

# Caregivers Intention in Adapting The Waqf-Based Autistic Physical Environment Care-Centre

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## Abstract

This research is based on the theoretical framework of the Theory of Planned Behaviour, which identified the initial basements about the impact of attitude, awareness, and trust to this theory and how much it influences the future behaviour intention of caregivers of children with autism spectrum disorders (ASD). A field survey was conducted in Malacca, Malaysia to collect data from parents and caregivers of children with ASD. Structural equation modelling using the partial least squares (PLS) method with a bootstrap estimate was used to test the research model. The studies related to attitude, awareness, and trust in influencing behaviour intention are available in the Malaysia context. The finding of this study showed that caregivers have high behaviour intention to change the normal environment to more suitable care-centre physical environment for their children with ASD. The behaviour intention significantly influences by the variable of attitude and trust. Furthermore, the variable of trust successfully mediates the relationship between attitude and awareness toward behaviour intention. The results of this study indicate that this research model provide an effective prediction of the behaviour intention and provides valuable implications for academicians and practitioners. Children with ASD have a diverse, complex, and inescapable effect. The interest in setting up a suitable care-centre for children with ASD has mushroomed during the past few years. The key challenge for this enrichment face while serving good to these young children with ASD is the financial resources. Thus, to encounter the lack insight into this core issue, the usage of waqf as financial resource had been highlighted.

**Keywords:** Autism Spectrum Disorder (ASD), Care-Centre, Physical Environment, Children with Autism

## Introduction

Most of the children with ASD require centre-based treatment (Deochand, Conway & Fuqua, 2015), physical environment, healthcare, and special educational needs that are addressed by multiple professional service providers. The care-centre is an institution that

provides supervision and care of young children with ASD during the daytime, particularly so that their parents can hold jobs. Since the care-centre provides care for individuals, therefore it is important to consider the living, sensory features in the environment, therapeutic and educational needs of everybody (Deochand et al., 2015). For instance, the physical design for typical developing (TD) children mostly is bright coloured with contrast-coloured drawings and paintings on the wall, ample natural and artificial lighting, and similar type of chairs and tables (Manchala, 2016).

However, for the children with ASD's perspective, the coloured walls trigger temper tantrums and inability to concentrate on an activity in the classroom (Manchala, 2016). In other words, children with ASD can get distracted easily because they are trying to adapt to the unwelcoming and uncomfortable space. Unfortunately, parents experience lack of funding to fulfil the needs and to ensure it is tailored according to the needs of children with ASD. This is because wrong physical resources will cause unpleasant behaviour of the children and will lead to increasing parents and teacher's psychological burden. Furthermore, the information in literature reveals the focus is on school setting and psychiatric treatment facilities rather than children with ASD treatment facilities (Deochand et al., 2015). Therefore, it is important to cater special needs children with ASD, especially on their care-centre, so that they can do thrive in an inclusive situation.

### **Literature Review**

Theory of Planned Behaviour (TPB) is found to be well supported by empirical evidence (Ajzen, 1991) by performing behavioural in different areas by using predicting components which have high accuracy from the attitude toward behavioural, subjective norms and perceived behavioural control (Ajzen, 1991; Davis et al., 2002). The expected behaviour theory is an extension of the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) made possible by the weaknesses of the original models when dealing with actions over which persons have insufficient will power. The potential behavioural feedback effects of the antecedent variables are not displayed for ease of presentation. As in the original theory of reasoned action, the desire of individuals to perform a given activity is a central element in the theory of expected conduct. Intentions are thought to capture the motivating factors influencing a behaviour; they are indicators of how hard people are prepared to work, and how much time they expect to spend on carrying out the task.

Generally, the greater the intent to engage in behaviour, the more likely its success should be. However, it must be clear that a behavioural purpose can find expression in behaviour only if the behaviour involved is under volitional influence, i.e., whether the individual can decide to execute the behaviour at will or not. While some activities which fulfil this requirement very well, the success of others depends on such non-motivational factors as the availability of the necessary resources and opportunities, at least to some degree. These factors collectively reflect people's actual behavioural regulation (Ajzen, 1991). The basic paradigms of Theory of Planned Behaviour suggest that a particular behaviour will be performed if an individual believes (1) that such a behaviour leads to a valuable outcome (attitude); (2) that he/she will get approval from the reference group (subjective norms); and (3) that the resources, abilities, and opportunities to perform the behaviour are available (perceived behavioural control). This study decides to use the attitude and extending the variable with awareness and public trust in waqf institution.

### *Attitude*

Attitude is the one of the Theory of Planned Behaviour component determinants and defined as behavioural belief which represents the perceived outcome or attribute to the behaviour (Conner & Armitage, 1998). This variable explains the degree to which a person has a favourable or unfavourable evaluation or appraisal of the behaviour in question (Kautonen et al., 2011). A study by Icek Ajzen et al (2004) state that direct attitude can be rated by endpoint like harmful to beneficial, undesirable to desirable, unpleasant to pleasant, good to bad, reasonable to unreasonable, comfortable to uncomfortable, negative to positive, fair to unfair, enjoyable to unenjoyable and wrong to right. Evidently, attitude is viewed as an important and useful concept to predict. On the Theory of Planned Behaviour model, behavioural beliefs or attitude to the action can be interpreted as assumptions about the action's likely consequences. Behavioural values make the actions favourable or unfavourable. It tests to what extent a person has a negative or a positive assessment of his or her behavioural performance (Hoa et al., 2018).

### *Awareness*

Awareness is the stage where the individual is first exposed to the information or the first impression takes place before making any decision (Radu, 2013). Even though at this stage they are only able to find out the existence of something, but they still have lack of information on it. This is the first step to know the availability of something before they can choose to be involved with it. For instance, individuals that have the intention to buy a new product or service must firstly know that the product or service is available (Bellur, 1984). This has revealed that awareness is an important factor that will be able to influence the decision-making process.

### *Waqf public trust*

Waqf funding is well known as a potential financing system that not only focus on religious expenses but also supporting diverse needed worldwide, such as education, health, social care and commercial activates, basic infrastructures. This Islamic financial instrument, able open the broader opportunities to explore the potential to finance all areas without draining authorities' expenditure. The collaboration between the waqf and theory had been established in many researches (Osman et al., 2016; Daud et al., 2011; Ghazali & Sawari, 2014; Hasbullah et al., 2015; Thaker et al., 2018; Musa & Salleh, 2018; Ratnasari & Arifin, 2017; Sulaiman et al., 2016; Umam, 2020). Along with the revitalisation of waqf institutions around the world, there is a growing public trust concerning the waqf management (Osman et al., 2016) and the usefulness and ease of use of the crowdfunding-waqf model (Thaker et al., 2018). Thus, this study aims to contribute to the literature with the objective of better understanding of waqf public trust mediating role and behavioural intention in using the waqf funding to adapt a suitable build environment among target respondents. This study was relevantly related to the Theory of Planned Behaviour to explain the behaviours among parents and caregivers of children with ASD.

### **Methodology**

The model used for this research involves multiple constructs which are attitude, awareness, trust, and behavioural intention. PLS-SEM is essentially an iterative estimation procedure that integrates principal components analysis with multiple regressions (Jawahar & Nigama, 2011). PLS-based SEM has been and continued being extensively used in a wide

variety of fields such as information technology (Baker et al., 2007; Roni, 2015; Mohamadali, 2012) international marketing (Cornwell, 2001), entrepreneurship (Jawahar & Nigama, 2011; Kautonen et al., 2011; Linan, 2004; Cornwell, 2001) and business (Taskin, 2013). There are many factors to choose PLS-SEM which included low demands on sample size than other methods, applied to complex SEM with a large number of constructs, able to handle reflective constructs, suited for theory development, useful for prediction (Urbach & Ahlemann, 2010) and friendly user interface and advanced reporting features (Wong, 2013). Despite of that, this application is usually based on the assumption that the analysed data stem from a single population (Sarstedt et al., 2011).

Thus, this study decided to use the PLS-SEM to conduct data analysis because the data is collected from single population and the core of this study is based on the theory development to predict the parents with an ASD children's behaviour intention which highly able to solve by PLS-SEM. The PLS-SEM analysis is consisting of two stages which are the stage of assessing the measurement model and the stage for assessing the structural model.

## Results

This first stage in PLS-SEM is measurement model which is a necessary step before interpreting the structural model (PLS-SEM stage 2). This stage involved the assessment of item reliability, convergent validity, discriminate validity, and reliability. Convergent validity is defined as the degree to which individual items reflecting a construct converge comparison to items measuring a different construct (Mohamadali, 2012; Urbach & Ahlemann, 2010). The convergent and discriminant validity test to ensure that the measurements were in assent and do not reflect other factors (Hair, Hult, Ringle, & Sarstedt, 2013). Convergent validity was confirmed based on factor loadings, composite reliability and the average variance extracted (AVE). Table 2 indicated that all the variable or construct involved had composite reliability, ranging from 0.77 to 0.955. The result had exceeded the recommended values of 0.7.

Table 1

*Values of outer loadings, Cronbach alpha, AVE, VIF, R<sub>2</sub> and Q<sub>2</sub>*

Constructs	Factors loading	Composite reliability	Cronbach Alpha	AVE	VIF	R <sub>2</sub>	Q
ATT1	0.916	0.948	0.931	0.786	2.026		
ATT2	0.95						
ATT3	0.845						
ATT4	0.915						
ATT5	0.798						
INT1	0.895	0.946	0.924	0.815	2.927	0.668	0.68
INT2	0.868						
INT3	0.942						
INT4	0.905						
TRUST1	0.955	0.971	0.96	0.893	2.759	0.55	0.569
TRUST2	0.954						
TRUST3	0.941						
TRUST4	0.93						
AWARE1	0.892	0.891	0.815	0.732	1.196		
AWARE2	0.9						
AWARE3	0.77						

Table 2

*Correlation among the Constructs*

Constructs	ATT	INT	TRUST	AWARE
ATT	<b>0.887</b>			
INT	0.678	<b>0.903</b>		
TRUST	0.654	0.778	<b>0.945</b>	
AWARE	0.351	0.373	0.364	<b>0.856</b>

Note: Square roots of average variances extracted (AVEs) shown on diagonal.

Meanwhile, the method to assess the discriminate validity (Square-root of AVE) (Table 3) should be more than the correlations of the latent variables. Discriminate validity is a measure of the quality of a measurement instrument. The instrument itself is typically a set of question statement. A measurement instrument has good discriminate validity if the question statement associate with each latent variable is not confused by the respondents, in term of their meaning, with the question statement associated with the other latent variable (Kock, 2015). The AVE of this study constructs succeeded the passing acceptance level of 0.5 (Hair et al., 2013). All the items loading significantly by value of more than 0.6. The outcomes demonstrate the convergent validity of the measurement. In this study, discriminant validity was tested through the Hair et al. (2013). All the scales appear to have a considerably higher AVE value.

Reliability has been measured by two methods which are Cronbach's alpha ( $> 0.70$ ) and VIF ( $< 5.0$ ). Cronbach's alpha referring to measuring reliability associated to a latent variable and VIF is a measure of the degree of collinearity (or multicollinearity) among variables, including both indicators and latent variables (Kock & Lynn, 2012; Kock, 2015). Lastly, the nature of the construct can determine whether it formative or reflective using theoretical assessment, indicator inter-correlation and weight loading sign (Hair et al., 2010). Referring to table 2, the Cronbach alpha of the construct at the range 0.818-0.96, which is acceptably significant. In the meantime, all constructs VIF value is below than 0.5. The results of the measurement model indicate that various validity and reliability criteria are satisfactory and acceptable. Therefore, constructs developed in this measurement model could be used to test the structural model and the associated hypotheses.

The results of the structural model are presented in Table 2, 3 and 4. PLS-SEM stage 2 had proceeded after the result for measurement model is found to be relevant and accepted. This stage analysed coefficient of determination ( $R^2$ ), predictive relevance ( $Q^2$ ), and the effect size ( $F^2$ ) and path coefficients (P-Value). The model explained 68 per cent and 56.9 per cent of the variance in waqf public trust and behavioural intention to change respectively ( $R^2 =$  refer table 1). Attitude towards behavioural intention to change ( $\beta=.32$ ;  $p<0.006$ ), attitude towards trust ( $\beta=.55$ ;  $<0.001$ ), trust toward towards behavioural intention to change ( $\beta=.33$ ;  $p<0.001$ ) and awareness toward trust ( $\beta=.56$ ;  $p<0.005$ ) had significant relationships with the intention to invest in enhancing physical environment care-centre. Thus H1, H2, H3 and H4 were supported.

Table 3

*Result of structural model and hypothesis testing Path*

	Effect size	$\beta$	Hypothesis	P-Value	Results
<b>ATT→INT</b>	0.227	0.32	H1	0.006	supported
<b>ATT→TRUST</b>	0.373	0.55	H2	<0.001	supported
<b>TRUST→INT</b>	0.441	0.33	H4	<0.001	supported
<b>AWARE →TRUST</b>	0.177	0.56	H3	0.005	supported

### Conclusion and Discussion

This study is important in deciding a suitable care-centre for children with ASD since the main challenge for this effort is the financial resources. The results of this study, altogether, has important theoretical and practical implications. First and foremost, the study was able to provide a theoretical implication by giving additional empirical evidences within the domain of the Theory of Planned Behaviour which posits that attitude able to determine future behavioural intention. By extension, this study has been able to examine a broader range of organizational attributes in terms of the autistic-based physical environment care-centre awareness, and waqf public trust, and waqf institution may needed to develop trust attribute to deliver unique chance for this institution to be judge whether it is likely to be trustworthy or not.

Trust is built by exposure to information about the character and interests of the organization, often based on previous behaviour. Besides, the results of this study indicated that waqf trust is a relevant and significant mediator of attitude and awareness, influence on future behavioural intention to adapt the autistic-based physical environment care-centre via waqf funding, and it also suggests that attitude has a direct relationship at improving intention. This study has contributed to the literature with the aim to promote a better understanding of waqf public trust in using the waqf funding to adapt a convenient and suitable built environment among target respondents. This study was relevantly related to the Theory of Planned Behaviour to explain the behaviours among parents and caregivers of children with ASD.

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### References

- Ajzen, I. (1991). The theory of planned behavior. *Organ. Behav. Hum. Decis. Process.*, vol. 50 (2), pp. 179–211.
- Ajzen, I., Brown, T. C., & Carvajal, F. (2004). Explaining the Discrepancy Between Intentions and Actions: The Case of Hypothetical Bias in Contingent Valuation. *Personal. Soc. Psychol. Bull.*, vol. 30(9), pp. 1108–1121, doi: 10.1177/0146167204264079.
- Baker, E. W., Al-Gahtani, S. S., & Hubona, G. S. (2007). The effects of gender and age on new technology implementation in a developing country: Testing the theory of planned behavior (TPB),” *Inf. Technol. People*, vol. 20(4), pp. 352–375, doi: 10.1108/09593840710839798.
- Bellur, V. V. (1984). NOW Accounts : Awareness and Impact,” *Int. J. Bank Mark.*, vol. 2 (1), pp. 40–49.
- Conner, M., & Armitage, C. J. (1998). Extending the Theory of Planned Behavior: A Review and

- Avenues for Further Research. *J. Appl. Soc. Psychol.*, vol. 28 (15), pp. 1429–1464, doi: 10.1111/j.1559-1816.1998.tb01685.x.
- Cornwell, T. B. (2001). *Advances in International Marketing (Book)*. *J. Acad. Mark. Sci.*, vol. 29(3), pp. 318–319, doi: 10.1016/0167-8116(92)90003-4.
- Daud, D., Rahman, R. A., & Sulaiman, Z. (2011). Waqf Reporting to Fulfil Stakeholder Attribution in Waqf Islamic Councils. *Univ. Publ. Cent. Inst. Bus. Excell.*, vol. 10, pp. 38–53, doi: 10.1017/CBO9781107415324.004.
- Davis, L. E., Ajzen, I. I., Saunders, J., & Williams, T. (2002). The decision of African American students to complete high school: An application of the theory of planned behavior. *J. Educ. Psychol.*, vol. 94 (4), pp. 810–819, doi: Doi 10.1037//0022-0663.94.4.810.
- Ghazali, M. A. I., & Md. Sawari, S. S. (2014). *International Journal of Islamic and Civilizational Studies*,” *Int. J. Islam. Civiliz. Stud.*, vol. 01(2016), pp. 35–44.
- Hasbullah, N. A., Khairi, K. F., Ridhwan, M., & Aziz, A. (2015). The Theory of Planned Behaviour and The Impact of Moral Norm. *Stud. Soc. Sci. Humanit.*, vol. 3(2), pp. 61–70.
- Hoang, P. H., Dzong, H. O. C. H. I., & Long, N. H. (2018). Using TPB Model to Explore Drivers of and Barriers to Intention for Consumer Loan from Official Financial Institutions. *J. Asian Rev. Pblc Aff. Policy*, vol. 3(3), pp. 1–13, doi: <http://dx.doi.org/10.222.99/arpap/2018.40> Using.
- Jawahar, P. D., & Nigama, K. (2011). The influence of social capital on entrepreneurial opportunity recognition behaviour. *Int. J. Econ. Manag.*, vol. 5(2), pp. 351–368.
- Kautonen, T., Tornikoski, E. T., & Kibler, E. (2011). Entrepreneurial intentions in the third age: The impact of perceived age norms. *Small Bus. Econ.*, vol. 37(2), pp. 219–234, doi: 10.1007/s11187-009-9238-y.
- Mat Roni, M. S. M. (2015). *An Analysis of Insider Dysfunctional Behaviours in an Accounting Information System Environment*. Edith Cowan University.
- Mohamadali, N. A. K. (n.d). *Exploring New Factors and The Question of ‘Which’ in User Acceptance Studies of Healthcare Software*. The University of Nottingham, 2012.
- Mohsin, M. I. A. (2013). Financing through cash-waqf: a revitalization to finance different needs. *Int. J. Islam. Middle East. Financ. Manag.*, vol. 6(4), pp. 304–321, doi: 10.1108/IMEFM-08-2013-0094.
- Musa S. O., & Salleh, C. M. M. (2018). Proposing a Model for Entrepreneurship Development: the Role of Entrepreneurs’ Cash Waqf Intention. *J. Islam. Monet. Econ. Financ.*, vol. 4(1), pp. 183–204, doi: 10.21098/jimf.v4i1.764.
- Osman, A. F., Mohammed, M. O., & Fadzil, A. (2015). Factor Influencing Cash Waqf Giving Behavior : a Revised Theory of Planned Behavior. *J. Glob. Bus. Soc. Entrep.*, vol. 1(2), pp. 12–25.
- Radu, P. F. (2013). Relationship marketing strategies in the knowledge society. *Univ. Oradea, Fac. Econ. Economic Science Series*, 22(2), 605–613.
- Ratnasari, R. T., & Arifin, M. H. (2017). Theory of Planned Behavior in Intention to Pay Cash Waqf. *1st International Conferene on Islamic Economics, Business, and Philanthropy (ICIEBP)*, pp. 641–644, doi: 10.5220/0007087206410644.
- Sarstedt, M., Henseler, J., & Ringle, C. M. (2011). Measurement and Research Methods in International Marketing Article information. *Adv. Int. Mark.*, vol. 22, pp. 195–218.
- Sulaiman, M., Alwi, N. M., & Adnan, M. A. (2016). Waqf accountability from the stakeholder salience theory: a case study. *J. Islam. Monet. Econ. Financ.*, vol. 2, no. 1, pp. 1–140.
- Umam, M. R. K. (2020). Organizational commitment in the waqf organization of muhammadiyah: a perspective from social exchange theory,” *Al-Tahrir J. Pemikir. Islam*,

vol. 20(1), pp. 51–73, doi: 10.21154/altahrir.v20i1.2006.

Urbach, N., & Ahlemann, F. (2010). Structural Equation Modeling in Information Systems Research Using Partial Least Squares Structural Equation Modeling in Information Systems Research Using Partial Least Squares,” *J. Inf. Technol. Theory Appl.*, vol. 11(2), pp. 5–40.

Wong, K. K. K. (2013). Partial Least Squares Structural Equation Modeling (PLS-SEM) Techniques Using SmartPLS,” *Mark. Bull.*, vol. 24(1), pp. 1–32, doi: 10.1108/EBR-10-2013-0128.