
THE EFFECT OF MINDFUL ATTENTION ON CONSUMERS' IMPULSIVE BUYING BEHAVIOR AND THE MODERATING ROLE OF FAMILY TYPE¹

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ABSTRACT

Intrinsic and extrinsic influences to which consumers are exposed can differentiate the reasonableness of their purchasing behavior. One of these intrinsic influences is impulse, which is also effective in online purchasing behavior. Although mindfulness is thought to influence consumption behavior, evidence of the effect of demographic characteristics is insufficient. This cross-sectional study examines the degree of influence of the MAAS (Mindfulness Awareness Scale) score on the IBBS (Impulsive Buying Behaviour Scale) score and the moderating role of family type on this effect. The study data were obtained from adults with monthly income through an online survey (n=459). In line with the study's results, when the effect of any demographic factor is not considered, it is understood that the IBBS score will decrease as the MAAS score increases. The results explain the moderating role of family type. It was calculated in this context that the increase in MAAS score had a more significant effect on the decrease in IBBS score for participants living in nuclear families. However, the same effect was not observed for participants living in extended families.

Keywords: Consumer behavior, Mindful awareness (attention), Impulsive buying, Online purchases, Digital marketing, Family type

Doi: 10.15659/ppad.18.1.1471640

1 The ethics committee permission document required for the collection of research data was obtained from the Sivas Cumhuriyet University Scientific Research and Publication Ethics Social Sciences and Humanities Committee with decision number 23 and dated 24/02/2022.

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Geliş Tarihi / Received: 21.04.2024, Kabul Tarihi / Accepted: 14.10.2024

BİLİNÇLİ FARKINDALIĞIN DİKKAT BOYUTUNUN TÜKETİCİLERİN DÜRTÜSEL SATIN ALMA DAVRANIŞLARI ÜZERİNDEKİ ETKİSİ VE AİLE TÜRÜNÜN MODERATOR ETKİSİNİN İNCELENMESİ

ÖZ

Tüketicilerin maruz kaldığı içsel ve dışsal etkiler, satın alma davranışlarının makullüğünü farklılaştırabilir. Bu içsel etkilerden biri de dürtüdür ve online satın alma davranışlarında da etkilidir. Bilinçli farkındalığın tüketim davranışını etkilediği düşünülse de, demografik özelliklerin etkisine ilişkin kanıtlar yetersiz kalmaktadır. Bu kesitsel çalışma, MAAS (Dikkatli Farkındalık Ölçeği) puanının IBBS (Dürtüsel Satın Alma Davranışı Ölçeği) puanı üzerindeki etki derecesini ve aile tipinin bu etki üzerindeki düzenleyicilik rolünü incelemektedir. Çalışma verileri aylık geliri olan yetişkinlerden çevrimiçi anket aracılığıyla elde edilmiştir (n=459). Çalışmanın sonuçları doğrultusunda, herhangi bir demografik faktörün etkisi dikkate alınmadığında, MAAS puanı arttıkça IBBS puanının düşeceği anlaşılmaktadır. Sonuçlar aile tipinin düzenleyici rolünü açıklamaktadır. Bu bağlamda, çekirdek ailelerde yaşayan katılımcılar için MAAS skorundaki artışın IBBS skorundaki düşüş üzerinde daha anlamlı bir etkiye sahip olduğu hesaplanmıştır. Buna karşın aynı etki geniş ailelerde yaşayan katılımcılar için gözlenmemiştir.

Anahtar Kelimeler: Tüketici davranışı, Bilinçli farkındalık (dikkat), Dürtüsel satın alma, Çevrimiçi satın alma, Dijital pazarlama, Aile tipi

1. Introduction

“Emotion regulation can be defined as the mechanism by which individuals change their emotions (intentionally or unintentionally) to achieve a desired outcome (Schreiber et al., 2012). Van Overveld (2016) claims that the cost of lack of emotion regulation is high for individuals and puts individuals' tendency towards impulsive buying based on this claim. In another parallel study, Fenton-O'Creevy et al. (2018) emphasize that impulsive buying is a psychological disorder that tends to become chronic, and the way to correct it is through emotion regulation. According to Guendelman et al. (2017), mindfulness is one of the effective ways of emotion regulation, and this view is supported in the literature (Brown et al., 2007; Chambers et al., 2009; Goldin & Gross, 2010; Hölzel et al., 2011). Cai et al. (2015) stated that narcissism is characterized by impulsivity and materialism, and narcissism is a potential determinant of impulsive buying. Cisek et al. (2014) also state that narcissism justifies the behaviors of exposing oneself and arrogant behaviors. This information links the way individuals with impulsive buying tendencies regulate their buying behaviors to the condition of controlling their own emotions. In support of this, Fenton-O'Creevy et al. (2018) characterized impulsive buying tendencies as a possible consequence of individuals' inability to regulate emotions. They argued that regulating emotions at this point can somewhat reduce the impacts of impulsive buying tendencies.

In terms of its role in regulating impulsive buying tendencies, mindful consumption is a topic that tends to gain popularity in the literature. Sermboonsang et al. (2020) argue that mindfulness-based transformational learning effectively manages impulsive buying. In one of the impulsive buying studies, Dhandra (2020) found that self-esteem mediated the relationship between mindfulness and impulsive buying. In another study, Yiğit (2020) investigated the moderating role of hedonic shopping motivations in the relationship between mindfulness and impulsive buying. The author found that this relationship was significant only for low levels of mindfulness. Vihari et al. (2022) investigated mindfulness and online impulsive buying according to problematic internet use and emotional intelligence levels. As in the current study, it was concluded that problematic internet use mediates the effect between mindfulness and online impulsive buying behavior, and emotional intelligence negatively moderates this effect.

Fischer and Hanley (2007) claim that habitual consumption decisions are based on routines that do not require cognitive effort. Schäfer et al. (2012) emphasize the importance of identifying these routines and habits in sustainable consumption research, and Sheth et al. (2010) based their consumer-based perspective on sustainability on mindfulness. For this reason, Fischer et al. (2017) argue that the proper attitude-behavior gap should be found in consumer research. For this purpose, individuals' routines and their underlying factors should be identified. Wallace (2011) points to introspection as a way of observing mental phenomena and mindfulness as a dominant theme. In addition, mindfulness disrupts the routine in consumer behavior, builds the self, increases non-material value and well-being, and develops unique behavioral patterns (Fischer et al., 2017). The fact that mindful consumers are less sensitive to marketing campaigns and persuasion efforts directed at them (Rosenberg, 2005) is an example of the unique behaviors expressed by Fischer et al. (2017). In another study that is in parallel with this phenomenon, it was revealed that the hedonic and materialistic orientation of consumers who meditate for mindfulness decreased. Accordingly, their greed for money disappeared (Gentina et al., 2021). According to Kreuzer and Mühlbacher (2017), mindful consumers shelter themselves from the hustle and bustle of everyday life to their 'home' of safety, prosperity, and well-being and shape their behavior in a more peaceful environment.

Since there are significant differences between the dimensions of mindfulness measured by scales related to mindfulness (Rosch, 2007), several instruments that differ according to the perspectives related to the concept are used (Hunecke & Richter, 2019). One of these scales is the MAAS (Mindful Attention Awareness Scale), developed by Brown and Ryan (2003), which measures the concept of mindfulness in terms of attention. Impulsive buying tends to form a habit (Hejase et al., 2018), and according to Verplanken et al. (2005), habituation has several consequences, such as reduced influence of attitudes and intentions on behavior and reduced attention to behavior or context-related information. On the other hand, Brown and Ryan (2003) argued in their study that the attention levels of individuals' characteristics will affect their tendency to be in the moment at different levels. As it is known, MAAS promises to measure only the dimension of acting with awareness among the five dimensions of mindfulness, which include observing, identifying, acting with awareness, not reacting, and not judging (Baer et al., 2006). Similarly, Van Dam et al. (2010) and Sauer et al. (2013) state that the MAAS measures inattention, i.e., it reveals the awareness of inattention in individuals. Papias et al. (2012) support that mindful attention prevents mindless impulses. Thus, this study aims to evaluate the effect of consumers' level of mindfulness on their impulsive buying behavior and determine how this relationship is affected by family types. Hence, our research seeks to address this gap by confronting the following research questions:

RQ₁: *Can impulsive buying behavior explain mindful attention awareness?*

RQ₂: *Does the explainability of mindful attention awareness with impulsive buying behavior differ according to consumers' family type characteristics?*

Examining the moderating effect of family-type variables in the study has theoretical and practical benefits. First, it provides an opportunity to determine whether consumer behavior is valid under certain conditions. In particular, it is aimed to obtain information in a broader field of study represented by the concepts of nuclear family and extended family. It is thought that the dynamics in the family structure will affect instinctive purchasing differently, even under conscious awareness. Thus, it will be possible to understand consumer behavior in different demographic structures. From a practical point of view, it will be possible to obtain inferences in various application areas, such as differences in marketing messages, personalized products, and service delivery, as well as having an idea about raising consumer awareness and developing the right training programs in sustainable consumption.

Considering that the difference in the attention capacities of individuals mentioned by Brown and Ryan (2003) may be related to their socio-demographic characteristics, the present study focuses on the regulatory role of the participants' socio-demographic characteristics. On the other hand, impulsive buyers allocate less attention to a specific product than non-impulsive buyers (Büttner et al., 2014). This explains the use of the MAAS in the current study due to its attention-oriented nature. As far as reviewed from the literature, MAAS has been used in studies investigating the effect of mindfulness on pro-environmental behavior (Panno et al., 2017), life satisfaction (Yüksel Doğan & Metin, 2023), and sustainable food consumption (Hunecke & Richter, 2019). However, no study has used this scale within the scope of mindful marketing or mindful consumption. This distinguishes this study from the mindful consumption studies in the literature.

2. Conceptual Framework

2.1. Mindfulness and Mindful Attention Awareness

Mindfulness, an ancient Buddha teaching with links to the foundations of today's life, is simply being aware of the present moment (Kabat-Zinn, 2001, p. 12). This concept, considered a secularised area of psychology for the Western world (Wheeler et al., 2017), requires being open to all experiences rather than a meditation that requires concentration on a single point close to the outside (Shapiro et al., 1998). According to Bishop (2004), mindfulness consists of two components: focusing attention on experiencing the current moment and living the whole experience with curiosity, openness, and acceptance. Mindfulness comprises seven attitudes: non-judgment, patience, initiating mind, trust, acceptance, and release (Phang & Oei, 2012). Mindfulness starts with bringing awareness to the current experience, which requires observation and changing thoughts, feelings, and sensations by organizing the focus of attention (Bishop, 2004). Mindfulness is the background radar of consciousness, through which individuals continuously monitor the internal and external environment (Brown & Ryan, 2003). Attention, conversely, is the process of focusing on mindfulness and provides high sensitivity to a limited range of experiences (Westen, 1998). However, while mindful individuals focus their attention on the emotions they are currently experiencing and internal and external experiences, they can stay away from reacting to these emotional experiences (Wu et al., 2013).

Wheeler et al. (2017) revealed that mindfulness can change the brain's structure. Moreover, mindfulness even causes an increase in the proportion of grey matter in individuals' brains (Hölzel et al., 2011; Tang et al., 2020). The grey matter, which Hilger et al. (2020) revealed to be directly related to the IQ level in individuals, can increase the capacity of cognition and learning concepts, especially in young individuals (Young et al., 2015). In parallel, Van Den Bos et al. (2012) emphasized that grey matter improves individuals' IQ, educational, and learning capacity. Fischer et al. (2017) show various practices that systematically teach mindfulness and emotional non-reactivity as the basis of the increase in the learning capacity of mindfulness. Wheeler (2017) also emphasized that mindfulness contributes to regulating emotions. Grossman (2015) states that these practices contribute to developing ethical values that aim to show kindness to the world. In summary, an individual's moral development through mindfulness is based on the development of brain activities and the ability to master emotions.

The fact that mindfulness is a teaching that reduces depression (Wu et al., 2013) and an effective method used in cognitive behavioral therapy (Phang & Oei, 2012) makes mindfulness popular. Consequently, according to Berthon and Pitt (2019), mindfulness is no longer a doctrine in the modern world. Still, it has become an industry that covers many products and services, especially software applications and wearable technologies. Therefore, studies within marketing and mindfulness have become a trend nowadays. Kumar et al. (2023) categorize marketing studies into mindful marketing and mindful consumption. Several studies are conducted within the scope of mindful consumption, which is also included in the scope of the current study. The related literature shows that mindfulness reduces greedy monetary attitudes in consumers (Gentina et al., 2021), provides long-term eating awareness (Bahl et al., 2013), increases the social and environmental well-being of the consumer (Bahl, 2016), increases sensitivity to physiological problems (Van De Veer et al., 2016); affects ethical consumer beliefs (Dhandra & Park, 2018); increases

social and environmental well-being (Bahl et al., 2016); affect willingness to use mobile payment systems (Flavian et al., 2020); shape spending and credit utilization tendencies (Pereira & Coelho, 2019); strengthen brand experience (Ngo et al., 2016; Haobing, 2021); exhibit hedonic tendencies (Richter & Hunecke, 2021; Yiğit, 2020); support brand loyalty (Ndubisi, 2014) and increase the tendency to follow brand rituals (Liu et al., 2022).

Mindfulness is a multidimensional construct, encompassing five distinct facets: observing, describing, acting with awareness, non-reacting, and non-judging (Baer et al., 2006). One of these facets, acting with awareness, is called mindful attention. Mindful attention shows the level of attention and awareness of the present moment (Brown & Ryan, 2003). According to Papies et al. (2012, p. 291), "... mindful attention to one's own mental experiences helps to control impulsive responses and thus suggest mindfulness as a potentially powerful method for facilitating self-regulation". Impulsive buyers are more likely to act on impulse and respond positively and immediately to buying impulses (Rook & Fisher, 2007).

2.2. Impulsive Buying Behavior

An essential goal of understanding consumer psychology is to identify when and why consumer behavior is driven by impulses rather than rational decisions (Hofmann et al., 2008). One of these behaviors is impulse buying behavior. Impulsive buying is a concept first discussed by Kollat and Willett (1967), defined by Rook (1987) as sudden and unplanned purchases initiated instantly and accompanied by a strong impulse and feelings of pleasure and excitement. (Sermboonsang, 2020) states that approximately 60% of shoppers impulsively purchase at least 1 to 3 unlisted products. With the developing technologies, this behavior has started to be seen in online and traditional environments (Yiğit, 2020). As individuals experience uneasiness when they cannot buy the products they touch (Peck & Childers, 2006), they tend to be impulsive in their online purchasing behavior (Chih et al., 2012). The increase in Internet usage affects positively buying impulsively (Sun & Wu, 2014). Impulsive buying behaviors performed using the Internet, a channel positioned by this increase, are called online IBB (Cavazos-Arroyo & Máynez-Guaderrama, 2022). Moreover, as a marketing channel, the Internet encourages such purchases as consumers feel less inhibited due to relative social anonymity (Sun & Wu, 2011). Online IBB is seen in many types of shopping via the Internet, from e-shopping to social commerce (Akram et al., 2018), and consumers make such purchases regardless of the negative consequences (Utama et al., 2021). Additionally, according to Cavazos-Arroyo and Máynez-Guaderrama (2022), impulse buying influences online impulse buying behavior directly and indirectly. Indeed, the online environment has become an element of culture, and Kacen and Lee (2002) emphasized that culture is a determinant of impulse buying.

Impulsive buying may depend on personality traits (Suher & Hoyer, 2020) and normative traits (Rook & Fisher, 1995). Cai et al. (2015) stated that narcissism is characterized by impulsivity and materialism, and narcissism is a potential determinant of impulsive buying. Cisek et al. (2014) stated that narcissism justifies self-promotion and arrogant behavior. This suggests that the way for individuals with impulsive buying tendencies to regulate their buying behaviors depends on the condition of regulating their own emotions. In support of this, Fenton-O'Creevy et al. (2018) characterized impulsive buying tendencies as a possible consequence of individuals' inability to regulate their emotions, suggesting

that regulating emotions can reduce the impacts of impulsive buying tendencies to some extent. According to Wang et al. (2022), there is escalating concern about impulsive buying, which generates adverse consequences for consumers' well-being and their environmental and societal sustainability. Black (2007) sees this dysfunction as a chronic disorder that combines with the consciousness of excessive shopping, which can lead to compulsive buying behavior in individuals (Brunelle & Grossman, 2022). This disorder is often associated with hedonic buying (Chen & Wang, 2016) and social tendencies (Meng et al., 2019). Based on the arguments offered above, we posit as follows:

H₁: The degree of mindful attention awareness has an effect on the degree of impulsive buying behavior.

2.3. Family Type

Marketing experts and academics recognize the importance of tracking household structure and composition variables (Lee & Beatty, 2002). As one of these variables and as a sociological unit, the family is a sociological group of individuals. Family type is a crucial context variable frequently used in psychological and cultural research (Georgas et al., 2001), and there are mainly three different family types according to their size: extended, joint, and nuclear (Georgas et al., 2001; Maqsood, 2021). In a joint family, individuals from different generations (grandparents, parents, and children) live together (Maqsood, 2021). An extended family is defined as an enlarged family consisting of all nuclear family members and all relatives (Ranga, 2017). The nuclear family is frequently seen in every modern society and consists of a husband, wife, and children (Ahmed, 2019). There are many studies in the marketing literature that support the argument that family type affects consumers' decisions (Holdert & Antonides, 1997; Lee & Beatty, 2002; Bravo et al., 2006; Rindfleisch et al., 1997; Tinson et al., 2008; Ranga, 2017; Lien et al., 2018). When the related literature is examined, it is seen that joint family type, as a rarer family type, is not associated with purchasing decisions in the literature, whereas extended (Lien et al., 2018) and nuclear (Lee & Beatty, 2002; Ahmed, 2019) family types are associated with purchasing decisions.

The fact that individuals in the nuclear family are connected by biological, moral, legal, religious, and social ties simultaneously makes it a remarkable issue in terms of consumption (Presvelou, 1972, p. 103). In the literature, many studies investigate the effect of nuclear family type on purchasing decisions (Commuri & Gentry, 2000; Lee & Beatty, 2002; Epp & Price, 2008; Kerrane et al., 2012; Ahmed, 2019). In addition, it is understood from the literature that the nuclear family type affects compulsive (Rindfleisch et al., 1997) and impulsive (Sumetha & Vasanthi, 2016) purchasing types. Although a study examines whether mindfulness practices differ according to nuclear family type, no research investigates mindfulness practices or types and nuclear family structure in purchasing decisions. The hypothesis formulated for the family type variable is given below:

H₂: Family type moderates the interaction between mindful attention awareness and impulsive buying behavior.

3. Method

3.1. Participants

This study utilized a data set that combines consumer behavior and consumer psychology. The sample consisted of 580 people who could be reached using the convenience sampling. The participants were adults ($Age \geq 18$) with any level of education who had achieved financial freedom, had shopped on online platforms, and planned to do so. The condition of not accepting participation was first considered as an exclusion criterion. The second exclusion criterion was not shopping on online platforms and not planning to do so in the future. Incomplete or incorrect information was removed from the questionnaires obtained, and the data set was formed with the questionnaire form of 459 participants who decided to be used in the study.

3.2. Procedure

The primary problem in creating the dataset is geographical accessibility. This problem can be overcome thanks to technological developments. An online questionnaire was prepared to ensure the participants were from a wider geographical area. The URL address of the prepared form was shared through individual networks, professional contacts, social networks, institutions, and organizations. No one in the sample was promised a reward or any earning opportunity to participate in the study. When consumers who want to participate reach the URL address, they first get the information text about the survey. At the end of the text, they are expected to check the “check box” to confirm their participation in the survey. The total time required to complete the study was set at a maximum of 30 minutes. Participants could discontinue the survey at any stage. The ethics committee permission document required for the collection of research data was obtained from the Sivas Cumhuriyet University Scientific Research and Publication Ethics Social Sciences and Humanities Committee with decision number 23 and dated 24/02/2022.

3.3. Measures

3.3.1. Demographics Questionnaire

The essential characteristics of the people who took part in the study are specified under the heading “participants.” In addition, multiple-choice questions were included to determine the demographic characteristics of the participants. These variables include essential characteristics (gender, age, family type) and outcomes (education, marital status, sector of employment, income).

Table 1. Demographic Characteristics of Participants

Variables	Mean/n (SD/%)
Age*	30.38 (5.57)
Gender	
Male	216 (47.1)
Female	243 (52.9)
Education	
Secondary Education Degree	78 (17)
Bachelor's Degree	245 (53.4)
Postgraduate Degree	136 (29.6)
Marital Status	
Single	361 (78.6)
Married	98 (21.4)
Sector	
Private	268 (58.4)
Public	191 (41.6)
Income	
15000 TL and below	11 (2.4)
15001 TL – 20000 TL	253 (55.1)
20001 TL – 30000 TL	124 (27.0)
30001 TL and above	71 (15.5)
Family Type	
Nuclear	399 (86.9)
Extended	60 (13.1)

* N = 459; SD = Standard Deviation

3.3.2. Impulsive Buying Behavior Scale (IBBS)

Impulsive buying behavior, one of the consumers' purchasing behaviors, was selected, and the scale developed by Rook and Fisher (1995) was used in the study. The scale defines consumers' impulse buying behavior as the consumer's tendency to buy spontaneously, impulsively, immediately, and kinetically (Rook & Fisher, 1995). In this respect, the scale has an actional characteristic. In the scale consisting of 9 statements in total, information is obtained on a 5-point Likert scale. Participants can answer the statements in the range of 1=strongly disagree and 5=strongly agree. The scale has been used in the literature that contextualizes the influence of touch (Peck & Childers, 2006), attentional bias (Büttner et al., 2014), consumers' antecedents (Chih et al., 2012), apparel return behavior (Suher & Hoyer, 2020), genders and generation (Cavazos-Arroyo & Máynez-Guaderrama, 2022) with impulse-purchasing behavior.

Table 2. IBBS CFAs Statistics

Items	Item Loading	Scale
IBB1	0.718	
IBB2	0.767	Mean=3.15
IBB3	-	Sd.=0.922
IBB4	0.748	
IBB5	0.755	Cronbach's Alpha= 0.777
IBB6	0.703	Measure of Sampling Adequacy= 0.904
IBB7	0.763	
IBB8		Bartlett's Test of Sphericity <0.001
	0.752	AVE=0.547
IBB9	0.725	

When the validity and reliability statistics of the questionnaires were obtained from the samples, the results were as follows: (χ^2/df)=3.1, CFI=0.939, TLI=0.915, SRMR=0.037, RMSEA=0.068 and α =0.777 (Sarstedt et al., 2021; Dijkstra & Henseler, 2015; Schubert & Henseler, 2023). When the responses were analyzed, it was seen that the statement “I often buy things without thinking” (IBB3 Item) negatively affected the overall consistency and was removed from the study. Therefore, it was understood that the results of the questionnaire scale were valid, and the results of scale validity were not shown again under the title of application results. Thus, it is understood that the survey scale results are valid. This study used consumers' Impulsive Buying Behavior scores as the dependent variable.

3.3.3. Mindful Attention Awareness Scale (MAAS)

Another scale used in the study was the Mindful Attention Awareness scale. This scale was taken from the study by Brown and Ryan (2003), in which the concept and role of mindful attention in mental health were discussed. This scale measures the absence of automated, mindless behavior (Coffey & Hartman, 2008). In the scale comprising 15 items (all reverse-scored), data is obtained via a 5-point Likert scale. Participants can answer the statements between 1 = almost never and 5 = almost always. The scale used in the literature contextualizes the executive function of the human body (Black et al., 2011), alcohol consumption (Berry et al., 2021), helping behavior (Avcu Meriç & Sönmez, 2022), and procrastination behavior (Tarman & Sari, 2023) with mindful attention awareness. As it is understood, this scale is also orientated towards the actions of consumers. Moreover, MAAS is also theoretically consistent with mindful treatment (Michalak et al., 2008) and brain activity (Creswell et al., 2007).

On the other hand, Van Dam et al. (2010) suggested that the MAAS is a possible exception to the construct representation problem, with a specific cognitive theory related to scale development. They justified the selection of items representing mindlessness by stating that this was due to the suggestion that “...given that mindless situations are much more common than mindful situations, situations that reflect less mindlessness are likely to be more accessible to most individuals...”. The MAAS also has a strongly supported

unidimensional factor structure and good nomothetic span (e.g., Brown & Ryan, 2003; MacKillop & Anderson, 2007; Van Dam et al., 2010), making it a seemingly good candidate to represent mindfulness (Brown & Ryan, 2003; Van Dam et al., 2010).

Table 3. MAAS CFAs Statistics

Items	Item Loading	Scale
MAA1	0.631	
MAA2	0.780	
MAA3	0.794	
MAA4	0.800	Mean=3.14
MAA5	0.800	
MAA6	0.752	Sd.=0.819
MAA7	0.823	Cronbach's Alpha= 0.940
MAA8	0.802	
MAA9	0.750	The measure of Sampling Adequacy= 0.948
MAA10	0.702	Bartlett's Test of Sphericity <0.001
MAA11	0.713	
MAA12	0.651	AVE=0.556
MAA13	0.722	
MAA14	0.705	
MAA15	0.632	

When the validity and reliability statistics of the questionnaires collected from the participants were examined, (χ^2/df)=6.1, CFI=0.893, TLI=0.875, SRMR=0.048, RMSEA=0.105, and α =0.940 values were found (Sarstedt et al., 2021; Dijkstra & Henseler, 2015; Schubert & Henseler, 2023). Thus, it was understood that the results of the questionnaire scale were valid, and the results of scale validity were not shown again under the title of application results. Consumers' MAA scores were used as an independent variable in this study.

3.4. Data Analysis

All analyses used in the study were conducted with IBM SPSS v24.0. The analysis of the study consists of several parts. Firstly, the validity and reliability analyses of the scales and the age variable were tested for compatibility with the normal distribution. The difference analyses between demographic data and scales were calculated and interpreted in the second stage. In addition, correlation analysis results of continuous variables were evaluated at this stage. In the last stage, models in which MAAS (independent), IBBS (dependent), and family type (moderating variables) were tested. The models used to investigate the moderating effect were implemented using Model 1 of the PROCESS plugin (Hayes, 2022). 10000 bootstrap samples were used to correct the bias and to reveal the confidence interval. To explain the moderating role, the conditional effects of different levels of moderators on categorical variables were examined, and data points were created to show interactions (Hair et al., 2012).

3.5. Results

The analyses were conducted on samples consisting of 47.1% men and 52.9% women, with an average age of 30.38 (df=5.57). Notably, the participants had higher education (53.4%) and above (29.6%). Another striking demographic situation is the high number of participants living in nuclear families (n=399), with a rate of 86.9% (Table 1).

MAAS and IBBS variables were created with statements whose suitabilities were confirmed due to Cronbach's Alpha statistics. As a result of the normality test (Kolmogorov Smirnov Z test, according to the $n > 50$ assumptions) of the continuous variables (MAAS, IBBS, Age) in the data set, it was understood that all variables had a skewed distribution (Serper, 1986, p. 150; Marasinghe et al., 1996).

Table 4. MAAS and IBBS Median Differences According to Participant Demographic Characteristics

Variables	MAAS M(SD)	P	IBBS M(SD)	P
Gender				
Male	3,03 (0,84)	0,068	3,25 (0,91)	0,280
Female	3,13 (0,80)		3,13 (0,94)	
Education				
Secondary Education Degree	3,00 (0,78)	0,458	3,50 (0,96)	0,021^a
Bachelor's Degree	3,07 (0,82)		3,13 (0,89)	
Postgraduate Degree	3,13 (0,84)		3,00 (0,93)	
Marital Status				
Single	3,07 (0,81)	0,775	3,13 (0,91)	0,411
Married	3,10 (0,83)		3,25 (0,96)	
Sector				
Private	3,10 (0,84)	0,843	3,19 (0,93)	0,765
Public	3,00 (0,80)		3,13 (0,91)	
Income				
15000 TL and below	3,00 (0,61)		3,63 (0,93)	
15001 TL – 20000 TL	3,13 (0,82)	0,154	3,13 (0,89)	0,351
20001 TL – 30000 TL	3,03 (0,84)		3,25 (0,93)	
30001 TL and above	3,00 (0,78)		3,25 (1,02)	
Family Type				
Nuclear	3,03 (0,75)	0,689	3,31 (0,99)	0,541
Extended	3,07 (0,83)		3,13 (0,91)	

^a P Secondary Education - Postgraduate Degree = 0,007

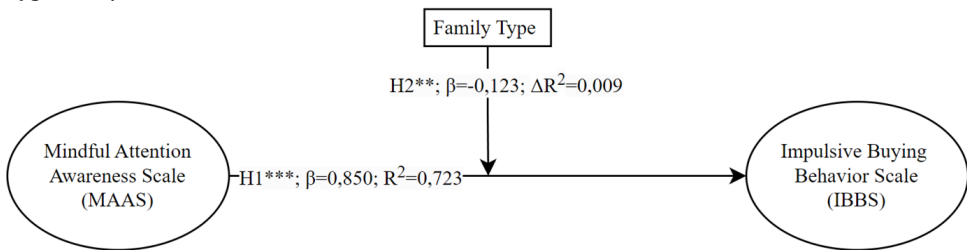
In the difference analysis, according to demographic characteristics, no statistically significant MAAS or IBBS differences were calculated based on the characteristics of the participants, except for education. This difference is because the IBBS median value of the participants with secondary education degrees is statistically higher than that of those with postgraduate degrees (Table 4).

As a result of the correlation analysis between MAAS and IBBS, $r=-0.723$ ($p<0.001$). Thus, it is understood that there is a strong negative correlation between these two scale scores. Therefore, the causality between MAAS and IBBS was revealed through regression analysis, and the contribution of demographic variables was revealed by examining the moderating effect (Table 5).

Table 5. Moderating Effect of Family Type on MAAS and IBBS Causality

Variables	β	SE_{β}	<i>b</i>	<i>p</i>	CI	R^2	ΔR^2
(Constant)	7,769.000	0.772	-	<0.001	[(6252)-(9285)]	0.479	0.009
MAAS	-1,397.000	0.235	-1,240.000	<0.001	[(-1858)-(-0.935)]		
Family Type	-0.123	0.093	-0.045	0.187	[(-0.305)-(0.060)]		
MAASxFamily Type	0.270	0.100	0.561	0.007	[(0.073)-(0.467)]		

The moderating effect of family type on the interaction between MAAS and IBBS was examined with a series of regression models. As can be seen in the models, there is a negative interaction between MAAS and IBBS (H1 Supported). It is possible to mention a moderating effect in the family type variable ($\beta=0.270$, $p=0.007$; H2 supported). The causality between MAAS and IBBS has a moderating effect on individuals living in nuclear and extended families. While the IBBS score of individuals living in extended families is higher, and a faster decrease is expected with the effect of MAAS ($\beta=-1.07$), the IBBS score of individuals living in nuclear families is lower, and a slower decrease is expected with the effect of MAAS ($\beta=-0.74$). When there is no moderating effect of family type, the β coefficient is calculated as -0.77 .



<0,05; *<0,001;&>0,05

Figure 1. Structural Model

Figure 1 shows the structural model of all analyses. The model shows the mediation effects and the statistically significant effect between MAAS and IBBS.

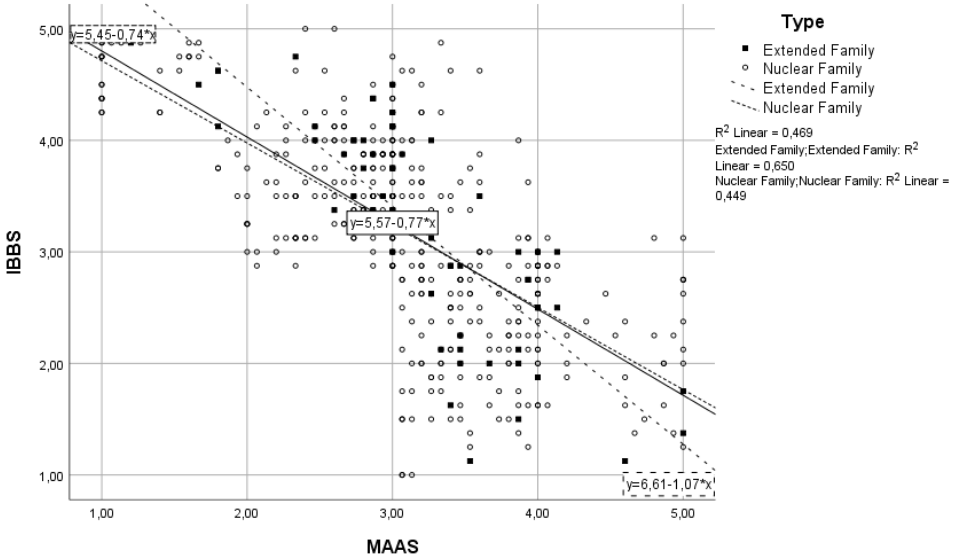


Figure 2. Regulatory Role of Family Type in the Causality between MAAS and IBBS

While the equation shown in Figure 1 shows the causality between MAAS and IBBS under the effect of the nuclear family, the equation at the bottom of the figure shows the effect of the extended family in the same causality. Consequently, individuals in extended families ($R^2=0.650$) have a higher effect level than individuals in nuclear families ($R^2=0.449$).

4. Discussion

This study investigates the causality between MAAS and IBBS and the contribution of demographic characteristics to this causality in adults with online shopping experience. A simple inference from the information in the introduction is that an increase in MAAS will decrease psychological negative reactions. In this study, the direction of the relation between MAAS and IBBS was negative, which is consistent with the literature. In other words, it is understood that consumers acting by being aware of their carelessness will cause a decrease in impulsive buying behaviors (RQ1).

The analyses calculated that IBBS was high for participants with secondary education degrees, while IBBS was low for consumers with postgraduate degrees. Moreover, MAAS scores did not differ according to demographic characteristics (Table 2). At this point, the moderating effect of family type becomes more critical. Among the demographic variables, family type ($\Delta R^2=0.009$) was found to have a role in reducing the level of IBBS (RQ2). As shown in Figure 1, an increase in MAAS score has a higher effect on decreasing IBBS among those living in nuclear families. At the same time, the interaction was calculated to have a higher predictive power (Figure 2: $\beta_{\text{Extended Family}}=-1.07$, $R^2_{\text{Extended Family}}=0.650$; $\beta_{\text{Nuclear Family}}=-0.74$, $R^2_{\text{Nuclear Family}}=0.469$).

The findings of various studies and the results of this study reveal the significant effects of family structure on consumption behavior. Studies by Holdert and Antonides (1997) and Lien et al. (2017) suggested that a collective structure prevails in large families and that longer and more conscious decision processes are experienced. These findings are consistent with

the conclusion that spontaneous consumption is lower in extended families in the current study and that mindfulness can reduce this consumption more slowly. On the other hand, Rindfleisch et al. (1997) and Lee and Beatty (2002) show that faster and more instinctive consumption decisions are made in nuclear families. However, the results obtained in this study reveal that this instinctive consumption can be reduced by increasing conscious awareness in nuclear families. As supported by the studies of Sumetha and Vasanthi (2016) and Kerrane et al. (2012), it is seen that consumption habits formed by individualization and emotional interventions in nuclear families can be changed positively through mindfulness.

In general, the findings in the literature and this study emphasize the impact of family structure on consumption decisions and the role of mindfulness in this process. They reveal that mindfulness is more effective in reducing instinctive consumption in nuclear families. This shows that family structure should be considered to understand and guide consumer behavior.

The main conclusion from the analysis is that the consumers in the sample show high levels of impulsive buying behavior and that they can move away from impulsivity in their buying behavior by becoming aware of the carelessness in their actions. Therefore, it is understood that this study is in line with the research that explains that mindfulness can positively affect individuals' preferences during psychological impairment or decision-making. Flavian et al. (2020) revealed in their study that mindfulness affects mobile payment usage intention; it affects perceived ease of use and perceived usefulness. Similarly, Gordon and Schaller (2014) mention the moderating effect of mindfulness on opportunity assessment in market analysis by entrepreneurs. Therefore, entrepreneurs can make more accurate and consistent decisions when evaluating market opportunities. Bahl et al. (2013) linked consumption to students' mindless eating habits, and Bahl et al. (2016) studied the impact of mindless consumption on individual and collective welfare. Both studies pointed out that the negative aspects of consumers' habits and behaviors can be prevented by mindful behavior. These four studies demonstrate the positive effects of mindfulness on consumption and behavior.

In their study on smartphone addiction as a current consumption habit, Kim et al. (2018) reveal that this addiction has a moderating effect in terms of adverse health consequences according to age. As a solution, the authors suggest creating conscious awareness programs and their delivery to consumers through mobile applications. Among the studies on decision-making, Kumar et al. (2023) identified gaps in marketing research and introduced the concepts of mindful marketing and mindful consumption to achieve consumption balance. Ndubisi's (2014) study revealed that consumer loyalty has significant differences between high and low-conscious consumers. Low-conscious consumers need to be made aware of market developments, which, as a result, lead to wrong consumption decisions. Yüksel Doğan and Metin (2023) revealed that, more generally, mindfulness in young people positively affects their life satisfaction. They proved that social competence and self-esteem can regulate this interaction. Regarding customer and brand, Ngo et al. (2016) found that mindfulness positively affects the perception of other customers (perception of other customers - those who do not use that product) on the service-brand experience. Thus, it is inferred that imprecise and biased information about the service can be made consistent with mindfulness. Therefore, mindfulness's direct regulatory and mediating roles in regulating consumers' emotional states, increasing their decision-making abilities, and encouraging them to consume for social and individual value-added consumption are explained.

IBB arises from the perception and physical interaction of a consumption behavior that turns into action. In parallel with the study conducted by Wang et al. (2022), it is also recognized in this study that IBB has the potential to threaten both social and environmental sustainability. In this way, it is possible to connect the mental activities of consumers to an actional outcome and to stimulate the senses. Therefore, impulse buying is a complex behavior that cannot be explained by a single factor. Peck and Childers (2006) suggested that touch and hedonism may be related and that sensory stimulation and pleasure-seeking may positively affect impulsive buying behavior. When this situation is examined at the cognitive level, Dhandra (2020) stated that low self-esteem motivates impulsive buying behavior, and mindfulness can help control impulsive tendencies and behaviors by increasing self-esteem. Chen and Wang (2016), Meng et al. (2019), and Chih et al. (2012) stated that hedonism positively affects impulsive buying behavior. One of these studies, Chen & Wang (2016), stated that payment facilities affect impulsive buying, while Meng et al. (2019) noted that family, relatives, and social influences affect impulsive buying. In the studies mentioned so far, physical purchases are in question. On the other hand, Sun & Wu (2011) found that emotional instability positively affects internet addiction, which in turn positively affects the impulse to buy online. Similarly, Cavazos-Arroyo and Máñez-Guaderrama (2022) found that impulsive buying tendencies, directly and indirectly, affect online impulsive buying behavior. They also explained that gender has no effect on this model, whereas there are significant differences between millennials and pre-millennials. Kacen and Lee (2002) found that cultural factors have an effect on impulsive buying behavior. Similarly, Suher and Hoyer (2020) present evidence that impulsive buying behavior may be related to intrinsic and extrinsic personality traits.

When the studies cited in this section and the study results are brought together, it is understood that consumption behavior can change according to cognitive and physical influences. Since behaviors can be shaped by the characteristics acquired at birth and the abilities acquired later, purchasing behavior can also be affected by these situations. Studies in the literature prove that birth time, gender, family status, and psychological states can directly or indirectly affect impulsive buying. The current study calculates that family type (nuclear, extended) has a moderating role among consumers' socio-demographic characteristics. Like many studies that conclude that it is necessary to increase the level of awareness in eliminating the negative situations in consumption, the positive effect of MAA level on reducing the level of IBB is noteworthy in the current study. At this point, consumers who show impulsive buying behavior regardless of their demographic characteristics should pay careful attention to reduce this situation. It is understood that these applications will produce more successful results for individuals in large families.

5. Limitations & Future Research

While this study makes many contributions to the field, its limitations should be noted. First, there are temporal limitations in the causal results that can be obtained due to the use of cross-sectional data in the study. It is difficult to determine whether similar results can be obtained in examinations conducted simultaneously with the same scales. Another limitation is that the participants have more similar racial and cultural characteristics. It is impossible to say whether the study can reach similar results in different minorities, sexual identities, cultural diversity, etc. Another limitation is that the study was conducted among adults who have reached financial sufficiency. The convenience sampling technique was

used to get this sample, and no limitations were imposed on the participants that could create a quota.

The MAAS also has some limitations in terms of its structure. It should be noted that the scale only measures the dimension of acting with awareness instead of all dimensions of awareness. In future studies, it is thought that examining the dimensions of observing, defining, not reacting, and not judging and revealing their effects on variables will improve the understanding of consumer behaviors and attitudes.

Besides the study's limitations, the current study can be used as a starting point for future research. The current study may be inadequate in using only MAAS and family type to influence the level of IBB. However, with the results of this study, researchers will be able to conduct extended studies using different cognitive attitudes and behaviors, participant characteristics, or attributes. Meaningful results can be reached by examining the direct or indirect effects of the degree of mindful attention in consumers and the emotional dimensions of consumption with mindful attention. Unlike this study, it is thought that generalizations can be reached by repeating the study in samples where the participant population is less solid (Hispanic, Afro-American, Asian, Syberian, Latino, etc.). In addition, by evaluating the relevant samples together with Hofstede cultural dimensions, it will be possible to reveal how mindful consumption understanding is affected by cultural dimensions. In addition, it is possible to conduct impulsive buying behavior studies that consider individual factors (chronic illness, health level, trauma history, etc.) that may make the transition to mindful attention difficult. Finally, it is thought that studies on the change in impulsive buying behavior of mindful consumers when they are afraid of missing out on developments (FOMO) and when they enjoy them (JOMO) will significantly contribute to the literature.

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