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Developing and Validating the Terengganu Family Development Foundation (TFDF) Resident Responsibility Negligence Measurement Instrument

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Abstract: Low-cost housing and social housing in Malaysia were created as a proactive government measure to provide affordable housing for low-income groups. In Terengganu, the Terengganu Family Development Foundation (TFDF) plays an important role by providing Family Village Flat units as a housing alternative for the urban poor and families in need. However, the problem of rent arrears has been identified as an ongoing issue that not only affects the financial flow of TFDF, but also threatens the sustainability of social housing management. Previous studies have shown that the problem of rent arrears among low-cost housing residents is usually caused by unstable household income, increasing cost of living, weaknesses in family financial management, and the absence of a flexible payment system (Mohd Noor, 2020; Abdullah & Daud, 2022). However, the phenomenon of rent arrears cannot be seen only from a financial perspective, but also involves aspects of neglect of residents in various dimensions, social, economic, physical and moral. This study was conducted to develop and validate an instrument based on the Exploratory Factor Analysis (EFA) process to measure rent arrears among TFDF residents. This study uses a quantitative research method based on Structural Equation Modeling (SEM) to analyze the various relationships between variables in the study model. Before the data was analyzed using Structural Equation Modeling (SEM), Exploratory Factor Analysis (EFA) was conducted to identify the suitability of the items used in the study instrument. This study explains in detail the procedure for conducting Exploratory Factor Analysis (EFA) for each construct. The findings of this study show that the validity values based on Kaiser-Meyer-Olkin (KMO), Total Variance Explained (TVE), Factor Loading and reliability values based on Cronbach's Alpha, have met all the required values.

Keywords: Validity, Reliability, Terengganu Family Development Foundation (TFDF)

Introduction

Public housing provided by the government and related agencies aims to help low-income groups enjoy comfortable, affordable, and conducive housing. In Terengganu, the Terengganu Family Development Foundation (TFDF) plays an important role in providing housing for the underprivileged through the Flat Desa Keluarga project. However, there are long-standing issues related to the neglect of residents' responsibilities and an integrity crisis that affects the management of the flats and the well-being of the local community. Among the forms of neglect of responsibility identified include

failure to consistently pay rent, damage to shared property, irregular garbage disposal, and a casual attitude towards community rules. This not only burdens the TFDF management, but also affects the image of low-cost housing as a medium for social development. A study by Kamaruddin et al. (2018) shows that neglect of responsibility among public housing residents often stems from attitudinal factors, lack of civic awareness, and weak community oversight. In addition, the integrity crisis among residents is also a concern. Integrity refers to the values of honesty, trust, and accountability in carrying out obligations. However, there are residents who are not transparent in paying rent, abusing living assistance, and failing to demonstrate accountability as recipients of affordable housing benefits. According to Mohd Noor and Hashim (2021), an integrity crisis in the public housing community environment can affect social harmony, the effectiveness of housing policies, and the sustainability of community life. In the context of TFDF's Family Rural Flats, the problem of neglect of responsibility and integrity crisis not only affects the relationship between residents and management, but also has an impact on the quality of life of other residents. For example, the issue of high rent arrears will hinder TFDF's efforts to improve basic facilities, while the collapse of integrity values among residents causes social problems, community conflicts, and a decline in family values. Therefore, it is important to study this phenomenon in depth in order to identify the main factors that drive the neglect of responsibility and integrity crisis. This study can provide valuable input to TFDF in formulating more effective housing management policies, building civic awareness modules, and strengthening community integrity monitoring in low-cost flats. Furthermore, understanding this issue is in line with the aspirations of the National Housing Policy which emphasizes aspects of sustainability, well-being, and social responsibility in public housing.

Housing is one of the basic human needs that not only functions as a place to live, but also as a social, economic and cultural vehicle that shapes the quality of life. In Malaysia, the government has implemented various social housing initiatives to assist low-income groups, including the provision of low-cost housing and rental flats. These initiatives are not just about providing shelter, but also aim to reduce social gaps and improve the well-being of low-income families in urban and suburban areas (Abdullah & Daud, 2022). In Terengganu, the Terengganu Family Development Foundation (TFDF) is one of the main state agencies that manages low-cost rental housing schemes, including Family Village Flats. This program was created to provide opportunities for the urban poor, single mothers and marginalized families to obtain comfortable housing with low and affordable rental rates. However, the implementation of this scheme faces an ongoing issue of rent arrears among residents, which can affect the sustainability of management and the effectiveness of the original purpose of this project (Ismail & Rahman, 2021). The problem of rent arrears in low-cost housing is not new. Studies in various countries show that rent arrears are often associated with factors such as income instability, high cost of living, weaknesses in financial management, and residents' shirking of payment responsibilities (Mohd Noor, 2020; Omar et al., 2019). However, in the context of social housing, this issue becomes more complex as it also involves dimensions of neglect of residents from social, economic, physical and moral aspects.

Explortory Factor Analysis (EFA)

EFA is conducted to identify several components that exist in a set of questionnaires that have been formed. EFA is a statistical technique that linearly transforms a set of original construct data into a set of smaller constructs that can provide a comprehensive picture of all the information contained in the original construct (Duntemen, 1989). The purpose of EFA is to reduce the dimensions of the original data to several smaller components that can be interpreted more easily and meaningfully (Duntemen,

1989; Lewis-Beck, 1994 & Field, 2016). According to Tabachnick and Fidell (2013), EFA needs to go through several stages. The first stage is to calculate the correlation matrix between all the constructs that are factor analyzed. The next stage involves extracting several factors from the correlation matrix and determining the number of factors formed (Alam et al., 2025). The rotation of the factors is done to improve the interpretation so that the factors are more meaningful and interpretable. The last and most important stage in factor analysis is to interpret the results of the factors obtained and give a suitable name to each factor. According to Chik, Abdullah, Ismail and Mohd Noor (2024) and Hoque et al (2017), if researchers adapt instruments that have been developed by previous researchers and modify the statements to suit the current study, then they need to re-run the EFA procedure. This is because the current study area may be different from previous studies, or the current study population is very different from previous studies in terms of socioeconomic status, race and culture. Therefore, there may be some items that have been developed previously, which are no longer suitable for the current study or there may also be a different item structure in the current study compared to the structure in the previous study (Hossen & Pauzi, 2025). Therefore, researchers need to recalculate the Internal Reliability value for the current instrument, which is the new Cronbach's Alpha value (Chik et al., 2024; Hoque et al., 2017). In this study, the researchers conducted a pilot study on 100 residents at TFDF and re-ran the EFA on the items that measure the construct.

Findings

Exploratory Factor Analysis (EFA) based on Rental Payment Method

Each item in the Rental Payment Method uses a total of five (5) items and is labeled BS1 to BS5. Next, the use of an interval scale for measuring the items is between one (1) (Strongly Disagree) to 10 (Strongly Agree). The EFA procedure using the Principal Component Analysis (PCA) method with Varimax Rotation was conducted on five (5) items that measure the Rental Payment Method. The results of Table 1 below show that the value of Bartlet's Test is significant (P-Value < 0.05). Measure of Sampling Adequacy by Kaiser-Meyer-Olkin (KMO) is 0.781 which is above the minimum value of 0.6 (Chik et al., 2024; Hoque et al., 2017). Both of these achievements (Bartlet's Test significant & KMO value>0.6) reflect the observed data is suitable for the next procedure in EFA (Chik et al., 2024; Hoque et al., 2017).

Table 1 KMO Values and Bartlet's Test for Rental Payment Method

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.781
	Approx. Chi-Square	341.768
Bartlett's Test of Sphericity	df	10
	Sig.	0.000

Total Variance Explained (TVE) is important for researchers to know what percentage of the items used can measure a research construct. Table 2 below shows the total variance value estimated by the items used to measure the Rental Payment Method. Reading from Table 2 below found that Rental Payment Method measured using five (5) items in one component can measure Rental Payment

Method as much as 67.410%. This value is sufficient because it exceeds the minimum requirement of 60% (Chik et al., 2024; Hoque et al., 2017).

Table 2 Total Variance Explained for Rental Payment Method

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	3.370	67.410	67.410

Findings from Table 2 above show that Rental Payment Method is measured by only one component. Thus, the researcher wants to know the selected items to measure the component. Table 3 below shows the distribution of items accepted to measure Rental Payment Method. All items have a factor loading value exceeding the minimum limit of 0.6 and items that are less than 0.6 should be discarded because they do not contribute to the measurement of the construct (Chik et al., 2024; Hoque et al., 2017).

Table 3 Factor Loading for One (1) Component Rental Payment Method

Component Matrix ^a	
Items	Component
BS1	0.906
BS2	0.937
BS3	0.877
BS4	0.910
BS5	0.820

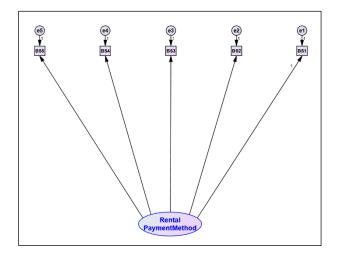


Figure 1. Position of Components and Items for Rental Payment Method (Before and After EFA)

Another piece of information that researchers need to report is the reliability value of the items that have been built to measure that construct. The measure of instrument reliability is estimated through Cronbach's Alpha value that exceeds the minimum limit of 0.7 to be adopted in the study. Table 4 below shows the value of Cronbach's Alpha equal to 0.865, for each item in the Rental Payment Method that exceeds 0.7 and can be used in this study (Chik et al., 2024 & Hoque et al., 2017).

Table 4 Cronbach's Alpha Value for Each Item in the Rental Payment Method

Component	Number of Items	Cronbach's Alpha	
1	5	0.865	

Exploratory Factor Analysis (EFA) based on Attitudes and Life Habits

Each item in the Attitudes and Life Habits uses a total of five (5) items and is labeled TH1 to TH5. Next, the use of an interval scale for measuring the items is between one (1) (Strongly Disagree) to 10 (Strongly Agree). The EFA procedure using the Principal Component Analysis (PCA) method with Varimax Rotation was conducted on five (5) items that measure the Attitudes and Life Habits. The results of Table 5 below show that the value of Bartlet's Test is significant (P-Value < 0.05). Measure of Sampling Adequacy by Kaiser-Meyer-Olkin (KMO) is 0.885 which is above the minimum value of 0.6 (Chik et al., 2024; Hoque et al., 2017). Both of these achievements (Bartlet's Test significant & KMO value>0.6) reflect the observed data is suitable for the next procedure in EFA (Chik et al., 2024; Hoque et al., 2017).

Table 5 KMO Values and Bartlet's Test for Attitudes and Life Habits

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy 0.885		0.885
	Approx. Chi-Square	433.258
Bartlett's Test of Sphericity	df	10
	Sig.	0.000

Total Variance Explained (TVE) is important for researchers to know what percentage of the items used can measure a research construct. Table 6 below shows the total variance value estimated by the items used to measure the Attitudes and Life Habits. Reading from Table 6 below found that Attitudes and Life Habits measured using five (5) items in one component can measure Attitudes and Life Habits as much as 79.413%. This value is sufficient because it exceeds the minimum requirement of 60% (Chik et al., 2024; Hoque et al., 2017).

Table 6 Total Variance Explained for Attitudes and Life Habits

Component	Extrac	tion Sums of Squar	red Loadings
	Total	% of Variance	Cumulative %

1	3.971	79.413	79.413

Findings from Table 6 above show that Attitudes and Life Habits is measured by only one component. Thus, the researcher wants to know the selected items to measure the component. Table 7 below shows the distribution of items accepted to measure Attitudes and Life Habits. All items have a factor loading value exceeding the minimum limit of 0.6 and items that are less than 0.6 should be discarded because they do not contribute to the measurement of the construct (Chik et al., 2024; Hoque et al., 2017).

Table 7 Factor Loading for One (1) Component Attitudes and Life Habits

Component Matrix ^a	
Component	
0.914	
0.886	
0.951	
0.829	
0.871	

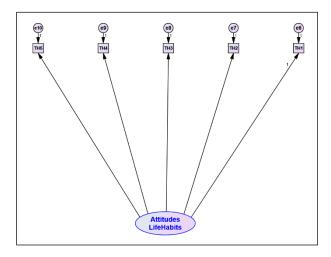


Figure 2. Position of Components and Items for Attitudes and Life Habits (Before and After EFA)

Another piece of information that researchers need to report is the reliability value of the items that have been built to measure that construct. The measure of instrument reliability is estimated through Cronbach's Alpha value that exceeds the minimum limit of 0.7 to be adopted in the study. Table 8 below shows the value of Cronbach's Alpha equal to 0.933, for each item in the Attitudes and Life Habits that exceeds 0.7 and can be used in this study (Chik et al., 2024 & Hoque et al., 2017).

Table 8 Cronbach's Alpha Value for Each Item in the Attitudes and Life Habits

Component	Number of Items	Cronbach's Alpha
1	5	0.933

Exploratory Factor Analysis (EFA) based on Social Symptoms

Each item in the Social Symptoms uses a total of five (5) items and is labeled GS1 to GS5. Next, the use of an interval scale for measuring the items is between one (1) (Strongly Disagree) to 10 (Strongly Agree). The EFA procedure using the Principal Component Analysis (PCA) method with Varimax Rotation was conducted on five (5) items that measure the Social Symptoms. The results of Table 9 below show that the value of Bartlet's Test is significant (P-Value < 0.05). Measure of Sampling Adequacy by Kaiser-Meyer-Olkin (KMO) is 0.759 which is above the minimum value of 0.6 (Chik et al., 2024; Hoque et al., 2017). Both of these achievements (Bartlet's Test significant & KMO value>0.6) reflect the observed data is suitable for the next procedure in EFA (Chik et al., 2024; Hoque et al., 2017).

Table 9 KMO Values and Bartlet's Test for Social Symptoms

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy 0.759		0.759
	Approx. Chi-Square	318.542
Bartlett's Test of Sphericity	df	10
	Sig.	0.000

Total Variance Explained (TVE) is important for researchers to know what percentage of the items used can measure a research construct. Table 10 below shows the total variance value estimated by the items used to measure the Social Symptoms. Reading from Table 10 below found that Social Symptoms measured using five (5) items in one component can measure Social Symptoms as much as 69.220%. This value is sufficient because it exceeds the minimum requirement of 60% (Chik et al., 2024; Hoque et al., 2017).

Table 10 Total Variance Explained for Social Symptoms

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	3.980	69.220	69.220

Findings from Table 10 above show that Social Symptoms is measured by only one component. Thus, the researcher wants to know the selected items to measure the component. Table 11 below shows

the distribution of items accepted to measure Social Symptoms. All items have a factor loading value exceeding the minimum limit of 0.6 and items that are less than 0.6 should be discarded because they do not contribute to the measurement of the construct (Chik et al., 2024; Hoque et al., 2017).

Table 11 Factor Loading for One (1) Component Social Symptoms

Component Matrix ^a	
Items	Component
GS1	0.787
GS2	0.800
GS3	0.787
GS4	0.810
GS5	0.880

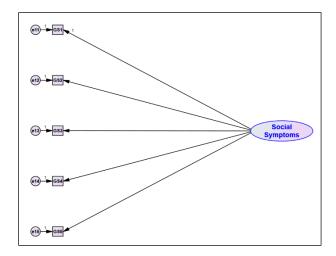


Figure 3. Position of Components and Items for Social Symptoms (Before and After EFA)

Another piece of information that researchers need to report is the reliability value of the items that have been built to measure that construct. The measure of instrument reliability is estimated through Cronbach's Alpha value that exceeds the minimum limit of 0.7 to be adopted in the study. Table 12 below shows the value of Cronbach's Alpha equal to 0.745, for each item in the Social Symptoms that exceeds 0.7 and can be used in this study (Chik et al., 2024 & Hoque et al., 2017).

Table 12 Cronbach's Alpha Value for Each Item in the Social Symptoms

Component	Number of Items	Cronbach's Alpha	
1	5	0.745	

Exploratory Factor Analysis (EFA) based on Moral Decline

Each item in the Moral Decline uses a total of five (5) items and is labeled KA1 to KA5. Next, the use of an interval scale for measuring the items is between one (1) (Strongly Disagree) to 10 (Strongly Agree). The EFA procedure using the Principal Component Analysis (PCA) method with Varimax Rotation was conducted on five (5) items that measure the Moral Decline. The results of Table 13 below show that the value of Bartlet's Test is significant (P-Value < 0.05). Measure of Sampling Adequacy by Kaiser-Meyer-Olkin (KMO) is 0.818 which is above the minimum value of 0.6 (Chik et al., 2024; Hoque et al., 2017). Both of these achievements (Bartlet's Test significant & KMO value>0.6) reflect the observed data is suitable for the next procedure in EFA (Chik et al., 2024; Hoque et al., 2017).

Table 13 KMO Values and Bartlet's Test for Moral Decline

KMO and Bartlett's Test			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy 0.818			
	Approx. Chi-Square	405.527	
Bartlett's Test of Sphericity	df	10	
	Sig.	0.000	

Total Variance Explained (TVE) is important for researchers to know what percentage of the items used can measure a research construct. Table 14 below shows the total variance value estimated by the items used to measure the Moral Decline. Reading from Table 14 below found that Moral Decline measured using five (5) items in one component can measure Moral Decline as much as 68.910%. This value is sufficient because it exceeds the minimum requirement of 60% (Chik et al., 2024; Hoque et al., 2017).

Table 14 Total Variance Explained for Moral Decline

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	3.912	68.910	68.910

Findings from Table 14 above show that Moral Decline is measured by only one component. Thus, the researcher wants to know the selected items to measure the component. Table 15 below shows the distribution of items accepted to measure Moral Decline. All items have a factor loading value exceeding the minimum limit of 0.6 and items that are less than 0.6 should be discarded because they do not contribute to the measurement of the construct (Chik et al., 2024; Hoque et al., 2017).

Table 15 Factor Loading for One (1) Component Moral Decline

Component Matrix ^a		
Items	Component	

0.816
0.747
0.767
0.888
0.833

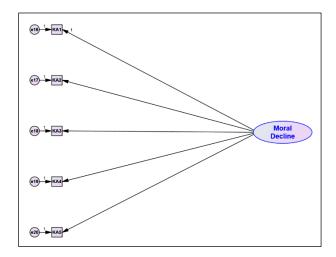


Figure 4. Position of Components and Items for Moral Decline (Before and After EFA)

Another piece of information that researchers need to report is the reliability value of the items that have been built to measure that construct. The measure of instrument reliability is estimated through Cronbach's Alpha value that exceeds the minimum limit of 0.7 to be adopted in the study. Table 16 below shows the value of Cronbach's Alpha equal to 0.845, for each item in the Moral Decline that exceeds 0.7 and can be used in this study (Chik et al., 2024 & Hoque et al., 2017).

Table 16 Cronbach's Alpha Value for Each Item in the Moral Decline

Component	Number of Items	Cronbach's Alpha	
1	5	0.845	

Exploratory Factor Analysis (EFA) based on Living Assistance

Each item in the Living Assistance uses a total of five (5) items and is labeled SH1 to SH5. Next, the use of an interval scale for measuring the items is between one (1) (Strongly Disagree) to 10 (Strongly Agree). The EFA procedure using the Principal Component Analysis (PCA) method with Varimax Rotation was conducted on five (5) items that measure the Living Assistance. The results of Table 17 below show that the value of Bartlet's Test is significant (P-Value < 0.05). Measure of Sampling Adequacy by Kaiser-Meyer-Olkin (KMO) is 0.715 which is above the minimum value of 0.6 (Chik et al., 2024; Hoque et al., 2017). Both of these achievements (Bartlet's Test significant & KMO value>0.6) reflect the observed data is suitable for the next procedure in EFA (Chik et al., 2024; Hoque et al., 2017).

Table 17 KMO Values and Bartlet's Test for Living Assistance

KMO and Bartlett's Test			
Kaiser-Meyer-Olkin Measure o	0.715		
	Approx. Chi-Square	361.215	
Bartlett's Test of Sphericity	df	10	
	Sig.	0.000	

Total Variance Explained (TVE) is important for researchers to know what percentage of the items used can measure a research construct. Table 18 below shows the total variance value estimated by the items used to measure the Living Assistance. Reading from Table 18 below found that Living Assistance measured using five (5) items in one component can measure Living Assistance as much as 77.251%. This value is sufficient because it exceeds the minimum requirement of 60% (Chik et al., 2024; Hoque et al., 2017).

Table 18 Total Variance Explained for Living Assistance

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	4.420	77.251	77.251

Findings from Table 18 above show that Living Assistance is measured by only one component. Thus, the researcher wants to know the selected items to measure the component. Table 19 below shows the distribution of items accepted to measure Living Assistance. All items have a factor loading value exceeding the minimum limit of 0.6 and items that are less than 0.6 should be discarded because they do not contribute to the measurement of the construct (Chik et al., 2024; Hoque et al., 2017).

Table 19 Factor Loading for One (1) Component Living Assistance

Component Matrix ^a		
Items	Component	
SH1	0.816	
SH2	0.898	
SH3	0.817	
SH4	0.823	
SH5	0.835	

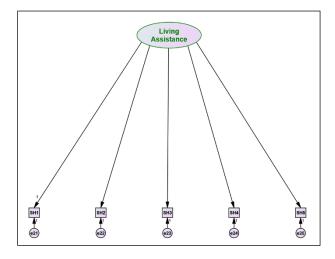


Figure 5. Position of Components and Items for Living Assistance (Before and After EFA)

Another piece of information that researchers need to report is the reliability value of the items that have been built to measure that construct. The measure of instrument reliability is estimated through Cronbach's Alpha value that exceeds the minimum limit of 0.7 to be adopted in the study. Table 20 below shows the value of Cronbach's Alpha equal to 0.813, for each item in the Living Assistance that exceeds 0.7 and can be used in this study (Chik et al., 2024 & Hoque et al., 2017).

Table 20 Cronbach's Alpha Value for Each Item in the Living Assistance

Component	Number of Items	Cronbach's Alpha
1	5	0.813

Exploratory Factor Analysis (EFA) based on Explanation of Rent Arrears

Each item in the Explanation of Rent Arrears uses a total of five (5) items and is labeled TS1 to TS5. Next, the use of an interval scale for measuring the items is between one (1) (Strongly Disagree) to 10 (Strongly Agree). The EFA procedure using the Principal Component Analysis (PCA) method with Varimax Rotation was conducted on five (5) items that measure the Explanation of Rent Arrears. The results of Table 21 below show that the value of Bartlet's Test is significant (P-Value < 0.05). Measure of Sampling Adequacy by Kaiser-Meyer-Olkin (KMO) is 0.897 which is above the minimum value of 0.6 (Chik et al., 2024; Hoque et al., 2017). Both of these achievements (Bartlet's Test significant & KMO value>0.6) reflect the observed data is suitable for the next procedure in EFA (Chik et al., 2024; Hoque et al., 2017).

Table 21 KMO Values and Bartlet's Test for Explanation of Rent Arrears

KMO and Bartlett's Test			
Kaiser-Meyer-Olkin Measure o	0.897		
Bartlett's Test of Sphericity	Approx. Chi-Square	928.472	
barriett 3 rest of Spheriotty	df	10	

Sig. 0.000

Total Variance Explained (TVE) is important for researchers to know what percentage of the items used can measure a research construct. Table 22 below shows the total variance value estimated by the items used to measure the Explanation of Rent Arrears. Reading from Table 22 below found that Explanation of Rent Arrears measured using five (5) items in one component can measure Explanation of Rent Arrears as much as 94.410%. This value is sufficient because it exceeds the minimum requirement of 60% (Chik et al., 2024; Hoque et al., 2017).

Table 22 Total Variance Explained for Explanation of Rent Arrears

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	4.720	94.410	94.410

Findings from Table 22 above show that Explanation of Rent Arrears is measured by only one component. Thus, the researcher wants to know the selected items to measure the component. Table 23 below shows the distribution of items accepted to measure Explanation of Rent Arrears. All items have a factor loading value exceeding the minimum limit of 0.6 and items that are less than 0.6 should be discarded because they do not contribute to the measurement of the construct (Chik et al., 2024; Hoque et al., 2017).

Table 23 Factor Loading for One (1) Component Explanation of Rent Arrears

Component Matrix ^a					
Items	ms Component				
TS1	0.934				
TS2	0.952				
TS3	0.943				
TS4	0.966				
TS5	0.925				

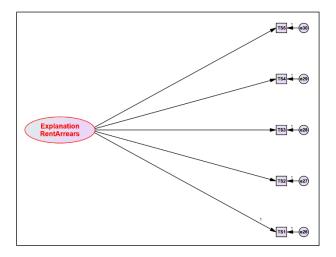


Figure 6. Position of Components and Items for Explanation of Rent Arrears (Before and After EFA)

Another piece of information that researchers need to report is the reliability value of the items that have been built to measure that construct. The measure of instrument reliability is estimated through Cronbach's Alpha value that exceeds the minimum limit of 0.7 to be adopted in the study. Table 24 below shows the value of Cronbach's Alpha equal to 0.985, for each item in the Explanation of Rent Arrears that exceeds 0.7 and can be used in this study (Chik et al., 2024 & Hoque et al., 2017).

Table 24 Cronbach's Alpha Value for Each Item in the Explanation of Rent Arrears

Component	Number of Items	Cronbach's Alpha		
1	5	0.985		

Overall Results of Exploratory Factor Analysis (EFA) Constructs

Based on the results of the EFA (Exploratory Factor Analysis) analysis on the questionnaire items, no items were excluded. Table 25 below shows the latest ranking of item categories after the EFA (Exploratory Factor Analysis) analysis was conducted and Figure 7 below shows all the items in the study model after EFA.

Table 25 Overall EFA Analysis Construct

	Constructs	Validity				Reliability
No		Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO>0.6)	Bartlett's Test of Sphericity (Sig.< 0.05)	Total Variance Explained (>60%)	Items Factor Loading (>0.60)	Cronbach' s Alpha (>0.70)
1	Rental Payment Method	0.781	0.000	67.410	5 items > 0.60	0.865
2	Attitudes and Life Habits	0.885	0.000	79.413	5 items > 0.60	0.933

ICI	RRD Journal				aı	rticle
3	Social Symptoms	0.759	0.000	69.220	5 items > 0.60	0.745
4	Moral Decline	0.818	0.000	68.910	5 items > 0.60	0.845
5	Living Assistance	0.715	0.000	77.251	5 items > 0.60	0.813
6	Explanation of Rent Arrears	0.897	0.000	94.410	5 items > 0.60	0.985

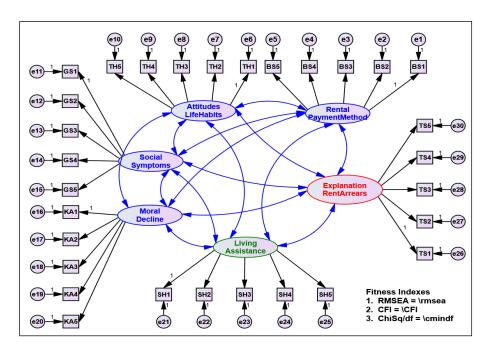


Figure 7. Overall Maturity of Youth Based on Rental Payment Method, Attitudes and Life Habits, Social Symptoms, Moral Decline, Living Assistance and Explanation of Rent Arrears

Conclusion

Overall, the requirements of the items in each construct Rental Payment Method, Attitudes and Life Habits, Social Symptoms, Moral Decline Living Assistance and Explanation of Rent Arrears, as a whole meet the KMO value (> 0.6), the achievement of Bartlet's Test (significant.), total variance value exceeds 60%, factor loading value exceeds the minimum limit of 0.6 and Alpha Cronbach exceeds the minimum limit of 0.7 for use in the study. This illustrates that the items are not excluded and are eligible for use in this study (Chik et al., 2024 & Hoque et al., 2017).

Validity refers to the extent to which the research instrument actually measures what it is supposed to measure. In this study, validity ensures that the questionnaire items, interviews, and rent arrears records used truly reflect the issues of neglect of responsibility, integrity crisis, life attitudes, and living assistance factors. With good validity, the study findings can reflect the real reality faced by residents and the TFDF. According to Creswell and Creswell (2018), validity is very important because it increases the accuracy of interpretation and reduces researcher bias.

Reliability refers to the level of consistency of the instrument or data when the study is conducted repeatedly. In the context of this study, high reliability means that residents' responses to the questionnaire or interview are stable and consistent, while the rent arrears records obtained from the TFDF are valid and trustworthy. This is important to prevent the study results from being influenced by coincidence or temporary circumstances. According to Tavakol and Dennick (2011), high reliability provides confidence that the study findings can be generalized to a wider situation.

The implications of this study when both aspects of validity and reliability are met, include:

- 1) Provide accurate, consistent and authoritative findings.
- 2) Ensure that the results of the analysis can be used to assess the real issues of the residents of TFDF's Family Rural Flats.
- 3) Enable proposed solutions (e.g. strategies to reduce rent arrears or improve the integrity of residents) to be more relevant and practical.

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References

- Abdullah, N. H., & Daud, N. (2022). Housing Affordability and Low-Income Tenants in Malaysia: Challenges and Policy Implications. *Journal of Social Policy in Asia*.
- Alam et al., 2025. (2025). Online Corrective Feedback and Self-Regulated Writing: Exploring Student Perceptions and Challenges in Higher Education. 15(06), 139–150. https://doi.org/https://doi.org/10.5430/wjel.v15n6p139
- Chik, Z., & Abdullah, A. H. (2018). Developing and validating instruments for measurement of motivation, learning styles and learning disciplines for academic achievement. *International Journal of Academic Research in Business and Social Sciences*, 8 (4), 594 605.
- Chik, Z., Abdullah, A. H., Ismail, M. S. & Mohd Noor, A. Z. (2024). Impact of Industrial Revolution 4.0 (IR4.0) Knowledge, Application Learning, University Policy, Commitment to Study and Motivation on Assimilate IR4.0 in Education. *Journal of Economics, Finance and Management Studies*, 7 (4), 3884 3889.

Chik, Z., Abdullah, A. H., Muda, M. R., Muda, H., Hashim, A.Mohamed, M. L., Said, S. & Kamaruddin, K. (2022). Determinants of Residential Satisfaction towards Low-cost Housing in Terengganu. *Journal of Engineering Research and Education (JERE): Vol. 13*, 35-43.

- Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 5th Edition. SAGE.
- Duntemen, G. H. (1989). *Principles components analysis: Quantitative applications in the social sciences*. California: Sage Publications, Inc.
- Field, A. (2016). Discovering statistics using SPSS. London: Sage Publications Ltd.
- Hoque, A. S. M. M., Awang, Z., Jusoff, K., Salleh, F., and Muda, H (2017). Social Business Efficiency: Instrument Development and Validation Procedure using Structural Equation Modelling. *International Business Management*, 11(1), 222-231.
- Ismail, S., & Rahman, A. (2021). Social Vulnerability and Housing Issues in Low-Cost Flats. *Malaysian Journal of Social Sciences*.
- Hossen, M. S., & Pauzi, H. M. (2025b). Synthesis of Psychological Wellbeing of the Elderly Individuals Literature Using Bibliometric Analysis. *Pertanika Journal of Social Sciences & Humanities*, 33(3).
- Kamaruddin, R., Omar, D., & Hamzah, H. (2018). Community responsibility and housing management issues in low-cost housing in Malaysia. *Planning Malaysia*, 16(1), 211-222.
- Lewis-Beck M. S. (1994). Factor analysis and related techniques. London: Sage Publication, Ltd.
- Mohd Noor, M. A., & Hashim, H. (2021). Integrity and accountability in community housing schemes: Challenges and prospects. *Journal of Social Development, 34*(2), 55-70.
- Mohd Noor, N. (2020). Tenant Behavior and Rent Arrears in Public Housing. *International Journal of Housing Studies*.
- Omar, R., Aziz, W. N. A. W., & Nawawi, A. H. (2019). *Low-Cost Housing Management Issues in Malaysia*. International Journal of Built Environment Research.
- Tabachnick, B. G., & Fidell, L. S. (2013). Using multivariate statistics (6th ed.). Boston, MA: Pearson.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55.



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