

## Promoting Sustainable Forest Products: Assessing Residents' Willingness to purchase sustainable furniture in Ghana

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**ABSTRACT:** Following the various gaps left in green products literature, this study aims at establishing the role of beliefs and norms in the choice of sustainable furniture purchase in Kumasi, Ghana. Sustainable furniture research is limited in general even though furniture production and usage keep increasing around the world. In the African and Ghanaian context, it is non-existent, and this study closes the gap. The development and consumption of sustainable products are essential for the achievement of the Sustainable Development Goals (SDGs). Better environmental performance during manufacture, usage, and disposal characterizes sustainable products. Sustainable products have less of an impact on the environment during their life cycles than standard products, and customers can stop or lessen environmental damage by buying sustainable items. With time consumers around the globe have started showing ethical behavior by choosing sustainable products including furniture. As a result, the green campaign must be emphasized in that area to improve sustainability and have the people live with it as they live with their furniture. In this study, critical variables have been selected to determine their impact on residents' willingness to purchase sustainable furniture. Most research in the area has focused on the processing, manufacturing, and technological aspects of green furniture whilst paying less attention to consumers' acceptance. In that regard, it is imperative to examine the psychological and behavioral aspects of this prominent topic to determine the influence of these factors on their willingness to purchase. The study used the theory of reasoned action (TRA). In this theory, an individual's willingness to participate in a specific action is evident by their intention, which is the immediate antecedent of behavior. The theory comprises two fundamental antecedents responsible for predicting intention. These constructs are attitude and subjective norms.

However, other studies have argued that other constructs can be added to TRA to improve its predictability and this study took advantage of that. The study believes that factors such as motivation, perceived benefits, and environmental concerns are critical factors that will have a great influence on residents' willingness to purchase sustainable furniture. Various studies have used these constructs in other pro-environmental research and this study believes they will be relevant in predicting residents willingness in this field. Various literature regarding the TRA and these added variables have been discussed thoroughly and the gaps and hypotheses identified and drawn. A comprehensive model is drawn, using all the variables to establish the various relationships and moderating effects the study intends to find.

From March to April 2023, the research team engaged some respondents to obtain their opinions regarding sustainable furniture purchases. Questionnaire items were developed and distributed through WhatsApp for these potential green furniture buyers. Face-to-face interviews with some of the respondents to meet the study's objectives were conducted. Respondents' consent was sought, and they were promised that their anonymity would be kept. A total of 500 respondents were targeted but only 408 responses were received and used. This data obtained has been

assessed and analyzed using the partial least squares structural equation modeling. Before the analysis, various validity measurements were undertaken to ensure data validity. The Cronbach alpha, factor loadings, Composite reliability test, and Average variance extracted are all constructs validity tests adopted for the study. When the validity tests proved sufficient, the study went ahead to apply the structural equation modeling in its analysis. The study adopted partial least squares structural equation modeling (PLS-SEM). PLS-SEM relaxes the limitations on the normal distributional assumptions of data and can be used to analyze non-normally distributed data in addition to complex predictive modeling and confirming the causal relationship between variables. This model has been used widely to examine sustainable behaviors.

The results provide new findings in the sustainable furniture industry and help move a step closer to achieving SDGs. The study found that attitude strongly influences willingness to purchase sustainable furniture purchases. Subjective norms were also identified to influence willingness to purchase sustainable furniture. Personal norms and motivation had positive influences on sustainable furniture purchase willingness. It was also found that motivation positively influences residents' willingness to purchase sustainable furniture in Ghana. Perceived benefits positively influence personal norms and attitudes toward sustainable furniture purchases. Residents' concern for the environment triggered their attitudes and personal norms to influence their willingness to purchase green furniture. The mediation roles of attitude and personal norms were established as they mediated motivation, perceived benefits and environmental concerns, and willingness to purchase sustainable furniture. These findings provide great insights into the quest towards sustainable economies and SDGs. They also lay a strong theoretical foundation for future studies. Policy implications have been outlined for authorities and policymakers to help regulate and improve the adoption of sustainable furniture and green economies. Encouraging residents to appreciate the benefits of sustainable products is very key. Also, intensive education is needed to help residents understand the need to substitute sustainable products with traditional ones.

**Keywords:** Sustainable Furniture; Forest products; Green products; Theory of Reasoned Action; Ghana