

PRE-RETIREMENT PLANNING OF EXPATRIATE INSTRUCTORS: APPLICATION OF THEORY OF PLANNED BEHAVIOR TO THE CASE OF THE SULTANATE OF OMAN

ILYA BYSTROV¹, MOHAMED WAHISH HASHIM², UMAIR WAQAS³, SONIA UMAIR⁴

University of Buraimi, Oman¹

University of Buraimi, Oman²

University of Buraimi, Oman³

Independant⁴

ilya.bystrov@gmail.com¹

mohamed.w@uob.edu.om²

umairwaqas@gmail.com¹

soniyalatif@gmail.com²

Abstract - With aging population of many countries, problems related to retirement become more and more important. At the same time, globalization resulted in emergence of new cultural groups that didn't exist just several decades ago. Focus of the present study was to determine predictors of pre-retirement behavior of expatriate instructors. This was done through application of the Theory of Planned Behavior. The study was based on a sample of 76 academicians employed in the Sultanate of Oman. The proposed model demonstrated good explanatory ability. Attitude and perceived behavioral control constructs proved to be good predictors of retirement behavior, while the impact of subjective norms was not confirmed. Further research can be conducted in different geographical locations and different occupational groups.

Keywords: retirement; pre-retirement planning; expatriate instructors; Theory of Planned Behavior; Oman

INTRODUCTION

Problems related to retirement should be under close attention of governments and businesses. For the first category it means deeper insight in existing tendencies that later will have an impact on local social security system. For the latter it gives better understanding of factors that define career trajectories and motivations of employees. The latest publications show that this problem area is recognized and receives a fair care of researchers. In this way, for example, the importance of pension as an indispensable part of an employee's benefits (Fapohunda, 2013) is recognized, as well as instruments to delay retirement in countries that experience population aging are proposed (Shen & Yang, 2021).

However, even though the importance of this problem area is recognized by the key players, responsibilities and risks associated with retirement are shifting towards individuals (Z. Chen & Zurlo, 2019). There is no surprise that such shift causes pre-retirement anxiety, disillusionment and apprehension (Asiedu et al., 2018; Peter Kofi Vordzorgbe et al., 2018) and requires institutionalized reaction and even counselling. As an example, getting and following financial advising and consultations during retirement planning demonstrates increased post-retirement spending (Harlow et al., 2020). In the similar way, even though employees of educational sector didn't demonstrate a high level of psychological readiness for retirement (Gathiira et al., 2019), relevant psychosocial programs could improve this.

Our study has an aim to contribute to the corresponding body of knowledge by an attempt to get an insight of how expatriate instructors approach to planning their retirement and which factors affect this. Our study limits itself with only one country - Sultanate of Oman. However, similar study can be extended to the entire Gulf Country Council (GCC) countries.



In general, the retirement-related questions can't be characterized as understudied. Different aspects of retirement have been covered by dozens of research publications that are mostly country-specific. The range is wide, starting with how retirement affects volunteering ability of an individual (Tang, 2016) and relation between the size of social networks and retirement (Kauppi et al., 2021) to retirement patterns of European couples (Hospido & Zamarro, 2021) and how spouses' health and employment status impact retirement-related decisions (Prattley & Chandola, 2021) Usually, researchers focus on retirement problems related to different occupational groups (e.g., teachers, lawyers, medical workers, etc.).

A vast number of publications focus on financial literacy as a factor that determines retirement planning. Most of them explore relation between financial literacy and retirement on samples covering a diverse set of countries - e.g., USA (Lusardi & Mitchell, 2017), China (B. Chen & Chen, 2023), Ghana (Sarpong-Kumankoma, 2023), India (Agarwal et al., 2015), Indonesia (Harahap et al., 2022), Finland (Kalmi & Ruuskanen, 2019), Japan (Sekita, 2011), Italy (Ricci & Caratelli, 2017) and Slovakia (Cupák et al., 2019).

Financial security is commonly named as a decisive factor in pre-retirement planning. A study carried out on pre-retirees aged between 51 and 61 (Z. Chen & Zurlo, 2019) indicated that having a retirement account is positively associated with retirement planning and mediates the relationship between credit card debt and retirement planning. Other types of debt, such as mortgage and credit card debt, are negatively associated with retirement planning. Another study (Wang & Bartholomae, 2020) based on US statistics revealed that many Americans are quite concerned about their financial security in retirement. Another study (Burkert & Hochfellner, 2017) examines relation between an intention to achieve better financial security and post-retirement employment.

Earlier studies (Szinovacz et al., 2001) underline the relation between retirement and family obligations and variation of this relation with respect to marital status, race and gender. Other studies point out the involvement of partners and spouses in the retirement planning as having a significant influence. In this sense, post-retirement goal instrumentality and goal alignment are linked to retrospective cognitive dependency of couples (Lamarche & Rolison, 2021). Another example of research in this area (Whitaker & Bokemeier, 2018) reviews the impact of spouses and families on retirement decisions of married pre-retirees.

In the recent years retirement-related research has been enriched with publications that incorporates sustainability agenda into consideration. As an example, a study (Mustafa et al., 2023) based on a sample of 416 self-employed Malaysians investigates the implications that financial and health literacy have on long-term financial planning for retirement. Another research (Ketkaew et al., 2022) studies Thailand waged workers in frames of sustainable retirement planning.

If we get closer to retirement intentions and planning among academicians, a relatively recent study (Silver & Williams, 2018) based on qualitative methodology examines interrelation between work identity and retirement intentions among North American academic physicians. The study reveals that strong work identity that is elaborated and developed throughout the career creates negative sensibility towards retirement and in this way delays it. Another publication shows that "Professional identity transfers with the teachers into retirement life." (Shlomo & Oplatka, 2023). Some studies (Tarkar & Dhamija, 2022) go even further and suggest that job satisfaction affects positively the intention to seek employment after retirement. Satisfaction is defined as a valid factor by other researches as well (Van Droogenbroeck & Spruyt, 2014). Prevalence of similar attitudes among expatriate instructors could be also relevant and requires investigation.

Another example of research dedicated to pre-retirement planning (Castillo et al., 2022) reveals predominating unreadiness of instructors to retire. The study has been performed in Wesleyan University - Philippines and focuses on those female instructors with Master's degree that are approaching retirement age (55 years old and above). Insufficiency of savings is named as one of the most significant factors of unreadiness to retire. Another study (De los Santos et al., 2020) explored the relationship between happiness with own financial status and readiness to retire



among Filipino employees. The research confirmed financial happiness, being a female and relatively higher educational levels to be good predictors of retirement readiness.

Retirement decision can also be affected by the social security system of a country. A recent research based on a sample of teachers from Tennessee, USA, (Ni et al., 2022) demonstrates that manipulation with pension plans has a potential to define a retirement decision.

Taking into consideration the range of factors described above and that can potentially define the approach or intention to retire, we developed our own research design that was used in our study.

THEORETICAL FRAMEWORK

The Theory of Planned Behavior (TPB) is a widely accepted theoretical framework that analyses and forecasts behavioral patterns in people. According to the TPB, human behavior results from an individual's intention to carry out a certain conduct, which is defined by three variables: attitude, subjective norms and a person's perceived behavioral control. This paradigm has been widely applied in a number of disciplines, including social, environmental, and health psychology. We shall thoroughly study the TPB and look at its uses in various contexts in this literature review.

The TPB was first presented (Ajzen, 1991) as a further development of the Theory of Reasoned Action (TRA). The TRA contends that an individual's attitude towards a conduct and subjective norm determine their behavior. Perceived behavioral control, which refers to the individual's confidence in the ability to carry out an action, is a third aspect that the TPB adds. The TPB has been proven to be useful in predicting a wide range of behaviors, e.g. quitting smoking (Norman et al., 1999).

The person's opinion of the activity, whether favorable or unfavorable, is their attitude towards the behavior. It comprises opinions on the significance of the consequences of the behavior as well as its effects. The subjective norm is how an individual feels under societal pressure to engage in a behavior or not to engage in it. It entails attitudes towards crucial individuals' expectations as well as the drive to live up to them. The individual's assessment of how easy or difficult it is to carry out the behavior is known as perceived behavioral control. Beliefs regarding the opportunity and resources available to engage in the behavior are included.

The TPB has also been used to study a variety of behaviors besides health, including environmental behaviors (Turaga et al., 2010). The TPB also proved successful in predicting ecologically favorable actions, such as recycling and cutting back on energy consumption (Bamberg & Möser, 2007).

Overall, it has been demonstrated that the Theory of Planned Behavior is a reliable theoretical model for forecasting a range of behaviors in a variety of contexts. The three main constructs of this model offer a thorough framework for comprehending the elements that influence behavior. The TPB can be used by researchers and practitioners to create and assess interventions that try to alter behavior in diverse circumstances.

METHODOLOGY

A qualitative deductive methodology was utilized in the study to evaluate the Theory of planned behavior (Hyde, 2000), which is considered to be a good prediction instrument for changes in behavior (Ajzen, 2011, 2020; Bosnjak et al., 2020). The study was based on the sample of 76 university instructors of different academic ranks working in higher education establishments operating in the Sultanate of Oman. The sampling frame was constrained by the university's privacy restrictions; hence the study used a non-probability convenience sampling.

The questionnaire contained five sections: demographic information, Retirement intention (five questions), Subjective norms (six questions), Attitude (four questions), Perceived behavioral control (seven questions). Construct-related questions supposed answers with the 7-point Likert scale.



Retirement Intention construct included the following questions:

INTQ1. My approach to retirement supposes that I will not require any external support

INTQ2. My approach to retirement supposes that I make sufficient savings during my career to secure financially independent retirement

INTQ3. I rely on the social security system for the time when I retire

INTQ4. I rely on support of my relatives for the time when I retire

INTQ5. I plan to stay partially employed when I reach retirement age

Subjective Norms construct was formed by the following questions:

SNQ1. I believe that my immediate family expects more that I should accumulate enough savings in any form before retirement to be fully self-sufficient

SNQ2. I believe that my friends expect that I should accumulate enough savings in any form before retirement to be fully self-sufficient

SNQ3. I believe that my colleagues expect that I should accumulate enough savings in any form before retirement to be fully self-sufficient

SNQ4. To which extent do you care about what your immediate family thinks when you are to take decisions about your future retirement

SNQ5. To which extent do you care about what your friends think when you are to take decisions about your future retirement

SNQ6. To which extent do you care about what your colleagues think when you are to take decisions about your future retirement

Attitude construct included the following questions:

AttIQ1. If you were to choose between financial self-sufficiency and dependence on your family/part-time work/social security when entering the retirement, what would you prefer?

AttIQ2. Since I entered the labor force, I have never thought that asking for support from the family or giving support back to the family is something extraordinary

AttIQ3. Regardless of financial matters, I would prefer to work part-time just for pleasure when I retire

AttIQ4. Putting extra financial burden on members of my family after I retire is not acceptable for me.

Perceived Behavioral Control construct included the following questions:

PBCQ1. I don't see ways how I would be able to accumulate savings and/or investments that would be sufficient to fully sustain my decent living when I retire

PBCQ2. I don't think I will be able to continue working with same efficiency as now when I retire

PBCQ3. The number of possible unexpected outcomes before I retire is so big that I can hardly predict what will happen when its time will come

PBCQ4. Nowadays, me and my instructor-colleagues constantly live under the pressure of financial responsibilities and the debt that we accumulate by the time we would like to retire doesn't allow us to do so and we are compelled to continue working.

PBCQ5. I don't think that my employer cares a lot about my retirement. That's why I need to rely on myself when the time of my retirement will come.



PBCQ6. I don't think that government of my country cares a lot about my retirement. That's why I need to rely on myself when the time of my retirement will come.

PBCQ7. I don't think that members of my family care a lot about my retirement. That's why I need to rely on myself when the time of my retirement will come.

HYPOTHESES

Hypothesis 1. Subjective norms affect the retirement intention among university instructors in Oman.

Hypothesis 2. Personal attitude affects the retirement intention among university instructors in Oman.

Hypothesis 3. Perceived behavioral control affects the retirement intention among university instructors in Oman.

RESPONDENTS PROFILE

Descriptive statistics were used to analyze the demographic details. Most of the 76 respondents were males, accounting for 78.9%, while females accounted for 21.1%. Most of the survey respondents belonged to two age categories, 45-54 (42.1%), and 35-44 (40.8%). The most commonly met highest qualification of the respondents was doctorate (72.4%), with the master's degree (27.6%) being on the second place.

Table 1 - Demographic of respondents

Variable	Frequency	(%)
Gender		
Male	60	78.9
Female	16	21.1
Age		
25-34 years	5	6.6
35-44 years	31	40.8
45-54 years	32	42.1
Over 55 years	8	10.5
Highest Qualification		
Doctorate	55	72.4
Master degree	21	27.6

The gender structure reflects well the realities of working as an expatriate instructor in Oman, as majority of the GCC countries are more friendly and welcoming to the male employees, while female employees can even experience difficulties in bringing their families to the country.



Requirements that are levied on the higher education institutions from the side of the local Ministry of Higher Education and accreditation authority are well reflected in the high share of doctor-degree holders among the respondents. The local employers prefer experienced instructors with international exposure and solid publication background, which can be seen in prevalence of mid- and late-career respondents.

DATA ANALYSIS

Data analysis commenced with data screening by checking impermissible values, missing data, and outliers using IBM SPSS version 25. The analysis identified 2 outliers, which were deleted as they accounted for 2.6% of the data.

The normality of the data was assessed by considering the Kurtosis and Skewness Z values (-1.96 to +1.96) (“Sage Dictionary of Statistics: A Practical Resource for Students in the Social Sciences,” 2005), and the Shapiro-Wilk test P-value (P-Value should be above 0.05) (Salkind, 2015). The results of the normality tests are presented in Table 2.

Table 2 - Normality Test

Construct	Skewness Z values	Kurtosis Z values	Shapiro-Wilk (Sig)
Retirement Intention	1,33	.16	.72
Subjective norm	-1.24	1.13	.06
Personal Attitude	-1.05	.54	.142
Perceived Behavioral control	1.82	.44	.211

The results of the normality tests indicate that the variables' data demonstrated a normal distribution as per the Skewness Z values, Kurtosis Z values and Shapiro-Wilk test.

The internal reliability of the subscales was assessed by considering Cronbach's alpha for each of the subscales, and the study used 0.7 as Cronbach's alpha minimum value as proposed for basic research (Cortina, 1993).

The internal reliability test for each subscale was: retirement Intention of 4 items ($\alpha = .706$), Subjective norms of 6 items ($\alpha = .726$), personal attitude of 4 items ($\alpha = .829$), perceived behavioral control of 5 items ($\alpha = .733$), as presented in Table3.

Table 3 - Initial Internal Reliability Scores- Cronbach's Alpha

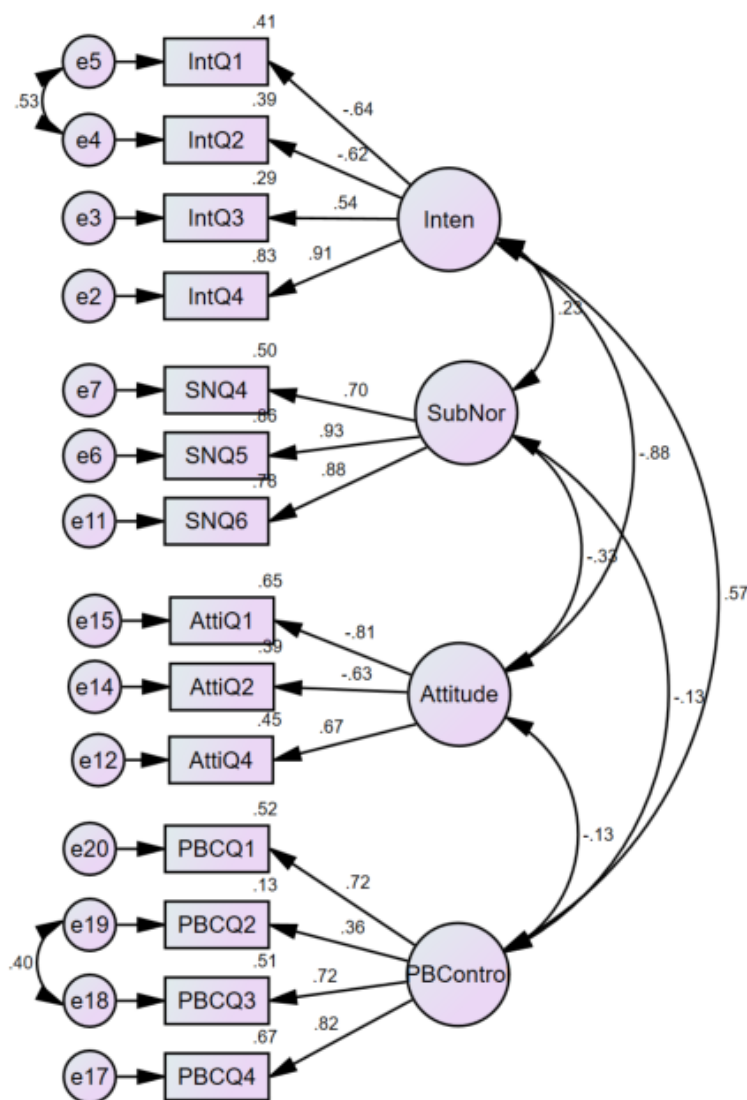
Item No	Subscale	Initial Number of Items	Items deleted	The final number of items	Cronbach's Alpha
1	Intention	5	IntQ3	4	.706
2	Subjective norm	6		6	.726
3	Personal attitude	4		4	.829
4	Perceived Behavioral control	7	PBCQ7, PBCQ6	5	.733



To establish the measurement instrument's validity, exploratory factor analysis was carried out. On the information gathered from 74 participants, a principal component analysis using a Direct Oblimin rotation of the 19 questionnaire items was performed. The sample was factorable, according to an analysis of the Kaiser-Meyer Olkin measure (KMO =.728), and Bartlett's test of sphericity was significant (p.001).

The hypothesis testing was carried out using Structural Equation Modeling by adopting the two-stage approach that is recommended in similar cases (Anderson & Gerbing, 1988). Stage one involved developing an overall measurement model, while the second stage involved developing a structural model to test the hypothesis. The below figure illustrates the overall measurement model.

Figure 1- Overall Measurement Model



The confirmatory factor analysis evaluated factor loadings for every item. Due to low factor loadings (<0.5), eight items were eliminated. The model's overall goodness of fit was evaluated using the model fit metrics (CMIN/df, GFI, CFI, TLI, SRMR, and RMSEA), and all values were within their corresponding acceptance levels (Bagozzi & Yi, 1988; Bentler, 1990; Hair et al., 2021; Hu &



Bentler, 1998; Schumacker, R & Lomax, 1996). The data were well fit by the initial individual measurement model, which had the following values: CMIN/df = 2.111, GFI =.911, CFI =.910, TLI =.901, SRMR =.061, and RMSEA =.058.

Table 4 - Fit Indices for measurement model

Fit Indices	Recommended Vales	Source	Obtained Values
P	Insignificant	(Bagozzi and Yi 1988)	.000
CMIN (chi-square/df)	3-5	(Schumacker and Lomax 2004)	2.111
GFI	>.90	(Hair, Ortinau, and Harrison 2010)	.911
CFI	>.90	(Bentler 1990)	.910
TLI	>.90	(Bentler 1990)	.901
SRMR	<.08	(Hu and Bentler 1998)	.061
RMSEA	<.08	(Hu and Bentler 1998)	.058

CONVERGENT VALIDITY

The degree to which different measurements of the construct that theoretically should be connected are really related is known as convergent validity. Using the Average Variance Extracted, we evaluated the convergent validity (AVE). The AVE shows how much of the latent unobserved variable's variance can be accounted for by the indicator.

Convergent validity will be demonstrated by an AVE greater than 0.5. (Bagozzi & Yi, 1988). The convergence validity for each construct is shown in the table below.

Table 5 - Convergent Validity Scores

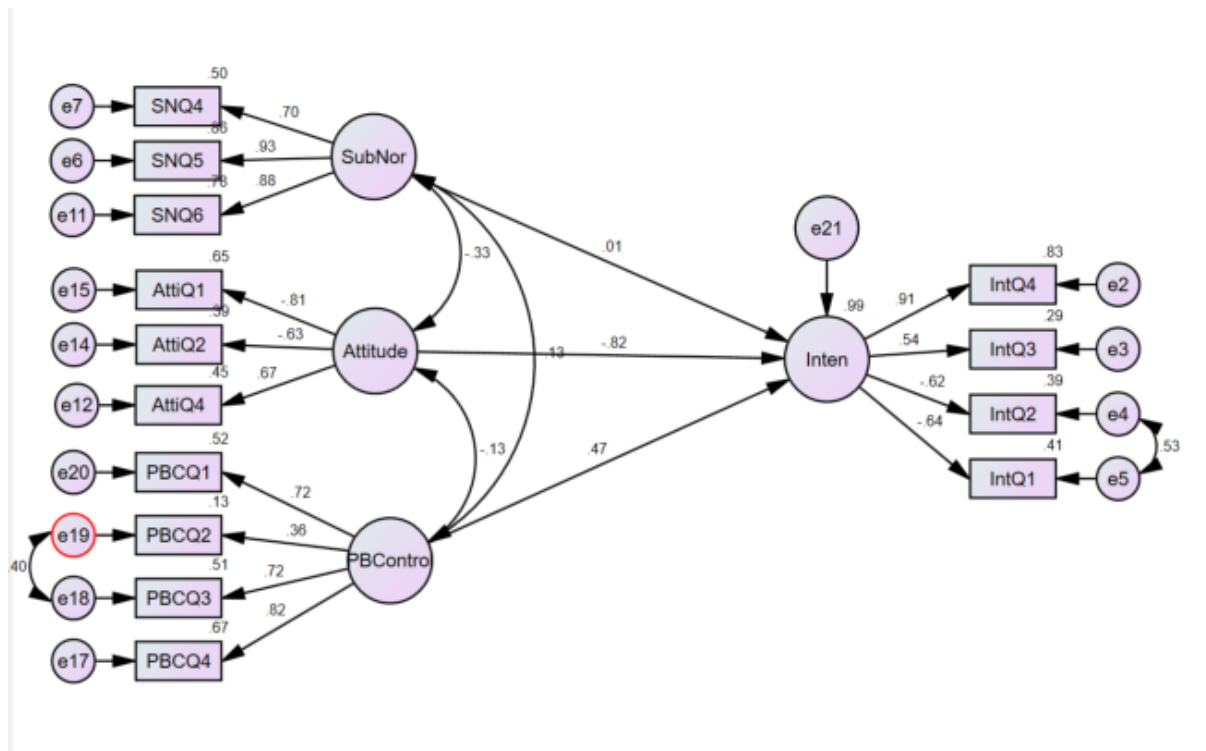
Ite m No	Subscale	Number of Items	AVE	CR
1	Retirement intention	4	0.552	1.108
2	Perceived behavioral control	4	0.627	0.77
3	Subjective Norms	3	0.565	0.841
4	Attitude	3	0.525	0.872

The convergent validity for each construct was: Retirement intention of 4 items (AVE = .552), Perceived behavioral control 4 items (AVE = .627), Subjective Norms of 3 items (AVE = .565), attitude of 3 items (AVE = .525). The AVE should ideally be greater than 0.5.



Figure 2 contains the structural model.

Figure 2- Structural Model



The hypothesis in this study was tested using a structural equation model produced by AMOS. If the CMIN/df, Tucker Lewis Index (TLI), Confirmatory Fit Indices (CFI), and Goodness of Fit Indices (GFI) (Hair et al., 2021) values are more than 0.90, the model is considered to be well-fit (Hair et al., 2021). Additionally, if the calculated values of the Standardized Root Mean Square Residuals (SRMR) <0.08 (Hu and Bentler 1998) and the Root Mean Square of Error Approximation (RMSEA) is between 0.05 and 0.08, the model is considered to be adequate (Hair et al., 2021). The fit indices of the model, which are listed in the table below, were CMIN/df = 2.111, GFI =.908, CFI =.910, TLI =.901, SRMR =.061, and RMSEA =.058. They all fell inside the acceptable range.

The squared multiple correlations for retirement intention were 0.52, indicating that personal attitudes, perceived behavioral control, and subjective norms together accounted for 52% of the variance in retirement intention.

The study assessed retirement intention among expatriate instructors. The effect of subjective norms on retirement intention was insignificant (b =.012, t =.132, p=.895), not supporting H1. The effect of personal attitude on retirement intention was significant (b =-.818, t =-5.589, p<.001), hence supporting H2. The impact of perceived behavioral control on retirement intention was positive and significant (b =.470, t =4.822, p<.001), supporting H3.

The model fit indices and hypothesis results are presented in table 6.

Table 6 - Model fit indices

Hypothesized relationship	Standardized Estimates	t value	P value	Decision
Subjective norms → Retirement	.022	.132	p=.895	Not Supporting H1



Intention				
Personal attitude → Retirement Intention	-.818	-5.589	p<.001	Supporting H2
Perceived behavioral control → Retirement Intention	.470	4.822	p<.001	Supporting H3
R- Square				
Retirement Intention	0.52			
Model Fit				
CMIN/df = 2.111, GFI = .908, CFI = .910, TLI = .901, SRMR =.061, and RMSEA = .058.				

FINDINGS AND DISCUSSION

Hypothesis 1 (Subjective norms affect the retirement intention among university instructors in Oman) was not supported by the research findings. In this conclusion our results go in line with a study based on a sample of generation Y employees from Malaysia that didn't observe a positive correlation between subjective norms and preparation for retirement (Kumaraguru & Geetha, 2021). At the same time, multiple other studies have opposite results. For example, a recent research that used a similar methodology and covered a sample of 400 employees working in Thailand (Kerdvimaluang & Banjongprasert, 2022) revealed a relation between saving plan intention and subjective norms.

Hypothesis 2 (Personal attitude affects the retirement intention among university instructors in Oman) was supported by the research findings. This result proves to be same in multiple other studies. For example, a study conducted on a sample of 112 respondents from Malaysia (Kadir et al., 2020) showed that personal attitude has a significant effect on retirement behavior. Similar results were obtained by a study of retirement planning behavior of estate sector employees in Sri Lanka (Heenkenda, 2016). A qualitative study that was carried out on a sample of Tanzanian academicians also confirmed relation between personal attitudes and retirement planning (Amani et al., 2023).

Hypothesis 3 (Perceived behavioral control affects the retirement intention among university instructors in Oman) was supported by the research findings. Similar results were observed by other studies. For example, the study of Malaysian generation Y employees showed a positive correlation between perceived behavioral control and preparation for retirement (Kumaraguru & Geetha, 2021). Another research that was also based on a sample localized in Malaysia named perceived behavioral control as the most significant predictor for retirement saving behavior. An earlier study (Davis & Hustvedt, 2012) also demonstrated that perceived behavior control is the most important variable in predicting retirement saving behavior.

Overall, the suggested approach that we used in the research - the theory of planned behavior - demonstrated that it can explain 52% of relations in the model. This approached has already proved its efficiency by hundreds of researchers in the wide range of subject fields, starting with psychology (Romano & Netland, 2008) and environmental sciences (Turaga et al., 2010) and ending with business studies (Zulaikha et al., 2019) and even political science (Bosnjak et al., 2020). Our research has also confirmed its efficiency for the studies that aim at explaining human behavior.



The research has allowed us to make some other interesting observations. For example, about 43% of respondents specified that they would like to completely withdraw from the labor force only after 65 with more than half of respondents specifying that they don't think their age will affect their productivity significantly. These results go in line with observations of another study, which specified that 38% of retirees said they "want to" work until they are 65 years old or older, and 54% of retirees said they still "can" work (Nilsson et al., 2011). However, such observations were not our primary goal.

CONCLUSION REMARKS

The design of the study was based on application of the Theory of Planned Behavior. A compact non-probability convenience sampling covering 76 academicians of different rank, age, gender and experience was used in frames of primary data collection. The questionnaire contained five sections (a demographic section and four sections that defined key model constructs) that enabled the further analysis. The data analysis was started with normality and internal reliability testing. The hypothesis testing was conducted using Structural Equation Modeling with the two-stage approach.


The squared multiple correlations were 0.52 for retirement intention, which means that 52% of variations in retirement behavior can be explained by subjective norms, personal attitude and perceived behavioral control constructs of the model. Analysis didn't confirm the impact of subjective norms on retirement intention, while two other constructs - attitude and perceived behavioral control - proved to define the retirement intention. The findings were mostly consistent with other studies in the subject area of retirement.


The results of the research can be of interest to scholars specializing in cultural studies and problems of retirement. They also can be useful for the decision-makers in the regulating authorities (ministries of higher education, accreditation agencies, ministries of labor or manpower and similar), as well as higher educational institutions.


Further research in this area could be advanced in several directions. Firstly, a qualitative study is required in order to define the studied cultural group - expatriate instructors - with more precision. It could also be interesting to carry out a comparative research of this cultural group's composition, values and motivations with respect to their location - Middle East, Africa, South-East Asia. Secondly, a similar study could be conducted for another occupational group, or another region. Revision of publications has showed that even though there is an abundance of studies dedicated to pre-retirement planning and behavior, still, there are plenty of region/occupational group combinations that could be studied.

REFERENCES

- [1] Agarwal, S., Amromin, G., Ben-David, I., Chomsisengphet, S., & Evanoff, D. D. (2015). Financial literacy and financial planning: Evidence from India. *Journal of Housing Economics*, 27. <https://doi.org/10.1016/j.jhe.2015.02.003>
- [2] Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*,. In University of Massachusetts (Vol. 50, Issue 2).
- [3] Ajzen, I. (2011). The theory of planned behaviour: Reactions and reflections. In *Psychology and Health* (Vol. 26, Issue 9). <https://doi.org/10.1080/08870446.2011.613995>
- [4] Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, 2(4). <https://doi.org/10.1002/hbe2.195>
- [5] Amani, J., Luvanga, B., Kihaga, H., Ndeskoi, T., & Gabriel, L. (2023). Why do academics fail to plan for retirement? Employers' and employees' views. *Journal of Aging Studies*, 64. <https://doi.org/10.1016/j.jaging.2023.101103>
- [6] Anderson, J. C., & Gerbing, D. W. (1988). Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach. *Psychological Bulletin*, 103(3). <https://doi.org/10.1037/0033-2909.103.3.411>

- 
- [7] Asiedu, V. A., Assoah, S. K., & Wilson, K. N. (2018). Managing Pre-Retirement Anxiety Among Teachers In Asunafo South District of the Brong Ahafo Region of Ghana. *International Journal of Sociology and Anthropology Research*, 4(2).
- [8] Bamberg, S., & Möser, G. (2007). Twenty years after Hines, Hungerford, and Tomera: A new meta-analysis of psycho-social determinants of pro-environmental behaviour. *Journal of Environmental Psychology*, 27(1). <https://doi.org/10.1016/j.jenvp.2006.12.002>
- [9] Bosnjak, M., Ajzen, I., & Schmidt, P. (2020). The theory of planned behavior: Selected recent advances and applications. In *Europe's Journal of Psychology* (Vol. 16, Issue 3). <https://doi.org/10.5964/ejop.v16i3.3107>
- [10] Burkert, C., & Hochfellner, D. (2017). Employment Trajectories Beyond Retirement. *Journal of Aging and Social Policy*, 29(2). <https://doi.org/10.1080/08959420.2016.1213092>
- [11] Castillo, M. P., Mamacay, A. G., Guevara, M. A., & Ayro, E. C. (2022). Retirement Planning: A Pre-Retirement Framework for Employees of Wesleyan University-Philippines. *Studies in Social Science Research*, 3(2). <https://doi.org/10.22158/sssr.v3n2p32>
- [12] Chen, B., & Chen, Z. (2023). Financial Literacy Confidence and Retirement Planning: Evidence from China. *Risks*, 11(2). <https://doi.org/10.3390/risks11020046>
- [13] Chen, Z., & Zurlo, K. (2019). THE ROLE OF SECURED AND UNSECURED DEBT IN RETIREMENT PLANNING AMONG PRE-RETIRES. *Innovation in Aging*, 3(Supplement_1). <https://doi.org/10.1093/geroni/igz038.1404>
- [14] Cortina, J. M. (1993). What Is Coefficient Alpha? An Examination of Theory and Applications. *Journal of Applied Psychology*, 78(1). <https://doi.org/10.1037/0021-9010.78.1.98>
- [15] Cupák, A., Kolev, G. I., & Brokešová, Z. (2019). Financial literacy and voluntary savings for retirement: novel causal evidence. *European Journal of Finance*, 25(16). <https://doi.org/10.1080/1351847X.2019.1641123>
- [16] Davis, K., & Hustvedt, G. (2012). It's a Matter of Control: Saving for Retirement. *International Review of Social Sciences and Humanities*, 3(2).
- [17] De los Santos, J. A. A., Labrague, L. J., & Milla, N. E. (2020). Happiness and Retirement Readiness among Pre-Retiring Employees: a Cross-Sectional Study. *Ageing International*, 45(1). <https://doi.org/10.1007/s12126-019-09351-z>
- [18] Fapohunda, T. M. (2013). The pension system and retirement planning in Nigeria. In *Mediterranean Journal of Social Sciences* (Vol. 4, Issue 2). <https://doi.org/10.5901/mjss.2013.v4n2p25>
- [19] Gathiira, T. G., Muathe, S. M. A., & Kilika, J. M. (2019). Psychosocial Programmes and Employees Retirement Preparedness: Empirical Evidence From the Educational Sector in Kenya. *International Journal of Business Administration*, 10(2). <https://doi.org/10.5430/ijba.v10n2p82>
- [20] Harahap, S., Thoyib, A., Sumiati, S., & Djazuli, A. (2022). The Impact of Financial Literacy on Retirement Planning with Serial Mediation of Financial Risk Tolerance and Saving Behavior: Evidence of Medium Entrepreneurs in Indonesia. *International Journal of Financial Studies*, 10(3). <https://doi.org/10.3390/ijfs10030066>
- [21] Harlow, W. V., Brown, K. C., & Jenks, S. E. (2020). The use and value of financial advice for retirement planning. *Journal of Retirement*, 7(3). <https://doi.org/10.3905/jor.2019.1.060>
- [22] Heenkenda, S. (2016). Readiness to retirement planning of estate sector employees in Sri Lanka Readiness to Retirement Planning of Estate Sector Employees in Sri Lanka. MPRA Munich Personal RePEc Archive, 72744. <https://doi.org/10.1227/01.NEU.0000349921.14519.2A>
- [23] Hospido, L., & Zamarro, G. (2021). Retirement Patterns of Couples in Europe. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2396381>
- [24] Hyde, K. F. (2000). Recognising deductive processes in qualitative research. *Qualitative Market Research: An International Journal*, 3(2). <https://doi.org/10.1108/13522750010322089>

- 
- [25] Kadir, J. M. A., Zainon, S., Ismail, R. F., Aziz, S. N. A., & Amran, A. A. I. (2020). Retirement Planning and its Impact on Working Individuals. *European Journal of Molecular and Clinical Medicine*, 7(6).
- [26] Kalmi, P., & Ruuskanen, O. P. (2019). Financial literacy and retirement planning in Finland. *Journal of Pension Economics and Finance*, 17(3). <https://doi.org/10.1017/S1474747217000270>
- [27] Kauppi, M., Virtanen, M., Pentti, J., Aalto, V., Kivimäki, M., Vahtera, J., & Stenholm, S. (2021). Social network ties before and after retirement: a cohort study. *European Journal of Ageing*, 18(4). <https://doi.org/10.1007/s10433-021-00604-y>
- [28] Kerdvimaluang, N., & Banjongprasert, J. (2022). AN INVESTIGATION OF FINANCIAL ATTITUDES AND SUBJECTIVE NORMS INFLUENCING RETIREMENT PLANNING. *The EUrASEANs: Journal on Global Socio-Economic Dynamics*, 1(32). [https://doi.org/10.35678/2539-5645.1\(32\).2022.67-76](https://doi.org/10.35678/2539-5645.1(32).2022.67-76)
- [29] Ketkaew, C., Van Wouwe, M., Jorissen, A., Cassimon, D., Vichitthamaros, P., & Wongsachia, S. (2022). Towards Sustainable Retirement Planning of Wageworkers in Thailand: A Qualitative Approach in Behavioral Segmentation and Financial Pain Point Identification. *Risks*, 10(1). <https://doi.org/10.3390/risks10010008>
- [30] Kumaraguru, L., & Geetha, C. (2021). The Influence of Attitude, Subjective Norms and Perceived Behavioral Control on Retirement Preparation: A Case of Gen Y in Selangor, Malaysia. In *International Journal of Advanced Research in Economics and Finance* (Vol. 3, Issue 3).
- [31] Lamarche, V. M., & Rolison, J. J. (2021). Hand-in-hand in the golden years: Cognitive interdependence, partner involvement in retirement planning, and the transition into retirement. *PLoS ONE*, 16(12 December). <https://doi.org/10.1371/journal.pone.0261251>
- [32] Lusardi, A., & Mitchell, O. S. (2017). How Ordinary Consumers Make Complex Economic Decisions: Financial Literacy and Retirement Readiness. *Quarterly Journal of Finance*, 7(3). <https://doi.org/10.1142/S2010139217500082>
- [33] Mustafa, W. M. W., Islam, M. A., Asyraf, M., Hassan, M. S., Royhan, P., & Rahman, S. (2023). The Effects of Financial Attitudes, Financial Literacy and Health Literacy on Sustainable Financial Retirement Planning: The Moderating Role of the Financial Advisor. *Sustainability (Switzerland)*, 15(3). <https://doi.org/10.3390/su15032677>
- [34] Nilsson, K., Hydbom, A. R., & Rylander, L. (2011). Factors influencing the decision to extend working life or retire. *Scandinavian Journal of Work, Environment and Health*, 37(6). <https://doi.org/10.5271/sjweh.3181>
- [35] Ni, S., Podgursky, M., & Wang, X. (2022). Teacher Pension Plan Incentives, Retirement Decisions, and Workforce Quality (inline image). *Journal of Human Resources*, 57(1). <https://doi.org/10.3368/jhr.57.1.1218-9912R2>
- [36] Norman, P., Conner, M., & Bell, R. (1999). The theory of planned behavior and smoking cessation. *Health Psychology*, 18(1). <https://doi.org/10.1037/0278-6133.18.1.89>
- [37] Peter Kofi Vordzorgbe, Samuel Kofi Assoah, Yayra Dzakadzie, & Rev. Kwesi Nkum Wilson. (2018). Managing Pre-Retirement Anxiety Among Teachers in the Yilo-Krobo Municipality in the Eastern Region of Ghana. *US-China Education Review B*, 8(3). <https://doi.org/10.17265/2161-6248/2018.03.001>
- [38] Prattley, J., & Chandola, T. (2021). The Influence of Household Pension Wealth, Partner's Health and Spousal Employment Status on Heterogeneous Early Retirement Transitions among Women in England. *Work, Employment and Society*, 35(1). <https://doi.org/10.1177/0950017020906358>
- [39] Ricci, O., & Caratelli, M. (2017). Financial literacy, trust and retirement planning. *Journal of Pension Economics and Finance*, 16(1). <https://doi.org/10.1017/S1474747215000177>
- [40] Romano, J. L., & Netland, J. D. (2008). The application of the theory of reasoned action and planned behavior to prevention science in counseling psychology. In *Counseling Psychologist* (Vol. 36, Issue 5). <https://doi.org/10.1177/0011000007301670>
- [41] Sage Dictionary of Statistics: A Practical Resource for Students in the Social Sciences. (2005). *Reference Reviews*, 19(2). <https://doi.org/10.1108/09504120510580208>

- 
- [42] Salkind, N. (2015). Shapiro-Wilk Test for Normality. In *Encyclopedia of Measurement and Statistics*. <https://doi.org/10.4135/9781412952644.n404>
- [43] Sarpong-Kumankoma, E. (2023). Financial literacy and retirement planning in Ghana. *Review of Behavioral Finance*, 15(1). <https://doi.org/10.1108/RBF-05-2020-0110>
- [44] Sekita, S. (2011). Financial literacy and retirement planning in Japan. *Journal of Pension Economics and Finance*, 10(4). <https://doi.org/10.1017/S1474747211000527>
- [45] Shen, Z., & Yang, J. (2021). A Simulation Study of the Effect of Delayed Retirement on Welfare of the Elderly: Evidence from China. *SAGE Open*, 11(2). <https://doi.org/10.1177/21582440211016901>
- [46] Shlomo, H., & Oplatka, I. (2023). "I am still a teacher": The place of the teaching career in the process of retirement adjustment. *Educational Studies*, 49(2). <https://doi.org/10.1080/03055698.2020.1837614>
- [47] Silver, M. P., & Williams, S. A. (2018). Reluctance to Retire: A Qualitative Study on Work Identity, Intergenerational Conflict, and Retirement in Academic Medicine. *Gerontologist*, 58(2). <https://doi.org/10.1093/geront/gnw142>
- [48] Szinovacz, M. E., DeViney, S., & Davey, A. (2001). Influences of family obligations and relationships on retirement: Variations by gender, race, and marital status. *Journals of Gerontology - Series B Psychological Sciences and Social Sciences*, 56(1). <https://doi.org/10.1093/geronb/56.1.S20>
- [49] Tang, F. (2016). Retirement Patterns and Their Relationship to Volunteering. *Nonprofit and Voluntary Sector Quarterly*, 45(5). <https://doi.org/10.1177/0899764015602128>
- [50] Tarkar, P., & Dhamija, S. (2022). Intentions towards work post-retirement: a mediator-moderator analysis through job satisfaction and age. *International Journal of Human Resources Development and Management*, 22(3-4). <https://doi.org/10.1504/ijhrdm.2022.124874>
- [51] Turaga, R. M. R., Howarth, R. B., & Borsuk, M. E. (2010). Pro-environmental behavior: Rational choice meets moral motivation. In *Annals of the New York Academy of Sciences* (Vol. 1185). <https://doi.org/10.1111/j.1749-6632.2009.05163.x>
- [52] Van Droogenbroeck, F., & Spruyt, B. (2014). To Stop or Not to Stop: An Empirical Assessment of the Determinants of Early Retirement Among Active and Retired Senior Teachers. *Research on Aging*, 36(6). <https://doi.org/10.1177/0164027513519449>
- [53] Wang, M., & Bartholomae, S. (2020). Retirement Preparedness: How Important Is Being Financially Literate? *Innovation in Aging*, 4(Supplement_1). <https://doi.org/10.1093/geroni/igaa057.1440>
- [54] Whitaker, E. A., & Bokemeier, J. L. (2018). Spousal, Family and Gender Effects on Expected Retirement Age for Married Pre-retirees. *Journal of Family and Economic Issues*, 39(3). <https://doi.org/10.1007/s10834-018-9564-9>
- [55] Zulaikha, Basuki Hadiprajitno, P. T., & Amal, M. I. (2019). Social constructs in predicting corruptive attitudes and behavior from theory of planned behavior perspective. *International Journal of Economics and Business Administration*, 7(3). <https://doi.org/10.35808/ijeba/316>