

A Work Project, presented as part of the requirements for the Award of a Master's degree in
International Management from the Nova School of Business and Economics.

Escaping uncertainty: The impact of crisis-induced fear on consumer behavior

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17/12/2025

Abstract

This study examines how crisis-induced fear shapes consumers' intention to engage in escapist consumption and whether intolerance of uncertainty moderates this effect. Drawing on coping, compensatory consumption and escapism theories, a survey of 203 respondents recalling the COVID-19 crisis was conducted using validated scales. Results show that fear significantly increases escapist consumption intentions, while intolerance of uncertainty independently predicts escapist consumption intention but does not moderate the relationship. The study advances understanding of emotional and cognitive drivers of consumer behavior in prolonged crises and offers implications for marketers navigating uncertain environments.

Keywords: Consumer behavior, Prolonged crises, Emotional responses, Compensatory consumption, Escapist consumption, Psychological coping, Intolerance of uncertainty

This work was funded by Fundação para a Ciência e a Tecnologia (UID/00124/2025, UID/PRR/124/2025, Nova School of Business and Economics) and LISBOA2030 (DataLab2030 - LISBOA2030-FEDER-01314200).

1. Introduction

In recent years, public life has been increasingly marked by episodes of tension. Violent political disagreements, such as the controversial ICE operations in the U.S. or police violence during protests shared on social media, fuel perceptions of polarization and unrest. At the same time, recurring terror threats highlight continued vulnerability of even highly regulated public events. Together, these dynamics create an atmosphere of instability that shapes how individuals perceive and respond to their environment.

In times of prolonged crises, uncertainty becomes an inescapable part of daily life and fear often pervades society (Katsikas et al. 2025). For humans, anxiety in the face of the unknown is a default response, as evolutionary instincts prioritize caution when outcomes are unpredictable (Anderson et al., 2019; Mobbs et al., 2015). Over the past two decades, societies worldwide have become increasingly confronted with what scholars describe as a state of permacrises, meaning a prolonged condition in which overlapping, unpredictable and compounding crises shape everyday life (Skade et al., 2025; Katsikas et al., 2025), while most of the crises that humanity is confronted with are prolonged crisis (Hafsi and Baba, 2023). Individuals who are less tolerant of uncertainty tend to experience even greater distress during such periods, struggling to cope with continuous unpredictability (Dugas et al., 2005).

From global health pandemic such as the COVID-19 crisis, to geopolitical instability, climate disruption and rising social unrest, these events create a sense of continuous instability that cuts across borders and social groups (Rouleau et al., 2021).

A common coping mechanism that emerges in unwanted scenarios is escapist consumption, where individuals engage in activities or indulgences that provide a temporary escape from reality and alleviate negative emotions (Orazi et al., 2023).

For example, during the global COVID-19 pandemic, many people turned to

streaming entertainment, comfort foods or online shopping sprees as a form of escapism (Park et al., 2022).

The interplay between emotions like fear that result from those crises, the intolerance that people have towards uncertainty and escapist consumption is highly relevant for understanding contemporary consumer behavior. During periods of instability, consumers often shift from goal-directed, rational decision-making toward more affect-driven and compensatory forms of consumption (Mandel et al., 2017).

Despite growing research about consumer behavior, significant gaps persist in understanding the impact of prolonged crises on this topic. How do consumers change their patterns during specific threats? What is the moderator to explain why consumers react different? From a theoretical standpoint, this topic sits at the intersection of psychology and consumer behavior research. It connects insights on uncertainty-driven fear with core concepts in consumer behavior. By examining how prolonged crises shape emotional states and, in turn, alter consumption patterns, this research expands understanding of how consumers adapt under threat, uncertainty and perceived loss of control, and it specifically examines whether consumers act in consumption patterns as a result of fear and their perceived tolerance of the uncertain.

In the next section relevant literature will be outlined, followed by the conceptual framework and hypotheses development, describing the methodology and results and concluding with a discussion, implications and limitations.

2. Literature-based foundations

2.1 Prolonged crises

The world is experiencing increasing frequency and awareness of large-scale crises (Skade et al., 2025). Yet, scholarly understanding of prolonged crises remains limited, despite extensive examples such as the COVID-19 pandemic (Rouleau et al., 2021), the 2008

financial crisis (DesJardine et al., 2019; Höllerer et al., 2018), and the ongoing climate crisis (Wright and Nyberg, 2017), which is considered to be one of the biggest challenges to be confronted in the 21st century (Howard-Grenville et al., 2014). The COVID-19 pandemic in particular demonstrated that crises today can transcend borders, overlap, and persist over extended periods.

In this study, crises will be defined as a prolonged period of instability, uncertainty, or threat (Katsikas et al., 2025; Anisimova et al., 2025). Building upon this, prolonged crises can take several forms, such as socio-political crises, economic crises, environmental crises, public health crises, and many more. Since the early 2000s, global disruptions such as 9/11, the Asian and European migrant crises, and the ongoing climate emergency have illustrated the enduring and far-reaching nature of prolonged crises (Rouleau et al., 2021). The year 2020 exemplified the compounding nature of global crises. Within a short period, the world faced Australia's devastating bushfires, political unrest in Hong Kong and Belarus, the Beirut port explosion, an oil spill in Mauritius, outbreaks of Ebola and measles in the Democratic Republic of Congo, and the killing of George Floyd, which reignited Black Lives Matter protests worldwide. These overlapping events unfolded in a year when an estimated 168 million people already required humanitarian assistance, without yet accounting for the COVID-19 pandemic (Rouleau et al., 2021).

As of 2025, global society continues to face multiple overlapping conflicts and crises. The war between Russia and Ukraine, which began in February 2022, has significantly disrupted the trade of oil, energy, and raw materials, creating uncertainty and hesitation among Western consumers (Simchi-Levi & Haren, 2022; Qaisrani et al., 2023), without accounting for the deaths and daily threat that the inhabitants must face. Simultaneously, the genocide in Gaza since 2023 has generated worldwide agitation and precaution (Ghaddar, 2025). Further unrest can be seen in the M23 conflict in the

Democratic Republic of Congo marked by severe human rights violations such as forced recruitment, executions and sexual violence carried out by the rebel group M23 (Kiyala, 2025). Political protests in Indonesia, frequently escalating into violence amplified through social media, represent another widely visible crisis (Fariza, 2025).

However, these global conflicts represent only part of the broader landscape of disruption, as individuals are simultaneously confronted with more localized and everyday forms of terror and insecurity. Rising gun violence, especially in the United States (Romer et al., 2025), contributes to a persistent climate of anxiety and stress (Kottke et al., 2025). Beyond these direct incidents, the constant circulation of crisis-related content through social media and 24-hour news channels further intensifies perceived threat (Holman et al., 2024). Real-time exposure to images and reports of violence and instability makes distant events feel immediate and personal (Rosenberger et al., 2023), cultivating a heightened perception of uncertainty and risk in daily life (Cuenca and Pérez, 2025). This continuous exposure has been shown to blur the boundary between global and personal threat, shaping both collective consciousness and everyday behaviors in profound ways (Hopwood and Schutte, 2016).

2.2 Emotional responses

As society is increasingly confronted with crises, threats and terror in their daily environments (Skade et al., 2025), emotional reactions have become a central lens for understanding behavior. Emotions play a pivotal role in shaping decision-making and consumer behavior (Zarantonello and Pauwels-Delassus, 2017; Yang et al., 2025), as different affective states can significantly alter the ways individuals evaluate, choose, and consume products (Laros et al., 2005) and crises evoke a range of negative emotions (Antonetti et al., 2025). This section outlines key emotional responses and how they emerge and function during crises.

Loneliness has become a widespread emotional consequence of prolonged crises, influencing consumer decisions (Wang et al., 2012; Hu et al., 2024). A Meta-Gallup survey across 142 countries reveals that nearly one in four people worldwide experiences loneliness (Meta-Gallup, 2023).

Loneliness occurs when people experience a mismatch between the social connections they desire and those they perceive themselves to have, leaving their belonging needs unmet (Shrum et al., 2023), which is associated with depression, cardiovascular disease, cognitive decline and increased mortality (Lim et al., 2020).

Crises such as the COVID-19 pandemic have intensified these conditions by restricting social interaction and increasing isolation (O'Sullivan et al., 2021; Pai and Vella, 2021).

The Evolutionary Theory of Loneliness (ETL) (Cacioppo and Cacioppo, 2018) acknowledges loneliness as a subjective and aversive experience stemming from relational deficits, yet emphasizes its adaptive role rather than framing it as inherently negative. Much like biological warning systems that signal physical danger, perceptions of social isolation function as alerts that vital social bonds are lacking (Cacioppo and Cacioppo, 2018).

Thus, loneliness often drives toward escapist activities to distract themselves from their emotional state (Mandel et al., 2017). According to the ETL, loneliness activates both the motive for social connection and the motive for self-preservation, each shaping consumption as a coping strategy (Shrum et al., 2023). Under the connection motive, consumerism can serve as a substitute for social belonging, when lonely individuals signal affiliation through popular product choices (Shrum et al., 2023), form supportive ties in brand communities (Sullivan and Richardson, 2020; Snyder and Newman, 2019), and seek acknowledgment through hedonic or luxury consumption, even when it leads to impulsive

or irrational purchases (Muawaliyah and Saifuddin, 2023; Peña-García et al., 2020). This aligns with hedonism theory, which states that people tend to pursue pleasure and avoid pain (Mendini and Furchheim, 2025). When loneliness activates the self-preservation motive, it heightens short-term survival focus, vigilance toward social threats, preference for distance, and self-centeredness - patterns also seen in consumption (Fumagalli, Shrum et al., 2021).

Crises also generate anger, which fuels a distinct of behavioral responses. Anger often motivates outward-focused prosocial behavior rather than escapist coping. It can even be a stronger predictor of advocacy or political engagement than moral emotions such as empathy or guilt (van Doorn et al., 2014).

Furthermore, anger shapes risk perception. After the 9/11 attacks, research showed that anger reduced perceived risk, while fear heightened it (Lerner et al., 2003). This distinction matters in crisis context: anger may lead to confrontational consumption behaviors, whereas fear tends to activate avoidance-oriented or compensatory responses (Sleboda et al., 2025).

In contrast to anger, fear plays a different role in shaping responses to crises and trauma. Traumatic, life-threatening events often evoke fear and helplessness, which can lead to post-traumatic stress, with affected individuals frequently displaying a range of symptoms (Ruvio et al., 2014). Canetti's early work on crowd behavior already demonstrated that fear can provoke irrational collective actions (Canetti, 1984). Conceptually, fear is a protective response to an identifiable, present threat and is characterized by intense physiological arousal such as increased blood pressure, muscle tension, and startle responses distinguished it from anxiety, which relates to potential or uncertain threats (Barlow, 2002; McNeil and Vowles, 2004; Cisler et al., 2009).

In consumer contexts, fear frequently leads to maladaptive coping strategies.

Individuals may turn to panic buying, hoarding, or excessive consumption as a way to regulate heightened emotional arousal and temporarily restore a sense of control (Ruvio et al., 2014).

Overall, fear and the uncertainty that accompanies crises situations disrupt perceived control and intensify arousal, prompting individuals to seek short-term relief, distraction, or mood regulation through consumption (Omar et al., 2021).

2.3 The intolerance of uncertainty

As crises are defined as prolonged periods of instability and uncertainty, understanding how individuals tolerate uncertainty is essential for explaining their emotional responses and behavioral reactions. Intolerance of uncertainty (IU) refers to the tendency to perceive ambiguous or unpredictable situations as threatening, stressful or unacceptable (Dugas et al., 2004). Yang and Wang (2025) already suggest intolerance of uncertainty as a possible moderator in crises context. Individuals with high IU are more likely to interpret ambiguous information in a threatening way (Dugas et al., 2005; Carleton, 2016), contributing to significant somatic stress reactions (Greco and Roger, 2001). Prolonged crises amplify this dynamic by sustaining environments in which outcomes are unclear, risks are difficult to assess, and future expectations are disrupted (Yang and Wang, 2025).

Uncertainty is highly connected with the emotion of fear, as also presented in the intolerance of uncertainty scale by Carleton et al. (2007), where the two dimensions are described as Prospective Anxiety and Inhibitory Anxiety.

Importantly, uncertainty influences not only emotional states but also decision-making processes. High IU has been shown to impair judgment, reduce cognitive flexibility and shift evaluations toward risk-avoidant or impulsive choices (Carleton, 2016). Under uncertainty, individuals rely more on heuristics, simplified reasoning, or emotional cues, which can magnify the impact of fear, anxiety or frustration on subsequent

behavior (Mousavi and Gigerenzer, 2014). This becomes particularly relevant in crises contexts, where the lack of control and predictability increases the likelihood of maladaptive coping (Chaaya et al., 2025).

In consumer behavior, uncertainty is a major driver of compensatory and control-restoring actions. When individuals feel unable to predict or manage their environment, they turn to behavior that offer temporary structure or psychological safety. Research during the COVID-19 pandemic shows that uncertainty about resources, health risks, and social stability contributed to panic buying and excessive consumption as people attempted to regain control (Peng et al., 2025).

Uncertainty also interacts with emotions like fear and loneliness, intensifying their behavioral consequences (Grupe and Nitschke, 2013). High-IU individuals show stronger threat appraisals and avoidance-oriented coping (Carleton, 2016), making them especially prone to escapist or compensatory consumption (Workman and Lee, 2022). Thus, uncertainty not only shapes cognitive evaluations but amplifies emotional responses, influencing how people navigate crises through marketplace behavior (Workman and Lee, 2022).

2.4 Escapist consumption as a compensatory consumption strategy

There are multiple perspectives that explain why individuals turn to consumption as a coping mechanism during emotionally demanding circumstances. Generally, compensatory consumption explains the psychological value that consumption provides, beyond the functional value (Mandel et al., 2017). A key foundation is the concept of self-discrepancy, the perceived gap between one's actual and ideal selves (Mandel et al., 2017). Such discrepancies can arise across various life domains and are psychologically aversive, motivating individuals to regain a sense of internal alignment, while such regulation often occurs through consumer behavior, since compensatory consumption can alleviate the

discomfort associated with self-discrepancies if it effectively addresses the perceived gap (Mandel et al., 2017). While this discrepancy may be reduced through sustained effort, it typically requires considerable time and resources to resolve (Wang and Tian, 2025).

These dynamics become especially salient in the context of prolonged crises. During the COVID-19 pandemic, for example, the sudden announcement of global lockdowns triggered widespread panic buying, leaving supermarket shelves empty in many countries (Goh and Ho, 2023). Although often discussed in terms of resource scarcity, such behaviors can also be interpreted as compensatory responses to heightened fear and uncertainty. Regarding escapist consumption specifically, individuals confronted with boredom or aversive emotions frequently turn to consumption as a means of psychological escape, using enjoyable or stimulating consumption activities to alleviate stress and disengage from unpleasant experiences (Maru and Dey, 2014; Orazi et al., 2023).

2.5 Research gaps and relevance to the study

While researchers have extensively studied compensatory behavior (Mandel et al., 2017) and also the interrelation of a crisis like COVID-19 with Intolerance of Uncertainty (Yang and Wang, 2025), significant gaps remain in understanding how escapist consumption behavior is a result of fear during experienced prolonged crises.

Specifically, whether there is a positive relationship between consumers intention towards escapist consumption and fear with a moderation factor of intolerance of uncertainty.

This study advances existing research by addressing these gaps and redirecting attention from regular consumption to the huge impact that prolonged crises nowadays have on consumption behavior, specifically escapist consumption.

3. Conceptual framework and hypotheses development

3.1 Transactional model of stress and coping

This study draws on the transactional model of stress and coping developed by Lazarus and Folkman (1984). In this perspective, stress is understood as the result of a continuous exchange between how individuals interpret a situation and the demands placed on them by their environment (Lazarus and Folkman, 1984). The model differentiates between two main appraisal processes: Primary appraisal, which refers to the evaluation whether a situation is perceived as threatening or not, and secondary appraisal, which involves evaluating the personal resources available to cope with it (Obbarius et al., 2021). Within this framework the model serves to clarify how individuals respond to crises-related emotional stress. In the context of prolonged crises such as the COVID-19 pandemic or other global instability, individuals may appraise the situation as threatening (Chu et al., 2022) while simultaneously perceiving limited control or coping capacity (Lazarus and Folkman, 1984).

This combination is likely to elicit coping strategies, where coping describes the cognitive and behavioral methods individuals use to deal with challenging circumstances (Chu et al., 2022). Particularly avoidance-based responses, such as escapist consumption can serve as a way to temporarily reduce negative affect and escape from distressing realities (Maru and Dey, 2024).

The model also introduces the inclusion of individual difference variables, such as intolerance of uncertainty, which may intensify the subjective appraisal of threat (Carleton et al., 2007) and reduce perceived coping strategies (Shu et al., 2022).

3.2 Compensatory consumption theory

Another theoretical foundation comes from the compensatory consumption theory (Mandel et al., 2017). This model posits that individuals engage in consumption to restore psychological balance when their self-concept is threatened (Mandel et al., 2017).

Emotional distress such as fear, powerlessness, or identity insecurity are seen as

psychological deficits (Cao et al., 2025) that can activate compensatory responses (Rustagi and Shrum, 2024), including symbolic consumption, status signaling and escapist behaviors (Mandel et al., 2017). Individuals with a high intolerance of uncertainty may experience these negative states more intensely (Satıcı et al., 2020; Sahib et al., 2023).

3.3 Consumer escapism theory

Another psychological theory is the consumer escapism theory, which names that consumers tend to escape from unpleasant situations through escapist consumption, where escapist consumption refers to the use of consumption as a means of psychological escape (Maru and Dey, 2024). Individuals are often driven to escape in response to boredom or the desire to avoid negative emotional states (Orazi et al., 2023). Engaging in consumption-related activities can serve this purpose by offering enjoyment and alleviating stress (Orazi et al., 2023). According to Mandel et al. (2017) “Escapism involves deliberately directing one’s thoughts away from a self- discrepancy by turning attention elsewhere; in the domain of consumer behavior, escapism can manifest in focusing one’s attention to eating or shopping” (p. 139).

3.4 Conceptual framework

The present study integrates theoretical foundations from three perspectives to explain how individuals respond to crises-induced distress through escapist consumption and how the intolerance of uncertainty moderates this relationship.

The Transactional Model of Stress and Coping (Lazarus and Folkman, 1984) suggests that individuals evaluate potentially threatening situations through cognitive appraisal processes. When a situation (in the study’s case a prolonged crisis) is perceived as threatening and coping resources are appraised as insufficient, individuals often engage in emotion-focused coping strategies, leading to the Compensatory Consumption Theory (Mandel et al., 2017). This explains how individuals respond to psychological deficits,

such as fear, loss of control or identity threat, by turning to consumption-based behaviors. Escapist Consumption is considered one such compensatory strategy, particularly relevant in emotionally overwhelming or uncertain contexts. As mentioned, Mandel et al. (2017) describe escapist consumption as the deliberate redirection of one's thoughts away from a self-discrepancy by shifting attention elsewhere. Orazi et al. (2023) offer a refined conceptualization of escapist consumption, defining it as a form of consumption specifically aimed at mentally detaching from reality when individuals experience emotional discomfort. Yang and Wang (2025) also suggested Intolerance of Uncertainty as a possible moderator in relationship with a prolonged crises.

In order to measure the emotion of fear during a prolonged crisis, this study uses the fear of COVID-19 as an example, since COVID-19 represented a major, prolonged global crisis, that left society facing unpredictable outcomes (Ahorsu et al., 2020).

H1: Fear of COVID-19 is positively associated with behavioural intention towards escapist consumption.

Grupe and Nitschke (2013) mention that “fear and anxiety can be distinguished according to how much certainty one has regarding the likelihood, timing, or nature of the (...) threat” (p.489), stating that:

H2: Intolerance of Uncertainty moderates the relationship between fear of a crisis (in this case COVID-19) and escapist consumption intention.

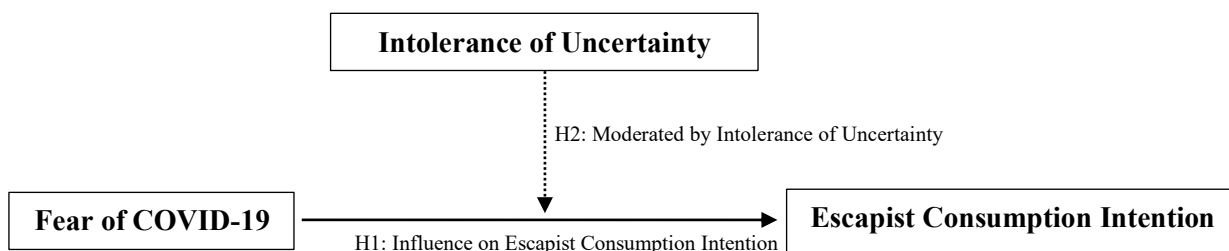


Figure 1: Conceptual framework depicting hypotheses and their interrelationships

4. Methodology

4.1 Measures

To test the study's research hypotheses, a self-administrated questionnaire was developed. Before launching the questionnaire, a pilot test with eight individuals was carried out. The pilot test consisted of four German individuals, two Portuguese individuals, one Austrian individual and one Belgian individual. The individuals were requested to pre-test the questionnaire to assure the understanding of the questionnaire across different geographics.

After positive feedback from all participants of the pilot test, the questionnaire was launched. The data was collected through an online questionnaire anonymously.

The constructs to measure the variables were taken from - or developed based on previous studies (see Table 1). All variables were measured using a seven-point Likert scale (Likert, 1932), 1= Strongly Disagree and 7= Strongly Agree. All seven items from the fear of COVID-19 scale developed by Ahorsu et al. (2020) were used and in the description for the scale the individuals were asked to recall their fear of COVID-19 to the best they can while experiencing the crisis and indicate to what extent the statements applies to them. The original scale was measured with a five-point Likert scale (Likert, 1932), however during this study a seven-point Likert scale (Likert, 1932) was used for all multi-item scales. The score range for this scale is between 7 and 49, with higher scores indicating higher levels of fear. Second, an adapted version of the Three-Item Loneliness Scale (TILS) by Hughes et al. (2004) was used, in order to match the construct with the COVID-19 crisis. During this question the individuals were also asked to recall their personal state during the COVID-19 pandemic and then indicate to what extent the statements applies to them. Loneliness is not part of the study, but was, however included in the questionnaire as a backup in case one of the other scales would have turned out

unreliable, due to an insufficient Cronbach's alpha for example. The three items of the scale were slightly rephrased in order to match with a seven-point Likert scale (Likert, 1932), instead of a frequency-based Likert which the original scale provides, since all variables were measured with a seven-point Likert scale (Likert, 1932) and the score range for this scale is between three and 21, with higher scores indicating higher feeling of loneliness.

The intention for escapist consumption was measured using the validated Consumer Escapism Scale (CES) by Orazi et al. (2023). The scale consists of nine items across three dimensions. Each dimension consists of three items, the first dimension being Cognitive distraction, the second dimension Reality detachment and the third dimension Anticipated relief. During the question the participants were asked to indicate to what extent the statements apply to them. The scores for this scale are between nine and 63, with higher scores indicating higher intention of escapist consumption.

Lastly, the intolerance of uncertainty was measured using the IUS-12 scale by Carleton et al. (2007). The scale consists of two dimensions and twelve items, where the participants were again asked to indicate to what extent the statements apply to them. The first seven statements belong to the dimension of Prospective Anxiety and the last five items belong to the dimension of Inhibitory Anxiety. The scores for this scale range between 12 and 84, with higher scores indicating higher intolerance of uncertainty.

Construct	Definition	Adapted from	Scale of Measure
Fear (of COVID-19)	An intense negative emotional reaction to a perceived threat during a crisis, often characterized by dread, anxiety, or worry.	Ahorsu et al. (2020); Lerner et al. (2003); Barlow (2002); McNeil and Vowles (2004)	Fear of COVID-19 Scale (FCV-19S), seven items, Ahorsu et al. (2020)
Loneliness	The subjective and distressing feeling that one's relationships are too few or insufficient, reflected in perception of lacking companionship, feeling left out or feeling isolated from others.	Hughes et al. (2004); Russell et al. (1980); Russell (1996)	Three-Item Loneliness Scale (TILS), three items developed by Hughes et al. (2004), slightly adapted phrasing in the study

Escapist Consumption Intention	The intention to engage in consumption activities specifically aimed at mentally detaching from reality when experiencing unpleasant emotions or stressful realities.	Hirschman (1983); Orazi et al. (2023)	Consumer Escapism Scale (CES), nine items across three dimensions, Orazi et al. (2023)
Intolerance of Uncertainty	A psychological state where individuals feel uncertain about outcomes or lacking control over events, with the tendency to perceive ambiguous or unpredictable situations as threatening, stressful or unacceptable.	Cohen et al. (1983); Cramer et al. (1997); Carleton, 2016	Intolerance of Uncertainty Scale (IUS-12), twelve items, two dimensions, Carleton et al. (2007)

Table 1: Constructs for the research model

4.2 Design and procedure

The used questionnaire began with a choice question where the participants agree that they are 18 years of age or older, and that they participate voluntarily. This was followed by a filter question. The participants were asked whether they have ever experienced a prolonged crisis, followed by a short definition of prolonged crises. If the participants answered with ‘Yes’, the next question appeared. When they answer with ‘No’, the questionnaire ended for them, since they didn’t match the requirements for the study. This item served as an attention-check question to ensure that respondents read all statements carefully before completing the Likert scale. Since participants who selected ‘No’ were automatically exited from the study since their answers would not be reliable, their responses were excluded from the data analysis. Following this question the participants were presented the statements of the Fear of COVID-19 scale, where they indicated to what extent the statements applied to them.

The next page was about the intention of escapist consumption. This section also included a filter question to introduce the subsequent topic. Participants were asked whether they had ever engaged in consumption behavior, followed by a definition of the term that was consistently applied throughout the study. Respondents who answered ‘Yes’ proceeded to the next question, while those who answered ‘No’ were screened out, as they

did not meet the study's eligibility criteria, the same process as in the first filter question. The following question was about the intention of escapist consumption, presenting all statements of the Consumer Escapism Scale and the respondents were asked to indicate to what extent each statement applied to them. The fourth page included one question, where the participants again indicated to what extent the statements applied to them, this time showing the statements of the Intolerance of Uncertainty scale (IUS-12).

On the last page demographic variables, including age, gender, education and ethnicity were recorded to account for potential confounding effects.

In the end, the participants submitted the study and were thanked for participating.

4.3 Data and sample collection

The data was collected through an online questionnaire distributed to mainstream consumers across several geographics reaching individuals from more than 20 nationalities. The survey was spread through personal and professional social media, personal connections and through third people. This approach enabled the collection of data from participants across diverse genders, age groups, geographic regions and academic backgrounds. The original sample included 267 participants in total, of which a sample of 203 individuals were considered for the study since these participants were not screened out by one of the filter questions and completed the whole study. After cleaning out the unreliable participants, all further analysis was conducted with the remaining sample of 203 participants $N=203$.

The sample demographic profile revealed a higher participation from females (53.7%; $N=109$). Regarding the age group, most of the participants belong to the generation of Gen Z (46.3%; $N=94$), followed by Gen X (25.1%; $N=51$), Millennials (21.2%; $N=43$), and Baby Boomers (7.4%; $N=15$). The average age of the sample ($N=203$) revealed an age of $M=36$ ($SD=15.2$). The main continent of origin was Europe (96.1%; $N=195$), followed by America

(2%; $N= 4$), Asia (1%; $N= 2$) and Africa (1%; $N= 2$), with Cyprus counting to Europe and Turkey to Asia. The majority of the participants suggested the Nationality ‘German’ (64.5%; $N= 131$), followed by ‘Dutch’ (6.9%; $N= 14$) and ‘Portuguese’ (4.9%; $N= 10$). 31% ($N= 63$) of the participants indicated that their highest degree of education was a Bachelor’s degree (31%, $N= 63$), with the same value for High school degree (31%, $N= 63$), followed by 29.1% ($N= 59$) indicating a Master’s degree, 6.9% ($N= 14$) indicated ,Other‘ and 2% ($N= 4$) a Doctorate.

Measures	Values	Frequency	Percentage
Gender	Male	94	46.3
	Female	109	53.7
Age (generational distribution)	Gen Z	94	46.3
	Millennial	43	21.2
	Gen X	51	25.1
	Baby Boomer	15	7.4
Highest level of education	High School	63	31
	Bachelor’s	63	31
	Master’s	59	29.1
	Doctorate	4	2
	Other	14	6.9
Nationality (continental distribution)	Africa	2	1
	America	4	1.9
	Asia	2	1
	Europe	195	96.1

Table 2: Sociodemographics of the sample

5. Results

5.1 Descriptive statistics and reliability

During the statistical evaluation three softwares were used: The softwares Jamovi (The jamovi project, 2024), SPSS (IBM Corp., 2024) and Smart PLS (Ringle et al., 2024).

In order to calculate with the categorical values that were measured using a seven-point Likert scale (Likert, 1932), the categorical values we decoded to numerous values in

the following distribution: (1) *Strongly Disagree*, (2) *Disagree*, (3) *Somewhat Disagree*, (4) *Neither Agree nor Disagree*, (5) *Somewhat Agree*, (6) *Agree*, (7) *Strongly Agree*.

The Cronbach's alpha for each scale was calculated, in order to assure reliability of the scales and the values. Values for the Cronbach's alpha are recommended to be above 0.7 to ensure reliability (Nunnally, 1967). For the fear of COVID-19 scale the original reliability was a Cronbach's alpha coefficient of 0.82 (indicating excellent reliability) and a test-retest reliability of 0.88 (Ahorsu et al., 2020). In this study the fear of COVID-19 scale revealed a Cronbach's alpha of .92 during the reliability test, indicating excellent reliability.

The Loneliness scale revealed a Cronbach's alpha of .89, also indicating excellent reliability, but since the other scales were also reliable the Loneliness scale was no longer taken into account during the study.

In the Consumer Escapism scale the original Cronbach's alpha revealed a value of .93 (Orazi et al., 2023), and in this study the Cronbach's alpha also revealed a value of .93, indicating excellent reliability and exactly the same numerous value. The Cronbach's alpha value for the Intolerance of Uncertainty scale originally showed an excellent internal consistency of .91 (Carleton et al., 2007), while the Cronbach's alpha during this study showed a value of .90, which is also a very good reliability.

The mean value and standard deviation were also calculated for each scale.

Scale	Number of items	Cronbach's alpha	Mean Value	Standard Deviation
Fear of COVID-19	7	$\alpha = .92$	$M = 3.18$	$SD = 1.45$
Loneliness	3	$\alpha = .89$	$M = 4.44$	$SD = 1.59$
Consumer Escapism	9	$\alpha = .93$	$M = 4.23$	$SD = 1.33$
Intolerance of Uncertainty	12	$\alpha = .90$	$M = 3.83$	$SD = 1.05$

Table 3: Reliability and descriptive statistics for the scales of measure

5.2 Hypotheses testing

To test the study's first hypothesis, a linear regression analysis was conducted using SPSS software and a Partial Least Squares Structural Equation Modeling (PLS-SEM) analysis was conducted using SmartPLS (see Appendix 3.2). Because the conceptual model is based on latent constructs rather than single observed variables, PLS-SEM represents the most appropriate analytical approach. For transparency and methodological comparison, the SPSS regression results for Hypothesis 1 are provided in the appendix (see Appendix 3.1). However, the hypothesis testing presented in the main text relies on the SmartPLS model, as it provides a more robust estimate based on latent variable scores. The structural path from fear of COVID-19 to escapist consumption intention was positive and statistically significant ($\beta = .333$, $t = 5.764$, $p < .001$). The 95% confidence bias-corrected confidence interval (.222, .460) excludes zero, indicating a robust and reliable effect. Thus, higher levels of fear of COVID-19 are associated with stronger intention to escapist consumption intention, supporting Hypothesis 1. Regarding explanatory power, the model accounted for 11.1% of the variance in escapist consumption intention ($R^2 = .111$), with an adjusted R^2 of .107. According to Chin (1998), R^2 values around .10 indicate small to moderate predictive accuracy in behavioral research. The effect size ($f^2 = .125$) falls within the small-to-medium range, suggesting that fear of COVID-19 contributes meaningfully, though not overwhelmingly, to explaining the escapist consumption intention patterns. Taken together, these results provide clear evidence that fear of COVID-19 operates as a significant psychological driver of escapist consumption intention.

Moderation model analysis was conducted equivalent to Hayes' Process Model 1 (Hayes, 2022) to test the study's Hypothesis 2, which proposed that intolerance of uncertainty moderates the relationship between fear of COVID-19 and escapist consumption intention. This analysis was conducted using Smart PLS with a two-stage

approach (see Appendix 3.3). The model included the direct effect of fear of COVID-19 and intolerance of uncertainty on escapist consumption intention as well as their interaction term (IU x Fear; see Appendix 3.3). The results show that fear of COVID-19 ($\beta = .165$, $t = 2.113$, $p = 0.035$) and intolerance of uncertainty ($\beta = .331$, $t = 5.297$, $p < .001$) both exert significant positive direct effects on escapist consumption intention. However, the interaction term was not statistically significant ($\beta = 0.035$, $t = 0.560$, $p = .575$) and its 95% bias-corrected confidence interval included zero (-0.075; 0.179), indicating that the effect is neither reliable nor meaningful. The corresponding effect size was negligible ($f^2 = 0.001$), further demonstrating that intolerance of uncertainty does not meaningfully alter the strength of the relationship between fear of COVID-19 and escapist consumption intention. The inclusion of the moderator increased the explained variance of escapist consumption intention to $R^2 = 0.191$ (adjusted $R^2 = 0.107$ in the simple model), reflecting modest overall predictive power. Model fit indices were satisfactory, with an SPMR value of 0.075 remaining below the recommended cutoff of 0.08.

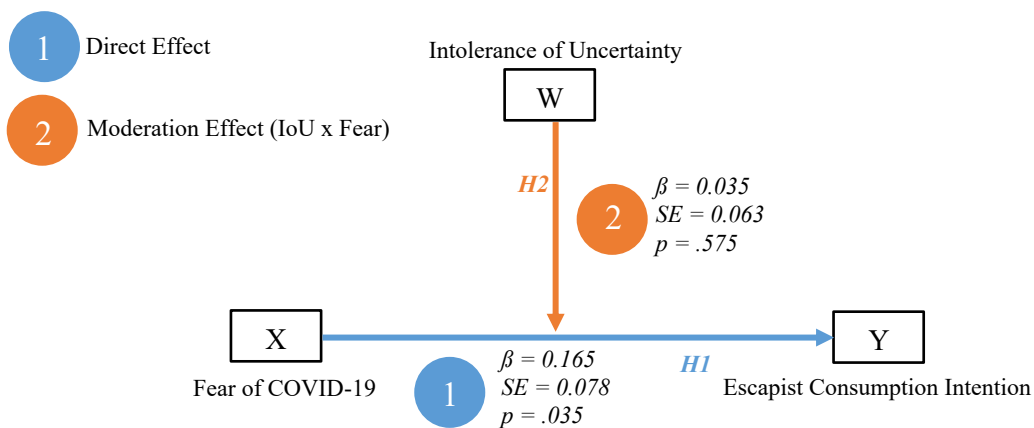


Figure 2: Results of moderation analysis (Hayes Process Model 1)

Taken together, these results do not support Hypothesis 2. Intolerance of uncertainty does not moderate the relationship between fear of COVID-19 and escapist consumption intention, instead, both constructs exert independent direct effects on escapist consumption tendencies.

6. Discussion

This study shows that fear of COVID-19 is positively associated with the intention towards escapist consumption. This effect aligns with the compensatory consumption theory as well as the consumer escapism theory, since fear of COVID-19 reflects an unpleasant emotional state that individuals tend to escape from through consumption. However, contrary to the expectations derived from the transactional model of stress and coping, intolerance of uncertainty, expected to function as an individual difference variable intensifying this relationship, did not moderate the effect. The absence of a moderating effect suggests that in highly salient, prolonged crises such as COVID-19, intense fear may override individual difference variables that typically shape coping responses.

Previous research has shown that individuals with high intolerance of uncertainty tend to perceive ambiguous or threatening situations more negatively and react with heightened anxiety, avoidance or maladaptive coping strategies (Carleton, 2016; Anderson et al., 2019; Carleton et al., 2007). From this perspective, intolerance of uncertainty would be expected to intensify the behavioral consequences of fear towards escapist consumption. However, the absence of a moderation effect may reflect prior research highlighting the primacy of strong emotional states in shaping consumer behavior (Li and Deng, 2026). According to Redine et al. (2023), fear is a high-arousal emotion that can trigger immediate, impulse, affect-driven coping strategies independent of cognitive traits or stable personality dispositions. In crisis contexts, strong affective reactions may override deliberative psychological mechanisms, leading consumers to respond similarly regardless of their intolerance of uncertainty, consistent with evidence that intense emotional arousal narrows behavioral variability and reduces the influence of individual differences (Bartholomeyczik et al., 2022; Lerner et al., 2015; Loewenstein et al., 2001).

Furthermore, the literature on escapism suggests that such behaviors often function as

automatic emotion-regulation strategies rather than reasoned coping responses (Orazi et al., 2023; Hirschman, 1983), which aligns with the study's finding. If escapist consumption operates primarily as an immediate form of affective relief (Orazi et al., 2023), cognitive predispositions such as intolerance of uncertainty may exert limited influence on how strongly fear translates into such behaviors. Rather than shaping the relationship between fear and escapism, intolerance of uncertainty appears to act as an independent predictor, as shown by its significant direct effect on escapist consumption intention.

6.1 Theoretical implications

This study offers an extension of the current literature and provides unexpected findings regarding consumer behavior during this specific COVID-19 crisis. A novel contribution of this research is the finding that intolerance of uncertainty, while not amplifying the effect of fear, nonetheless independently predicts escapist consumption intentions, indicating that emotional and cognitive responses shape coping behaviors through separate channels. The finding of this study offers an interesting contrast to the existing literature, which often positions uncertainty intolerance as a key amplifier of threat-related responses (Yang and Wang, 2025; Chaaya et al., 2025).

The study also advances the understanding of escapist consumption by reinforcing its nature as an affective coping mechanism that responds directly to situational emotional states. By showing that intolerance of uncertainty predicts escapism independently, the research further extends personality-based explanations of consumer coping behaviors. It also enhances the understanding of the intense buying during the COVID-19 pandemic (Goh and Ho, 2023) and offers an alternative perspective by incorporating fear and intolerance of uncertainty.

Overall, the results broaden existing literature and understanding of consumer behavior during this prolonged crisis and suggest that fear of COVID-19 and intolerance of

uncertainty should be understood as parallel but independent drivers of escapist consumption.

6.2 Practical implications

From a managerial perspective, the findings highlight the importance of recognized emotional and psychological drivers of consumer behavior during prolonged crises.

Based on these findings, companies should recognize that both fear and intolerance of uncertainty independently stimulate consumers' tendency to seek escapist forms of consumption during prolonged crises. This highlights the need for brands to strategically design offerings and communications that provide emotional relief, stability and comfort (Ainsworth and Foster, 2017). Firms can develop products and experiences that facilitate mental detachment, such as immersive digital content or multisensory experiences that promote relaxation. During the COVID-19 pandemic, brands such as Nike, Hilton and L'Oreal illustrated this approach through supportive communication and socially responsible initiatives (Byun et al., 2025). This also aligns with Terror Management Theory, which suggests that individuals regulate fear through reassurance from close relationships and shared beliefs (Plusnin et al., 2018).

Communication strategies emphasizing comfort and emotional support may therefore resonate more strongly during periods of widespread anxiety. However, as fear drives escapist consumption, marketers should avoid fear-based messaging and instead promote calming and empowering narratives. Policymakers and mental health professionals may also use these insights to anticipate coping-related consumption patterns and design interventions that promote healthier, more sustainable coping strategies.

7. Limitations and directions for future research

Although this study provides valuable insights into prolonged crisis-related consumer behavior, several limitations should be acknowledged.

First, the cross-sectional design limits causal interpretation. Future studies should employ longitudinal or experimental designs to better understand how fear and escapist behavior unfold over time.

Second, the findings are specific to the COVID-19 pandemic, a highly salient globally shared health crisis. Other crisis types may elicit different emotional responses, and the moderating role of intolerance of uncertainty may emerge in contexts characterized by greater ambiguity or unpredictability. Future research should therefore compare different prolonged crisis contexts.

Third, the study relies on self-reported intentions rather than actual behavior, which may limit ecological validity. Future research could incorporate behavioral or digital consumption data and distinguish between different forms of escapist consumption.

Finally, intolerance of uncertainty may appear as a moderating effect among individuals with extreme levels of uncertainty sensitivity or in clinical populations where emotional and dispositional factors interact more strongly. The study relied on a predominantly European, non-clinical general population sample, not characterized by specific psychological or diagnostic conditions. It is possible that moderation effects emerge only under more extreme elevated levels, since Dugas et al. (2004) proposed that intolerance of uncertainty has its strongest influence in populations characterized by pathological worry, health anxiety or generalized anxiety disorders. This study also focused primarily on fear as an emotional driver. However, prolonged crises evoke a rich range of affective states, that may independently or interactively shape consumption responses. Future research could also investigate other potential emotional responses or moderators, such as coping styles, emotion regulating strategies or social support, which may better explain when and why consumers engage in escapist consumption behavior during prolonged crises.

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[illegible]

Demographics

8. Please select your gender *

- ☐ Male
- ☐ Female
- ☐ Non-binary / third gender
- ☐ Prefer not to say

9. Please enter your age in whole numbers (e.g., 22). *

10. What is the highest level of education you have completed? *

- ☐ High school
- ☐ Bachelor's
- ☐ Master's
- ☐ Doctorate
- ☐ Other

11. Please enter your Nationality (e.g., German). *

Thank you for your participation!

If you have any questions about the study, please feel free to contact me at any time via the email: 65890@novasbe.pt. The survey is now complete. You may close the window.

Appendix 2: Descriptive Statistics

Appendix 2.1: Descriptive Statistics Age

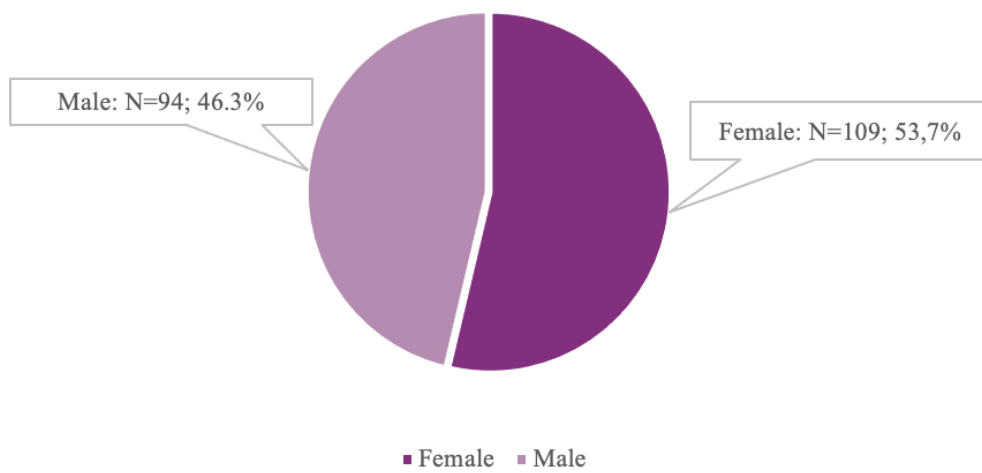
Descriptives	
	Age
N	203
Missing	0
Mean	36.0
Median	30
Standard deviation	15.2
Minimum	18
Maximum	77

Appendix 2.2: Distribution Nationality

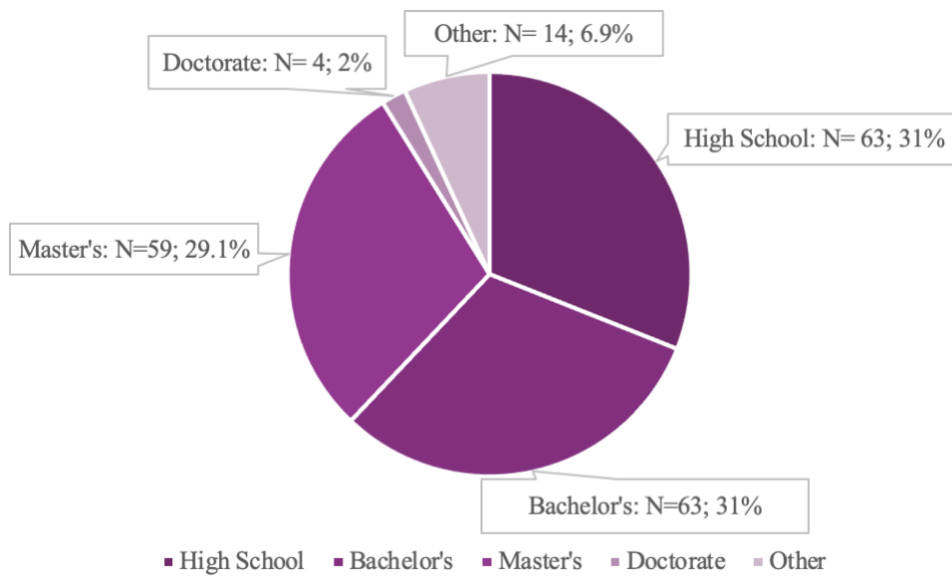
Nationality	Number of Participants
German	131
Dutch	14
Portuguese	10
Austrian	9
French	9
Swedish	5
Italian	4
Belgian	4
Spanish	3
USA	3
Canadian	1
Cypriot	1
Irish	1
Luxembourg	1
Indian	1

Tanzanian	1
Hungarian	1
Turkish	1
Tunisian	1
Croatian	1
UK	1

Appendix 2.3: Distribution Gender



Appendix 2.4: Distribution Highest level of education



Appendix 2.7: Descriptive Statistics Intolerance of Uncertainty scale

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
IntoleranceofUncertaintyScale	203	1.08	6.25	3.8264	1.04547
Valid N (listwise)	203				

Descriptives

	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11	Item 12
N	203	203	203	203	203	203	203	203	203	203	203	203
Missing	0	0	0	0	0	0	0	0	0	0	0	0
Mean	4.21	4.97	4.48	4.24	3.91	3.56	4.29	3.18	3.10	3.62	3.27	3.10
Median	5	5	5	4	4	4	5	3	3	4	3	3
Standard deviation	1.57	1.36	1.39	1.62	1.56	1.47	1.51	1.56	1.49	1.56	1.62	1.56
Minimum	1	1	1	1	1	1	1	1	1	1	1	1
Maximum	7	7	7	7	7	7	7	7	7	7	7	7

Appendix 3: Results SPSS / SmartPLS

Appendix 3.1: Linear Regression Analysis Hypothesis 1 SPSS

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	FearofCOVID19 ^b	.	Enter

a. Dependent Variable: Escapism

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.318 ^a	.101	.097	1.26786

a. Predictors: (Constant), FearofCOVID19

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	36.369	1	36.369	22.625	<.001 ^b
	Residual	323.103	201	1.607		
	Total	359.472	202			

a. Dependent Variable: Escapism

b. Predictors: (Constant), FearofCOVID19

Coefficients^a

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	3.300	.215		15.319	<.001
	FearofCOVID19	.293	.062	.318	4.757	<.001

a. Dependent Variable: Escapism

Appendix 3.2: PLS-SEM Analysis Hypothesis 1 Smart PLS

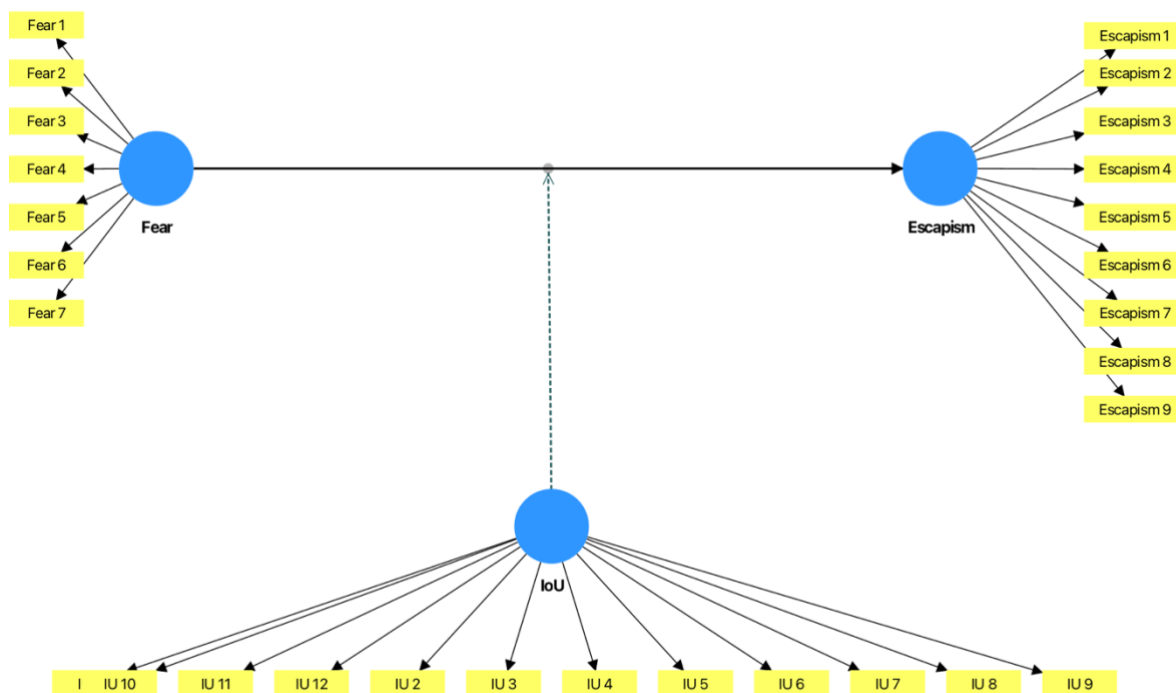
	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Fear -> Escapism	0.333	0.347	0.058	5.764	0.000

	Original sample (O)	Sample mean (M)	Bias	2.5%	97.5%
Fear -> Escapism	0.333	0.347	0.013	0.216	0.435

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Escapism	0.111	0.123	0.040	2.747	0.006

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Fear -> Escapism	0.125	0.143	0.054	2.301	0.021

Appendix 3.3: PLS-SEM Hayes Model 1 Hypothesis 2 Smart PLS



	Original sample (O)	Sample mean (M)	Bias	2.5%	97.5%
Fear -> Escapism	0.165	0.165	0.000	0.005	0.309
IoU -> Escapism	0.331	0.349	0.017	0.194	0.437
IoU x Fear -> Escapism	0.035	0.027	-0.008	-0.075	0.179

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Fear -> Escapism	0.165	0.165	0.078	2.113	0.035
IoU -> Escapism	0.331	0.349	0.063	5.297	0.000
IoU x Fear -> Escapism	0.035	0.027	0.063	0.560	0.575

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Escapism	0.191	0.215	0.045	4.207	0.000

	Original sample (O)	Sample mean (M)	Bias	2.5%	97.5%
Escapism	0.191	0.215	0.025	0.102	0.260

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Fear -> Escapism	0.024	0.031	0.026	0.927	0.354
IoU -> Escapism	0.101	0.119	0.046	2.213	0.027
IoU x Fear -> Escapism	0.001	0.005	0.007	0.188	0.851

	Original sample (O)	Sample mean (M)	95%	99%
Saturated model	0.075	0.051	0.058	0.061
Estimated model	0.075	0.051	0.058	0.061