Exploring the Perceptions of customers: The Impact of Phygital Retailing on Customer Satisfaction in the Retail Industry

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Abstract:

This study aims to investigate customer perceptions of phygital retailing's impact on satisfaction in the retail industry, given the growing interest in combining physical and digital elements to enhance the customer experience. Utilizing a descriptive research method with a sample of 420 participants selected through stratified random sampling, both primary (surveys and interviews) and secondary data collection methods are employed. The findings reveal significant associations between satisfaction, education, and occupation. A majority of respondents expressed satisfaction with physical retailing, favoring mobile apps and virtual reality as valuable technologies. Personalization and convenience emerged as key satisfaction factors, guiding retailers to tailor strategies to educational and occupational demographics, prioritize personalization, convenience, and technology integration for improved customer satisfaction.

Keywords: Phygital retailing, customer satisfaction, perceptions, convenience, personalization, engagement

Introduction:

Phygital retailing refers to the integration of physical and digital elements in the retail experience. It combines the best of both worlds by leveraging the advantages of physical stores, such as tangible products and in-person interactions, with the convenience and personalization offered by digital technologies. Phygital strategies encompass a wide range of

initiatives, including mobile apps, virtual reality, augmented reality, interactive displays, and seamless omnichannel experiences.

In today's retail landscape, where e-commerce and online shopping have gained significant traction, phygital retailing has emerged as a crucial strategy for retailers. It recognizes that customers now interact with brands and make purchasing decisions through multiple touchpoints, both online and offline. By integrating physical and digital elements, retailers aim to provide a seamless and immersive customer journey that enhances satisfaction and drives loyalty.

Customer satisfaction is a paramount consideration for retailers, as it directly impacts their bottom line. Satisfied customers are more likely to become repeat customers, recommend the brand to others, and contribute to positive word-of-mouth. In an increasingly competitive market, where customer expectations are rising, retailers need to prioritize customer satisfaction to stay ahead.

Understanding the relationship between customer satisfaction and phygital strategies is vital for retailers. Phygital retailing has the potential to enhance customer satisfaction in several ways. For instance, it can offer personalized recommendations based on customer preferences, enable convenient and seamless online-to-offline experiences, provide immersive and interactive product experiences, and enable easy access to product information and reviews. By embracing phygital strategies, retailers can create a cohesive and engaging shopping environment that caters to customers' evolving needs and preferences.

By comprehending the impact of phygital strategies on customer satisfaction, retailers can make informed decisions about technology adoption, store design, and customer engagement strategies. They can allocate resources effectively, invest in the right technologies, and design experiences that align with customer expectations. Ultimately, understanding the relationship between phygital retailing and customer satisfaction is essential for retailers to succeed in the dynamic and evolving retail industry.

Literature review:

Ahmed and Khalique (2020) defined phygital retailing as a seamless integration of physical and digital elements to create a holistic shopping experience. They discussed the evolution of phygital retailing, its benefits, and challenges.

Alzaidiyeen (2019) conducted a systematic literature review to investigate the impact of phygital technology on enhancing customer experience. The author found that phygital technology enhances customer engagement, satisfaction, and loyalty.

Baabdullah (2019) conducted an exploratory study to investigate the effect of phygital retailing on customer experience. The findings of the study suggested that phygital retailing positively affects customer experience.

Balaji and Roy (2019) proposed a framework to explore the impact of phygital retailing on retail experience and customer value. They identified the key elements of phygital retailing and discussed their impact on customer value and satisfaction.

Gaur and Sharma (2020) conducted a study to investigate the impact of phygital retailing on customer experience and satisfaction in the Indian retail industry. The findings suggested that phygital retailing positively affects customer experience and satisfaction.

He et al. (2021) conducted an empirical study to investigate the effect of phygital retail experience on customer satisfaction. The results indicated that phygital retail experience positively affects customer satisfaction.

Khalique and Ahmed (2021) conducted an exploratory study to investigate the impact of phygital retailing on customer satisfaction and loyalty. The findings suggested that phygital retailing positively affects customer satisfaction and loyalty.

Ko and Meisel (2019) investigated the effects of in-store augmented reality on the shopping satisfaction of mobile device users. The study found that in-store augmented reality positively affects shopping satisfaction.

Lee and Lee (2020) explored the role of phygitalstorescape on customer satisfaction and loyalty. The authors found that the phygitalstorescape positively affects customer satisfaction and loyalty, and technology innovativeness moderates the relationship.

Li and Cui (2021) investigated whether phygital retail experience drives customers' purchase intention and found that it does, and product category moderates the relationship.

Oghuma et al. (2020) critically reviewed the concept of phygital retailing, its applications, opportunities, and challenges. The authors discussed the need for retailers to create a seamless integration of physical and digital elements to enhance customer experience.

Papagiannidis and Bourlakis (2019) discussed the role of phygital retail experiences in omni-channel marketing. The authors suggested that retailers should combine physical and digital channels to create a seamless and holistic shopping experience for customers.

Sharma and Gaur (2019) proposed a conceptual framework of phygital retailing and its effect on customer satisfaction and loyalty. The framework suggests that phygital retailing positively affects customer satisfaction and loyalty.

Verma et al. (2021) discussed the conceptualization of phygital retailing in India and its future directions. The authors identified the key challenges and opportunities for retailers in adopting phygital retailing in India.

Xue et al. (2021) investigated the effects of phygital retail environment on customer experience and found that it positively affects customer satisfaction and loyalty.

Objectives of the Study:

1) To explore the perceptions of customers regarding the impact of phygital retailing on customer satisfaction in the retail industry.
2) To identify the key elements of phygital retailing that contribute to customer satisfaction, such as convenience, personalization, and engagement.
3) To provide recommendations for retailers to optimize their phygital strategies based on customer perceptions and expectations.

Hypotheses of the Study:

H_o: The level of satisfaction with phygital retailing is not associated with age levels.

H_1: The level of satisfaction with phygital retailing is associated with age levels.

H_{10}: The level of satisfaction with phygital retailing is not associated with income levels.

H_{11}: The level of satisfaction with phygital retailing is not associated with income levels.

H_{20}: The level of satisfaction with phygital retailing is not associated with education levels.

H_{21}: The level of satisfaction with phygital retailing is associated with education levels.

H_{30}: Hypothesis: The level of satisfaction with phygital retailing is NOT associated with occupation.

H_{31}: Hypothesis: The level of satisfaction with phygital retailing is associated with occupation

3.Research methodology:

The study will utilize a sample size of 420 participants. The sampling technique employed will be stratified random sampling. This technique ensures that the sample represents various demographic characteristics, such as age, gender, and income levels, within the target population. By stratifying the sample, the study can capture a diverse range of customer perceptions and experiences related to phygital retailing.

4. Data analysis and discussions

Table:1

Frequency Table forAge wise distribution respondents

Variable	Frequency	Percentage
Below 20	113	27.56
20 to 30	255	62.20
30 to 40	30	7.32
More than 40	12	2.93
Total	410	100.00

Variable	Frequency	Percentage
Male	171	41.71
male	239	58.29
Total	410	100.00

Variable	Frequency	Percentage

	Frequency	Percentage
No income	27	6.59
0-100000	179	43.66
100000-500000	85	20.73
500000-1000000	119	29.02
Total	410	100.00

Variable	Frequency	Percentage
Employee	108	26.34
Student	189	46.10
Business	113	27.56
Total	410	100.00

Variable	Frequency	Percentage
Hindu	146	35.61
Muslim	246	60.00
Christian	15	3.66
Jain	3	0.73
Total	410	100.00

Variable	Frequency	Percentage
UG	134	32.68
P. G	139	33.90
INTERMEDIATE	124	30.24

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SSC	13	3.17
Total	410	100.00

Demographic characteristics:

Age distribution: The majority of respondents (62.20%) were in the age range of 20 to 30, followed by those below 20 years (27.56%).

Gender distribution: The sample consisted of more male respondents (58.29%) compared to female respondents (41.71%).

Income distribution: The largest income category was 0-100000 (43.66%), followed by 500000-1000000 (29.02%).

Occupation distribution: The respondents were primarily students (46.10%), followed by employees (26.34%) and business owners (27.56%).

Religion distribution: The majority of respondents identified as Muslim (60.00%), followed by Hindu (35.61%).

Education distribution: The highest proportion of respondents had completed undergraduate (UG) education (32.68%), followed by postgraduate (P.G) education (33.90%).

Table:2

Frequency Table for level of satisfaction with physical Retailing

Variable	*n*	*%*
Neutral	95	23.17
Very satisfied	53	12.93
Satisfied	229	55.85
Dissatisfied	29	7.07

Very dissatisfied	4	0.98
Total	410	100.00

The table 2 shows that out of the total 410 respondents, the highest percentage (55.85%) reported being "Satisfied" with physical retailing. The second highest percentage (23.17%) reported feeling "Neutral" about physical retailing, and the third-highest percentage (12.93%) reported being "Very satisfied". The categories of "Dissatisfied" and "Very dissatisfied" had the lowest percentages, with only 7.07% and 0.98% of the respondents, respectively.

This table provides information about the level of satisfaction with physical retailing among the respondents and helps to understand their overall attitudes towards physical retailing. It is important to note that this table only represents the attitudes of the respondents in the sample, and it may not be entirely representative of the attitudes of the larger population or a specific geographic area.

Table:3

Frequency Table for factors influenced your level of satisfaction with physical retailing

Variable	Frequency	Percentage
Quality of in-store experience	48	11.71
Integration of technology	99	24.15
English	4	0.98
Personalization	111	27.07
Convenience	119	29.02
Level of customization offered	29	7.07
Total	410	100.00

The table 3 shows that out of the total 410 respondents, the highest percentage (29.02%) reported "Convenience" as the factor that influenced their level of satisfaction with physical retailing. The category of "Personalization" had the second highest percentage (27.07%) of

the respondents. The category of "Integration of technology" represents 24.15% of the respondents. The categories of "Quality of in-store experience" and "Level of customization offered" had the lowest percentages, with 11.71% and 7.07% of the respondents, respectively. The category "English" had only 0.98% of the respondents.

This table provides information about the factors that influenced the level of satisfaction with physical retailing among the respondents and helps to understand the factors that are important to them. It is important to note that this table only represents the opinions of the respondents in the sample, and it may not be entirely representative of the opinions of the larger population or a specific geographic area. Additionally, the categories of the variable used in the table should be well-defined and accurately represent the factors that influence satisfaction with physical retailing.

Table:4

Frequency Table for integration of physical and digital elements in retailing enhance your shopping experience

Variable	Frequency	Percentage
Yes	374	91.22
No	36	8.78
Total	410	100.00

This table 4 shows the frequency and percentage distribution of respondents based on their opinion on whether the integration of physical and digital elements in retailing enhances their shopping experience. The variable is divided into two categories: "Yes" and "No".

The table shows that out of the total 410 respondents, the majority (91.22%) agreed that the integration of physical and digital elements in retailing enhances their shopping experience. Only 8.78% of the respondents disagreed with this statement.

This table provides information about the opinion of the respondents regarding the integration of physical and digital elements in retailing and helps to understand the importance of this integration to the respondents. It is important to note that this table only represents the opinions of the respondents in the sample, and it may not be entirely representative of the

opinions of the larger population or a specific geographic area. Additionally, the wording of the variable used in the table should be clear and accurately represent the concept being measured.

Table:5

Frequency Table for Most useful technology in the physical retailing

Variable	Frequency	Percentage
Digital signage	47	11.46
Augmented reality	50	12.20
Mobile apps	164	40.00
Virtual reality	145	35.37
Sites	4	0.98
Total	410	100.00

This table 5 shows the frequency and percentage distribution of respondents based on the technology they consider most useful in physical retailing. The variable is divided into five categories: "Digital signage", "Augmented reality", "Mobile apps", "Virtual reality", and "Sites".

The table shows that out of the total 410 respondents, the highest percentage (40.00%) reported "Mobile apps" as the most useful technology in physical retailing. The category of "Virtual reality" had the second-highest percentage (35.37%) of the respondents. The category of "Augmented reality" represents 12.20% of the respondents. The categories of "Digital signage" and "Sites" had the lowest percentages, with 11.46% and 0.98% of the respondents, respectively.

This table provides information about the technology that the respondents consider most useful in physical retailing and helps to understand their preferences for technology-based solutions. It is important to note that this table only represents the opinions of the respondents in the sample, and it may not be entirely representative of the opinions of the larger population or a specific geographic area. Additionally, the categories of the variable used in

the table should be well-defined and accurately represent the technology-based solutions being considered.

Table:6

Frequency Table for Most useful technology in the physical retailing

Variable	Frequency	Percentage
Digital signage	47	11.46
Augmented reality	50	12.20
Mobile apps	164	40.00
Virtual reality	145	35.37
Sites	4	0.98
Total	410	100.00

This table 6 shows the frequency and percentage distribution of respondents based on the technology they consider most useful in physical retailing. The variable is divided into five categories: "Digital signage", "Augmented reality", "Mobile apps", "Virtual reality", and "Sites".

The table shows that out of the total 410 respondents, the highest percentage (40.00%) reported "Mobile apps" as the most useful technology in physical retailing. The category of "Virtual reality" had the second-highest percentage (35.37%) of the respondents. The category of "Augmented reality" represents 12.20% of the respondents. The categories of "Digital signage" and "Sites" had the lowest percentages, with 11.46% and 0.98% of the respondents, respectively.

This table provides information about the technology that the respondents consider most useful in physical retailing and helps to understand their preferences for technology-based solutions. It is important to note that this table only represents the opinions of the respondents in the sample, and it may not be entirely representative of the opinions of the larger population or a specific geographic area. Additionally, the categories of the variable used in

the table should be well-defined and accurately represent the technology-based solutions being considered.

Table:7

Frequency Table for Overall perception towards physical retailing.

Variable	Frequency	Percentage
Positive	177	43.17
Very positive	108	26.34
Neutral	105	25.61
Negative	20	4.88
Total	410	100.00

This table 7 shows the frequency and percentage distribution of respondents based on their overall perception towards physical retailing. The variable is divided into four categories: "Positive", "Very positive", "Neutral", and "Negative".

The table shows that out of the total 410 respondents, the highest percentage (43.17%) reported having a "Positive" perception towards physical retailing. The category of "Very positive" had the second-highest percentage (26.34%) of the respondents. The category of "Neutral" represents 25.61% of the respondents, while the category of "Negative" had the lowest percentage (4.88%) of the respondents.

This table provides information about the overall perception of the respondents towards physical retailing and helps to understand their overall attitudes towards this mode of shopping. It is important to note that this table only represents the opinions of the respondents in the sample, and it may not be entirely representative of the opinions of the larger population or a specific geographic area. Additionally, the variable used in the table should be well-defined and accurately represent the concept being measured.

Table:8

Frequency Table for Overall perception towards physical retailing.

Variable	Frequency	Percentage
Positive	177	43.17
Very positive	108	26.34
Neutral	105	25.61
Negative	20	4.88
Total	410	100.00

This table 8 shows the frequency and percentage distribution of respondents based on their overall perception towards physical retailing. The variable is divided into four categories: "Positive", "Very positive", "Neutral", and "Negative".

The table shows that out of the total 410 respondents, the highest percentage (43.17%) reported having a "Positive" perception towards physical retailing. The category of "Very positive" had the second-highest percentage (26.34%) of the respondents. The category of "Neutral" represents 25.61% of the respondents, while the category of "Negative" had the lowest percentage (4.88%) of the respondents.

This table provides information about the overall perception of the respondents towards physical retailing and helps to understand their overall attitudes towards this mode of shopping. It is important to note that this table only represents the opinions of the respondents in the sample, and it may not be entirely representative of the opinions of the larger population or a specific geographic area. Additionally, the variable used in the table should be well-defined and accurately represent the concept being measured.

Table:9

Frequency Table for experience with physical retailing

Variable	Frequency	Percentage
No	138	33.66

Yes	272	66.34
Total	410	100.00

This table 9 shows the frequency and percentage distribution of respondents based on their experience with physical retailing. The variable is divided into two categories: "Yes" and "No".

The table shows that out of the total 410 respondents, the majority (66.34%) had experience with physical retailing. Only 33.66% of the respondents had no experience with physical retailing.

This table provides information about the experience of the respondents with physical retailing and helps to understand the sample's exposure to physical retailing. It is important to note that this table only represents the opinions of the respondents in the sample, and it may not be entirely representative of the opinions of the larger population or a specific geographic area. Additionally, the variable usedin the table should be well-defined and accurately represent the concept being measured.

Hypothesis testing:

H_o: The level of satisfaction with phygital retailing is not associated with age levels.

H_1: The level of satisfaction with phygital retailing is associated with age levels.

Table 10

Observed and Expected Frequencies

Level of satisfaction with phygital retailing	Age levels				χ^2	*df*	*p*
	Below 20	20 to 30	30 to 40	More than 40			
Neutral	28[26.18]	59[59.09]	4[6.95]	4[2.78]	78.15	12	< .001
Very satisfied	24[14.61]	28[32.96]	1[3.88]	0[1.55]			

Satisfied	61[63.11]	144[142.43]	16[16.76]	8[6.70]
Dissatisfied	0[7.99]	24[18.04]	5[2.12]	0[0.85]
Very dissatisfied	0[1.10]	0[2.49]	4[0.29]	0[0.12]

Note. Values formatted as Observed [Expected].

The results of the Chi-square test of independence indicate a significant association between the level of satisfaction with phygital retailing and age levels, $\chi2(12) = 78.15$, $p < .001$. Therefore, we reject the null hypothesis and conclude that the level of satisfaction with phygital retailing is not independent of age levels.

The observed frequencies in the contingency table indicate several interesting patterns. For instance, the level of satisfaction with phygital retailing (Neutral) had higher observed frequencies for the age levels (Below 20) and (More than 40) compared to the expected frequencies. This suggests that individuals in these age groups were more likely to have a neutral level of satisfaction with phygital retailing.

On the other hand, the level of satisfaction with phygital retailing (Satisfied) had higher observed frequencies for the age levels (20 to 30) and (30 to 40) compared to the expected frequencies. This indicates that individuals in these age groups were more likely to be satisfied with phygital retailing.

Conversely, there were level combinations with observed frequencies that were lower than the expected frequencies. For example, the level of satisfaction with phygital retailing (Satisfied) had a lower observed frequency for the age level (Below 20) compared to the expected frequency. This suggests that individuals below the age of 20 were less likely to be satisfied with phygital retailing.

Overall, the results suggest that age plays a role in determining the level of satisfaction with phygital retailing. Different age groups may have varying expectations, preferences, and experiences with phygital strategies, which in turn influence their satisfaction levels. Retailers should take into account these age-related differences when designing and implementing phygital retailing initiatives to better cater to the needs and preferences of different customer segments.

H_{10}: The level of satisfaction with phygital retailing is not associated with income levels.

H_{11}: The level of satisfaction with phygital retailing is not associated with income levels.

Table 11

Observed and Expected Frequencies

level of satisfaction with phygital retailing	income level				χ^2	*df*	*p*
	Zero	0-100000	100000-500000	500000-1000000			
Neutral	9[6.26]	42[41.48]	16[19.70]	28[27.57]	68.62	12	< .001
Very satisfied	4[3.49]	30[23.14]	18[10.99]	1[15.38]			
Satisfied	14[15.08]	106[99.98]	39[47.48]	70[66.47]			
Dissatisfied	0[1.91]	1[12.66]	8[6.01]	20[8.42]			
Very dissatisfied	0[0.26]	0[1.75]	4[0.83]	0[1.16]			

Note. Values formatted as Observed[Expected].

Interpretation:

The results of the Chi-square test of independence reveal a significant association between the level of satisfaction with phygital retailing and income levels, $\chi2(12) = 68.62$, $p < .001$. Hence, we reject the null hypothesis and conclude that the level of satisfaction with phygital retailing is not independent of income levels.

Analyzing the observed frequencies in the contingency table, several interesting patterns emerge. For instance, the level of satisfaction with phygital retailing (Neutral) had higher observed frequencies for the income levels (Zero) and (0-100000) compared to the expected frequencies. This suggests that individuals with lower income levels were more likely to have

a neutral level of satisfaction with phygital retailing.

On the other hand, the level of satisfaction with phygital retailing (Satisfied) had higher observed frequencies for the income levels (0-100000) and (500000-1000000) compared to the expected frequencies. This indicates that individuals with moderate to higher income levels were more likely to be satisfied with phygital retailing.

Conversely, there were level combinations with observed frequencies that were lower than the expected frequencies. For example, the level of satisfaction with phygital retailing (Dissatisfied) had a lower observed frequency for the income level (Zero) compared to the expected frequency. This suggests that individuals with no income were less likely to be dissatisfied with phygital retailing.

Overall, the findings suggest a relationship between income levels and the level of satisfaction with phygital retailing. Different income groups may have varying expectations, affordability, and access to phygital retailing experiences, influencing their satisfaction levels. Retailers should consider income disparities when developing and implementing phygital strategies to ensure accessibility and cater to the needs of customers across different income brackets.

H_{20}: The level of satisfaction with phygital retailing is not associated with education levels.

H_{21}: The level of satisfaction with phygital retailing is associated with education levels.

Table 12

Observed and Expected Frequencies

level of satisfaction with phygital retailing	education				χ^2	*df*	*p*
	UG	P.G	INTERMEDIATE	SSC			
Neutral	28[31.05]	24[32.21]	35[28.73]	8[3.01]	48.40	12	<

				.001
Very satisfied	28[17.32]	8[17.97]	17[16.03]	0[1.68]
Satisfied	74[74.84]	90[77.64]	60[69.26]	5[7.26]
Dissatisfied	4[9.48]	17[9.83]	8[8.77]	0[0.92]
Very dissatisfied	0[1.31]	0[1.36]	4[1.21]	0[0.13]

Note. Values formatted as Observed [Expected].

The results of the chi-square test of independence indicate a significant association between the level of satisfaction with phygital retailing and education levels, $\chi2(12) = 48.40$, $p < .001$. Therefore, we reject the null hypothesis and conclude that the level of satisfaction with phygital retailing is not independent of education levels.

Analyzing the observed frequencies in the contingency table, several notable patterns emerge. For instance, the level of satisfaction with phygital retailing (Very satisfied) had higher observed frequencies for the education levels (UG) and (P.G) compared to the expected frequencies. This suggests that individuals with undergraduate and postgraduate education were more likely to be very satisfied with phygital retailing experiences.

Conversely, the level of satisfaction with phygital retailing (Neutral) had a higher observed frequency for the education level (INTERMEDIATE) compared to the expected frequency. This implies that individuals with intermediate education had a higher proportion of neutral satisfaction levels with phygital retailing.

Additionally, there were level combinations with observed frequencies that were lower than the expected frequencies. For instance, the level of satisfaction with phygital retailing (Neutral) had a lower observed frequency for the education level (UG) compared to the expected frequency. This indicates that individuals with undergraduate education were less likely to have a neutral satisfaction level with phygital retailing.

Overall, the findings suggest a relationship between education levels and the level of satisfaction with phygital retailing. Higher education levels, such as undergraduate and postgraduate degrees, may be associated with higher satisfaction levels, potentially due to a

better understanding and appreciation of the phygital retailing experience. Retailers should consider the educational background of their customers when designing and implementing phygital strategies, tailoring the experiences to meet the expectations and preferences of different educational groups.

H_{30}: The level of satisfaction with phygital retailing is NOT associated with occupation

H_{31}: The level of satisfaction with phygital retailing is associated with occupation

Table 13

Observed and Expected Frequencies

level of satisfaction with phygital retailing	OCCUPATION			χ^2	*df*	*p*
	Employee	Student	Business			
Neutral	20[25.02]	43[43.79]	32[26.18]	53.87	8	< .001
Very satisfied	21[13.96]	32[24.43]	0[14.61]			
Satisfied	50[60.32]	110[105.56]	69[63.11]			
Dissatisfied	17[7.64]	4[13.37]	8[7.99]			
Very dissatisfied	0[1.05]	0[1.84]	4[1.10]			

Note. Values formatted as Observed [Expected].

The chi-square test of independence reveals a significant link between satisfaction with phygital retailing and occupation, $\chi^2(8) = 53.87$, $p < .001$. The null hypothesis is rejected, indicating a non-independent relationship. Observing the data, it's evident that employees and students are more likely to be very satisfied with phygital retailing, while business-related employees tend to have lower neutral satisfaction levels. These findings underscore the connection between occupation and satisfaction with phygital retailing, emphasizing the need for retailers to tailor their strategies to different occupational groups.

Findings:

Level of satisfaction with physical retailing and education: The chi-square test showed a significant relationship between level of satisfaction with phygital retailing and education. Certain combinations of satisfaction levels and education levels had observed values that were greater or less than expected, indicating a relationship between these variables.

Level of satisfaction with physical retailing and occupation: The chi-square test revealed a significant relationship between level of satisfaction with phygital retailing and occupation. Some combinations of satisfaction levels and occupations had observed values that were greater or less than expected, suggesting an association between these variables.

Overall perception towards physical retailing: The majority of respondents had a positive or very positive perception (69.51%) towards physical retailing, while a smaller percentage had a neutral (25.61%) or negative (4.88%) perception.

Experience with physical retailing: The majority of respondents (66.34%) reported having experience with physical retailing, while a smaller percentage (33.66%) indicated no experience.

Most useful technology in physical retailing: Among the technology options provided, mobile apps (40.00%) and virtual reality (35.37%) were reported as the most useful technologies in physical retailing.

Factors influencing level of satisfaction with physical retailing: The factors that had the highest influence on satisfaction were personalization (27.07%) and convenience (29.02%). Integration of technology (24.15%) and quality of in-store experience (11.71%) also played significant roles.

Conclusions:

Firstly, it was found that education and occupation have a significant association with satisfaction levels. Respondents with higher levels of education, such as undergraduate and postgraduate degrees, expressed varying degrees of satisfaction. Similarly, individuals engaged in different occupations, including students, employees, and business owners, had different levels of satisfaction with physical retailing. These findings highlight the importance

of considering demographic characteristics when analyzing customer satisfaction in the retail industry.

Secondly, the majority of respondents reported being satisfied with physical retailing. More than half of the participants expressed satisfaction, while a smaller percentage indicated neutral or dissatisfied opinions. This suggests that physical retailing continues to hold value for consumers and remains a relevant mode of shopping.

Thirdly, mobile apps and virtual reality were identified as the most useful technologies in physical retailing according to the respondents. This underscores the significance of integrating digital solutions to enhance the retail experience and engage customers effectively. Retailers should prioritize the development and implementation of mobile apps and virtual reality experiences to provide a more immersive and interactive shopping environment.

Lastly, personalization and convenience were identified as critical factors influencing satisfaction with physical retailing. Customers value personalized experiences tailored to their preferences, as well as convenient shopping processes. Retailers should focus on offering customized products and services and optimizing convenience factors such as store layout, checkout processes, and delivery options.

In conclusion, this study highlights the importance of considering demographic characteristics, incorporating digital technologies, and prioritizing personalization and convenience in physical retailing. By understanding and addressing these factors, retailers can enhance customer satisfaction and improve the overall shopping experience.

References:

1) Ahmed, S., & Khalique, M. (2020). Understanding the Concept of PhyGital Retail: A Literature Review. Journal of Business and Retail Management Research, 14(2), 140-150.

2) Alzaidiyeen, N. J. (2019). Impact of phygital technology on enhancing the customer experience: A systematic literature review. Journal of Retailing and Consumer Services, 51, 98-109.

3) Baabdullah, A. M. (2019). An exploratory study of the effect of phygital retailing on customer experience. Journal of Retailing and Consumer Services, 48, 58-69.

4) Balaji, M. S., & Roy, S. K. (2019). Exploring the impact of phygital retailing on the retail experience and customer value: A framework and research agenda. Journal of Retailing and Consumer Services, 51, 381-389.

5) Gaur, S. S., & Sharma, S. (2020). Impact of phygital retailing on customer experience and satisfaction: a study of Indian retail industry. International Journal of Retail & Distribution Management, 48(3), 290-308.

6) He, Y., Cheng, Y., Guo, X., & Huang, S. (2021). Effect of phygital retail experience on customer satisfaction: An empirical study. Journal of Retailing and Consumer Services, 61, 102558.

7) Khalique, M., & Ahmed, S. (2021). Impact of phygital retailing on customer satisfaction and loyalty: An exploratory study. Journal of Retailing and Consumer Services, 58, 102317.

8) Ko, E., & Meisel, J. (2019). Augmenting the retail experience: Effects of in-store augmented reality on the shopping satisfaction of mobile device users. Journal of Retailing and Consumer Services, 50, 272-282.

9) Lee, Y., & Lee, S. (2020). Exploring the role of phygitalstorescape on customer satisfaction and loyalty: The moderating role of technology innovativeness. Journal of Retailing and Consumer Services, 57, 102157.

10) Li, Y., & Cui, X. (2021). Does phygital retail experience drive customers' purchase intention? The moderating effect of product category. Journal of Retailing and Consumer Services, 60, 102437.

11) Oghuma, A. P., Ucheaga, E. C., & Nwankwo, S. (2020). A critical review of phygital retailing: Conceptualization, applications, opportunities and challenges. Journal of Business Research, 113, 1-13.

12) Papagiannidis, S., & Bourlakis, M. (2019). The role of phygital retail experiences in omni-channel marketing. Journal of Business Research, 98, 400-406.