

KEY DETERMINANTS THAT ENHANCE COMMUNITY ACCEPTANCE OF MIGRANT LABOR SETTLEMENT IN THE ISKANDAR DEVELOPMENT REGION, JOHOR

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Abstract

Migrant labor plays a crucial role in Malaysia's development. As a result of the influx of migrant labors to work in Malaysia, migrant labor settlements have been established to provide shelter to support the laborers' daily activities. These migrant labor settlements are usually located within or surrounding residential areas, and have raised skepticism among the local communities, many of the residents of which perceive the settlements to pose the risk of adverse impacts on their neighborhoods. This has led a recent debate in Malaysia over whether to remove migrant labor settlements from residential areas. The determinants that shape local community perception towards migrant settlement, however, remained unclear. In this study, a survey was conducted among residents to understand the psychological determinants that influence their degree of acceptance of migrant settlements, and the data are analyzed using Partial Least Square-Structural Equation Model (PLS-SEM) analysis. The findings suggest that residents' acceptance can be moderately explained by Concern, followed by Subjective Norm, Perceived Behavioral Control, and Attitude. In addition, the findings imply that in order to improve acceptance among the community, priority should be given to resolving the local community's concerns, which consist of four main issues (in descending order): crime and safety, decline in property values, hygiene issues, and the poor physical appearance of the settlement. To this end, this paper provides policy recommendations for both the government and community, and advises the government *not* to

segregate the migrant settlement from the host community, provided that host-community concerns can be resolved.

Introduction

Labor migration has supported the growth and development of Southeast Asia by compensating for local labor shortages (Harkins and Ahlberg, 2017). Countries that receive more migrants experience increased production and better returns on capital, the combination of which has led to increases in GDP in East Asia (Walmsley, Aguiar and Ahmed, 2017).

Not surprisingly, these kinds of benefits encourage countries—including Malaysia—to welcome more migrants. In Malaysia, as the country became a migration hub, migrant labor issues received much attention from the government and the public. According to the International Labor Organization (2015), Malaysia is the largest migrant labor receiving country in the Association of Southeast Asian Nations (ASEAN), with 2.1 million migrant workers, followed by Singapore (1.3 million) and Thailand (1.1 million). While job growth in Malaysia is concentrated in highly skilled occupations, three-quarters of jobs in Malaysia are still low- and mid-skilled. By meeting that latter need, migrant labor continues to play a crucial role in Malaysia's development (Munoz Moreno et al., 2015). In fact, Malaysia depends on migrants in contributing to the labor workforce. In 2015, migrant workers found jobs in a range of industries, including construction (34.9 percent), agriculture (23.3 percent), manufacturing (21.1 percent), services (13.7 percent) and housekeeping (7 percent) (Ministry of Home Affairs, Economic Planning Unit Malaysia, 2016).

The swelling ranks of migrant labor in Malaysia have led to the creation of many migrant settlements, located within or around existing residential areas. Usually, migrant settlements consist of a group of housing units: apartments, terrace houses, or a shophouse's upper floor. Most are low- to mid-priced units that have been converted to dormitories. The housing is either rented by the workers' employer (either fully managed or loosely managed), or by the migrant laborers themselves, renting as a group. Usually, the dormitories and other forms of housing are near each other and form a settlement in the local residential area. Because the residents of this housing necessarily seek to minimize their expenses, it is not unusual for this housing to be overcrowded—sometimes packed with four to five people in a couple of rooms. In addition, houses that are loosely managed by employers—or not managed at all—are often poorly maintained.



Figure 1. Migrant labor housing: upper floor of shop lot



Figure 2. Migrant labor housing: terrace house



Figure 3. Migrant labor housing: apartment complex managed by employer



Figure 4. Migrant labor housing: apartment mixed with local residents

Migrant labor settlements have sparked negative reactions among the local communities, the resident of which often perceive the settlements to have potential adverse impacts to their neighborhood. A study conducted by Sirat and Ghazali (2011) in Penang, Malaysia, uses the word “invasion” to represent this phenomenon, and explains that the residents perceived the large numbers of migrant workers to be putting them at risk by downgrading the image and value of their residential area, and thereby posing a threat to their social status. To help defuse community hostility toward the migrant labor settlements, some state governments in Malaysia have considered relocating the “problem” by duplicating Singapore’s practice of building separate worker villages that segregate migrant labor from the local community. In fact, a publicly-listed Singaporean corporation has won a tender to build a large-scale migrant labor dormitory in Penang, Malaysia (The Star Online, 2015).

The large-scale dormitories built in Singapore are usually located far from the city center—again, to segregate migrant workers from the local community.¹ They tend to have adequate living space and recreational facilities, but are monitored under heavy security systems. This kind of deliberate segregation is contrary to the current migrant settlement housing model in Malaysia, in which most dormitories are either built or rented by the employer, and located near or mixed with the local community. The proposal to build dormitories to segregate migrant workers from residential areas has sparked substantial debate in Malaysia, as evidenced in mainstream and social media (Bernama, 2017; Chin, 2017).

The main challenge posed by the existing migrant settlement housing model in Malaysia is that it prompts the NIMBY (Not In My Backyard) response, in which a community rejects a proposal that a settlement be located near them. As suggested above, the reasons for resistance to migrant settlements may be complex, comprising a wide range of concerns about security, adverse impacts on property values, negative past experiences, negative externalities (i.e. noise and litter), and other issues. If the goal is to enhance community acceptance of migrant settlements, such issues need to be addressed. And while these issues have received significant attention in mass and social media, they have not yet been explored systematically either by government agencies or research centers. The result, not surprisingly, is a breakdown of communication between the local communities, migrant labor communities, and the local government.

Meanwhile, the importance of a comprehensive immigration policy to create safer communities has been emphasized in the 11th Malaysia Plan (Malaysia, 2015). This effort is also in line with the United Nation’s Sustainable Development Goal 11 for Sustainable Cities and

Communities, which has a secondary goals of “enhanc[ing] inclusive and sustainable urbanization and capacity for participatory, integrated, and sustainable human settlement planning and management in all countries” (United Nations General Assembly, 2015).

Malaysia has multiple strategies for managing and receiving migrant labor. Unskilled foreign laborers are considered contract migrant labor. They are hired on contracts that initially last for three years, with further extensions permitted on a year-to-year basis until the fifth year (Kaur, 2014).

The term "migrant labor" in this paper refers to unskilled or low skilled migrant labor that does not require professional knowledge or specialized training. It does not factor in demographic criteria, such as gender, age, and nationality. Due to the nature of these jobs, however, most migrant laborers in Malaysia are men (Ministry of Home Affairs, 2017), and the majority of the migrant laborers are between ages 25–44 (Munoz Moreno et al., 2015). The majority are involved in the construction and manufacturing sectors.

Literature review and theoretical framework

Migrant labor tends to undertake the kinds of “dirty, dangerous, and difficult” jobs (known as “3D” jobs) that are generally shunned by local workers (Lee, 2017), but which have the potential to contribute substantially to the local economy. This dynamic is well understood, and as a result, many Malaysians—especially employers and others who derive economic advantages from migrant laborers—tend to favor the employment of those laborers, as least in theory. Nevertheless, a proposal to house migrant laborers within a local neighborhood often leads that neighborhood to challenge the plan. In the abstract, in other words, people may recognize the need for a certain kind of development, but will fight it if it is proposed to be located within their neighborhood.

“NIMBY” is most often used to describe local opposition to large-scale infrastructural development projects and associated physical facilities. Yet the same phenomenon arises in the context of human settlements. Studies have used the NIMBY phenomenon to explain why local residents may have a favorable opinion towards social housing and affordable housing projects *in general*, but may nevertheless object strenuously when a project is proposed for their neighborhood (Gallent et al., 2002; Iglesias, 2002; Schively, 2007; Tighe, 2010; Nguyen et al., 2013; Ruming, 2014a; Ruming, 2014b). This concept has also been applied to local reaction towards asylum seeker centers (eg. Hubbard, 2005),

refugee settlements (eg. Ferwerda et al. 2017) and immigrant shelters (eg. Maney and Abraham, 2008).

On the other hand, the NIMBY concept has been critiqued as oversimplifying the reason for opposition by the local residents (Devine-Wright, 2005). Using NIMBY as the sole explanation may actually prevent the discovery of factors *beyond* NIMBY that can help explain local opposition (Wolsink, 2000). Accordingly, scholars have policy-makers to move beyond using NIMBY (alone) to explain why projects are facing opposition (Devine-Wright, 2005). At the same time, of course, NIMBY remains a factor, and ignoring it can lead to the delay, relocation, or even cancellation of the project (Zheng and Liu, 2018). Despite NIMBY's potential for "over-explanation," it should not be ignored.

Thus, in an effort to address this conceptual tension, this study adopts the Theory of Planned Behavior (TPB) as the theoretical framework with which to identify determinants that shape local community attitudes toward migrant labor settlements. TPB is a well established theory that explains human behavior and behavior change that has been widely applied across a variety of contexts (Ajzen, 1991). TPB stipulates that there are three core antecedent variables that drive people's intention to perform a specific behavior: attitude, subjective norm, and perceived behavioral control. These are explained below.

In addition to embracing these three core variables of TPB, we propose to extend the TPB framework by including an additional variable: "concern." Studies on the NIMBY phenomenon in the context of human settlements suggest that concerns that affect local residents to oppose housing projects can be grouped into two main aspects: their perception towards the project, and their perception of the people who will reside within the settlement once the project is completed (Gallent et al., 2002; Iglesias, 2002; Schively, 2007; Tighe, 2010; Nguyen et al., 2013; Ruming, 2014a; Ruming, 2014b). While attitude indicates the favorability of local residents toward migrant labor settlements, concern reflects the local resident's experience of and interactions with migrant laborers, which stimulates anxiety towards those laborers.

Perception focuses on the concerns of local citizens about the physical appearance of the project, and about the negative impacts that are expected from the siting of the settlement. Perception regarding the people who reside within the settlement is focused on their ethnicity, social class, and immigration status (Nguyen et al., 2013). To underscore this distinction, there are recorded cases in which opposition to a housing settlement project is actually aimed at the people who reside in the settlement project, instead of the settlement itself. In the context of this study, therefore, investigating community attitudes toward migrant labor settlements will not be limited to the settlement itself, but also will extend

to the people living within the settlement. This is why this study expand the TPB framework to include the additional variable of concern.

With that introduction in mind, let us explore each of the four determinants in the framework:

Attitude refers to the perceived favorability of a behavior. In this context, it refers to the inner perception (either positive or negative) in accepting the labor settlement. Moreover, attitude is based on the individual's knowledge and experience about the siting of the labor settlement. It indicates the local resident's beliefs about the consequence of the siting of the labor settlement within the neighborhood. In the context of migration, extensive studies have been conducted to reveal public attitude towards migrant and immigration policy (Ceobanu and Escandell, 2010). As acknowledged by Tunon and Baruah (2012), public attitude towards migrants is important, because it ultimately shapes immigration-related policy. TPB provides the researcher an opportunity to examine individuals' attitudes within a local community, by seeking out empirical evidence as to whether individual attitudes are shaping positive acceptance toward migrant settlements.

Subjective norm refers to the social pressure on an individual to perform or avoid a particular behavior. In this study, it refers to social pressure from the important referent group on an individual—specifically, pushing an individual to accept or not accept the migrant labor settlement within his or her neighborhood. The “referent group” are those people who exert influence on the individual's behavior. This group may include neighbors, family members, friends, and others. The behavior of individuals can be influenced by what they think the relevant referent group might want them to do.

Perceived behavioral control refers to, first, the difficulty level of performing a given behavior; and second, how confident an individual is that he or she can perform the specific behavior. For example: a local resident with intention to object to the migrant labor settlement (e.g., complain to the immigration officer) may halt that action if it appears that the action is difficult, won't be able to perform such an action. The impact can be seen on the collective level: there is a possibility that the community will accept the settlement simply because it feels that it is useless to object to it.

And finally, **concern**—the variable used to extend the TPB theoretical framework in this study—provides insight into what the local residents worry about vis a vis the migrant labor settlement. This variable indicates the local resident's awareness of the consequences and risks of having a labor settlement within their neighborhood. In contrast to attitude—which indicates the local resident's belief of consequences associated with the sitting of labor settlement—concern reveals the

anxiety of local residents regarding the perceived consequences and risks associated with the siting of a migrant labor settlement. Concern can be multifaceted, comprising (for example) environmental impacts, cleanliness, congestion, aesthetics, and crime. Understanding concerns among the residents provides insights into both NIMBY and LULU (locally unwanted land use) reactions.

A proposed theoretical framework is shown in Figure 1.

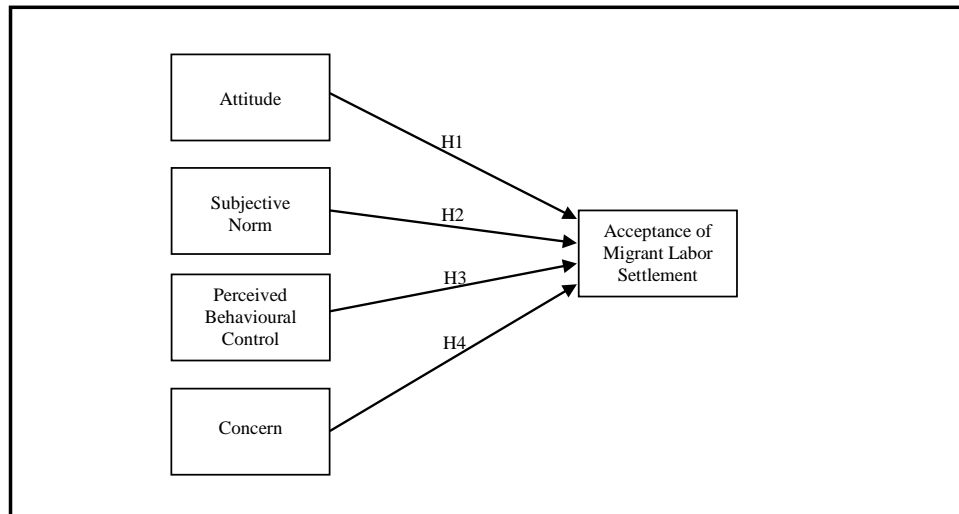


Figure 1: Proposed theoretical framework in investigating the key determinants that enhance community acceptance of migrant labor settlement.

Based on the proposed theoretical framework, there are four hypotheses being proposed. These hypotheses are as follows:

- **Hypothesis 1 (H1):** Local resident attitudes toward the migrant labor settlement will influence their acceptance of that settlement
- **Hypothesis 2 (H2):** Subjective norms will influence local resident acceptance of the settlement
- **Hypothesis 3 (H3):** Perceived behavioral control will influence local resident acceptance of the settlement
- **Hypothesis 4 (H4):** Local resident concerns about migrant labor settlement will influence their acceptance of that settlement

The findings derived from applying the proposed framework will explain which determinants influence the acceptance of migrant settlement—an understanding that can help the Malaysian government form better strategies for greater community acceptance. Table 1 in the appendix summarizes all the latent variables associated with the questionnaire.ⁱⁱ

Study area and methods

The Iskandar Development Region (IDR)—a special economic zone in Johor, Malaysia—has recorded a cumulative investment of RM222.44 billion over 10 years period (2000–2016), and invites in foreign workers from Indonesia, Nepal, Cambodia, Bangladesh, China, and other Asian countries to work in various sectors of its economy. The state of Johor has the second-largest population of foreign workers in Peninsular Malaysia, with foreign workers representing more than 10 percent of the workforce in Johor (Munoz Moreno et al., 2015). This large number of migrant workers from a variety of countries in make Johor Bahru suitable for a migrant labor case study. The same reasoning was used in selecting Johor Bahru as a Remittance Champion City, a collaborataion between the World Bank Group and Central Bank of Malaysia (Endo et al., 2017).

A survey was conducted to investigate and address community acceptance issues in IDR. Following the guidance of an official in the Immigration Department of Malaysia, the questionnaires were distributed in the four major migrant labor settlement hotspots: *Senai*, *Gelang Patah*, *Desa Cemerlang*, and *Taman Cempaka*. The targeted respondents for the survey were the local residents living near the migrant labor settlements. The questionnaires were distributed among the community living within the one-kilometer radius of the migrant labor settlement. To enhance the questionnaire response rate, a face-to-face questionnaire also was carried out. Fifteen research assistants were trained to conduct the questionnaire with the targeted respondents. The questionnaire was prepared in English, Malay, and Chinese, so that respondents could choose their preferred language. To ensure that respondents were randomly selected, the respondents were asked—prior to being selected to respond to the questionnaire—if they lived in the neighborhood. When necessary, assistance was given to the respondents to help them understand the questionnaire.

The questionnaire consisted of four sections: Section A (socio-demographic background); Section B (neighborhood characteristics); Section C (knowledge of the foreign labor settlement); and Section D (respondents' perception of foreign labor settlement in their

neighborhood). It was pilot-tested before distribution, and its final version reflected information received through the pilot test.

A total of 503 questionnaires were completed. Generally, each respondent took 10 to 15 minutes to complete the questionnaire. Prior to data analysis, data screening was conducted to eliminate incomplete questionnaires. After this data screening, there were 427 valid questionnaires, which were then subjected to data analysis.

Structural Equation Modelling (SEM) was used to develop an understanding of the concerns of, and barriers within, local communities regarding migrant labor settlements. Previous research, eg., Moffat and Zhang (2014), used a similar modelling technique to examine community acceptance of mining. SEM is a second-generation multivariate technique that gives the researcher greater flexibility to examine the causal relationships among multiple variables (Chin, 1998a; Chin, 1998b). SEM therefore has a great advantage over first-generation multivariate techniques (e.g. regression analysis); it allows the researcher to examine more than one relationship between variables at a time, whereas only one is possible in regression analysis (Mazzocchi, 2008). Further, Moreover, SEM can explore causal relationships among latent variables (Chin, 1998a; Chin, 1998b). The inability of first-generation techniques to accommodate latent variables is a clear limitation of those technique. As shown in Figure 1, there are several relationships among the latent variables in the present research; therefore, SEM is a more appropriate methodology for analyzing the collected data and achieving the research objectives.

There are two types of SEM: covariance-based SEM (CB-SEM) and partial least square SEM (PLS-SEM). CB-SEM is mainly used for testing and confirming an existing theory, whereas PLS-SEM is mainly used for predicting relationships and developing a theory in exploratory research (Hair et al., 2014). Given that the research objective is to explore and predict community response to migrant labor settlements, PLS-SEM is the more suitable technique for this study.

One limitation is worth highlighting, and it is coupled here with a two-part recommendation for future research. The respondents of this study were recruited only within the state of Johor. It is recommended that future research include more migrant labor settlements across a wider area—in other words, not limited to the four major hotspots as in this study. In addition, the distribution coverage should be extended to the community within a five-kilometer radius from the migrant labor settlement in order to determine how community acceptance of migrant labor settlements is related to distance from the settlement.

Results

As noted, a total of 427 questionnaires underwent data analysis. Prior to the PLS-SEM analysis, a descriptive analysis of the respondents' sample size was conducted. That analysis revealed that the respondents to this study were nearly equally divided in term of gender. In terms of age, the majority of respondents were below age 40, with a negligible amount above age 50. This is somewhat skewed, but given this study's goal of proposing future policies, the age distribution of the respondents seems appropriate. In terms of income distribution, the majority of respondents fall in the low- to middle-income group. This distribution is not surprising, as migrant labor settlements are usually established within low- and middle-income neighborhoods where property and buildings are more affordable. Almost 93 percent of the respondents had received at least a secondary school education, indicating that the respondents were able to understand the questionnaire well. The majority of respondents had lived within the neighborhood for more than six years, suggesting that they had sufficient experience interacting with the migrant laborers that reside in the neighborhoods to be able to provide valid and reliable opinions. A detailed breakdown of respondents' gender, age, income level, education level, household size, property ownership status, and duration of residence within the survey neighborhood is presented in Table 2 of the appendix.

Assessment of measurement model and structural model

The extended TPB theoretical framework for investigating the key determinants of community acceptance of migrant settlement was assessed using PLS-SEM via SmartPLS Software 3.0 (Ringle et al., 2015). The examination of model validity and reliability is based on a two-stage process, with the validity and reliability of the measurement needing to be established prior to the validity and reliability assessment of the structural model (Chin, 2010 and Hair et al., 2011).

The assessment of the measurement model involves exploring the relationships among the proposed latent variables (in this study, again, Attitude, Subjective Norm, Perceived Behavioral Control, and Concern) and their associated indicators. The validity and reliability criteria in assessing these relationships include composite reliability, convergent validity, and discriminant validity. Ideally, a value of composite reliability in between 0.7 and 0.9 is sufficient for the measurement model to achieve its internal consistency reliability (Nunally and Bernstein, 1994). Meanwhile, the convergent validity is assessed with indicator reliability and Average

Variance Extracted (AVE). Indicator reliability is established that the indicator loadings for each indicator is higher than 0.708, confirming that the indicator is associated with the corresponding latent variable (Hair et al., 2011). Similarly, a threshold value of 0.5 needed to be achieved for AVE to indicate that at least 50 percent of the variance of the latent variable's measurement items are being captured by the respective latent variable (Fornell and Lacker, 1981). Table 3 in the appendix displays the results of composite reliability and convergent validity of the measurement model. It is worth acknowledging that several indicators with low indicator loadings had been removed to ensure the establishment of the composite reliability and AVE threshold value criteria. Despite the removal of several indicators with loadings lower than the threshold value, the results suggest that the measurement model has achieved its composite reliability and convergent validity.

In term of discriminant validity, the heterotrait-monotrait (HTMT) ratio was referenced to ensure that each latent variable was distinct from other latent variables in the extended TPB model. The HTMT ratio has been identified as a superior discriminant validity criterion when compared to the traditional assessment criteria, such as the Fornell-Lacker criterion (Henseler et al., 2015). In order to establish the discriminant validity of a measurement model, the HTMT ratio must achieve a threshold value of either 0.90 or 0.85 (Henseler et al., 2015). The HTMT criterion result in this study is shown in Table 4 in the appendix. Accordingly, all the calculated HTMT ratios are below 0.85, which is the more conservative value to indicate the establishment of discriminant validity for the measurement model. Thus, the measurement model of this study is valid and reliable.

Having established the validity and reliability criteria for the measurement model, the next stage is the assessment of the structural model. This is key in determining whether the proposed extended version of the TPB model is valid in explaining community acceptance of the migrant labor settlement. In this study, the structural model is evaluated with the path coefficient (β) value and R^2 value (Chin, 2010 and Hair et al., 2011). The path coefficient result is used to assess the proposed hypotheses formulated in this study, based on the extended TPB theoretical framework. A bootstrapping procedure with 427 cases and 5000 sub-samples has been conducted to determine the path significance result, using the SmartPLS Software. The results of path coefficient, path significance (t-value), and the effect size of each proposed hypothesis relationship is summarized in Table 5 in the appendix. Interestingly, local residents' engagement towards the migrant labor settlement was largely influenced by the additional variable Concern. This variable has a positively significant path coefficient with a moderate effect size on local

residents' engagement. Meanwhile, the three core TPB variables are found to be positively significant in influencing local residents' engagement towards the establishment of the migrant labor settlement, but with a relatively low to medium effect size.

Despite the path significance, the structural model was evaluated with the variance explained (R^2 value). According to Hair et al. (2011), the R^2 values of 0.19, 0.33, and 0.67 can be interpreted as weak, moderate, and substantial, respectively. The R^2 value of migrant settlement engagement variable is 0.42, which can be considered higher than moderate. This result confirms that local resident engagement towards the migrant labor settlement can be moderately explained by the local resident's attitude, subjective norm, perceived behavioral control, and concern regarding the establishment of migrant settlement within their neighborhood.

Discussion

Migrant settlement is a widely discussed topic. Whereas previous studies have provided insight into local residents' responses to migrant asylum-seeker centers (Hubbard, 2005), refugee settlement (Ferber et al. 2017), and immigrant shelters (Maney and Abraham, 2008), this study provides insight into local residents' perceptions of migrant labor settlements within their neighborhood. Additionally, while previous studies reveal public concerns and attitudes regarding the immigration issues of migrant workers at a general level (Semyonov et al., 2002; Rajiman and Semyonov, 2004; Tunon and Baruah, 2012; Amit et al., 2015; Stansfield and Stone, 2018), this study adds to previous studies by focusing on the host community's response to establishment of the migrant labor settlement within the neighborhood. A discussion of the study's findings follows.

First, by going beyond the NIMBY phenomenon and digging deeper, this study provides a more useful explanation for local residents' responses toward migrant labor settlement. TPB is proven to be a useful theoretical framework for explaining community acceptance of migrant labor settlement. The results suggest that local residents' actions against the establishment of migrant labor settlements can be explained by the three core TPB constructs (attitude, subjective norm, and perceived behavioral control construct). The Perceived Behavioral Control construct appear to be the most influential determinant among the three core TPB constructs. This result is in line with previous meta-analysis findings, which suggested that Perceived Behavioral Control accounts for significant variance in predicting intention (Armitage, 2001). In addition to

the three core TPB constructs, the inclusion of the Concern construct leads to an interesting finding: this construct appears to have the largest effect in shaping local residents' attitudes against the establishment of migrant labor settlements.

Among the concern-related indicators, crime related to migrant laborers was of the greatest concern to local residents, followed by decline in property value, hygiene issues, and poor physical appearance of the migrant settlement. Previous studies indicate that local residents consider migrant labor the root cause for increases in crime rates, even though the opposite is revealed in statistical crime data (Kanapathy, 2006; World Bank, 2013). The local residents' concern over crime and safety issues can be caused by their negative attitude toward the migrant labor (Nielsen and Smyth, 2008). In addition to the physical aspect of the migrant labor settlement, the study results further reveal local residents' concern about those who reside in the settlement. The concern over the residents of the migrant labor settlement is similar as to previous findings on social and affordable housing settlements (Gallent et al., 2002; Iglesias, 2002; Schively, 2007; Tighe, 2010; Nguyen et al., 2013; Ruming, 2014a; Ruming, 2014b).

Concerns about possible declines in property value is the second most cited issue associated with the migrant labor settlement. A plausible reason for local residents' concern over property value can be linked to the respondent's property ownership status. The majority of respondents are the sole owners of, or are related to the owner of, their residential unit. This implies that most of the respondents have either a direct or indirect interest in the value of the residential unit. Negative stories about migrant labor presented by the media has led to distrust by the public and instilled negative preconceptions of migrant laborers (Tunon and Baruah, 2012). Therefore, the establishment of the migrant labor settlement can be seen as a threat to the neighborhood's image, which may have a negative impact on property values. It should be stated here, however, that the effects of migrant labor settlements on property transactions and property values is beyond the scope of this study.

Hygiene is another issue of concern to local residents. Migrant labor (especially undocumented migrants) has been claimed as a main factor contributing to the outbreak of health problems, in particular tuberculosis (Aziah, 2004). Migrant laborers (especially undocumented migrants) have been portrayed in Malaysian media as the root cause of recent disease outbreaks (New Strait Times, 2015; The Malay Mail Online, 2016; The Stars Online, 2015). Migrant laborers are also blamed for littering and contributing to an increasing amount of waste generation (Bavanim, 2013). It is very possible that local residents' concerns about migrant labor hygiene have been shaped by negative media coverage,

persuading them to act against the establishment of the migrant labor settlement within their neighborhoods.

In regard to physical appearance, neighborhoods showing signs of physical deterioration will lead to fear among those residents that their neighborhood is being physically changed (LaGrange et al., 1992). This tends to further stimulate local residents' concern over safety and crime issues (LaGrange et al., 1992 and Boorah and Carcach, 1997). If a migrant labor settlement has a poor physical appearance, that can exacerbate local residents' concern over safety and crime issues (LaGrange et al., 1992 and Boorah and Carcach, 1997). Accordingly, it is not surprising that local residents tend to act against migrant labor settlements that are poorly maintained and are therefore less visually appealing.

Conclusion and policy recommendation

Based on the discussion above, we argue that local community acceptance of migrant labor settlements can be enhanced by focusing on significant variables. Among the four variables, concern is the most significant, followed by subjective norm, perceived behavioral control, and attitude. The findings imply that in order to improve acceptance among the community, priority should be given to resolving the local community's concerns, which consisted of four main issues (in descending order): crime and safety, decline in property value, hygiene issues, and poor physical appearance of the settlement.

The findings provide a plausible solution on how to enhance community acceptance for migrant labor settlement. This could have an impact on the ongoing debate in Malaysia regarding whether or not to build formal dormitories that segregate migrant labor from the local residents. Based on the findings of this study, we argue that such a step is not necessary, provided that the concerns of the host community can be resolved.

In addressing the concerns, we propose a combination of efforts from all parties, including both the government and the local community. Existing practices in Malaysia to deal with the settlement issues—which depend heavily on government agencies (notably municipal governments and the federal immigration department)—may not be appropriate in the long term. This conclusion is in line with recommendations from Ager and Strang (2008), who suggest that two factors are important to successfully mediating and integrating migrants in the settlement: social connection, and the role of a facilitator. Local residents are considered to be social connectors, for they must integrate with the migrant laborers constantly.

The local community is advised to focus on addressing hygiene and poor building maintenance issues. This can be achieved through the management and maintenance efforts of residential associations formed by the local residents. They should consider including migrant laborers and the migrants' employers as part of the residential association committees. Employers' involvement in residential association is necessary, but has typically been neglected. In Malaysia, the migrant's employer has influence over work permit renewals, which is the major concern among migrant laborers. By involving the employer as part of the residential association, the migrant laborers are made aware that breaking the rules set by the residential association could negatively affect the renewal of their work permits.

We suggest that the role of facilitator in the effort to address crime and safety issues should be played by government agencies. As suggested by Colic-Peisker (2012), a successful approach to migrant housing needs to include a collaboration among a range of partners, including the employment agencies and employers, the police, and the migrant workers themselves. A more comprehensive security network—one that links communities, police, and employers—should be established, so that residents can easily report crime and safety issues in the settlement. Note that this effectively defuses the issue of Perceived Behavioral Control, in which (as noted above) people feel powerless and therefore fail to press their serious concerns.

One reason why local communities tend to fight migrant labor settlements is their overall negative attitudes towards migrant labor. Negative media coverage may have helped foment these negative attitudes. This is particularly true when it comes to concerns about crime and safety—concerns which are not always borne out by the evidence (Kanapathy, 2006; World Bank, 2013). Our suggestion is that effective communication platforms should be established between the local community and the migrant laborers to address this, with the assistance of a third party, such as a nongovernmental organization (NGO), a local council, or a negotiator. This will lead to increased mutual understanding between the community and migrant labor, and allow for more successful negotiations of the issues at hand. Miraftab (2016) notes that migrant laborers contribute to the host society and economy in many ways, and that local communities should be guided to view a multidirectional flow of resources between the host country and the migrant's country, rather than seeing the migrant as receiving assistance from the host country and giving nothing in return.

This study is among the first to attempt to provide an explanation for local residents' response to migrant labor settlements established within residential neighborhoods—specifically, community acceptance of

migrant labor settlements. The findings indicate that the negative “NIMBY” phenomenon often evident among residents can be resolved, provided that the identified concerns and other variables are given sufficient attention.

As Malaysia’s economy grows, more migrant laborers will be needed to support the continuous development of the nation. Kaur (2014), for example, recommends that Malaysia should plan for long-term dependence on foreign labor. This rising number of migrant laborers will create the need for more settlements, with the possibility of more frequent and severe confrontations with local communities. The suggestion to simply relocate migrant labor from existing residential areas and regroup them into separate migrant villages is likely to be at best a short-term solution, since so doing only shifts the NIMBY phenomenon from one place to another—and sooner or later, the same question of where these new migrant villages should be located will come back to policymakers.

Recent news regarding large-scale operations to detain illegal migrant labor, abusive employers (whose victims are often foreign domestic helpers), wage fraud, and poor working conditions have all contributed to demotivating migrant laborers to work in Malaysia. Especially given its reputation as a nation of strong multi-ethnic and multi-cultural religious traditions, Malaysia can and should promote itself as a migrant labor-friendly nation. Enhancing community acceptance of migrant labor—by addressing the concerns among all constituents—would be a strong starting point.

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References

1. Ager, A., & Strang, A. (2008). Understanding Integration: A Conceptual Framework. *Journal of Refugee Studies* VO-21
2. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*. 50 (2), 179-211
3. Amit, K., Achdut, N. and Achdut, L. (2015). Public attitudes toward policies related to labor migrants in Israel. *The Social Science Journal*. 52(4), 516-526
4. Armitage, C.J. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British Journal of Social Psychology* 40, 471-499
5. Aziah, A.M. (2004). Tuberculosis in Malaysia: combating the old nemesis. *Med J Malaysia*. 59(1), 1-3
6. Bavanim (2013, June 3). KL heaped with rubbish. *The Star*. Retrieved June 28, 2017, from <http://www.starproperty.my/index.php/articles/property-news/kl-heaped-with-rubbish/>
7. Bernama. (2017, October 7). Penang govt goes ahead with foreign worker dorms. *Malaysian National News Agency*. Retrieved May 10, 2018, from <http://www.bernama.com/en/general/news.php?id=1398204>
8. Boorah, V.K. and Carcach, C.A. (1997). Crime and fear: Evidence from Australia. *British Journal of Criminology*. 37(4), 635-657
9. Chin, W.W. (1998a). The partial least square approach to structural equation modeling. In Marcoulides, G.A. (Ed.) *Modern methods for business research* (pp. 295-358). Lawrence Erlbaum, Mahwah
10. Chin, W.W. (1998b). Issues and opinion on structural equation modeling. *MIS Quarterly*. 22(1), 7-16

11. Chin, W.W. (2010). How to write up and report PLS analyses. In Vinzi, V. E., Chin, W. W., Henseler, J. and Wang H. (Eds.) *Handbook of Partial Least Squares* (pp. 655-690). London, New York: Springer
12. Chin, M. (2017). Migrant workers villages? Heaven forbid; let them be among us. Retrieved May 10, 2018, from <https://aliran.com/thinking-allowed-online/2017-ta-online/migrant-workers-villages-heaven-forbid-let-among-us/>
13. Ceobanu, A.M. and Escandell, X. (2010). Comparative analyses of public attitudes toward immigrants and immigration using multinational survey data: A review of theories and research. *Annual Review of Sociology*. 36, 309-328
14. Colic-Peisker, V. (2012). *Immigration and housing policy*. In Smith, S.J. (Ed.) *International Encyclopedia of Housing and Home* (Vol. 4). Elsevier Ltd. <https://doi.org/10.1016/B978-0-08-047163-1.00697-4>
15. Devine-Wright, P. (2005). Beyond NIMBYism: towards an integrated framework for understanding public perceptions of wind energy. *Wind Energy*. 8(2), 125-139
16. Endo, Isaku; De Smet, Dieter J. (2017). *Greenback 2.0 Johor Bahru Report : migrant workers' remittances from Malaysia (English)*. *Malaysia development experience series*. Washington, D.C.: World Bank Group
17. <http://documents.worldbank.org/curated/en/369391509457405143/Greenback-2-0-Johor-Bahru-Report-migrant-workers-remittances-from-Malaysia>
18. Ferwerda, J., Flynn, D.J. and Horiuchi, Y. (2017). Explaining opposition to refugee resettlement: The role of NIMBYism and perceived threats. *Science Advances*. 3(4), e1700812
19. Fornell, C. and Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*. 18, 39-50
20. Gallent, N., Mace, A. and Tewdwr-Jones, M. (2002). Delivering affordable housing through planning: explaining variable policy usage across rural England and Wales. *Planning Practice and Research*. 17(4), 465-483
21. Glennie, C. (2015). Singapore is keeping an eye on its migrant workers. *BBC News*. Retrieved April 2, 2018, from <http://www.bbc.co.uk/news/business-32297860>
22. Harkins, B. and Ahlberg, M. (2017). *Access to justice for migrant workers in South-East Asia*. Retrieved January 5, 2018, from http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/documents/publication/wcms_565877.pdf

23. Hair, J. F., Hult, G. T. M., Ringle, C. M., and Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. SAGE Publications, Thousand Oaks
24. Hair, J.F., Ringle, C.M. and Sarstedt, M. (2011). PLS-SEM: indeed a silver bullet. *The Journal of Marketing Theory and Practice*. 19(2), 139-152
25. Henseler, J., Ringle, C.M. and Sarstedt, M. (2015). A new criterion for assessing discriminant validity in Variance-based Structural Equation Modeling. *Journal of the Academy of Marketing Science*. 43(1), 115-135
26. Hubbard, P. (2005). Accommodating Otherness: anti-asylum centre protest and the maintenance of white privilege. *Transactions of the Institute of British Geographers*. 30(1), 52-65
27. Iglesias, T. (2002). Managing local opposition to affordable housing: a new approach to NIMBY. *Journal of Affordable Housing & Community Development Law*. 12(1), 78-122
28. International Labor Organization. (2015). *Migration in ASEAN in figures: The International Labor Migration Statistics (ILMS) Database in ASEAN*. International Labor Organization, Thailand
29. Kanapathy, V. (2006). Migrant workers in Malaysia: An overview. *Workshop on an East Asian Cooperation Framework for Migrant Labor*. 6th-7th December 2006. Kuala Lumpur, Malaysia
30. Kaur, A. (2014). Managing Labor Migration in Malaysia: Guest Worker Programs and the Regularisation of Irregular Labor Migrants as a Policy Instrument. *Asian Studies Review*. 38(3), 345–366 <https://doi.org/10.1080/10357823.2014.934659>
31. LaGrange, R., Ferraro, K. and Supancic, M. (1992). Perceived risk and fear of crime: role of social and physical incivilities. *Journal of Research in Crime and Delinquency*. 29, 311-334
32. Lee, H.A. (2017). Labor Policies and Institutions in the Eleventh Malaysia Plan: Aiming High, Falling Short. *Journal of Southeast Asian Economies*. 34(3), 552–570
33. Malaysia. (2015). *Eleventh Malaysia Plan 2016-2020: Anchoring Growth on People*. Putrajaya: Prime Minister's Department
34. Maney, G.M. and Abraham, M. (2008). Whose backyard? Boundary making in NIMBY opposition to immigrant services. *Social Justice*, 35(4(114)), 66-82
35. Mazzocchi, M. (2008). *Statistics for marketing and consumer research*. Thousand Oaks: SAGE Publications Ltd.
36. Ministry of Home Affairs. (2016). Number of Foreign Workers in Malaysia by Sector, 2000 - 2015. *Website of Economic Planning Unit, Malaysia*, 1–2. Retrieved April 11, 2018, from <http://www.epu.gov.my/sites/default/files/1.5.1.pdf>

37. Ministry of Home Affairs. (2017). Number of Foreign Workers by Gender and Country of Origin. Retrieved May 8, 2018, from http://www.data.gov.my/data/ms_MY/dataset/jumlah-pekerja-asing-plks-aktif-mengikut-jantina-dan-negara-sumber
38. Miraftab, F. (2016). *Global heartland: displaced labor, transnational lives, and local placemaking*. Bloomington: Indiana University Press
39. Moffat, K., and Zhang, A. (2014). The paths to social licence to operate: An integrative model explaining community acceptance of mining. *Resources Policy*. 39(1), 61–70
40. Munoz Moreno, Rafael; Del Carpio, Ximena Vanessa; Testaverde, Mauro; Moroz, Harry Edmund; Carmen, Loo; Smith, Rebekah Lee; Ozden, Caglar; Karakurum-Ozdemir, Kamer; Yoong, Pui Shen. (2015). *Malaysia - Economic monitor: immigrant labor* (English). Washington, D.C.: World Bank Group. Retrieved May 10, 2018, from <http://documents.worldbank.org/curated/en/753511468197095162/Malaysia-Economic-monitor-immigrant-labor>
41. New Straits Times. (2015, September 21). Experts: Screen foreign workers regularly. New Straits Times. Retrieved March 6, 2018, from <https://www.nst.com.my/news/2015/09/experts-screen-foreign-workers-regularly>
42. Nguyen, M., Basolo, V. and Tiwari, A. (2013). Opposition to affordable housing in the USA: debate framing and the responses of local actors. *Housing, Theory and Society*. 30(2), 107-130
43. Nielsen, I. and Smyth, R. (2008). Who wants safer cities? Perceptions of public safety and attitudes to migrants among China's urban population. *International Review of Law and Economics*. 28(1), 46-55
44. Nunally, J.C. and Bernstein, I.H. (1994). *Psychometric Theory*. McGraw Hill, New York
45. Raijman, R. and Semyonov, M. (2004). Perceived threat and exclusionary attitudes toward foreign workers in Israel. *Ethnic and Racial Studies*. 27(5), 780-799
46. Ringle, Christian M., Wende, Sven and Becker, Jan-Michael. (2015). *SmartPLS 3*. Bönningstedt: SmartPLS. Retrieved January 15, 2018, from <http://www.smartpls.com>
47. Ruming, K. (2014a). "It wasn't about public housing, it was about the way it was done": challenging planning not people in resisting the Nation Building Economic Stimulus Plan, Australia. *Journal of Housing and the Built Environment*. 29(1), 39-60
48. Ruming, K. (2014b). Social mix discourse and local resistance to social housing: the case of the Nation Building Economic Stimulus Plan, Australia. *Urban Policy and Research*. 32(2), 163-183

49. Schively, C. (2007). Understanding the NIMBY and LULU phenomena: reassessing our knowledge base and informing future research. *Journal of Planning Literature*. 21(3), 255-266
50. Semyonov, M., Raijman, R. and Yom-Tov, A. (2002). Labor market competition, perceived threat, and endorsement of economic discrimination against foreign workers in Israel. *Social Problems*. 49(3), 416-431
51. Sirat, M and Ghazali, S (2011). Migrant labor, residential conflict and the city: The case of foreign worker's invasion of residential neighbourhoods in Penang, Malaysia. In Wong, T.-C., & Rigg, J. (Ed.). *Asian cities, migrant labor and contested spaces*. (175-200). London, New York : Routledge. Retrieved February 18, 2018, from <https://search.ebscohost.com/login.aspx?direct=true&db=cat00916a&AN=mit.001713807&site=eds-live&scope=site>
52. Stansfield, R. and Stone, B. (2018). Threat perceptions of migrants in Britain and support for policy. *Sociological Perspectives*. 1-18
53. The Malay Mail Online. (2016, March 12). Almost half of tested foreign workers have TB, doctors say. *The Malay Mail*. Retrieved March 6, 2018, from <http://www.themalaymailonline.com/malaysia/article/almost-half-of-tested-foreign-workers-have-tb-doctors-say#dqmJ4u43kKyTVGyi.97> [Accessed 6 March 2018]
54. The Star Online. (2015, March 14). Growing concern over TB. *The Star Online*. Retrieved March 6, 2018, from <https://www.thestar.com.my/news/nation/2015/03/14/growing-concern-over-tb-rise-in-ncd-and-greying-population-also-contributing-factors-says-ministry/>
55. The Star Online. (2015, November 2). All clear for foreign worker dorms. *The Star Online*. Retrieved May 10, 2018, from <https://www.thestar.com.my/news/nation/2015/11/02/all-clear-for-foreign-worker-dorms-state-expects-construction-of-hostels-with-facilities-to-start-ne/>
56. Tighe, J.R. (2010). Public opinion and affordable housing: a review of the literature. *Journal of Planning Literature*. 25(1), 3-17
57. Tunon, M., Baruah, N. (2012). Public attitudes towards migrant workers in Asia. *Migration and Development*. 1(1), 149-162
58. United Nations General Assembly. (2015). Transforming our world: The 2030 agenda for sustainable development, A/RES/70/1, Retrieved June 10, 2018, from <https://sustainabledevelopment.un.org/content/documents/7891Transforming%20Our%20World.Pdf>, (1), 1-5.
<https://doi.org/10.1007/s13398-014-0173-7.2>

59. Walmsley, T., Aguiar, A. and Ahmed, S. A. (2017). Labor Migration and Economic Growth in East and South-East Asia. *The World Economy*. 40(1), 116–139. <https://doi.org/10.1111/twec.12334>
60. Wolsink, M. (2000). Wind power and the NIMBY-myth: institutional capacity and the limited significance of public support. *Renewable Energy*. 21(1), 49-64
61. World Bank. (2013). *Immigration in Malaysia: Assessment of its economic effects, and a review of the policy and system*. Human Development, Social Protection and Labor Unit, East Asia and Pacific Region, World Bank
62. Zheng, G. and Liu, W. (2018). Same projects, different endings - Comparative case studies on NIMBY facility construction in Beijing. *Cities*. 73, 63-70

Appendix

Latent Variable	Statements
Attitude	1. I think accepting the siting of the foreign workers settlement in this neighborhood is the right thing to do.
	2. Having a foreign workers settlement within a local resident neighborhood is a good idea.
	3. I do not feel insecure with the foreign workers settlement located at this neighborhood
	4. The establishment of the migrant settlement will contribute to local economic activities, especially local merchandise and grocery shops.
	5. The establishment of the foreign workers settlement will enrich the local cultural value.
	6. The foreign workers settlement can bring negative impacts to its neighborhood.
Subjective norm	1. My families and friends think that I should accept the foreign workers settlement placement as it is.
	2. I am concerned about how society judges my opinion of the foreign workers settlement.
	3. My family and friends disagree with me living near to the foreign workers settlement.
	4. My family and friends believe that opposing the foreign workers settlement is not the right thing to do.
Concern	1. I am concerned with the health impacts from the foreign workers settlement.
	2. I am concerned about hygiene issues from the foreign workers settlement.
	3. I am concerned about crime and safety issues from the foreign workers settlement.
	4. I am concerned about the cultural differences of the foreign workers that live in the settlement.
	5. The foreign workers settlement affects property value in this neighborhood and I am concerned.
	6. I am concerned about the poor appearance of the foreign workers settlement.
	7. I am concerned that the foreign workers settlement is poorly maintained and managed.
Perceived	1. I have the right to oppose the placement of the foreign

behavioral control	workers settlement.
	2. The procedures for me to oppose the placement of foreign workers settlement is very complex.
	3. I feel helpless in asking for the relocation of the foreign workers settlement.
	4. I do not have alternatives other than staying in the neighborhood as it is.
Self-reported behavior for acceptance of migrant labor settlement—property engagement	1. I am likely to sell my property and/or move out of this neighborhood.
	2. I will keep staying in this neighborhood despite the foreign workers settlement.
	3. I do not recommend family and friends to live in this neighborhood, because it is located near to the foreign workers settlement.
Self-reported behavior for acceptance of migrant labor settlement—migrant settlement engagement	1. I am likely to seek help from/or report to the relevant authorities for the relocation of the foreign workers settlement.
	2. I have complained about the foreign workers settlement with neighbors/friends/family/others.
	3. I accept the foreign workers settlement in my neighborhood as it is.

Table 1. Summary of latent variables of community acceptance

Variable	Description	Percentage (%)
Gender	Male	56.2
	Female	43.8
Age	Below 21	20.5
	21–30	33.7
	31–40	23.6
	41–50	13.4
	51–60	5.5

	Above 60	3.3
Income	No income	8.4
	No fixed income	4.7
	Less than RM1,000	9.1
	RM1,001–RM2,000	28.6
	RM2,001–RM5,000	36.5
	RM5,001–RM10,000	10.3
	RM10,001–RM20,000	2.3
Education level	No formal education	0.7
	Primary school	6.1
	Secondary school	55.6
	College/University	37.6
Household size	5 and below	67.6
	More than 5	32.4
Property ownership status	Sole owner	33.5
	Property owned by spouse	6.9
	Property owned by family members	29.5
	Tenant	30.2
Length of time respondent has lived in survey neighborhood	5 years and below	37.6
	6–10 years	19.5
	11–15 years	12.4
	16–20 years	14.6
	More than 20 years	15.9

Table 2. Questionnaire respondents' profile

Latent variable and its associated indicators	Loading	Composite Reliability	AVE
Attitude (ATTD)		0.935	0.783
Attd_1	0.859		
Attd_2	0.876		
Attd_3	0.905		

Attd_6	0.897		
Subjective Norm (SN)		0.932	0.821
Sn_1	0.897		
Sn_3	0.913		
Sn_4	0.908		
Perceived Behavioral Control (PBC)		0.907	0.710
Pbc_1	0.868		
Pbc_2	0.856		
Pbc_3	0.856		
Pbc_4	0.786		
Concern (CON)		0.834	0.556
Con_2	0.730		
Con_3	0.795		
Con_5	0.733		
Con_6	0.724		
Migrant Settlement Engagement (MSE)		0.867	0.684
Mse_1	0.817		
Mse_2	0.816		
Mse_3	0.848		

Table 3. Reliability and validity assessment results of the measurement model

	ATTD	SN	PBC	CON	MSE
ATTD					

SN	0.358				
PBC	0.325	0.330			
CON	0.734	0.497	0.524		
MSE	0.536	0.470	0.498	0.801	

Table 4. Discriminant validity (HTMT criterion)

Path Relationships	Path Coefficient (β)	t-value	effect size (f ²)	Hypothesis
ATTD→MSE	0.113	2.192*	0.014	Supported
SN→MSE	0.140	3.189**	0.028	Supported
PBC→MSE	0.164	3.337**	0.037	Supported
CON→MSE	0.410	7.451**	0.156	Supported

*P<0.05; **P<0.001

Table 5. Significant testing results of the structural model path coefficient

Notes

ⁱ According to Jolovan Wham of the Humanitarian Organization for Migration Economics (HOME), out-of-town dormitories as built in Singapore are intended to keep migrant workers out of the community (Glennie, 2015).

ⁱⁱ A latent variable is an unobserved variable that needs to be measured with multi-indicators or items.