Investigating the Impact of User Experience in Turkey's Online Bookstore: Application of Flow Theory

Doctoral Dissertation
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ABSTRACT

This dissertation explores the relationship between trust, satisfaction, and intention to repurchase in the digital retail sector, specifically focusing on online book shopping. The study conducted a survey with customers of www.idefix.com, a prominent e-commerce website in Turkey. Applying flow theory, the research identified the drivers of online shopping satisfaction and repurchase intention. The analysis, using partial least squares structural equation modeling (PLS-SEM), revealed that both affective and cognitive experiential states have a direct positive impact on online shopping satisfaction and repurchase intention. The findings contribute to understanding consumers' experiences in e-commerce and provide insights for website managers to enhance customer experiences and website performance. The study also explores theoretical implications for the retail sector in the context of digitalization and e-commerce trends.

Keywords: Flow Theory, Online Repurchase Intention, E-commerce, Online Shopping Satisfaction
1. Research Background

The rise of online shopping has had a transformative impact on consumer behavior, including in Turkey. Understanding the factors that contribute to a positive online shopping experience and encourage repeat purchases is crucial (Kim & Forsythe, 2008). Flow theory, which highlights the importance of achieving a balance between skill and challenge for an engaging experience, has been studied in the context of e-commerce and has shown promising results in understanding consumer behavior (Csikszentmihalyi, 1990; Huang & Hsu, 2009). The Online Customer Experience model identifies four direct antecedents of the optimal Online Flow state: telepresence, challenge level, skill, and interactive pace (Novak et al., 2000). These antecedent variables shape the Cognitive Experiential State, which is characterized by a state of complete absorption in the activity (Csikszentmihalyi, 1975; Novak et al., 2000, 2003; Hoffman & Novak, 2009). Drawing on previous research on flow theory, online customer experience, satisfaction, and repurchase intention, the study aims to examine the antecedents and consequences of flow, as well as the role of affective and cognitive states in shaping consumer behavior (Chen & Hsu, 2018; Babin et al., 1995). The findings will provide valuable insights for developing effective marketing strategies for Turkey's Online Bookstore and other online book retailers (Oliver, 1980; Shin & Kim, 2008; Rose et al., 2012).

2. Statement of the Research Problem

The e-commerce market in Turkey has experienced significant growth, with an increasing percentage of consumers shopping online (Çebi Karaaslan, 2022). The rapid development of online shopping and applications has contributed to this growth, with a substantial increase in online visits and the overall market size (İçözü, 2020; Turkish Informatics Industry Association [Tubsiad], 2022). However, understanding the factors that drive online purchasing behavior remains a challenge, leading to a reliance on incentive-based marketing strategies (İçözü, 2020).

To address this gap, this study aims to investigate the relationships between skill, challenge, cognitive experiential state, online shopping satisfaction, and online book purchasing intentions in
Turkey's online book market. Specifically, the study examines the mediating role of the affective experiential state in the relationship between flow experience, online shopping satisfaction, and online repurchase intention. It also explores how skills and challenges impact the affective and cognitive components of consumer experiences and how flow experience and experiential states influence repurchasing intentions.

Drawing on flow theory and social psychology, the study seeks to develop a modified model based on previous research to explain the relationship between flow experience and repeat purchase behavior in Turkey's Online Bookstore (Csikszentmihályi, 1975; Hoffman & Novak, 2009). Flow is defined as an optimal state where individuals are fully engaged in an activity, losing track of time, and occurs when skills align with the challenges presented (Csikszentmihályi, 1990).

The research aims to contribute to theory development in consumer behavior and e-commerce and provide practical implications for online stores, particularly in the context of Turkey's Online Bookstore (Csikszentmihályi, 1975; Hoffman & Novak, 2009). By examining the antecedents and consequences of using the online bookstore, the study seeks to identify key factors that influence repeat purchase behavior and enhance understanding of the online customer experience.

3. Significance of Study

This doctoral dissertation addresses the need for a deeper understanding of online shopping and the experiences of online buyers in the context of the increasing trend towards digitization and mobility. With global e-commerce sales projected to reach $6.5 trillion by 2023 (eMarketer, 2021), it is crucial to examine how these changes affect consumer behavior. While previous studies have explored the relationship between online shopping and flow theory, there is still a research gap that needs to be filled. This study aims to investigate a new dimension of consumer behavior by examining the impact of user experience and flow theory in the context of online shopping.
The research findings are expected to contribute to the existing literature and provide insights that can be valuable to businesses and marketers. By uncovering the relationship between flow experience and other variables in the study, it can help businesses understand their target audience and design effective online shopping experiences. Additionally, the study has regional significance as it explores the online shopping behavior of consumers in Turkey and how e-commerce platforms can contribute to enhancing the overall online shopping experience and improving customer satisfaction and repurchase intentions. The findings can be useful for promoting digitalization and economic growth nationwide. The significance of the study lies in its potential to inform business strategies and advance our knowledge of the factors influencing online consumer behavior in the rapidly growing e-commerce industry.

4. Research Design and Methodology

The research design and methodology employed in this study are discussed in this section. The research paradigm, approach, strategy, and methods used for data collection and analysis are outlined. The time horizon of the study and the website under scrutiny, idefix.com, are described. The sampling procedures, questionnaire development, and validity and reliability measures are explained. The PLS (Partial Least Squares) path modeling is utilized for data analysis. Overall, the research design and methodology ensure a robust and rigorous approach to address the following research questions:

1. **What is the mediating role of the affective experiential state (AES) in the relationship between flow experience (CES), online shopping satisfaction (OSS), and online repurchase intention (ORI)?**

2. **How do skills and challenges impact the affective and cognitive components of consumer experiences?**

3. **How do the flow experience and experiential states drive consumers' repurchasing intention?**
The study focuses on idefix.com, a prominent online bookstore in the Turkish market, and investigates the relationships between flow experience, affective and cognitive experiential states, online shopping satisfaction, and online repurchase intention. The research aims to shed light on the mediating role of the affective experiential state, the impact of skills and challenges on consumer experiences, and the drivers of repurchase intention in the context of online shopping.

4.1. Research Method

Research methodologies encompass various techniques, instruments, and procedures utilized in conducting research. These methodologies are crucial for gathering data, performing statistical analyses, and evaluating findings. Researchers often employ a combination of techniques to optimize data acquisition and enhance its quality and validity (Walliman, 2011).

In this particular research, a convenience sampling approach was used, and an online Qualtrics survey was employed as the data collection tool. The construct assessment utilized multi-item scales, which were adapted slightly for the study by replacing "the Internet shopping website that I regularly use" with "the idefix.com website". The research's validity was assessed through pilot interviews conducted with a sample of 30 online shoppers.

Data analysis was carried out using SPSS V25 for descriptive analysis, and SmartPLS 3.2 was utilized to test the research model with Partial Least Squares Structural Equation Modeling (PLS-SEM). This approach allowed for the examination of relationships between variables.
5. Conceptual Model and Hypotheses

The thesis focuses on understanding the factors that influence consumer behavior in online shopping and proposes a conceptual model that examines the relationship between various factors affecting online customer experience and subsequent behaviors. The model includes experiential states such as skill, challenge, affective experiential state, and cognitive experiential state, as well as online shopping satisfaction and online repurchase intention.

The study draws on flow theory, which suggests that optimal experiences occur when individuals are fully engaged and experience a sense of control, enjoyment, and involvement in an activity. Inspired by Rose et al.’s (2012) study on online customer experiences, the model simplifies their 15-concept model into a 6-concept model, focusing on the conditions of flow (skill and challenge) and their impact on flow and the emotional component of online customer experience.

Figure 1: Research Model

Source: Edited by Author
The research model is shown in Figure 1. In the following section, we provide a detailed description of the model and hypotheses.

We also assume that the emotional component mediates the relationship between the conditions of flow and the cognitive state. We argue that flow can still be experienced by consumers in the online shopping context once they feel skilled enough to be fully immersed in the activity they are carrying out (Larche & Dixon, 2021). This reinforces our conceptual model, which predicts that the more specific the skill is, the more likely it will shape the affective and cognitive experiential states of consumers. Novak et al.’s (2000) flow channel segmentation model provides a deeper understanding of the importance of the balance between skills and challenges in applying the flow theory to the online shopping context. Based on these arguments, we propose the following hypotheses:

**Hypothesis 1:** The level of skill a consumer has when shopping online will have a positive impact on their affective experiential state.

**Hypothesis 2:** The level of skill a consumer has when shopping online will have a positive impact on their cognitive experiential state.

According to Novak et al. (2000), Jaiswal et al. (2010), and Rose et al. (2012), having skills, expertise, and the ability to navigate the internet and online shopping is crucial for achieving consumer satisfaction. When information systems are technically and functionally error-free, they make website navigation easier, which builds consumer trust. Experienced online shoppers tend to have more confidence in e-commerce and perceive saved time and effort while shopping, leading to increased satisfaction (Roy, Lassar, and Shekhar 2016). Therefore, we posit that skill and the ability to overcome challenges are consistently and positively related to satisfaction, and thus propose the following hypothesis:

**Hypothesis 3:** The level of skill a consumer has when shopping online will have a positive impact on their online shopping satisfaction.

The process of shopping on an e-commerce website may pose certain challenges to consumers, despite providing the necessary products, services and information. For an e-commerce retailer,
facilitating an easy and smooth purchase process is crucial to promote sales (Nel et al. 1999; Rose et al. 2012; Saha et al. 2023). However, consumers have varying responses to such challenges, and may defect to other services or retailers if the website becomes too difficult to navigate (Somosi et al. 2021). According to the principles of flow theory (Csikszentmihalyi, 1990), a state of flow is achieved when the level of skill matches the difficulty of the task at hand. When the skill level is higher than the task's difficulty (i.e., the task can be completed with ease), individuals may experience boredom, while if the skill level is lower than the difficulty (i.e., the task is too hard to complete), individuals may experience frustration and anxiety. This is supported by previous research in the field of e-commerce (Hoffman and Novak, 2009; Rose et al. 2012). Therefore, we propose that:

**Hypothesis 4:** The level of challenge a consumer face when shopping online will have a positive impact on their affective experiential state.

**Hypothesis 5:** The level of challenge a consumer face when shopping online will have a positive impact on their cognitive experiential state.

**Hypothesis 6:** The level of challenge a consumer face when shopping online will have a positive impact on their overall online shopping satisfaction.

Previous studies have suggested that the online consumer experience (OCE) is affected by both the cognitive and emotional aspects of consumer behavior during online shopping. Research in marketing has established a link between rational thinking and emotional states and moods of individuals (Bagozzi, Gopinath, and Nyer 1999; Gentile, Spiller, and Noci, 2007; Saha et al. 2023). Furthermore, emotions (affective state) influence the retrieval of information, memory, and learning about brands. Emotions and moods play a crucial role in the decision-making and judgment process of individuals, and Rose et al. (2012) found a significant correlation between affective and cognitive experiential states in e-commerce. Therefore, we propose the following hypothesis:
**Hypothesis 7:** The affective experiential state of consumers while shopping online will have a positive impact on their cognitive experiential state.

The satisfaction that consumers feel after shopping online is influenced by the positive experiences they encounter during the purchasing process, as well as their lack of regret, which is a negative emotion that is determined cognitively (Barta, Gurrea, & Flaviàn, 2022). Previous research in e-commerce has shown that a satisfying purchase experience is dependent on several positive encounters (Chen & Chu, 2012). Therefore, we propose the following hypothesis:

**Hypothesis 8:** Affective experiential state has positive impact on online shopping satisfaction.

**Hypothesis 9:** Cognitive experiential state has positive impact on online shopping satisfaction.

Moreover, according to flow theory, engaging in a playful activity that offers achievable challenges promotes repetition. Previous studies have demonstrated that customer satisfaction is a precursor to repurchasing, which is a form of consumer behavioral attitude (Barta, Gurrea, & Flaviàn, 2022; Chen & Chou, 2012). Therefore, we put forth the following hypothesis:

**Hypothesis 10:** Online shopping satisfaction has positive impact on online repurchase intention.

- **Mediating role of affective experiential state**

Thus far, our argument has assumed that a balance between consumers' skills and challenges is necessary for a positive online shopping experience. These antecedent conditions of flow have a direct impact on consumers' affective and cognitive states, which in turn can influence their intention to repurchase online. The path to achieving satisfaction in online shopping, a prerequisite for repurchase intention, can take different dimensions. Thus, it is of interest to explore whether the affective experiential state acts as a mediator between the relationship of skill and cognitive experiential state and challenge and cognitive experiential state. Previous research conducted by Mauri et al. (2011) demonstrated that flow is associated with positive emotions and moods, as immersion in a task, such as online shopping, can create a sense of arousal when individuals are
focused and successfully coping with a challenge. Additionally, previous research has suggested that affective states and emotions can influence some characteristics of the flow experience. Given the need for consumers to remain attentive to their activities during online shopping in retail contexts (Saha et al., 2023; Kelemen-Erdős, 2016), it is crucial to understand the potential impact of moods and emotions on the experience. Therefore, we propose the following six hypotheses:

**Hypothesis 11:** The relationship between skill and cognitive experiential state is mediated by affective experiential state.

**Hypothesis 12:** The relationship between challenge and cognitive experiential state is mediated by affective experiential state.

**Hypothesis 13:** The relationship between skill and online shopping satisfaction is mediated by affective experiential state.

**Hypothesis 14:** The relationship between skill and online shopping satisfaction is mediated by cognitive experiential state.

**Hypothesis 15:** The relationship between challenge and online shopping satisfaction is mediated by affective experiential state.

**Hypothesis 16:** The relationship between challenge and online shopping satisfaction is mediated by cognitive experiential state.

It is worth mentioning that Rose et al. (2012) divided the online customer experience (OCE) into two distinct components, which served as an inspiration for our research. The authors defined ‘flow’ solely based on the cognitive component and thus evaluated only how their respondents perceived the flow experience cognitively. In contrast to Rose et al. (2012), our study assumes that individuals can attain a state of flow during online shopping when positive emotions are elicited.
6. Summary of Findings

6.1. Hypothesis Testing

This study investigates the impact of customer experience on repurchasing behavior in online bookshops using the flow theory. The findings reveal important relationships between flow experience, affective experiential state (AES), cognitive experiential state (CES), online shopping satisfaction (OSS), and challenges encountered during online purchases. The hypotheses of the structural model were evaluated through R-Square (R2), path coefficients (β), and t-values. A path coefficient is considered statistically significant if the t-value is equal to or greater than 1.96 (Hair Jr et al., 2017).

Table 1 presents the analysis outcomes of the structural model, displaying the path coefficients and hypotheses. The results show that eight hypotheses were statistically significant and supported in the SEM model. Specifically, skill has a significant positive correlation with AES, CES, and OSS, supporting hypotheses H1, H2, and H3. Challenge has a significant positive effect on CES, supporting H5. AES positively impacts both CES and OSS, supporting H7 and H8. CES has a significant positive effect on OSS, supporting H9. Furthermore, OSS significantly influences online repurchase intention (ORI).

<table>
<thead>
<tr>
<th>H#</th>
<th>Path link</th>
<th>Path coefficient</th>
<th>STD</th>
<th>T-values</th>
<th>P Values</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Skill -&gt; AES</td>
<td>0.386</td>
<td>0.039</td>
<td>9.996</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>Skill -&gt; CES</td>
<td>0.300</td>
<td>0.038</td>
<td>7.909</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>Skill -&gt; OSS</td>
<td>0.352</td>
<td>0.032</td>
<td>11.118</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>Challenge -&gt; AES</td>
<td>-0.116</td>
<td>0.036</td>
<td>3.250</td>
<td>0.001</td>
<td>Rejected</td>
</tr>
<tr>
<td>H5</td>
<td>Challenge -&gt; CES</td>
<td>0.314</td>
<td>0.044</td>
<td>7.070</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H6</td>
<td>Challenge -&gt; OSS</td>
<td>0.028</td>
<td>0.031</td>
<td>0.889</td>
<td>0.374</td>
<td>Rejected</td>
</tr>
<tr>
<td>H7</td>
<td>AES -&gt; CES</td>
<td>0.335</td>
<td>0.031</td>
<td>10.706</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H8</td>
<td>AES -&gt; OSS</td>
<td>0.378</td>
<td>0.028</td>
<td>13.681</td>
<td>0.000</td>
<td>Supported</td>
</tr>
</tbody>
</table>
However, the proposed paths H4 (Challenge to AES) and H6 (Challenge to OSS) did not exhibit significant effects or contributed inverse coefficients. These findings provide valuable insights into the relationships examined in the study.

**Hypothesis 1** examines the impact of a customer's skill level on their affective experiential state (AES). The findings indicate a positive correlation between skill level and AES, suggesting that customers with higher navigational skills report more positive affective experiences (path coefficient = 0.386, T = 9.996, p < 0.001).

**Hypothesis 2** explores the relationship between skill level and cognitive experiential state (CES). The study supports Hypothesis 2, revealing a significant positive influence of skill level on CES (path coefficient = 0.300, T = 7.909, p < 0.001). Customers with greater skill levels exhibit higher cognitive engagement and immersion in the online bookshop.

**Hypothesis 3** investigates the impact of skill level on online shopping satisfaction (OSS). The results demonstrate a significant positive correlation between skill level and OSS (path coefficient = 0.352, T = 11.118, p < 0.001). Customers with higher skill levels tend to have greater satisfaction with their online shopping experiences.

**Hypothesis 4** explores the relationship between the challenge level faced by customers and their affective experiential state (AES). The study reveals a significant negative correlation between challenge and AES (path coefficient = -0.116, T = 3.250, p = 0.001). Higher levels of perceived challenge in the online bookstore are associated with decreased affective experiences.
Hypothesis 5 examines the impact of challenge on cognitive experiential state (CES). The findings indicate a significant positive relationship between challenge and CES (path coefficient = 0.314, T = 7.070, p < 0.001). Increased levels of perceived challenge contribute to heightened cognitive engagement and immersion during the online bookshop experience.

Hypothesis 6 investigates the relationship between challenge and overall online shopping satisfaction (OSS). The study finds no significant relationship between challenge and OSS (path coefficient = 0.028, T = 0.889, p = 0.374). The degree of challenges faced by customers during online shopping does not significantly impact their overall satisfaction.

Hypothesis 7 examines the impact of AES on CES. The results reveal a significant positive correlation between AES and CES (path coefficient = 0.335, T = 10.706, p < 0.001). Favorable affective experiences in the online bookstore enhance cognitive engagement and absorption.

Hypothesis 8 explores the relationship between AES and OSS. The study demonstrates a significant positive correlation between AES and OSS (path coefficient = 0.378, T = 13.681, p < 0.001). Pleasant emotional experiences in the online bookshop contribute to higher levels of satisfaction with the purchasing experience.

Hypothesis 9 examines the impact of CES on OSS. The findings indicate a significant positive correlation between CES and OSS (path coefficient = 0.238, T = 7.919, p < 0.001). Customers' cognitive involvement and absorption in the online bookshop positively influence their satisfaction.

Hypothesis 10 investigates the relationship between OSS and online repurchase intention (ORI). The study reveals a significant positive correlation between OSS and ORI (path coefficient = 0.681, T = 31.914, p < 0.001). Higher satisfaction with the online bookstore experience increases the likelihood of intending to repurchase.
These findings highlight the relationships examined in the study regarding the impact of skill, challenge, AES, CES, OSS, and ORI in the context of online bookshop repurchases.

**Table 2: Path Coefficients: Statistical Measures and Indirect Effects**

<table>
<thead>
<tr>
<th>H#</th>
<th>Path link</th>
<th>Path coeff.</th>
<th>T</th>
<th>Path link</th>
<th>Path coeff.</th>
<th>T</th>
<th>P Values</th>
<th>2.5%</th>
<th>97.5%</th>
<th>Mediation</th>
</tr>
</thead>
<tbody>
<tr>
<td>H11</td>
<td>Skill -&gt; AES</td>
<td>0.386</td>
<td>9.996</td>
<td>Skill -&gt; AES -&gt; CES</td>
<td>0.129</td>
<td>6.220</td>
<td>0.000</td>
<td>0.093</td>
<td>0.174</td>
<td>Partial*</td>
</tr>
<tr>
<td>H12</td>
<td>Challenge -&gt; CES</td>
<td>0.314</td>
<td>7.070</td>
<td>Challenge -&gt; AES -&gt; CES</td>
<td>-0.039</td>
<td>3.127</td>
<td>0.002</td>
<td>-0.064</td>
<td>--0.016</td>
<td>Partial*</td>
</tr>
<tr>
<td>H13</td>
<td>Skill -&gt; OSS</td>
<td>0.352</td>
<td>11.118</td>
<td>Skill -&gt; AES -&gt; OSS</td>
<td>0.146</td>
<td>7.291</td>
<td>0.000</td>
<td>0.109</td>
<td>0.187</td>
<td>Partial*</td>
</tr>
<tr>
<td>H14</td>
<td>Skill -&gt; OSS</td>
<td>0.352</td>
<td>11.118</td>
<td>Skill -&gt; CES -&gt; OSS</td>
<td>0.071</td>
<td>5.183</td>
<td>0.000</td>
<td>0.046</td>
<td>0.098</td>
<td>Partial*</td>
</tr>
<tr>
<td>H15</td>
<td>Challenge -&gt; OSS</td>
<td>0.028</td>
<td>0.889</td>
<td>Challenge -&gt; AES -&gt; OSS</td>
<td>-0.044</td>
<td>3.352</td>
<td>0.001</td>
<td>-0.070</td>
<td>--0.018</td>
<td>Full</td>
</tr>
<tr>
<td>H16</td>
<td>Challenge -&gt; OSS</td>
<td>0.028</td>
<td>0.889</td>
<td>Challenge -&gt; CES -&gt; OSS</td>
<td>0.075</td>
<td>5.372</td>
<td>0.000</td>
<td>0.048</td>
<td>0.101</td>
<td>Full</td>
</tr>
<tr>
<td>H17</td>
<td>AES -&gt; OSS</td>
<td>0.378</td>
<td>13.681</td>
<td>AES -&gt; CES -&gt; OSS</td>
<td>0.080</td>
<td>6.270</td>
<td>0.000</td>
<td>0.056</td>
<td>0.106</td>
<td>Partial*</td>
</tr>
</tbody>
</table>

* - Complementary (partial mediation); $ - Competitive (partial mediation)

*Source: Own elaboration based on own results*
Table 2 presents the direct and indirect effects of various hypotheses in the study. It includes the path link, path coefficient, T-value, p-value, and confidence intervals for each effect. Additionally, it indicates whether the mediation effect is partial or full.

**Hypothesis 11** explores the mediating role of affective experiential state (AES) in the relationship between skill and cognitive experiential state (CES). The findings reveal that AES mediates the relationship, with a significant indirect influence (path coefficient = 0.129, T = 6.220, p < 0.001). Customers' skill levels positively impact their AES, which, in turn, affects their CES. This indicates that proficient customers are more likely to have positive affective experiences, leading to improved cognitive engagement and satisfaction with their online bookshop activities.

**Hypothesis 12** investigates the mediating role of AES in the relationship between challenge and CES. The analysis shows a significant indirect effect, with a negative relationship (path coefficient = -0.039, T = 3.127, p < 0.002). Customers' perceptions of challenge negatively correlate with their AES, which subsequently impacts their CES. The findings align with previous research on the influence of difficulty on emotional experiences and cognitive engagement. Excessive hurdles or difficulties encountered by customers in the online bookshop can negatively affect their emotional state, limiting their cognitive activity and overall satisfaction.

**Hypothesis 13** examines the mediating effect of AES between skill and online shopping satisfaction. The study finds a significant mediating effect, with a positive indirect impact of skill on satisfaction through AES (path coefficient = 0.146, T = 7.291, p < 0.001). Higher skill levels positively correlate with customers' affective experiences, which significantly influence their overall satisfaction with the online bookstore. The research suggests that customers' perceived competence in utilizing the platform leads to positive affective experiences, resulting in higher satisfaction levels.

**Hypothesis 14** explores the mediating role of cognitive experiential state (CES) in the relationship between skill and online shopping satisfaction. The results indicate a statistically significant indirect influence, with a positive relationship (path coefficient = 0.071, T = 5.183, p < 0.001).
Customers’ skill levels positively correlate with their cognitive engagement, leading to increased satisfaction with the online bookstore experience. Higher skill levels enable effective navigation and cognitive processes, contributing to greater satisfaction.

**Hypothesis 15** investigates the mediating effect of AES between challenge and online shopping satisfaction. The findings suggest a significant indirect influence, indicating a negative relationship (path coefficient = -0.044, T = 3.352, p = 0.001). Increased levels of challenge in the online bookstore interface lead to reduced customer satisfaction.

**Hypothesis 16** examines the mediating role of CES in the relationship between challenge and online shopping satisfaction. The results demonstrate a significant positive relationship between CES and challenge (path coefficient = 0.075, T = 5.372, p < 0.001). Additionally, a significant positive relationship is observed between CES and online shopping satisfaction (path coefficient = 0.080, T = 6.270, p < 0.001). The introduction of challenging tasks positively influences CES and, consequently, contributes to higher satisfaction levels among online shoppers.

### 6.2. Discussion and Conclusions

In this doctoral dissertation, the impact of online shopping experiences on customers' repurchase intentions on the idefix.com website was investigated, drawing on social psychology and the theory of flow. The study formulated and tested 16 hypotheses, modifying a model based on Rose et al.’s (2012) model to explain the relationship between flow experience and repeat purchase behavior in the context of Turkey's Online Bookstore.

The findings suggest significant relationships between various factors in online shopping experiences. Consumers' skills were found to positively influence their affective experiential state, which in turn affected their online shopping satisfaction. The impact of challenges on consumer experiences varied, with some relationships being significant and others not. This highlights the importance of considering both user skills and challenges during the online shopping journey.
Additionally, the study explored the mediating role of affective experiential state in the relationship between skills, challenges, and online shopping satisfaction. The results indicate that the affective experiences consumers have while engaging in online shopping play a significant role in shaping their overall satisfaction with the process.

Furthermore, the study findings indicate that online shopping satisfaction strongly impacts consumers' intention to repurchase from idefix.com. This emphasizes the importance of providing a positive and satisfactory online shopping experience to encourage repeat purchases and foster customer loyalty.

Based on these results, understanding, and managing users' skills, effectively addressing challenges, and creating positive affective experiences are crucial for enhancing online shopping satisfaction and fostering customer loyalty on the idefix.com platform. These insights can inform strategies and decision-making processes to improve the platform and provide a more satisfying online shopping experience for customers.

### 6.3. Theoretical Implications

The results of this study provide insights into the complex dynamics of online shopping experiences and their impact on consumer satisfaction and repurchase intentions. The research emphasizes the significance of understanding and effectively managing factors such as skills, challenges, affective experiential states, and online shopping satisfaction in the context of idefix.com. The study highlights the positive relationship between skills and both affective and cognitive experiential states, indicating that enhancing users' skills can improve their overall online shopping experiences. Additionally, moderate levels of challenges stimulate cognitive engagement and problem-solving abilities, contributing to a more immersive online shopping experience. The study also underscores the importance of affective and cognitive experiential states in shaping online shopping satisfaction and the strong link between satisfaction and repurchase intention. The mediating roles of affective and cognitive states in the relationships between skills, challenges, and online shopping satisfaction are explored, revealing their combined influence on user satisfaction. These theoretical implications enhance our understanding of online shopping
experiences and provide valuable guidance for future research and e-commerce practitioners. Future studies can investigate specific mechanisms, additional factors, and cross-platform and cross-cultural generalizability, ultimately leading to improved customer satisfaction and loyalty.

6.4. Expert Analysis and Managerial Implications

According to the analysis conducted, there are several key findings and strategies that businesses in the online book shopping industry can implement to enhance the user experience and drive customer satisfaction and repurchase intention.

Regarding skills, providing personalized book recommendations based on users' skills can improve the flow experience and increase users' affective and cognitive engagement. Advanced search options tailored to skilled users can also enhance the browsing experience.

In terms of challenges, incorporating interactive elements throughout the website and simplifying the checkout process are important for maintaining user engagement and satisfaction. Gamifying the browsing experience can also increase user motivation and enjoyment.

The flow experience outcome can be improved by providing book recommendations based on emotional preferences and enhancing customer support. Simplifying navigation and categorization is also recommended.

Finally, to encourage repurchase intention, businesses should consider implementing loyalty rewards and incentives to enhance customer commitment and foster long-term loyalty.

By applying these strategies, businesses can create a more engaging, personalized, and seamless online book shopping experience, leading to increased customer satisfaction, loyalty, and business success.
6.5. Limitations

The research on user experience in Turkey's online bookstore has several limitations. The findings may only be applicable to Turkey's online bookstore and may not generalize to other countries or regions. The sample used may not represent the entire population of online book shoppers in Turkey, limiting the generalizability of the results. Self-reported data introduces the potential for biases, such as recall bias and social desirability bias. The cross-sectional design of the study hinders the establishment of causal relationships and understanding of changes over time. The measurement instruments used may have limitations in terms of validity and reliability. Other factors that could influence online book purchasing behavior may have been overlooked. It is important to consider these limitations when interpreting the findings and understanding the research's scope.

6.6. Future Research

Future research in the field of user experience in online bookstores can benefit from several recommendations. Cross-cultural and cross-regional studies should be conducted to understand the influence of cultural and contextual factors on user behavior and satisfaction. Including larger and more diverse samples will enhance the generalizability of findings. Longitudinal research designs capturing data at multiple time points will provide insights into the dynamic nature of user experiences. A mixed methods approach combining quantitative and qualitative research methods will offer a deeper understanding of user perspectives. Improving measurement instruments to accurately assess user experiences is crucial. Exploring other factors such as price, product variety, customer reviews, and website design features will provide a comprehensive understanding of user satisfaction and repurchase intentions. By implementing these recommendations, future research can contribute to the field of user experience in online bookstores and provide valuable insights for practitioners to optimize their platforms and enhance customer satisfaction.
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