

The impact of rural agritourism on the well-being of middle-aged and elderly adult's: motivational factors and psychological outcomes

*Li-Fe Feng*¹, *Jun-Zhi Chiu*^{2,*}

¹ Ph.D. Student, Institute of China and Asia-Pacific Studies, National Sun Yat-sen University, Taiwan

² Department of Business Administration Management Chaoyang University of Technology, Taiwan

Abstract. Governments worldwide promote "active ageing," which improves quality of life for older adults. In this context, Taiwan's rural agritourism presents a distinctive form of leisure character raised by its natural rural landscapes, unique farm-to-table culinary offerings, and rich cultural experiences. The elements provide older adults with profound and meaningful engagement, as well as the advantages of mental and physical rejuvenation. The objective of this paper is to examine whether the motivations that drive middle-aged and older adults to engage in rural agritourism have a positive impact on their overall well-being. The data were collected from 250 middle-aged and older adults in urban areas. The findings indicate that autonomy and relatedness have a positive impact on well-being, while competence does not. This study will help rural agritourism operators create travel itineraries for middle-aged and older adults, fostering sustainable rural tourism.

* Corresponding author: jun-zhi65@hotmail.com

1. Introduction

As societies progressively transition into an era marked by aging populations, governments have been enacting policies aimed at addressing the prevailing trend of population aging, with a particular emphasis on promoting and sustaining the health of the elderly. These policies also encourage seniors to participate in outdoor activities, thereby providing them with enhanced opportunities for social interaction. The World Health Organization (WHO) has delineated a "Healthy Aging" policy framework, which articulates that aging is not an isolated phenomenon but is situated within the context of interpersonal relationships. This framework underscores the importance of physical health while also highlighting that the psychological and social dimensions of aging must not be neglected. The concept of "Active Aging" is increasingly promoted across various sectors, with the objective of integrating and advancing pertinent national policies to enhance the quality of life for the elderly population. This initiative aims to sustain the physical, mental, and spiritual well-being of older adults while encouraging their ongoing engagement in social activities, thereby facilitating the attainment of "Successful Aging." For middle-aged and older adults, tourism activities serve multiple purposes, including physical exercise, stress alleviation, and the expansion of personal horizons. Additionally, these activities provide recreational and rejuvenating benefits, contributing to improved physical and mental health, enriching social interactions, and fostering creativity and learning capabilities. Collectively, these factors positively influence the overall quality of life for this demographic.

In Taiwan's agricultural sector, the necessity to confront considerable structural challenges, in conjunction with the rising standard of living among the population, has resulted in an increased demand for tourism. This demand is perceived as a potential advantage for agricultural operations, as it has the capacity to stimulate economic activities in rural areas. In 2001, the government initiated the "One Township, One Leisure Farm and Fishery Park" programme. The principal objective of this initiative is to revitalise and transform rural economies by creating local employment opportunities for farmers and fishers. It seeks to transition agriculture from a production-oriented model to a service-oriented one, utilising existing agricultural resources to develop tourism services.

The decision to participate in tourism is influenced by both external and internal factors. The external social environment and the individual's psychological motivations play a significant role in shaping the willingness and intention to engage in tourism activities [12]. It is important to note that the internal and external push and pull factors are not solely within the control of middle-aged and senior citizens. Rather, they are the result of dynamic interrelationships between individuals and their environments. The phenomenon of counter urbanisation has prompted a renewed interest in rural areas, as individuals seek to address a spiritual void and escape the pressures of urban modernity [24]. Specifically, middle-aged and elderly tourists primarily engage in travel for purposes such as relaxation, sightseeing, and seeking novel experiences [1]. Agritourism in rural settings can satisfy these desires, as [29] posit that urban middle-aged and elderly individuals are motivated to travel to the countryside to experience its natural landscapes, culinary offerings, and cultural heritage. Moreover, a significant proportion of these individuals are inclined to relocate to rural areas in pursuit of a more tranquil environment and an enhanced quality of life [18]. However, existing research indicates that the primary motivations for older tourists to engage in tourism activities differ from those of other age groups. These manifest in specific preferences, including rest, novelty, socialisation, self-esteem, learning, emotional experiences, and visiting relatives [2][13][17]. Consequently, travel has the potential to transform their daily lives and enhance their overall quality of life by elevating their personal expectations. The term "well-being" is defined as a positive and affirming attitude that individuals possess, encompassing the perception that life is both pleasant and enjoyable [18]. Engaging in travel

has been demonstrated to foster a sense of well-being that can persist for up to one month following the trip [15]. Furthermore, travel has the potential to alleviate psychological stress and enhance life satisfaction and happiness, even after the journey has concluded. Consequently, the advantages of travel are more substantial than commonly perceived, and the well-being derived from travel offers significant benefits for individuals' emotional regulation, particularly among middle-aged and elderly populations.

Despite the growing importance of senior tourism, there is a gap in research on the motivations of middle-aged and senior citizens to engage in rural agritourism. This research examines the relationship between the motivations and well-being of middle-aged and senior citizens who participate in rural agritourism. It is anticipated that the findings will prove valuable to those involved in the development of rural agritourism management strategies. The findings inform decisions related to middle-aged and older adults' motivations. Moreover, this study seeks to establish a foundational framework for future research on rural agritourism targeting middle-aged and older adults. Findings based on aforementioned research hypotheses.

2. Literature review

2.1 Well-being

Argyle [3] is clear that well-being is about experiencing positive emotions, feeling satisfied with life, and avoiding negative states like depression and anxiety. The concept of well-being is contingent upon personal development, thorough preparation, and deliberate cultivation and maintenance [9]. Furthermore, Chang [5] definitively state that well-being is characterised by the subjective perception of individuals regarding their own definitions of happiness, which is associated with positive experiences and a lack of stress. The World Health Organization (WHO) definitively states that well-being is a state of optimal health that includes the physical, psychological, social, spiritual, and economic fulfilment of an individual's full potential [26]. The components of well-being can be summarised as physical, psychological, social, economic, and ecological [5]. It is understood as the gradual accumulation of short-term, achievable life goals or the fulfilment of personal needs. Middle-aged and elderly individuals can acquire new knowledge and enhance their sense of well-being by engaging in leisure activities and making choices about how to spend their time. This engagement not only fosters life satisfaction but also contributes to the maintenance of physical health, thereby potentially slowing the ageing process.

2.2 Tourism Motivations

Sage [25] defines motivation as the "direction" and "intensity" of an individual's effort, sufficient to propel a person to act in order to fulfil their needs [14]. Initially, tourism was primarily concerned with satisfying the physiological needs of travellers. However, over time, it has evolved to address the more psychological motivations underlying tourist behaviour. It can be reasonably deduced from pertinent studies in this field that motivation plays a pivotal role, acting as an impetus for individuals to engage in travel activities, thereby fulfilling their personal, social and psychological needs. This motivational force is associated with instinctual and psychological needs and is underpinned by reinforcement theory [22]. Furthermore, motivation for tourism activities is based on the need for leisure travel, which initiates an internal process prompting individuals to engage in travel activities to fulfil these needs [8]. Patterson [21] put forth the proposition that the travel motivations of older adults are significantly influenced by factors related to health and the opportunity to travel with

friends. In contrast, Hung [11] contend that seniors are motivated to travel for several reasons, including vacation, visiting friends and family, health considerations, and work-related purposes.

2.3 Self-Determination Theory

The Self-Determination Theory (SDT) explains intrinsic and extrinsic motivations and their influence on behaviour. SDT is about understanding why people act the way they do. The theory suggests that an individual's intrinsic motivation, personality and positive life conditions are formed by their innate growth tendencies and needs. The theory integrates three fundamental psychological needs – autonomy, competence, and relatedness – which are crucial for psychological well-being [10].

2.4 Autonomy

The fundamental inquiry in the field concerns the question of whether autonomous behavior and motivation arise from internal desires, and whether such behavior is primarily driven by self-determination as opposed to external influences. Autonomy is respect for tasks or activities and intrinsic motivation (Deci & Ryan, 2000). It functions as a representation of human autonomous behaviour (Chen & Jang, 2010). For middle-aged and older adults, the engagement with rural agritourism is closely linked to a sense of control and choice. This autonomy reflects the individual's capacity to pursue rural agritourism independently, based on personal motivations related to health, nostalgia, or leisure. Such autonomy means that middle-aged and older adults can make their own choices and control their actions to satisfy their needs (Deci & Ryan, 2000). Given the above, this study proposes the following hypothesis:

H₁: The autonomy dimension of rural agritourism motivation among middle-aged and older adults has a positive impact on well-being.

2.5 Competence

When individuals are given the chance to complete an activity, they are more likely to do it well and value it highly. Competence is defined as the capacity to perform successfully within a specific professional domain, whereby individuals demonstrate their abilities, behaviours and results[6]. Competence is a significant predictor of well-being [20]. Deci & Ryan [10] posit that the satisfaction of psychological needs is positively correlated with attachment. Consequently, facilitating opportunities for older adults to engage in rural agritourism, either through planning or forming connections with like-minded individuals, can be seen as a manifestation of intrinsic motivation related to competence[4]. This sense of competence is not a specific skill; it is confidence or enhanced coping ability. Thus, the study proposes the following hypothesis:

H₂: The competence dimension of rural agritourism motivation among middle-aged and older adults has a positive impact on well-being.

2.6 Relatedness

Deci & Ryan [10] argue that social interaction drives behaviour. 'Relatedness' describes the intrinsic desire to connect with others and the surrounding environment. It encompasses the tendency to form and maintain relationships, thereby fostering a sense of belonging [28]. The use of social media is driven by social motives like sharing and maintaining interpersonal

relationships [16] [7]. The need for relatedness is closely linked to the aspiration to belong to a social domain and to avoid isolation. The formation of emotional connections with others and the environment, such as through care and understanding, provides the strength to face challenges and difficulties, thereby leading to psychological well-being and personal development[10] [23]. This study posits

H₃: The relatedness dimension of rural agritourism motivation among middle-aged and older adults has a positive impact on well-being.

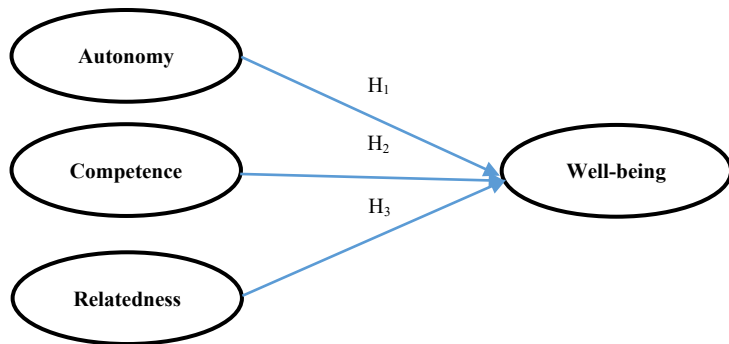


Fig. 1. Summarizes the definition of each construct and the conceptual research model

3. Methods

3.1 Sample and data collection

Questionnaires were distributed within these target groups. The study uses a purposive sampling method, specifically selecting individuals who have participated in rural agritourism activities within the past year as the research sample. In addition, the study aims to identify participants with previous experience of rural agritourism. Therefore, a 'drop and collect' method was used, whereby questionnaires were only distributed to those who agreed to participate in the survey. After excluding incomplete submissions, 250 valid responses were received from the 280 questionnaires distributed. Among the respondents, 108 individuals (43.2%) were aged between 55 and 65 years. Additionally, 74 respondents (44.3%) had completed high school education. A total of 188 respondents (75.2%) were married. The most common salary range among the respondents was between 30,001 and 35,000 New Taiwan Dollars (NTD), which accounted for 26.4% of the total sample, comprising 250 respondents. The results of the preceding survey are presented in Table 1. Reason: The revised text corrects grammatical issues, clarifies the presentation of data, and enhances the overall academic tone.

3.2 Measures

The questionnaire assessing motivation to travel for rural agritourism was adapted from Broeck et al. (2010). The initial scale was modified to align with the research objectives. The scale had 12 items, including this one: I engage in rural agricultural tourism activities and am able to plan the tour according to my preferences. The 'well-being' questionnaire was employed to plan the tour. The questionnaire of "well-being" for measuring the rural agritourism of middle-aged and elderly people was derived from the well-being scale developed by Diener et al. (1985). This scale included five items, such as: 'I am very satisfied

with my life at present'. All items of these constructs were rated on a 5-point Likert-type scale (1=strongly disagree, 2=disagree, 3=neutral, 4=agree, and 5=strongly agree).

4. Result

4.1 The measurement model

The analysis was based on partial least squares (PLS) path modelling using the SmartPLS 3.0 software. The PLS technique is a powerful component-based method widely utilized in previous studies. The PLS analysis form of structural equation modelling was used to test the conceptual model depicted in Figure 1.

Table 1. Results of the measurement model

Construct items	Factor loading	Cronbach's α	CR	AVE
Autonomy (AU)		0.869	0.910	0.717
AU1	0.826			
AU2	0.883			
AU3	0.848			
AU4	0.828			
Competence (CO)		0.804	0.884	0.718
CO1	0.838			
CO2	0.870			
CO3	0.834			
Relatedness (RE)		0.876	0.909	0.668
RE1	0.815			
ER2	0.846			
RE3	0.791			
RE4	0.849			
RE5	0.783			
Well-being (WB)		0.925	0.944	0.771
WB1	0.855			
WB2	0.911			
WB3	0.866			
WB4	0.897			
WB5	0.807			

4.2 Discriminant validity

The construct reliability, convergent validity, and discriminant validity of reflective constructs was evaluated. Table 2 shows that the measurement items have acceptable standardized parameter loadings (0.791 to 0.911) and significant t-values (0.05 level). The Cronbach's α of the constructs ranges from 0.804 to 0.925, and the CR ranges from 0.844 to 0.944, both of which exceed the benchmark of 0.7, thus confirming their reliability. Convergent validity is evaluated by the AVE from the latent variables. All variables exceeded the 0.50 threshold, with values from 0.668 to 0.771. The concept of discriminant validity

concerns the extent to which constructs that appear to be similar can be differentiated empirically. The heterotrait-monotrait (HTMT) criterion is a rigorous measure for identifying potential discriminants among variables. HTMT identifies collinearity issues in modelling, preventing misinterpretations. This study uses the HTMT criterion. HTMT values for latent constructs should be below 0.85, indicating discriminant validity.

4.3 The structural model

Bootstrapping resampling is used in Partial Least Squares (PLS) to estimate the structural model and test hypotheses. H1 suggests that greater autonomy in rural agritourism leads to enhanced well-being in middle-aged and older adults. Figure 2 shows the path coefficient is 0.361 ($P < 0.001$), supporting H1. Nevertheless, the relationship between autonomy in rural agritourism motivation and well-being (H2) is not statistically significant at the 0.001 level, with a path coefficient of 0.137 ($P = 0.103$). The study showed that the aspect of agritourism related to well-being has a considerable impact ($\beta = 0.329$, $P < 0.001$).

Table 2. Hypothesis test results

	Path	Path coefficient	t-value	Results
H ₁	Autonomy → Well-being	0.146**	1.987	Supported
H ₂	Competence → Well-being	0.137	1.609	No Supported
H ₃	Relatedness → Well-being	0.329***	3.869	Supported

Notes: *** $p < 0.001$; ** $p < 0.05$

5. Conclusion

The findings of the study indicate that the motives of middle-aged and older adults to engage in rural agritourism, in particular those pertaining to autonomy and relatedness, exert a beneficial influence on their well-being. In contrast, the variable of competence did not yield a statistically significant effect. The concept of competence is rooted in the necessity for individuals to perceive that they can influence their environment and select tasks that correspond with their capabilities (Deci & Ryan, 2000). This sense of competence is defined as the belief in one's ability to successfully accomplish tasks (Troost et al., 2016). Consider the safety and physical capabilities of middle-aged and older adults when designing rural agritourism, given that they may exhibit different needs and limitations. Itineraries are often based on package tours or rural agritourism routes. In the context of rural agritourism activities, middle-aged and older adults may lack control over their travel or activities and therefore experience less positive well-being.

An increasing number of seniors are investing more in leisure travel. The aim of these trips is relaxation and improved physical health. Rural agritourism operators should focus on the needs of senior travellers, offering them tailored travel experiences and services. The government should provide subsidies for middle-aged and older adults living in urban areas to participate in rural agritourism. They would leave urban areas, explore new places, and satisfy basic needs for autonomy, competence and relatedness. Fulfilling these needs slows aging and fosters well-being.

References

1. E. Alén, N. Losada, P. de Carlos, Profiling the segments of senior tourists throughout motivation and travel characteristics. *Curr. Issues Tour.* **20**, 1454-1469 (2017).
2. M. Amaral, A. I. Rodrigues, A. Diniz, S. Oliveira, S. Leal, Designing and evaluating tourism experiences in senior mobility: An application of the OEC framework. *Tour. Manag. Stud.* **16**, 59-72 (2020).
3. M. Argyle, *The social psychology of everyday life* (Routledge, London, 1992).
4. A. Bandura, Self-efficacy: Toward a unifying theory of behavioral change. *Psychol. Rev.* **84**, 191-215 (1982).
5. L. Chang, B. D. Moyle, K. Dupre, S. Filep, S. Vada, Progress in research on seniors' well-being in tourism: A systematic review. *Tour. Manag. Perspect.* **44**, 101040 (2022).
6. K. C. Chen, S. J. Jang, Motivation in online learning: Testing a model of self-determination theory. *Comput. Hum. Behav.* **26**, 741-752 (2010).
7. J. Choi, J. Jung, S. W. Lee, What causes users to switch from a local to a global social network site? The cultural, social, economic, and motivational factors of Facebook's globalization. *Comput. Hum. Behav.* **29**, 2665-2673 (2013).
8. R. Crandall, Motivation for leisure. *J. Leis. Res.* **12**, 45-54 (1980).
9. M. Csikszentmihalyi, *Flow: The psychology of optimal experience* (Harper & Row, New York, 1990).
10. E. L. Deci, R. M. Ryan, The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychol. Inq.* **11**, 227-268 (2000).
11. K. Hung, X. Bai, J. Lu, Understanding travel constraints among the elderly in Hong Kong: A comparative study of the elderly living in private and public housing. *J. Travel Tour. Mark.* **33**, 1051-1070 (2015).
12. S. Jang, B. Bai, C. Hu, C. E. Wu, Affect, travel motivation, and travel intention: A senior market. *J. Hosp. Tour. Res.* **33**, 51-73 (2009).
13. M. Johann, P. Padma, Benchmarking holiday experience: The case of senior tourists. *Benchmarking Int. J.* **23**, 1860-1875 (2016).
14. P. Kotler, *Marketing management* (Prentice Hall, New Jersey, 2000).
15. J. Kwon, H. Lee, Why travel prolongs happiness: Longitudinal analysis using a latent growth model. *Tour. Manag.* **7**, 10-44 (2020).
16. C. S. Lee, L. Ma, News sharing in social media: The effect of gratifications and prior experience. *Comput. Hum. Behav.* **28**, 331-339 (2012).
17. M. A. Lidia López-Marfil, M. A. Fernández-Gámez, J. A. Campos-Soria, D. Alaminos, Passengers' behavioural intentions towards cruise port of call: Evidence from senior tourists. *Anatolia* **32**, 628-642 (2021).
18. J. Lyu, H. Huang, Z. Mao, Middle-aged and older adults' preferences for long-stay tourism in rural China. *J. Destin. Mark. Manag.* **19**, 100552 (2021).
19. S. Lyubomirsky, L. King, E. Diener, The benefits of frequent positive affect: Does happiness lead to success? *Psychol. Bull.* **131**, 803-855 (2005).
20. J. Y. Y. Ng, N. Ntoumanis, C. Thøgersen-Ntoumani, E. L. Deci, R. M. Ryan, J. L. Duda, G. C. Williams, Self-determination theory applied to health contexts: A meta-analysis. *Perspect. Psychol. Sci.* **7**, 325-340 (2012).
21. I. Patterson, A. Balderas-Cejudo, S. Pegg, Tourism preferences of seniors and their impact on healthy ageing. *Anatolia* **32**, 553-564 (2021).
22. M. H. Pestana, A. Parreira, L. Moutinho, Motivations, emotions and satisfaction: The keys to a tourism destination choice. *J. Destin. Mark. Manag.* **16**, 100322 (2020).
23. R. M. Ryan, V. I. Chirkov, T. D. Little, K. M. Sheldon, E. Timoshina, E. L. Deci, The American dream in Russia: Extrinsic aspirations and well-being in two cultures. *Pers. Soc. Psychol. Bull.* **25**, 1509-1524 (1999).

24. R. Sharpley, D. Jepson, Rural tourism: A spiritual experience? *Ann. Tour. Res.* **38**, 52-71 (2011).
25. Sage, *Introduction to motor behaviour: Neuropsychological approach* (Addison-Wesley & Longman, 1977).
26. B. J. Smith, K. C. Tang, D. Nutbeam, WHO health promotion glossary: New terms. *Health Promot. Int.* **21**, 340-345 (2006).
27. J. K. Trost, M. Skerlavaj, J. Anzengruber, The ability-motivation-opportunity framework for team innovation: Efficacy beliefs, proactive personalities, supportive supervision and team innovation. *Econ. Bus. Rev.* **18**, 77-101 (2016).
28. A. Van den Broeck, M. Vansteenkiste, H. De Witte, B. Soenens, W. Lens, Capturing autonomy, competence, and relatedness at work: Construction and initial validation of the work-related basic need satisfaction scale. *J. Occup. Organ. Psychol.* **83**, 981-1002 (2010).
29. K. M. Wong, G. Musa, Retirement motivation among 'Malaysia my second home' participants. *Tour. Manag.* **40**, 141-154 (2014).