25] include the moral foundation in research on pro-environmental consumption. Similarly, Chen [26] also includes moral obligation as an antecedent to the study of coffee consumption behavior labeled as sustainability. Personal norm or moral norm affects attitude [27], which was explained by Lülfs & Hahn [28]. They agree that moral norms can influence the intention of sustainable behavior within the framework of the Theory of Planned Behavior [28]. Meanwhile, the subjective norm variable in the original construction of the TPB only concerned the dimensions of the injunctive norm and descriptive norm [29] while the descriptive norm and individual moral norm were not included [30], so the consistency of the influence of subjective norm on intentions was lower in an extended period of times [31]. However, so far it seems important to conduct research on the role of moral norms on pro-environmental behavior in the context of urban farm communities, such as UASS which was deliberately initiated by the government to develop community participation in sustainable development.

In subsequent developments, Liu & Liu [32] and Karimi & Saghaleini [33] positioned moral norms as mediating between subjective norms and attitudes, which was actually the opposite idea of Ajzen [20]. In addition, they highlight other mediating roles that are formed from the construction of the Extended Theory of Planned Behavior (ETPB) that was found [32, 33]. Although there were similarities in ETPB construction, there were different mediating effects used in the research. This research discussed the differences between subjective norms and moral norms. In line with this, sustainable business research among SMEs should include moral aspects in the construction of ETPB.

1.1 Urban Agricultural Society of Surabaya (UASS)

There are 3 main functions that can be activated in the development/procurement of a UA, namely: sustainability, resilience, and multifunctionality [35]. Of these three, the third function multifunctionally allows UA not only to serve as food security and natural sustainability but also for sociocultural functions, economics, and configurations [36]. UA development can also be carried out in an integrated manner that connects the functions of production, distribution, and processing of products but it requires cooperation between a) vacant land owners; b) farmers, or those who are willing to cultivate vacant land; and c) other communities [10]. The research conducted by Newell et al. [37] shows that there were obstacles to developing UA in Detroit (US), including land tenure uncertainty, environmental pollution, misunderstanding of possible environmental harm and a lack of government backing and financial investment as the biggest challenges. In relation to the UASS, from the data obtained, Surabaya is recorded to have only 1179.60 ha of agricultural land and 5,055 ha of non-rice field land [38]. However, these limited areas were developed multifunctionally. As in Jambangan, one of the sub-districts in Surabaya, UA has been developed not only to serve as food security but also for other functions. UA was developed in vacant areas such as government-owned land, public facilities (roadsides), and vacant land. The citizens used these areas to plant and develop urban farms in order to create environmental sustainability, social

sustainability, and economic functions. For example, using the Big Biopori Infiltration Hole (which is supposedly used for flood prevention) for catfish farms adds economic function and social function because it is used as a recreational site for the surrounding people.

1.2 Extended theory of planned behavior (ETPB)

The Theory of Planned Behavior is a theory from Ajzen and an extension of the Theory of Reasoned Action (TRA) [39]. The main construction of TPB explains that behavioral intentions are influenced by three main variables, namely attitudes, subjective norms, and PBC where subjective norms are only limited to injunctive norms [30]. TPB is a theory that considers social and psychological variables in the individual decision-making process [40]. Zhang [30] introduced the origins of TPB to be applied in many fields such as social psychology, health communication, marketing, management, and clinical medicine. This theory is most often cited to predict human social behavior [41].

Many studies have added other variables to the TPB model to improve the predictive ability of the model because the TPB only focuses on three variables [42]. The existence of ETPB indicates that scientists do not simply use the original version of TPB to provide an acceptable explanation for human behavior [43]. Other researchers Gao et al. [44], Savari & Gharechae [45], Shalender & Sharma [46], López-Mosquera et al. [47], and Hoeksma et al. [48] use extended TPB in sustained behavior with moral norm variables. Chen & Tung [49] not only include moral but also environmental concerns in the TPB model to predict consumers' intention to visit green hotels. In contrast to these studies, Singh et al. [50] expand TPB with variables other than the norm in circular economy readiness research in manufacturing MSMEs (Micro, Small, and Medium Enterprises) about nature but not moral norms. Moreover, Zhao et al. [51] use ETPB by including non-norm variables in the driving intention for the connected vehicle environment. Various research and studies explain that ETPB can be obtained by combining TPB with other theoretical models, such as integrating TPB with TTM (The Transtheoretical Model) [52, 53]; with TAM (Technology Acceptance Model) [54 - 56]; with the norm activation model (NAM) [57 - 60]; with Theory of Value-Belief-Norm [61]; with the Stimulus-Organism-Response (M-SOR) Model [62]; with consumer satisfaction theory [63]. Considering the combination of theories used research that includes moral norm variables to predict behavior includes the results of integration between TPB and NAM. The integration of TPB and NAM is almost entirely used to predict sustainable or pro-environmental behavior. NAM has been studied independently and separately from TPB in predicting behavior [64].

1.3 Variables in extended theory of planned behavior (ETPB)

The degree to which a person has a favorable or negative opinion or appraisal of the action in issue is referred to as attitude [65]. Attitude towards behavior is a function of one's belief in the consequences of behavior that is carried out where it is about a person's perceived probability that engaging in an appealing action would result in particular outcomes or deliver specific experiences [29]. Attitudes can be categorized into cognition, affect, and

connection [66]. The attitude toward sustainable business in this research is associated with the evaluation of SMEs on sustainable business practices as referred to by Aboelmaged [16].

Subjective norms are social pressures from reference group members to enforce behavior [27] based on normative beliefs or individual perceptions of others being considered. This factor is called subjective norm because it relates to perceived normative references [66]. Yet, Ajzen states that subjective norms are related to injunctive norms and descriptive norms [29]. Injunctive norm is the subjective expectation that a particular individual or reference group agrees or opposes engaging in the action under consideration, whereas the descriptive norm is the belief about whether another important person himself or herself performed the behavior. Perceived Behavioral Control (PBC) relates to the perceived ease or difficulty in carrying out the activity, and it is thought to reflect previous experiences as well as predicted hurdles and barriers [27]. PBC shows how much the behavior is under one's control [29]. PBC indicates a person's understanding of the target behavior's restrictions and capabilities [67]. A moral norm is the perception of the level of moral correctness of behavior [27]. Similarly, Schwartz (1977) defines moral norms as a person's perception of right or wrong and whether he feels morally obligated to take certain actions. Personal moral norms become obligation-based intrinsic motivation [69]. In pro-environmental behavior, individuals engage in public activism because they feel compelled to do so [70]. For this reason, the moral norm in this study leads to a feeling of obligation to take part in sustainable business actions as referred to by Aboelmaged [16]. Besides the variables mentioned, Hati et al. [71] found other factors that influence the intention in education are moral obligations in ethical theory. According to Zhang et al. [72] individual norms are the strongest direct determinant of intention. Similarly, Liu & Liu [73] agree that the extending theory of planned behavior (TPB) to environmentally friendly products can be done by including moral norms that influence purchase intention. Further, they mentioned that moral norms can also serve as mediators in the TPB model. Meanwhile, Chen & Lee [74] found that moral norms were significant predictors of attitudes which were supported by Shi, Wang, et al. [75] who found the positive effect of moral norms on every intention.

1.4 Research Hypotheses

Kumar et al. [80], Cahigas et al. [77], Ru, et al. [78], and Tommasetti et al. [79] stated that attitude has a significant effect on intention. Even Liu & Liu [73] and B. Chen & Lee [74] mention that extending the theory of planned behavior (TPB) to environmentally friendly products which includes attitudes was found to have the most significant role in predicting intentions. Furthermore, it is possible to research attitudes as a mediating moral norm towards intentions as was done by Ataei et al. [82], in addition to being extended to the prediction of feelings of moral regret as an additional predictor of intention.

H1: Significant influence of Attitude toward Sustainable Business (ATT-SB) to Intention toward Sustainable Business (Int-SB).

Kumar et al. [80], Shi, Wang, et al. [80], and Govindharaj et al. [83] prove that morality is a component that affects the variance of intentions. Esfandiar et al. [82] and Ataei et al. [84]

found the construct of moral norms on intentions. The results of the structural analysis by Zhang et al. [72] reveal that the proposed model of personal norms is the strongest direct determinant of intention. Liu & Liu (2019) expanded TPB to environmentally friendly products and included moral norms [73]. Similarly, Nayum & Th [86] used TPB in the conception of pro-environmental behavior showing that personal norms are the strongest predictor of pro-environmental behavior. This research will analyze the moral norm in sustainable business.

H2: Significant influence of Moral Norm (MN) to Intention toward Sustainable Business (Int-SB).

Cahigas et al. [77]; Liu & Liu [73]; Govindharaj et al. [83] proved that subjective norms had a significant positive effect on the intention component in the (TPB) framework. Subjective norms were also found to have a significant effect on the intention to behave pro-environmentally. Shi, Wang, et al. [82] found subjective norms have a positive effect on each vehicle reduction intention to reduce pollution. Furthermore, Wan et al. [87] show that subjective norms have a positive effect on people's intentions to use urban green areas. Tommasetti et al. [79] found that subjective norms influence consumer behavioral intentions to choose green restaurants. The results of this research are different from Shi, Fan, et al. [88] who state that subjective norms do not affect city emission control intentions.

H3: Significant influence of Subjective Norm (SN) to Intention toward Sustainable Business (Int-SB).

Cahigas et al. [77] and Shi, Fan, et al. [88] found evidence of planned behavior theory (TPB) intention to significantly and positively support perceived behavioral control. This finding is similar to Zhou et al. [90] who found that there is a relationship between perceived behavioral control and purchasing behavior. Liu & Liu [73] also found that perceived behavioral control affects purchase intentions. Perceived behavioral control was also found to have a significant effect on ethical behaviors. In addition, Wan et al. [87] show that behavioral control has a positive effect on people's intentions to use urban green areas. Tommasetti et al. [79] found that perceived behavioral control influences consumers' behavioral intentions to choose green restaurants. Lastly, Kumar et al. [80] found that perceived behavioral control influences intentions on unethical intentions. However, Sniehotta et al. [43] in a previous study found that the belief control intervention (PBC) did not affect intention. In contrast to the basic theory of TPB [20], Ru, Wang, & Yan [91] found that perceived behavioral control and subjective descriptive norms were negatively related to energy-saving intentions although both had a significant effect. This study will further analyze the perceived behavioral control towards sustainable business intentions.

H4: Significant influence of Perceived Behavioral Control (PBC) to Intention toward Sustainable Business (Int-SB).

Moral norms play a variety of roles, including as attitude predictors [92]. Environmental attitudes can be influenced by important moral norms for pro-environmental studies [93]. Moral norms influence intentions through attitudes. According to the results of the meta-analysis from Klöckner [94], some of the influence of moral norms on behavioral intentions will be conveyed through attitudes. People will weigh both the pros and cons of the behavior [95]. Liu et al. [32] and Karimi & Saghaleini [33] explained and hypothesized how moral norms were influenced by subjective norms, moral norms affect attitudes, and how moral norms serve as a bridge between subjective standards and intents. This study serves as a further discussion of the position of the moral norm as intended by the two researchers.

H5: Significant Influence of Moral Norm (MN) to Attitude toward Sustainable Business (ATT-SB).

As previously stated, moral norms appear to have a major influence on pro-environmental behavior. Apart from attitude, PBC, and subjective norms, the moral norm is the fourth variable in the TPB model [92]. Nonetheless, researchers rarely explore how it correlates with subjective norms. Subjective well-being does not necessarily have an immediate impact on intentions, but it can be used to determine whether certain behavioral choices are simple or effective [32]. Moral norms reflect internalized societal and subjective norms, which can be explained by the Norm-Activation model and the Value-Belief-Norm theory [33]. This theory focuses on how the reference group's beliefs on what is right and wrong are absorbed and altered into one's particular moral norms [96]. According to Onwezen et al. [64], through the integration of the Norm-Activation model with TPB, subjective norms can influence moral norms. This finding is consistent with the findings of Liu et al. [97] and Savari et al. [98], who both hypothesize that TPB modulates moral norms.

H6: Significant Influence of Subjective Norm (SN) to Moral Norm (MN).

2 Methods

2.1 Participants and data procedure

Respondents of this study include food-based SMEs in the UA area, Surabaya. These food-based SMEs were: 1) someone who owns and manages a food/beverage business, 2) who owns but does not manage a food/beverage business, or 3) who manages but does not own a food/beverage business. They were selected because of their roles in the sustainable development chain of the UA area in Surabaya. They are expected to be able to further cultivate UA's crops. The questionnaires were distributed to 222 respondents, but 193 were accepted and only 177 could be used as data for this. Although not all the questionnaires can be used, the number that were used as data already met the minimum requirement of 5 constructs according to [99]. Data was collected through a paper-based questionnaire because as stated by Wang et al. (2013), the instrument was suitable to collect where the respondents were located in the same public area and asked to complete it at the same time [100]. The questionnaire implemented a 5-scale Linkert scale with the criteria: Strongly Agree (SS),

Agree (S), Moderately Agree (CS), Disagree (TS) and Strongly Disagree (STS). Paper-based questionnaires were also selected because of the characteristics of the respondents who were mostly from X generation (51.10%), 13.74% were baby boomers, 28.57% were Y generation, 3.85% were Z generation and 2.75% of respondents did not provide this information. Gravili & Fait (2016) state that the X generation is the first generation for “literate technology”, unlike the following generations, the Y generation is considered the “technology controls” generation [101]. Therefore, using a paper-based questionnaire was to anticipate the respondents who had difficulties in using technology.

2.2 Measurement

Instrument measurement was adapted from Kim (2014), Liao & Fang (2019) and Shalender & Sharma (2020) [104][103][46]. The instrument developed by adapting Shalender & Sharma (2020) has the advantage of adding a moral norm variable, the attitude is more directed to a negative statement to measure belief in an opinion, while the instrument developed by Kim (2014) was suitable for food-based business respondents. Meanwhile, the instrument developed by Liao & Fang (2019) emphasized more on consumers. Considering the aims of this study, the variable employed was attitudes toward the intention to use Sustainable Business (ATT-SB). Subjective norms (SN), perceived behavioral control (PBB), moral norms (MN), and intention toward Sustainable Business (INT-SB). The analysis technique used was a regression in order to determine the causal relationship of the application of TPB on Sustainable Business to food business actors in the UASS program area.

2.3 Data analysis

The data analysis technique used was Structural Equation Modeling (SEM) using smartPLS3. The steps involved in SEM analysis are as follows.

- (1) Describing the research construct or variable. Researchers define each variable to find indicators that build the construct/variable in the research.
- (2) Developing and determining a measurement model. Researchers establish indicators to measure the constructs/variables being studied, including determining the relationships between variables in the research.
- (3) Designing the research design. Researchers determine the type of data collection techniques, including anticipatory measures to deal with missing data.
- (4) Evaluating the measurement model. Researchers evaluate the validity and reliability of research instruments.
- (5) Determining the structural model. Researchers test the significance of paths in research designs.
- (6) Evaluating the structural model. Researchers only evaluated the R^2 level.

The tests used include the measurement model test and the structural model test with the criteria as mentioned by Hair et al. [99]. Hypothesis testing became the main part of the discussion and part of the structural model test.

3 Result and discussion

3.1 Result

The results of data processing in general show the results of the measurement model test and structural model test. The measurement model test consists of convergent, divergent, and reliability validity. Furthermore, the structural model test consists of hypothesis testing, and R².

3.1.1 Convergent validity

Convergent validity is seen from the outer loading and AVE values. Figure 1 shows that the value of the outer loading of all indicator variables/constructs was > 0.5. It shows that the construct has met convergent validity from the outer loading side. Furthermore, the AVE value can be seen in table A (AVE value of all variables was greater than 0.5). The table shows that the AVE value of the ATT-SB variable was 0.776, the intention towards SMP was 0.904, the moral norm (MN) was 0.585, the subjective norm (SN) was 0.531, and the PBC was 0.712. Thus, it can be concluded that the existing instrument has met convergent validity.

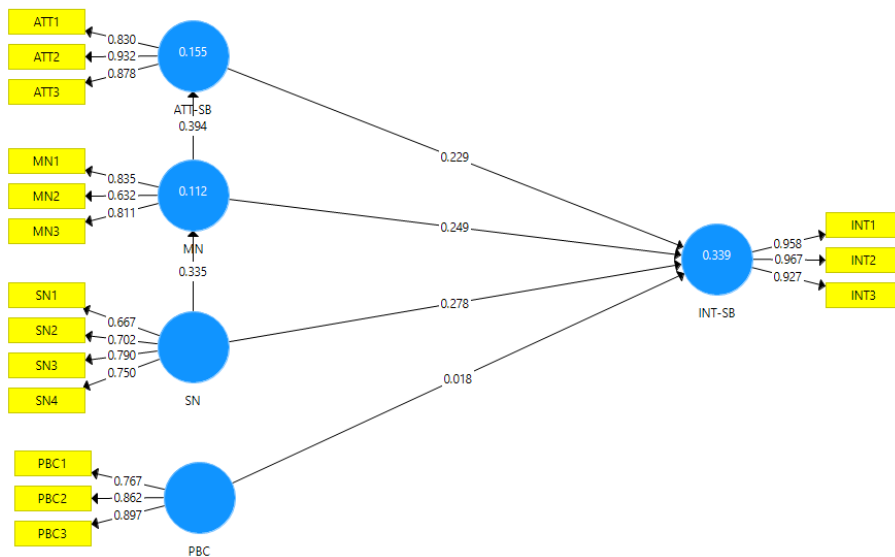


Fig. 1. Figure 1 Outer Loading

Table 1. AVE and Square Root AVE Scores

Variable/Construct	AVE	Cronbach's Alpha	\sqrt{AVE}				
			ATT-SB	INT-SB	MN	PBC	SN
ATT-SB	0.776	0.855	0.881				
INT-SB	0.904	0.947	0.430	0.951			
MN	0.585	0.647	0.394	0.441	0.765		

PBC	0.712	0.800	0.540	0.370	0.468	0.844	
SN	0.531	0.713	0.338	0.446	0.335	0.403	0.729

3.1.2 Divergent validity.

The AVE root value for attitude toward SMP was 0.881 and it was greater than the correlation coefficient with other constructs of 0.430 (correlation with intention toward SB), 0.394 (correlation with moral norm), 0.540 (correlation with PBC), and 0.338 (correlation with subjective norm). The AVE value for intention was 0.951 and this value is also greater than its correlation with other constructs (see Table 1). Likewise, the AVE root value for moral norm, PBC, and subjective norm which has a value greater than the correlation of these variables with other constructs. Thus, the outer model of this research has met discriminant validity. Another measurement of discriminant validity was seen from the value of outer loading compared to cross loading with other constructs (see Table 2).

Table 2. Cross Loading

Variable/Construct	ATT-SB	INT-SB	MN	PBC	SB
ATT1	0.830	0.382	0.323	0.398	0.296
ATT2	0.932	0.400	0.383	0.548	0.325
ATT3	0.878	0.354	0.333	0.476	0.269
INT1	0.447	0.958	0.430	0.385	0.460
INT2	0.383	0.967	0.423	0.351	0.443
INT3	0.395	0.927	0.403	0.315	0.363
MN1	0.389	0.394	0.835	0.414	0.249
MN2	0.211	0.203	0.632	0.223	0.226
MN3	0.280	0.378	0.811	0.403	0.296
PBC1	0.417	0.227	0.334	0.767	0.327
PBC2	0.444	0.331	0.417	0.862	0.375
PBC3	0.503	0.357	0.423	0.897	0.323
SN1	0.244	0.222	0.227	0.300	0.667
SN2	0.206	0.258	0.167	0.345	0.702
SN3	0.211	0.388	0.302	0.242	0.790
SN4	0.321	0.384	0.255	0.321	0.750

The value of outer loading on attitude toward SB, namely 0.830, 0.932, and 0.878 is greater than the cross loading with other constructs. The value of the outer loading variable intention toward SB, moral norm, PBC, and subjective norm is also greater than the cross loading with other constructs. From these results, the model in this study has good discriminant validity.

3.1.3 Reliability testing

The results of processing reliability data show that the Cronbach Alpha value (see Table 1) for all variables > 0.6 meaning that the construct was reliable [99]

3.1.4 Hypothetical testing

The results of hypothesis testing are seen from the p values or t statistics. A relationship between variables is said to have an effect if the significance level is: P-value < 0.05 or T-value > 1.96. The findings of the hypothesis testing are showed in Table 3.

Table 3. Result of Path Coefficient and Hypothetical Testing

Path	Path Coefficient	T Statistics	P Values	Conclusion
H1: ATT-SB -> INT-SB	0.229	2.506	0.013	H1 Accepted
H2: MN -> INT-SB	0.249	2.623	0.009	H2 Accepted
H3: SN -> INT-SB	0.278	3.455	0.001	H3 Accepted
H4: PBC -> INT-SB	0.018	0.184	0.854	H4 Rejected
H5: MN -> ATT-SB	0.394	4.823	0.000	H5 Accepted
H6: SN -> MN	0.335	4.212	0.000	H6 Accepted

3.1.5 Attitude toward Sustainable Business (ATT-SB) to Intention toward Sustainable Business (Int-SB)

The results of this research prove that ATT-SB has a significant impact toward Int-SB as indicated by the results of hypothesis testing which states that P-Value (0.009) is smaller than (0.05) and T-Value (2.607) is greater than 1.96, which means that H1 was accepted. This study supports the results of previous research which suggests there was a relevance and relationship between behavior towards sustainable business and the intention to carry out these activities (Kumar et al., [80], Cahigas et al. [77], Ru, Wang, Chen, et al. [78], and Tommasetti et al. [79]. Besides, this research also supports the research conducted by Liu & Liu [73] and Chen & Lee [74] that explain the environmental behavior through ETPB.

3.1.6 Moral Norm (MN) to Intention toward Sustainable Business (Int-SB)

This research proves that MN had significant influence on Int-SB (H2 was accepted). The findings were consistent with research conducted by Kumar et al. [80] , Shi et al. [82] , Esfandiar et al. [83] , Ataei et al. [84] who stated that moral norms were components that can affect the variance of intentions. In addition, the results of this study strengthen the results of research conducted by Liu & Liu [73] who discussed pro-environmental behavior. Therefore, MN can be calculated as a variable that can predict intentions as evidenced by the results of the path coefficient test which states a high value (0.249) in relation to Int-SB.

3.1.7 *Subjective Norm (SN) to Intention toward Sustainable Business (Int-SB)*

This research supports results of previous research Cahigas et al. [77], Liu & Liu [73], Govindharaj et al. [83] who found a important effect of subjective norms on intentions in the TPB framework. This can be seen from the results of hypothesis testing and path coefficient which shows the P value (0.000) is smaller than Sig. and the value of T (3,612) is greater than 1.96 which means that the hypothesis is accepted (H3). The significant impact of subjective norms on sustainable business intentions in this study also supports the results of previous pro-environmental research Wan et al. [79] and Tommasetti et al. [87]. However, this research did not support Shi, Fan, et al. [88] who mention the absence of SN influence on intention.

3.1.8 *Perceived Behavioral Control (PBC) to Intention toward Sustainable Business (Int-SB)*

The results of the analysis prove that in this study PBC was found to have no effect on sustainable business intentions in SMEs in MPP Surabaya, which means that H4 of this study cannot be proven. This is evidenced by the P value (0.860) which is greater than Sig. (0.05) and T value (0.177) which is smaller than 1.96. The results of this research are different from the findings of previous studies Cahigas et al. [77], Shi, Fan, et al. [88], Zhou et al. [90]; Liu & Liu [73] who stated that there was a significant influence of PBC on sustainable business intentions. In addition, this result also refutes the findings of Wan et al. [87] who agree on the influence of PBC toward intentions to use green areas in their research on environmental ethics, Tommasetti et al. [79] on intentions to choose green restaurants, and Kumar et al. [80] on unethical behavioral intentions. However, this research supports the findings in the study carried out by Liu et al. [107] which mentions the non-significance of PBC to ethical fashion consumption.

3.1.9 *MN to Attitude toward Sustainable Business (ATT-SB) and SN to MN*

However, in this study, the researcher emphasizes on two roles of MN, namely as a predictor of ATT-SB (H5) and the relationship between SN and MN (H6). From the results of the analysis and hypothesis testing, it was found that both hypotheses (H5 and H6) were accepted. This can be seen from the P value which is smaller than Sig. (0.05) and T value higher than 1.96. The results indicate that MN had a supportive role in Attitude toward sustainable business (ATT-SB) which means supporting the results of Liu & Liu [32] and Karimi & Saghaleini [33] who agreed on the positive roles for MN as predictors for sustainable business attitude. However, the results shown by H6 in this study were different from the opinion of Liu & Liu (2019), because they found that SN and MN did not have a significant influence to one another as it (SN) directly influenced on ATT-SB and did not require MN as mediator. In addition to proving the above hypothesis, this study discovered an indirect or mediating influence that could potentially be utilized to encourage discussion on the function of moral norms in the development of intentions.

3.1.10 R Square (R^2)

The amount of exogenous factors' influence on endogenous variables is explained by the value of R^2 Adjusted. The previous table explains that moral norms are influenced by subjective norms. The subjective norms can explain the exogenous moral norm variable of 10.7%. Yet the nature of the influence of them was weak because $0 < R^2 < 0.25$ (see Table 5). Similarly, it also explained the attitude was influenced by moral norms. Furthermore, considering the R^2 value, the R^2 attitude toward SMP was 0.150, which means that this variable can be explained by the moral norm of 15.0% with the nature of its influence was weak. Finally, the R^2 value for intention toward SB was 0.323 meaning that this variable was explained by attitude toward SB, moral norm, subjective norm, and PBC by 32.3% with the nature of its influence was moderate. Moreover, overall, the int-SB can be explained by its exogeneous variables (ATT-SB, MN, SN, and PBC) as 32.2 % which indicated that the influence of exogenous and endogenous variables was low (see Table 4).

Table 4. R2 Adjusted

	R² Adjusted
Attitude toward SB	0.150
Intention toward SB	0.323
Moral Norm	0.107

3.2 Discussion

Among of four predictors, PBC becomes the only predictor which did not have role in establishing Int-SB. The existence of this difference is possible because of external elements, such as culture in the community and the community's point of view. This can be seen from the results of observational analysis from MPP Surabaya which has formed a positive culture and perspective on eco-green so that this allows for different forms of culture and people's perspectives on sustainable business behavior that can affect their intentions indirectly. This is promoted by research Langemeyer et al. [35] and Hassan et al. [36] which stated that other functions of urban agriculture are as a form of business for natural, social, economic sustainability, and others. However, this assumption has not been proven because in this study cultural factors and people's perspectives were not included in the variables studied.

This study indicated that moral norms were the second-most significant predictor of int-SB after subjective standards, emphasizing the importance of moral norms. This demonstrates that moral norms must be incorporated into the TPB model in the case of environmental conservation behavior [93]. Furthermore, moral norms are predictors of attitudes toward sustainable business, which supports the findings of Klöckner [94], who suggest that some of the impact of moral standards toward behavioral motives is conveyed through behavior. Table 2 illustrates that attitude acts as a bridge between moral norms and intentions (MN -> ATT-SB -> INT-SB). This study, however, does not go into detail about the function of mediating attitudes in the connection between intentions and moral norms. In the case of conducting a sustainable business, humans have a moral imperative to safeguard the environment by decreasing pollution from their operations [57]. According to prior studies, SMEs account for 60–70% of industrial pollution in Europe [108, 109]. Accordingly, the role

of SMEs in safeguarding the environment. Corresponding with the various evidence, SMEs at UASS demonstrated that they have fulfilled their moral commitment to safeguarding the environment, such as through the installation of a Waste Water Treatment Plant (WWTP), a waste bank, and community 3R activities.

Subjective Norms affect moral norms. It was proven by the result of Hypothesis 6 (H6), which is accepted, meaning that the UASS group believes that business promoting cleanliness has been internalized and changed into personal or individual moral values for community food SMEs. Views from reference groups can be internalized and assimilated into personal moral norms [96]. UASS is a rural location where locals are more enthusiastic about waste management than residents in residential areas [110]. UASS, which has also expanded its function as a recreational facility, enables the development of a positive attitude toward the necessity of economic activities while safeguarding the environment. Thus, the subjective norms that play a role in the creation of moral standards in SMEs are inextricably linked to the research area's character, namely UASS. The issue of moral norms in SMEs cannot be separated from UASS outreach operations. Ryder (1965) defined socialization as an environmental process that involves mechanisms [111] such as observation, imitation, and internalization [112] to acquire skills, knowledge, and attitudes [113, 114] that influence people's behavior. Moral norms can be developed through socialization [68].

Morality is developed through the socialization process, which includes learning from experience, observation of others, and instructive stories (Moskalenko, 2008). Internalization of moral norms occurs through identification, discourse, and interaction with those who are referred to or embraced [115]. The openness trait shared by the people of Surabaya helps the socialization process for SMEs flow smoothly, resulting in the internalization of moral norms. When other variables are ineffective, attitude becomes a crucial variable for intention to fluctuate across activities and settings [20]. Table 2 further illustrates that attitude acts as a mediator between moral rules and intention. Attitudes are generated through the process of learning about an item through experience, which is a response to the evaluation of attitudes so that information about the object of the attitude improves [116]. In the example of food SMEs in UASS, their knowledge of sustainable business will determine whether their views toward sustainable business are positive or negative, which will affect their intention to execute sustainable business. The discussion that follows is about the influence of moral norms and other variables on SMEs' long-term business intentions. Moral norms with ATT-SB, PBC, and SN can only explain intention variables to a limited extent. This suggests that there may be additional variables that were not considered in this study but have a greater impact on intention formation. Wang and Zhang [117] Ahmed [118], Kabir et al. [119] and Moghavvemi et al. [120] present research on extending TPB with internal variables like self-efficacy, prior behavior, and locus control, as well as external variables like education and external assistance.

4 Conclusion

Attitude, moral norm, and subjective norm proved to have a direct influence on intention, but not with PBC. From these results indicate the need for an appropriate control to form appropriate behavior. For this reason, the public policy that is designed needs to include

elements of pro-environmental education to improve attitudes and morals. Moreover, the government policy is necessary to be directed in establishing community awareness to optimize the role of subjective norms on sustainable business intentions and moral norm establishment. In connection with PBC which is not significant to sustainable business intentions, future researchers need to consider the construction of intentions by using other theoretical approaches. Liu et al. [32] suspected that in the case of pro-environmental behavior, the Theory of Reasoned Action (TRA) is more suitable than the TPB model. This study recommends the need for further analysis of the TRA model which is expanded with moral norm variables for future pro-environment studies. Finally, moral norms remain the key to consider in the expansion of the TRA model. Because moral norms are part of the Norm-Activation model in behavior theory [33], integrating TRA with NAM can be a recommended option for examining pro-environmental behavior in people with compliance issues. This study did not reveal the complete relationship of ETPB, without SN to ATT as the original TPB construct. In addition, it also does not discuss SN to PBC, the model is only studied to photograph field conditions at MPP, by proving moral norms as the core policy in the pro-environmental area as a real manifestation of ethics in sustainable business.

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