

The relationship between mindfulness and sustainable consumer behaviour: The mediating effect of self-transcendence

Kintu Gerald Joseph¹, Enid Arinaitwe², Musa Muwaga³

¹Mountains of the Moon University, ²Bugema University, ³Kampala University

DOI: <https://doi.org/10.5281/zenodo.6500349>

Published Date: 28-April-2022

Abstract: Consumption which is a driving force in promoting economic activities in the global economy depends largely on utilization of natural resources to derive consumer satisfaction. Whereas consumers aim at maximizing satisfaction, this has been accompanied by increased degradation of the environment resulting from irrational consumption behaviours which is threatening the very systems that the current and future generation depends on. The objectives of the study included an examination of the relationship between mindfulness and self-transcendence, the relationship between self-transcendence and sustainable consumer behaviour, the relationship between mindfulness and sustainable consumer behaviour and the mediating effect of self-transcendence on the relationship between mindfulness and sustainable consumer behaviour. The study was carried out from Uganda and the population consisted of university students and workers. Using structural equations modelling, study findings indicate that there is a positive significant relationship between mindfulness and self-transcendence. It was also found out that the relationship between self-transcendence and sustainable consumer behaviour is positively significant. Further, it was found out that the relationship between mindfulness and sustainable consumer behaviour is significantly positive. The mediating effect of self-transcendence on the relationship between mindfulness and sustainable consumer behaviour was also found to be positively significant.

Keywords: Sustainable consumption behaviour, Mindfulness, Self-transcendence.

I. INTRODUCTION

Sustainable consumption has been identified as a vital source in promoting sustainable growth and development in emerging economies [28]. Consumption which is a driving force in promoting economic activities in the global economy depends largely on utilization of natural resources to derive consumer satisfaction [30]. [32] Noted that this however is being done in a way that continues to have destructive impacts on the environment. While neo-classical economics observed that consumers are rational, reality is that most consumption behaviours exhibit irrationality [34]. Whereas individual consumers may aim at maximizing satisfaction, this has been accompanied by increased environmental degradation resulting from irrational consumption behaviours which is threatening the very systems that the current and future generation depends on [20]. The cycle of consumption includes purchase, usage and disposal which needs to be considered holistically if sustainable consumption is to be achieved [5]; [29]. [29] Observed that the business community has concentrated so much on the stage of purchasing the product and ignored the stage of how a product is used and how it is disposed. [28] Noted that if the business community is to benefit from the increase in revenues raised from products purchased, consumer behaviour has to be sustainable. Sustainable consumer behaviour refers to the consumer's conduct of attempting to satisfy present needs when consuming a product while simultaneously benefiting or limiting environmental impact [29]

According to the United Nations (UN), an estimated one third of all food items produced in the world each year which is an equivalent of 1.3 billion tones valued at \$1 trillion, ends up rotting in the bins of consumers due to careless consumption behaviors [22]. Due to irresponsible consumption, the world is grappling with problems of unsustainable water use, overfishing, land degradation and declining soil fertility which are all lessening the ability of the current natural resource base to supply food to the current and future generation [2]. By 2040, an estimated three billion middle class consumers will join the global economy and if the current consumption behaviors are to be extended to 2040 the situation may worsen and get out of hand. By 2050, the global population is estimated to reach ten billion which is the equivalent of almost three planets that could be required to provide the natural resources needed to sustain current consumption lifestyles. Many studies have been carried out to explain the antecedents of sustainable consumption [12]; [29]. Such studies have indicated factors such as attitude, values, responsibility of consumers among others but failed to examine the mediating effect of self-transcendence. The current study in contrast to research on sustainable consumer behaviour, examines the mediating effect of self-transcendence on the relationship between mindfulness and sustainable consumer behaviour in the African context. The reminder of the article highlights the theoretical framework, literature review, methodology, findings and recommendations.

Theoretical perspective

The theory of self-determination [6]; Self-determination theory observes that human beings are innately active, growth-oriented and curious creatures who always strive toward a unified sense of self and the incorporation of the individual within a wider society [6]. The theory contends that human beings instinctively seek challenges, pursue defined interests and strive for social fitting [25]. Given their innate capacities and incorporated motives, human beings will pursue interests and strive for social fittings through integrated self-regulated behaviour. Self-regulated human behaviour is controlled by intrinsic and extrinsic motivations [6]. The theory observes that much of human behaviour which is self-regulated is intrinsically and extrinsically motivated meaning that human behaviours emerge as a result of a need to comply with internal and external contingencies [27]. At the heart of self-regulated behaviour there lies an individual ability to reflectively consider one's conduct in a wider community and its association with one's personal needs and values [25]. The commitment for one to act dependably with self but also be sensitive to circumstances that are external to others invites one to be mindful of his action [27]. Being mindful of self but also be sensitive to others calls for awareness of what is taking place around them [6]. When people are mindful of their actions, they adopt values which regulate their behaviour so as to be compatible with self and others in society. Therefore given the intrinsic and extrinsic motivations, people will become mindful of their actions and this prompts them to adopt self-transcendent values which regulate their consumption behaviours such that they are sustainable [1].

II. LITERATURE REVIEW

Relationship between mindfulness and self-transcendence

Mindfulness relates to a state of awareness to or conscious of something [11]. Being mindful is a form of attention which is said to be non-reactive, purposeful, focused and non-judgmental [16]. An individual is said to be mindful if he cultivates a sense of awareness with purpose which generates grounds for one to adopt values that he associates with [15]. The values that an individual may adopt nurture capabilities to successfully control behaviour [33]. Being mindful generates a positive relationship between self and others in society which transcends self-focused desires and intensifies pro-social characteristics of self-transcendence [3]. When people are mindful, they hold self-transcendence values of benevolence and universalism [21]. By being mindful of their actions, consumers are expected to promote values oriented towards establishing interpersonal harmony and equality in a community which are tenets of self-transcendence [8].

H1: There is a positive relationship between mindfulness and self-transcendence.

Relationship between self-transcendence and sustainable consumer behaviour

Self-transcendence is a character attribute that relates to a person looking at himself as an integral part of society [26]. Self-transcendence encompasses a fundamental shift in an individual's attitude of selfishness to that of caring for others in a community or something larger than oneself [10]. Self-transcendence is constructed based on values of benevolence and universalism [31]. Benevolence values are oriented towards preserving and enhancing the welfare of others whom an individual is in frequent contact with while universalism relates to tolerating, appreciating and protecting nature and welfare of others [13]. Individuals who care about preserving the welfare of others, he will conduct himself responsibly while purchasing, consuming and disposing a product which enriches sustainable consumption behaviours [4].

H2: There is a positive relationship between self-transcendence and sustainable consumer behaviour

Relationship between mindfulness and sustainable consumer behaviour

Consumption is a source of satisfaction that an individual aims at maximizing which is a foundation of nourishment, good health and wellbeing [7]. Consumption is a basic tenet needed for human life survival together with life enhancing products such as unpolluted air, clean water, and adequate shelter [12]. Of late, however, various social and environmental challenges have arisen due to irresponsible conduct of people when purchasing, consuming and disposing of products which is having an intense effect on both the environment [17]. All this has occurred due to consumers not being mindful of the rights of others and the consequences of their conduct [7]. People who are mindful of their actions tend to hold values that control their behaviours which results into promotion of sustainable consumption patterns [9].

H3: There is a positive relationship between mindfulness and sustainable consumer behaviour

The mediating effect of mindfulness on the relationship between self-transcendence and sustainable consumer behaviour

The significance of self-transcendence is rooted from a holistic perspective that human behaviour is controlled by values that one holds [26]. The conduct of a person can be traced from his attitude and beliefs which are derived from the values that he holds [19]. While empirical literature has observed that mindfulness determines the consumption behaviour of an individual, the relation is indirect since the immediate impact is on values that one holds which directly influence his conduct towards observance of sustainable consumption behaviours [3]; [21]. When a person upholds a character attribute where he looks at himself as an integral part of society, it promotes observance of benevolence and universalism rights [24]. Observance of principles of benevolence and universalism values will result into realignment of consumption behaviours not to endanger the environment or infringe on the rights of others in the community [4]; [24].

H4: Self-transcendence mediates the relationship between mindfulness and sustainable consumer behaviour

Methods

The current study was carried out from Uganda and the population consisted of university students and workers. The university setting was considered because such institutions bring together many people whose purchase, consumption and disposal levels in aggregate terms are high. The universities considered included Mountains of the moon university (MMU), Kampala University (KU) and Ndejje University (NU). Sampling procedure involved stratifying the population based on university and category of respondents i.e. workers and students. After stratification, convenience sampling was used to choose respondents of the study who were readily available and willing to participate in the study. The total sample size considered for the current study was 403 of which 122 were workers and 301 were students from the three universities.

Data collection

A questionnaire was developed which was supplied to the respondents considered for the study. The questionnaire was broken down into two parts where by the first part contained general information, measures of the mediator and the independent variable. The second part of the questionnaire measured the dependent variable. The first part of the questionnaire was supplied first to the informants and, the second part of the questionnaire was supplied after an interval of two weeks. This was done to reduce on common method bias which affects reliability of data results.

Measures

The study variables included mindfulness, self-transcendence and sustainable consumer behaviour. Mindfulness was measured based on dimensions of observing, describing and awareness [18]. Self-transcendence was measured based on dimensions of benevolence and universalism [10]. Sustainable consumer behaviour was measured based on dimensions of quality life, future generation care and environment wellbeing care [23].

III. RESULTS AND DISCUSSIONS

Demographic characteristics

Out of the 403 respondents who were supplied with questionnaires, 308 were returned. 82(27%) of the respondents who returned the questionnaires were employees while 226(73%) were students. 148(48%) of the respondents were female while 160(52%) were male. The results also indicate that by representation from the university, 78(25.3%) of the

respondents where from Kampala University, 109(35.4%) of the respondents where from Ndejje university while 121(39.3%) of the respondents where from Mountains of the Moon University.

To measure consistency and dependability of the questionnaire, instruments were subjected to reliability and validity test. To examine the reliability and validity of the items, confirmatory analysis (CFA) was examined and the results are shown in table I. For an item to be considered valid, its factor loading should be 0.5 and above [14]. It can be observed from table I that all items ranged from 0.5 to 0.9. For an instrument to be reliable, composite reliability (CR) should at least be 0.6 while Average Variance Extracted (AVE) should at least be 0.5 [18]. It can be observed from table I, that all variables achieved the minimum threshold points for both CR and AVE. To enrich validity of instruments, there should be discrimination in constructs measuring a variable and this is measured by discriminant validity criterion [14]. Discriminant validity condition requires the square of multiple correlations between constructs to be less than AVE. This condition was realized for all constructs used in the current study.

Table I: Confirmatory factor analysis

Item	Loading	CR	AVE	Cronbach
Mindfulness				0.72
Observation	0.55-0.78	0.72	0.65	
Awareness	0.72-0.83	0.79	0.54	
Describing	0.62-0.73	0.70	0.68	
Self-Transcendence				0.81
Universalism	0.61-0.82	0.76	0.57	
Benevolence	0.68-0.90	0.75	0.55	
Sustainable consumption behaviour				0.82
Quality life	0.76-0.87	0.81	0.61	
Future generation care	0.68-0.89	0.74	0.71	
Environmental wellbeing care	0.6-0.9	0.74	0.73	

CR= Construct reliability, AVE= Average variance extracted

Structural equations model

The main objective of this paper was to study the relationship between sustainable consumption behaviour and mindfulness mediated by self-transcendence with a specific focus on Uganda. To examine the relationship between the variables, structural equations modelling (SEM) method was used for analysis. It can be observed from table II that the relationship between mindfulness (Mindful) and self-transcendence (Transcend) was significant, mindfulness and sustainable consumption behaviour (Consume) was also significant, self-transcendence and sustainable consumption behaviour was also significant. Figure 1 expounds on results indicated in table II. Figure I is showing the relationship between observed and latent variables. From the three models tested, the model in figure I had a better model fit with a probability value of 0.139 which above a critical value of 0.05 as indicated in table III. By referring to [14] conditions the data fits the hypothesized model.

Table II: Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Transcend <--- Mindful	.142	.048	2.952	.003	
Consume <--- Mindful	.195	.096	2.024	.043	
Consume <--- Transcend	1.568	.572	2.743	.006	

Table III: Model fit

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	27	62.003	51	.139	1.216
Saturated model	78	.000	0		
Independence model	12	2242.749	66	.000	33.981

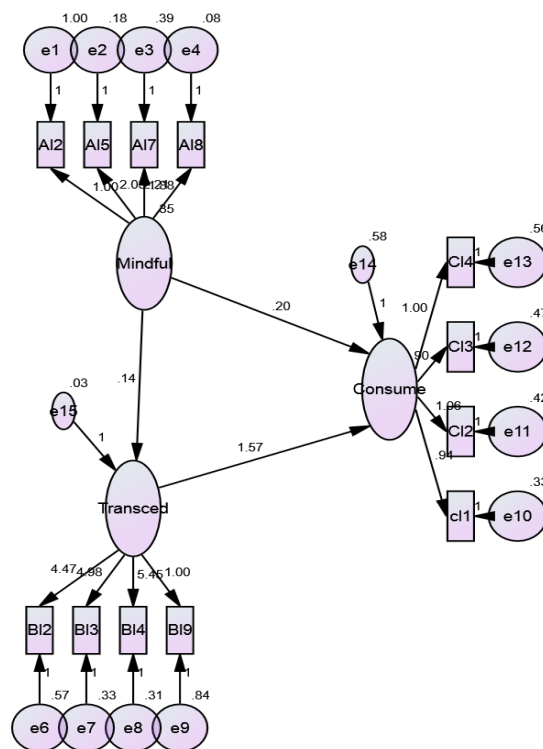


Figure I: Structural equation model

Mindfulness and self-transcendence

It can be observed from table II that the relationship between mindfulness and self-transcendence is positively significant. This implies that whenever an individual is mindful about how he conducts himself while purchasing, consuming and disposing of products, there is a magnitude of 0.142(14.2%) likelihood for him to be compassionate about others in the community. According to self-determination theory, when people are mindful of their actions, they adopt values which regulate their behaviour so as to be compatible with self and others in society. This was also supported by [8] who observed that being mindful of their actions; consumers are expected to promote values oriented towards establishing interpersonal harmony and equality in a community which are tenets of self-transcendence.

Self-transcendence and sustainable consumer behaviour

It can be observed from table II that the relationship between self-transcendence and sustainable consumer behaviour is positively significant. This implies that when an individual holds values that transcend beyond self and becomes compassionate about others while purchasing, consuming and disposing of products, there is a likelihood of 1.57(157%) magnitude for him/her to adopt sustainable consumption behaviours. Self-determination theory observes that at the heart of self-regulated behaviour there lies an individual ability to reflectively consider one's conduct in a wider community and its association with one's personal needs and values [25]. Therefore personal values compel one to adopt consumption behaviours which do not endanger the survival of the community at present and future times. This was also supported by [4] who observed that when an individual cares about preserving the welfare of others, he will conduct himself responsibly while purchasing, consuming and disposing a product which enriches sustainable consumption behaviours.

Mindfulness and sustainable consumer behaviour

It can be observed from table II that the relationship between mindfulness and sustainable consumer behaviour is positively significant. This implies that whenever an individual is mindful about how he conducts himself while purchasing, consuming and disposing of products, there is a magnitude of 0.192(19.2%) likelihood for him to adopt

sustainable consumption behaviours. According to self-determination theory, being mindful of self but also be sensitive to others calls for to adopt behaviours which don't endanger the health of others in the community thus adopting consumption behaviours that are sustainable [6]. People who are mindful of their actions tend to hold values that control their behaviours which results into promotion of sustainable consumption patterns [9]

Mediating effect of self-transcendence on the relationship between mindfulness and sustainable consumption behaviours

It can be observed from table II that the mediating effect of self-transcendence on the relationship between mindfulness and sustainable consumer behaviour is positively significant. It is estimated that a unit increase in mindfulness of an individual consumer influences sustainable consumption behaviours through self-transcendence by 0.028 derived from (0.142×0.192) . This means that there is a 2.8% mediating effect which is positively significant. According to self-determination theory, being mindful of self but also be sensitive to others calls for to adopt behaviours which don't endanger the health of others in the community thus adopting consumption behaviours that are sustainable [6]. The theory of self-determination observes that given the intrinsic and extrinsic motivations, people will become mindful of their actions and this prompts them to adopt self-transcendent values which regulate their consumption behaviours such that they are sustainable [1]. It was noted by [24] that when a person upholds a character attribute where he looks at himself as an integral part of society, it promotes observance of benevolence and universalism rights. Observance of principles of benevolence and universalism values will result into realignment of consumption behaviours not to endanger the environment or infringe on the rights of others in the community [4]; [24].

IV. CONCLUSIONS AND IMPLICATIONS

Study findings indicate that the relationship between mindfulness and self-transcendence is positively significant. It was also found out that the relationship between self-transcendence and sustainable consumer behaviour is positively significant. The relationship between mindfulness and sustainable consumer behaviour was also found to be significantly positive. The mediating effect of self-transcendence on the relationship between mindfulness and sustainable consumer behaviour was found to be positively significant. Since the size of regression weight on the relationship between mindfulness and consumption behaviour reduces from 2.1 (201%) to 1.57(157%) when a mediator is introduced, it then means that self-transcendence has a partial mediating effect on the relationship between mindfulness and sustainable consumption behaviours. This therefore implies that when a person is mindful about how he conducts himself while purchasing, consuming and disposing a product he/she adopts personal values which transcend beyond personal needs to those of a wider community from which sustainable consumption behaviours will emerge. Therefore by policy, companies need to carry out campaigns of awareness about how to consume and dispose products which eventually compel people to be mindful of their actions while purchasing, consuming and disposing products. Once people are mindful, they behave responsibly in the community by adopting values and behaviours which promote sustainable consumption patterns.

Limitations and areas for further research

The study was carried out from a developing country Uganda which may limit replication of the findings to the developed country. Thus there is a need to extend the study to a developed country. The study was carried out using a cross sectional research design where data was collected at one point within the same time period. There is need to extend the study by using a longitudinal study to examine the phenomenon over time.

REFERENCES

- [1] Aoki, S., & Fujita, S. (2021). Self-Transcendence of Japanese Female Breast Cancer Patients with Hereditary Breast and Ovarian Cancer Syndrome. *Asia-Pacific Journal of Oncology Nursing*, 8(6), 670-678.
- [2] Bartels, J., & Reinders, M. J. (2016). Consuming apart, together: The role of multiple identities in sustainable behaviour. *International Journal of Consumer Studies*, 40(4), 444-452.
- [3] Campanella, F., Crescentini, C., Urgesi, C., & Fabbro, F. (2014). Mindfulness-oriented meditation improves self-related character scales in healthy individuals. *Comprehensive Psychiatry*, 55(5), 1269-1278.
- [4] Costa Pinto, D., Nique, W. M., Maurer Herter, M., & Borges, A. (2016). Green consumers and their identities: How identities change the motivation for green consumption. *International Journal of Consumer Studies*, 40(6), 742-753.

- [5] Davis, S. L., Rives, L. M., & de Maya, S. R. (2017). Introducing personal social responsibility as a key element to upgrade CSR. *Spanish Journal of Marketing-ESIC*, 21(2), 146-163.
- [6] Deci, E. L., & Ryan, R. M. (1985). Self-determination theory. Retrieved Jan, 25, 2019.
- [7] Dhandra, T. K. (2019). Achieving triple dividend through mindfulness: More sustainable consumption, less unsustainable consumption and more life satisfaction. *Ecological economics*, 161, 83-90
- [8] Fischer, D., Stanszus, L., Geiger, S., Grossman, P., & Schrader, U. (2017). Mindfulness and sustainable consumption: A systematic literature review of research approaches and findings. *Journal of Cleaner Production*, 162, 544-558.
- [9] Frank, P., Sundermann, A., & Fischer, D. (2019). How mindfulness training cultivates introspection and competence development for sustainable consumption. *International Journal of Sustainability in Higher Education*.
- [10] Ganassali, S., & Matysiewicz, J. (2021). “What a lot of things I don’t need!”: consumption satiation, self-transcendence and consumer wisdom. *Journal of Consumer Marketing*.
- [11] Garland, E. L., & Fredrickson, B. L. (2019). Positive psychological states in the arc from mindfulness to self-transcendence: extensions of the Mindfulness-to-Meaning Theory and applications to addiction and chronic pain treatment. *Current opinion in psychology*, 28, 184-191.
- [12] Geiger, S. M., Fischer, D., Schrader, U., & Grossman, P. (2020). Meditating for the planet: Effects of a mindfulness-based intervention on sustainable consumption behaviours. *Environment and Behaviour*, 52(9), 1012-1042.
- [13] Grigoropoulou, N. (2021). The “Malevolent” Benevolence: what happens to perceived immigrant threat when value priorities collide?. *Ethnic and Racial Studies*, 44(16), 126-148.
- [14] Fornell, C. and Larcker, D. F. (1981), —Structural equation models with unobservable variable and measurement error: algebra and statistics! *Journal of Marketing Research*, Vol.18. No.3, pp.382-388.
- [15] Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R.L., (1998), *Multivariate data analysis*, Prentice hall, Upper Saddle River, NJ.
- [16] Hanley, A. W., & Garland, E. L. (2019). Spatial frame of reference as a phenomenological feature of self-transcendence: Measurement and manipulation through mindfulness meditation. *Psychology of Consciousness: Theory, Research, and Practice*, 6(4), 329.
- [17] Hanley, A. W., Dambrun, M., & Garland, E. L. (2020). Effects of mindfulness meditation on self-transcendent states: perceived body boundaries and spatial frames of reference. *Mindfulness*, 11(5), 1194-1203.
- [18] Hermann, E. (2022). Psychological targeting: nudge or boost to foster mindful and sustainable consumption?. *AI & SOCIETY*, 1-2.
- [19] Iani, L., Lauriola, M., Cafaro, V., & Didonna, F. (2017). Dimensions of mindfulness and their relations with psychological well-being and neuroticism. *Mindfulness*, 8(3), 664-676.
- [20] Jiang, T., & Sedikides, C. (2021). Awe motivates authentic-self pursuit via self-transcendence: Implications for prosociality. *Journal of personality and social psychology*.
- [21] Lubowiecki-Vikuk, A., Dąbrowska, A., & Machnik, A. (2021). Responsible consumer and lifestyle: Sustainability insights. *Sustainable production and consumption*, 25, 91-101.
- [22] Masters-Waage, T. C., Nai, J., Reb, J., Sim, S., Narayanan, J., & Tan, N. (2021). Going far together by being here now: Mindfulness increases cooperation in negotiations. *Organizational Behaviour and Human Decision Processes*, 167, 189-205.
- [23] Pelton, J. (2019). UN Sustainable Development Goals for 2030. *Handbook of Small Satellites: Technology, Design, Manufacture, Applications, Economics and Regulation*, 1-30.
- [24] Quoquab, F., Mohammad, J., & Sukari, N. N. (2019). A multiple-item scale for measuring “sustainable consumption behaviour” construct: Development and psychometric evaluation. *Asia Pacific Journal of Marketing and Logistics*.

- [25] Rahman, I., & Reynolds, D. (2019). The influence of values and attitudes on green consumer behaviour: A conceptual model of green hotel patronage. *International Journal of Hospitality & Tourism Administration*, 20(1), 47-74.
- [26] Reeve, J. (2002). Self-determination theory applied to educational settings. *Handbook of self-determination research*, 2, 183-204.
- [27] Reischer, H. N., Roth, L. J., Villarreal, J. A., & McAdams, D. P. (2021). Self-transcendence and life stories of humanistic growth among late-midlife adults. *Journal of Personality*, 89(2), 305-324.
- [28] Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary educational psychology*, 61, 101860.
- [29] Sheoran, M., & Kumar, D. (2020). Benchmarking the barriers of sustainable consumer behaviour. *Social Responsibility Journal*.
- [30] Sheoran, M., & Kumar, D. (2021). Conceptualisation of sustainable consumer behaviour: converging the theory of planned behaviour and consumption cycle. *Qualitative Research in Organizations and Management: An International Journal*.
- [31] Shiel, C., do Paco, A., & Alves, H. (2020). Generativity, sustainable development and green consumer behaviour. *Journal of Cleaner Production*, 245, 118865.
- [32] Teed, A. R., Rakic, J., Mark, D. B., & Krawczyk, D. C. (2020). Relative activation patterns associated with self-transcendent and self-enhancement core values: An fMRI study of basic human values theory concepts in males. *Social neuroscience*, 15(1), 1-14.
- [33] Torres-Ruiz, F. J., Vega-Zamora, M., & Parras-Rosa, M. (2018). Sustainable consumption: Proposal of a multistage model to analyse consumer behaviour for organic foods. *Business Strategy and the Environment*, 27(4), 588-602.
- [34] Verhaeghen, P. (2021). There is virtue in mindfulness: The relationship between the mindfulness manifold, virtues, and eudemonic wellbeing. *Personality and Individual Differences*, 176, 110767.
- [35] Wohlgenant, M. K. (2021). Consumer Demand—Theory. In *Market Interrelationships and Applied Demand Analysis* (pp. 5-19). Palgrave Macmillan, Cham.