# What Apparel Impulse Buying Says About Our Society: Does Consciousness for Sustainable Consumption Matter for Apparel Impulse Buying?

The purpose of this study was to investigate the relationship of consciousness for sustainable consumption (CSC) between fashion clothing involvement (FCI) and apparel impulse buying. In January 2019, at a southeastern university, a total of 2,399 college student responses to an online survey were analyzed through conditional regression process modeling (Hayes, 2018) to find the mediation effect of CSC between FCI and impulse buying. Environmentally conscience consumers were less likely to impulsively buy clothing, but surprisingly, socially conscience consumers were more likely to impulse buy clothing. The study's results reveal why consumers make impulsive apparel purchases and how they perceive their own sustainable consumption. The implications for families and educators are that more needs to be done in connecting the relationship between unsustainable buying behavior and the negative effect on society.

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All authors are in the Department of Textile, Merchandising, and Interiors at University of Georgia, in Athens, GA. In recent years, the fashion industry has been criticized for its practices that contribute to issues of unsustainability. The fast-fashion business model has aided in consumer overconsumption and impulse buying, intensifying harmful social, environmental, and economic effects (Croteau et al., 2016; McNeill & Moore, 2015; Niinimäki et al., 2020). In 2015, the United Nations (UN) proposed goals for sustainable development by 2030. Focusing on achieving *Goal 12: Ensure sustainable consumption and production patterns*, researchers have considered ways the family and consumer sciences (FCS) discipline might address issues concerning sustainable apparel production and consumption (Bürklin, 2019; Meacham et al., 2020; Norum, 2018; Stall-Meadows, 2010). Goal 12 encourages exploration of consumers' sustainable consumption behaviors.

Households in the United States have increasingly been spending more money on clothing and apparel items, especially with the rise of "fast fashion," resulting in over consumption and "throw away" clothing (Norum, 2018). Today's consumers are more demanding and fashion savvy, which forces fashion retailers to provide the right product at the right time for the right

price, in other words provide quick or "fast" fashion that can be bought and thrown away (Bhardwaj & Fairhurst, 2010). The relationship between impulsive patterns of consumption and sustainability practices is not a neglected area of research, but rarely has the intent to sustainably consume been explored in apparel literature. The purpose of this study was to investigate whether consciousness for sustainable consumption (CSC) mediates fashion clothing involvement (FCI) and apparel impulse buying due to CSCs' unique measurement of environmental, social, and financial dimensions. This study is intended to serve as an investigation of consumers' thought processes when rationalizing the decision to impulsively purchase, and it is anticipated that consumers and FCS educators may develop a better understanding of the sustainable impact of consumer purchases.

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# Consciousness for Sustainable Consumption as a Mediator

Overconsumption, which has been driven by fast fashion, has a negative impact on the environment, society, and personal finances (Croteau et al., 2016; Norum, 2018). Previous research shows that consumers' consideration of sustainability factors affects consumers' behaviors when purchasing apparel items, but most research in this area has focused on the environmental components of sustainability (Kang et al., 2013; Kim & Damhorst, 1998; Kozar & Hiller Connell, 2013). Balderjahn et al. (2013) developed CSC to measure sustainable development from the consumer's perspective, defining the term as "an intention to consume in a way that enhances the environmental, social

and economic aspects of quality of life," resulting in a comprehensive measurement of all three aspects of sustainability (p. 182). Elkington's (1994) triple bottom line theory (TBL) measures business' success by focusing on achieving sustainability goals from the perspective of people, planet, and profit, and was used as the foundation for CSC (Slaper & Hall, 2011).

CSC is measured using three dimensions based on the TBL framework and identifies factors in each dimension: (a) consciousness for environmental consumption (planet)—recycling, packaging, resources and energy, local production, and climate; (b) consciousness for social consumption (people)—fair trade compliance, human rights, child labor/forced labor, and fair compensation; and (c) consciousness for economic consumption (profit)—voluntary simplicity, debt-free consumption, and collaborative consumption (Balderjahn et al., 2013). With a focus on the intention to consume in more environmentally, socially, and economically sustainable ways, Suárez et al. (2020) investigated the influence of the three CSC dimensions on consumers' frugal behavior, but there has yet to be an investigation on whether consumers remain willing to impulsively purchase when being sustainable. Investigating consumer's sustainable consumption through CSC may highlight whether sustainable consumers' impulsive apparel buying and sustainability dimensions have different effects on impulsive shopping behavior. This insight is valuable in the education of future apparel shoppers.

### **Fashion Clothing Involvement**

Fashion clothing involvement is the interaction of an individual and fashion clothing product and how that interaction is relevant to the individual (O'Cass, 2004). Clothing choice is about more than just fulfilling a need, it is also fulfilling a want and, for some, fullfilling a deep expression of self (Hourigan & Bougoure, 2012). These complexities between clothing and the individual are important to consider when understanding how consumers weigh the option of making impulsive apparel purchases or practicing (or the intent of practicing) sustainable apparel shopping habits. High fashion involvement implies the consumer has a superior

knowledge of both product and fashion, giving the consumer more confidence when purchasing fashion items (O'Cass, 2004). Individuals with high fashion involvement are considered drivers of the industry because they are usually the early adopters in the fashion adoption process (Kim, 1998). For researchers, studying this involvement is particularly important because it is symbolic and reveals much about the consumer.

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Park et al. (2006) studied fashion-oriented impulse buying and found that those who make impulse purchases do not think it is wrong, and those who are highly involved in fashion are more likely to be impulsive buyers of fashion products. Researchers have investigated mediating factors between fashion involvement and impulse buying (Andani & Wahyono, 2018; Haq et al., 2014), but not in terms of sustainable consumption beliefs such as CSC. In the simplest terms, mediation allows for a deeper understanding of the relationship between two variables, with a mediating variable. Mediation analysis answers the question, How does the relationship between the independent variable and dependent variable change when the mediating variable intervenes? (Hayes, 2018). Investigating how conscious sustainable consumption intervenes between fashion clothing involvement and impulsive buying would give a deeper understanding to sustainable shopping.

### **Apparel Impulse Buying**

Consumption drives an economy and a consumer's well-being, but only to a certain degree. *Impulse buying* is generally considered "unplanned buying"—when a rapid and impulsive decision to buy a product overcomes a deliberate and careful

decision process, and it can be considered a negligent form of consumer behavior (Moschis & Cox, 1989; Park et al., 2006; Stern, 1962). According to Moschis and Cox, this impulse buying behavior can also be considered dysfunctional, negligent, and possibly deviant. Deviant consumer behavior includes having negative desires or consequences on society as a whole or to businesses (Moschis & Cox).

According to reviews of consumer buying habits, in 1945, 38.2% were unplanned purchases and that grew to 50.9% of purchases in 1959. With the passage of time, impulse buying has continued to rise. In the 1970s it accounted for 27%–62% of purchases in department stores and in 2003 there were reports of impulse buying accounting for up to 70% of purchases (Jeffrey & Hodge, 2007). Some reasons for the increase of impulse buying are more disposable income, availability of credit, and a decrease in apparel prices resulting from fast fashion (Schor, 2005).

Park et al. (2006) found that consumers with high fashion involvement were more likely to impulsively buy apparel products, and consumers who have high fashion involvement are aware of the negative effects of fast fashion (Haq et al., 2014; O'Cass, 2004). Therefore, research is needed to understand how CSC affects the relationship between fashion involvement and impulse buying. CSC is a relatively new construct developed by Balderjahn et al. (2013), and it has not yet been employed to investigate the relationship between FCI and impulse buying of apparel items. Therefore, this study investigated the relationship between fashion clothing involvement (IV) and impulse buying (DV), mediated by consciousness for sustainable consumption through each of the dimensions—environmental, social, and economic. The following hypotheses were proposed:

H1: Consciousness for environmental consumption will mediate the relationship between fashion clothing involvement and apparel impulse buying.

H2: Consciousness for social consumption will mediate the relationship between fashion clothing involvement and apparel impulse buying.

H3: Consciousness for economic consumption will mediate the relationship between fashion clothing involvement and apparel impulse buying.

### Method

### Research Design

A mixed-mode online survey design (Dillman, 2000) was utilized to test the study's hypotheses. The survey instruments were developed from existing scales and consisted of FCI (O'Cass, 2004), CSC (Balderjahn et al., 2013), and apparel impulse buying (Weun et al., 1998). All items were measured with a 7-point Likert scale (1 = not)*important* to 7 = very important) and concluded with demographic questions. A confirmatory factor analysis was performed for each measurement construct (CSC, FCI, and apparel impulse buying). As shown in Table 1, standardized factor loadings ranged from .62 to .97. Cronbach alphas ranged from .87 to .98 and item-total correlations were all over .50 (Tabachnick & Fidell, 2013). Therefore, no items were deleted; the measurement model was considered reliable and a total of 28 items were used for final hypotheses testing.

# **Data Collection and Analysis**

After IRB approval, participants from a southeastern university were recruited via email using convenience sampling, which is considered an inexpensive, simple way to sample data (Ferber, 1977). In January 2019, a recruitment email with the Qualtrics survey link was sent to all 37,409 university students. Most participants were in the Millennial cohort (born approximately between 1980 and 2000); 96.7% of the sample were between the ages of 18 and 39. Previous research has shown that this generation has a high level of spending power (Eastman et al., 2014). Because of this, only participants between the ages of 18–39 were analyzed. In addition, survey responses were not forced and therefore incomplete surveys were removed, resulting in the final data response of 2,320 participants. Sample characteristics included 1,898 (81.8%) aged 18-24, 1,780 (76.7%) gendered female, 1,738 (74.9%) Caucasian, 1,955 (84.3%) income less than \$30,000, and 1,718 (74.1%) with an undergraduate degree. Basic

tests for normality and sample descriptions were analyzed by descriptive statistics. Confirmatory factor analysis was run in IBM Amos and final PROCESS plug-in to IBM SPSS was used for final hypotheses testing.

### Results

### **Hypothesis Testing**

To analyze variable relationships, conditional regression process modeling (Hayes, 2018) was used to determine the mediating effect of CSC dimensions between fashion clothing FCI and impulse buying. Conditional process analysis is used to describe the conditional nature of the mechanisms by which a variable transmits its effect on another in contingent effects (Hayes, 2018). Mediation analysis is used to quantify and examine the direct and indirect effect paths through which an antecedent variable X transmits its effect on a consequent variable Y through one or more intermediary or mediator variables (Hayes & Preacher, 2008). From the PROCESS Models (Hayes, 2018), Model 4 with multiple parallel mediators was the best fit to analyze the data.

Hypothesis 1 proposed a mediating effect of CSC environmental on the relationship between FCI and apparel impulse buying. The PRO-CESS results for all 2,320 participants showed an effect of FCI indirectly influenced impulse buying through consciousness for environmental consumption (95% CI = .001 - .084), supporting H1. FCI positively influenced CSC environmental (unstandardized  $\beta = 0.043$ , p = .05) and, in turn, CSC environmental negatively influenced impulse buying (unstandardized  $\beta = -0.075$ , p < .001). This means that consumers who were involved with fashion were positively influenced by being environmentally conscientious, and when consumers were concerned about the environment, they were less likely to buy apparel impulsively.

Hypothesis 2 proposed a mediating effect of CSC social on the relationship between FCI and apparel impulse buying. FCI indirectly influenced impulse buying through consciousness for social consumption (95% CI = .062 - .132), supporting H2. FCI positively influenced CSC social (unstandardized  $\beta = 0.103$ , p < .001), however, CSC

Table I. Measurement Items with Reliability

CONCEDUCE AND MEASUREMENT ITEMS	STANDARDIZED FACTOR	CRONBACH'S	ĭΤC
CONSTRUCT AND MEASUREMENT ITEMS	LOADING	α	ITC
Consciousness of sustainable consumption (13 items)			
Environmental dimension – 4 items			
How important is it for you personally that during the manufacturing			
of an apparel item	02	0/	01
The apparel item is made from recycled materials?	.83 .90	.96	.81
The apparel item can be disposed of in an environmentally friendly manner?			.88
The apparel item is packaged in an environmentally friendly manner?	.92		.87
The apparel item is produced in an environmental manner?	.91		.86
Social dimension – 5 items			
How important is it for you personally that during the manufacturing of an apparel item			
Workers' human rights are adhered to?	.87	.96	.86
No illegal child labor is involved?	.95		.94
Workers are not discriminated against?	.95		.93
Workers are not abused?	.97		.95
Workers are treated fairly or are fairly compensated?	.96		.95
Economic dimension – 4 items			
Even if you can financially afford an apparel item, how important is it for you personally that			
You don't become over indebted in the long term	.78	.87	.69
The expenses of the apparel item don't unduly burden your financial situation?	.92		.82
You don't have to forego future purchases?	.67		.63
You don't have to take money from your financial reserve for emergency cases for the apparel item?	.79		.73
Fashion clothing involvement (10 items)			
Fashion clothing means a lot to me	.89	.98	.88
Fashion clothing is a significant part of my life	.92		.91
I consider fashion clothing to be a central part of my life	.86		.83
I think about fashion clothing a lot	.88		.87
For me personally fashion clothing is an important product	.92		.90
I am interested in fashion clothing	.81		.81
Some individuals are completely involved with fashion clothing, attached to it, absorbed by it. For others fashion clothing is simply not that involving.*	.92		.91
Fashion clothing is important to me	.94		.92
I am very much involved in/with fashion clothing	.92		.90
I find fashion clothing a very relevant product in my life	.91		.89
Apparel impulse buying tendency (5 items)			
When I go shopping, I buy apparel items that I had not intended to purchase	.88	.87	.79
I am a person who makes unplanned clothing purchases	.93		.83
When I see an apparel item that really interests me, I buy it without considering the consequences	.62		.59
It is fun to buy apparel items spontaneously	.68		.65
I avoid buying clothing that is not on my shopping list*	.65		.61
Note. All items tested in confirmatory factor analysis. *items are reversed coded			

social had a positive influence on impulse buying (unstandardized  $\beta = 0.058$ , p = .018). This was a surprising result because it means being involved in fashion had a positive influence on being a socially conscious consumer, but shockingly, socially concerned consumers were more likely to impulse buy.

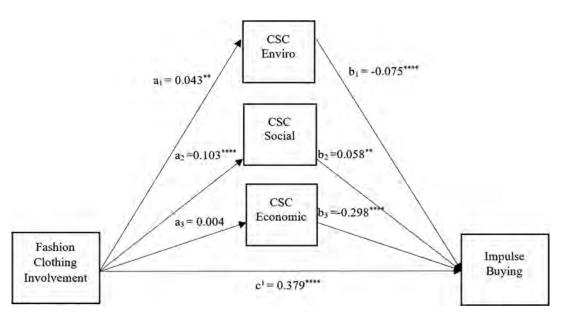
Hypothesis 3 proposed a mediating effect of CSC economic on the relationship between FCI and apparel impulse buying. FCI was not significantly influenced through consciousness for economic consumption (95% CI = -.014 - .028), rejecting H3. However, CSC economic did have a negative influence on impulse buying, meaning if consumers were economically conscious they would not impulse buy apparel (unstandardized  $\beta$  = -0.298, p < .001). See Figure 1 and Table 2 for a summary of the conceptual model with coefficient paths and a summary of regression coefficients, and standard error and p values.

# **Discussion and Implications**

This study has several implications and makes significant contributions. First, the study contributes to the breadth of sustainability research in the clothing and textile industry, adding to the knowledge of consumers' behaviors and the factors contributing to impulsive apparel purchasing

decisions. Scholars have investigated the relationship between FCI and apparel impulse buying (Park et al., 2006), but this study delves deeper into how CSC affects this relationship. This study utilized the concept *consciousness for sustainable consumption* (Balderjahn et al., 2013) and found that when consumers are both environmentally and financially conscious, they are less likely to practice impulse buying. However, consumers who are socially conscious are more likely to partake in impulse buying. This surprising finding is new and needs to be explored further.

Second, this study acts as a tool for educating individuals on consumer behavior and factors to consider when sustainably consuming apparel products. This study revealed that consumers are less likely to consume products when there is a potential negative impact on the environment but are more likely to practice impulsive behaviors regardless of the impact on people. Although it is a positive that consumers change their behavior for the environment, families and educators need to instill empathy for humanity as well. U.S. consumers feel disconnected from the people who make their clothing, and apparel consumers need to understand the impact of their shopping behavior on not just the planet, but on people (Omotoso, 2018). Educators need to make connections such



**Figure 1.** Conceptual parallel multiple mediator model with corresponding path coefficients for CSC mediating effect on Fashion Clothing Involvement and Impulse Buying. Note: \* = p < 0.10; \*\*\* = p < 0.05; \*\*\*\* = p < 0.01; \*\*\*\* p < 0.01.

Table 2. Regression Coefficients, Standard Errors, and Model Summary for Parallel Multiple Mediator CSC
on FCI and Impulse Buying

		Y															
	,	$M_1$ CSC(ENVIRO)			M <sub>2</sub> CSC(SOCIAL)			M <sub>3</sub> CSC(ECON)				Y (IMPULSE BUYING)					
X		COEFF.	SE	р		COEFF.	SE	р		COEFF.	SE	р		COEFF	SE	р	
FCI	a1	.043	.021	= .05	a2	.103	.018	< .001	a3	.004	.011	= .704	c1	.379	.017	< .001	
M <sub>1</sub> (CSC Enviro)													<i>b</i> 1	075	.020	<.001	
M <sub>2</sub> (CSC Social)													<i>b</i> 2	.058	.024	= .018	
M <sub>3</sub> (CSC Econ)													ЬЗ	298	.034	<.001	
Con- stant		4.176	.088	< .001		5.530	.074	< .001		5.337	.044	< .001		4.225	.219	<.001	
		$R^2 = 0.002$				$R^2 = 0.041$				$R^2 = 0.0001$				$R^2 = 0.20$			
		F(1,2318) = 4.016, $p = < .05$				F(1,2318) = 33.098, p = < .001			F(1,2318) = .144, p = .70				F(1,2315) = 146.523, $p = < .001$				

as the #whomademyclothes movement and the Fashion Revolution to help students understand the impact of consumerism on people and planet, so that new consumers demand transparent supply chains.

Third, this study contributes to the clothing and textiles industry because it helps apparel businesses understand consumers' behaviors, motivations, and tendencies. Brands and retailers can use this knowledge to educate consumers and encourage purchases that are well planned and support sustainable consumption. Understanding how fashion clothing involvement and CSC play into an individual's decision to make an apparel impulse buy can be used as a tool to aid in managing and reducing these impulsive purchases. Apparel businesses that have sustainability in their company mission and values need to align their branding on labels, websites, and in store to directly relate the consumer's purchase of an apparel item to the planet and especially people.

Last, this study contributes to society in showing how U.S. consumers may lack empathy, especially during impulse buying of clothing. Consumers who are knowledgeable of fashion and confident in their clothing purchase are more likely to also be socially conscious consumers who know about unfair wages, unsafe working conditions, and child labor in clothing factories.

However, this knowledge does not prevent the consumer from impulse buying. Our society needs to take a hard look at our capacity for humanity and work to be empathetic and to care for the well-being of all people.

As with any research, there were limitations which may lead to future research. The study's sample was comprised of Millennial college students in southeast U.S. The findings may not be generalizable across the U.S. Future research could survey a more representative U.S. population to see if there are regional differences. The surprising finding was how consumers with high fashion involvement and social consciousness were still impulsively buying clothing. There may be more at play here, specifically with other psychological factors that could uncover more insights on the relationship of CSC social and apparel impulse buying through conducting qualitative interviews. Furthermore, validation through qualitative interviews could help ensure the accuracy of the results of this quantitative study.

### References

Andani, K., & Wahyono, W. (2018). Influence of sales promotion, hedonic shopping motivation and fashion involvement toward impulse buying through a positive emotion. *Management Analysis Journal*, 7(4), 448–457.
Balderjahn, I., Buerke, A., Kirchgeorg, M., Peyer, M., Seegebarth, B., & Wiedmann, K. P. (2013). Consciousness for

- sustainable consumption: Scale development and new insights in the economic dimension of consumers' sustainability. *Academy of Marketing Science*, *3*(4), 181–192.
- Bhardwaj, V., & Fairhurst, A. (2010). Fast fashion: Response to changes in the fashion industry. *The International Review of Retail, Distribution and Consumer Research*, 20(1), 165–173.
- Bürklin, N. (2019). Institutional enhancement of consumer responsibility in fashion. *Journal of Fashion Marketing and Management*, 1, 48.
- Croteau, D., Yan, R. N., & Hyllegard, K. (2016). Determining effective approaches to promoting consumption of slow fashion apparel: The impact of message framing and message content on consumer responses to advertisements. *International Textile and Apparel Association Annual Conference Proceedings*, 73(1). Vancouver, British Columbia. https://core.ac.uk/download/pdf/128982297.pdf
- Dillman, D. A. (2000). Mail and internet surveys: The tailored design method (2nd ed.). Wiley.
- Eastman, J. K., Iyer, R., Liao-Troth, S., Williams, D. F., & Griffin, M. (2014). The role of involvement on millennials' mobile technology behaviors: The moderating impact of status consumption, innovation, and opinion leadership. *Journal of Marketing Theory and Practice*, 22(4), 455–470.
- Elkington, J. (1994). Towards the sustainable corporation: Win-win-win business strategies for sustainable development. *California Management Review*, 36(2), 90–100.
- Ferber, R. (1977). Research by convenience. *Journal of Consumer Research*, 4, 57–58.
- Haq, M., Khan, N. R., & Ghouri, A. M. (2014). Measuring the mediating impact of hedonic consumption on fashion involvement and impulse buying behavior. *Indian Journal of Commerce & Management Studies*, 5(3), 50–57.
- Hayes, A. F. (2018). Partial, conditional, and moderated moderated mediation: Quantification, inference, and interpretation. *Communication Monographs*, 85(1), 4–40.
- Hourigan, S. R., & Bougoure, U. S. (2012). Towards a better understanding of fashion clothing involvement. *Australian Marketing Journal*, 20, 127–135.
- Jeffrey, S. A., & Hodge, R. (2007). Factors influencing impulse buying during an online purchase. *Electronic Commerce Research*, 7(3-4), 367–379.
- Kang, J., Liu, C., & Kim, S. H. (2013). Environmentally sustainable textile and apparel consumption: The role of consumer knowledge, perceived consumer effectiveness, and perceived personal relevance. *International Journal of Consumer Studies*, 37, 442–452.
- Kim, H. S., & Damhorst, M. L. (1998). Environmental concern and apparel consumption. *Clothing and Textiles Research Journal*, 16(3), 126–133.
- Kozar, J. M., & Hiller Connell, K. Y. (2013). Socially and environmentally responsible apparel consumption: Knowledge, attitudes, and behaviors. *Social Responsibility Journal*, 9(2), 316–325.

- McNeill, L., & Moore, R. (2015). Sustainable fashion consumption and the fast fashion conundrum: Fashionable consumers and attitudes to sustainability in clothing choice. *International Journal of Consumer Studies*, 39(3), 212–222.
- Meacham, S., McAndrews, L. E., & Medvedev, K. (2020). The clothing consumption process of the vintage consumer and sustainable practices for mainstream consumers. *Journal of Family & Consumer Sciences, 112*(3), 34–40
- Moschis, G. P., & Cox, D. (1989). Deviant consumer behavior. In T. K. Srull (Eds.), Advances in Consumer Research (Vol. 16, pp. 732–737). Association for Consumer Research.
- Niinimäki, K., Peters, G., Dahlbo, H., Perry, P., Rissanen, T., & Gwilt, A. (2020). The environmental price of fast fashion. *Nature Reviews Earth & Environment*, 1(4), 189–200
- Norum, P. S. (2018). Clothing production and consumption: A view through the lens of sustainability. *Journal of Family & Consumer Sciences*, 110(1), 13–18.
- O'Cass, A. (2004). Fashion clothing consumption: Antecedents and consequences of fashion clothing involvement. *European Journal of Marketing*, 38(7), 869–882.
- Omotoso, M. (2018, December 5). Who made my clothes movement: How it all began. Fashion Insiders & Co. https://fashioninsiders.co/features/inspiration/ who-made-my-clothes-movement/
- Park, E. J., Kim E. Y., & Forney, J. C. (2006). A structural model of fashion-oriented impulse buying behavior. *Journal of Fashion Marketing and Management*, 10(4), 433–446.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891.
- Schor, J. B. (2005). Prices and quantities: Unsustainable consumption and the global economy. *Ecological Economics*, 55, 309–320.
- Slaper, T. F., & Hall, T. J. (2011). The triple bottom line: What is it and how does it work. *Indiana Business Review*, 86(1), 4–8.
- Stall-Meadows, C. (2010). Weaving sustainability into family and consumer sciences education. *Journal of Family & Consumer Sciences Education*, 28(1).
- Stern, H. (1962). The significance of impulse buying today. *Journal of Marketing*, 26(2), 59–62.
- Suárez, E., Hernández, B., Gil-Giménez, D., & Corral-Verdugo, V. (2020). Determinants of frugal behavior: The influences of consciousness for sustainable consumption, materialism, and the consideration of future consequences. *Frontiers in Psychology*, 11, 3279.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*. Pearson.
- Weun, S., Jones, M. A., & Beatty, S. E. (1998). Development and validation of the impulse buying tendency scale. *Psychological Reports*, 82, 1123–1133.