

## **CHAPTER V CONCLUSION**

The research's findings will be discussed in this section. This chapter also provides managerial implications, the research's limitations, and suggestions for the upcoming research.

### **5.1 Conclusion**

1. Social presence affects consumer purchase intention. The higher social presence is accepted by customers when watching the live video commerce, the higher the purchase intention between customers of Scarlett Whitening. Many consumers of Scarlett Whitening will get attracted to purchase the product by making a high engagement of communication to the consumers.
2. Social Presence does not affect immersive experience. The higher the social presence, does not give an effect on the immersive experience of Scarlett Whitening live video commerce will be. The more people who are aware of Scarlett Whitening's social presence, does not give any influence on the sensation of experience for the consumer when watching live video commerce.
3. Immersive Experience affects the consumer purchase intention. The more consumer has a higher effect of immersive experience on watching the live video commerce from Scarlett Whitening, the higher people will intend to purchase the Scarlett Whitening products.
4. Positive emotions do not moderate the effect of social presence towards purchase intention. There is an insignificant moderation from positive emotions toward the influence between the social presence on immersive experience. When social presence occurs on customers watching the live video commerce, the response of positive emotions from the seller do not have an effect for them to get the significant effect on immersive experience.
5. Immersive experience does not have a mediation of social presence towards consumer purchase intention. The result of the research shows a direct only without mediation. Therefore, the specific indirect effect shows no significant of

mediation.

## **5.2 Managerial Implications**

1. Social presence has a positive influence on consumer purchasing intention. It is an important thing for marketers and manufacturers to focus on effective engagement and communication. For instance, A warm welcome from a seller, and direct explanation of buyer needs and wants can create a positive first impression and potentially increase the number of products sold. Therefore, businesses can effectively attract and retain customers, ultimately leading to increased purchase intention and sales.
2. Immersive experience has a positive influence consumer purchase intention. Live video commerce systems and features attract consumers by allowing them to make purchasing decisions directly on the screen, rather than visiting an official store. Therefore, Scarlett Whitening should capitalize on this opportunity to utilize live video commerce. For instance, by engaging buyers with interesting marketing concepts, sellers can attract and retain customers, resulting in increased purchase intention. Scarlett Whitening can easily use features and systems for customers on the live video commerce to give access to communicate, choose, purchase products that provided in the live video commerce system. Therefore, the live video commerce that be offered will make an enjoyable for them to stay tune in a long time.

## **5.3 Research Limitations**

There are three indicators of purchase intention (PI) in the questionnaire that create a problem of causality. It is probably due to an unclear sentence from the previous journal article used as a reference for this research. Therefore, the author has a problem in creating the correct sentences as the indicator for this research.

## **5.4 Future Research Suggestion**

Researchers need to find new reference of questionnaire from the other a journal article that indicate about purchase intention variable. It is because in the questionnaire should be made in clear questions of causality from the article

journals as the reference meaning that the questionnaire that be made in the next research will create more valid and understandable for respondent in filling the questionnaire.



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# **APPENDIX I**

## **Questionnaire**

## APPENDIX I

### Questionnaires

<b>Table Filter</b>	
Apakah anda mengetahui produk merk <i>Scarlett Whitening</i> ?	
a. Ya	b. Tidak
Apakah anda pernah menonton live streaming e-commerce? (Tokopedia Play, Tiktok Shop live Streaming, Shopee Live,dll)	
a. Ya	b. Tidak
Apakah anda pernah berbelanja produk <i>Scarlett Whitening</i> melalui <i>live streaming e-commerce</i> ?	
a. Ya	b. Tidak
<b>Table Profiling</b>	
Jenis Kelamin :	
a. Pria	b. Wanita
Anggaran untuk belanja produk skincare dalam satu bulan	
a. < Rp.500,000	
b. Rp.500,000 - Rp.1,000,000	
c. > Rp.1,000,000	

#### Keterangan

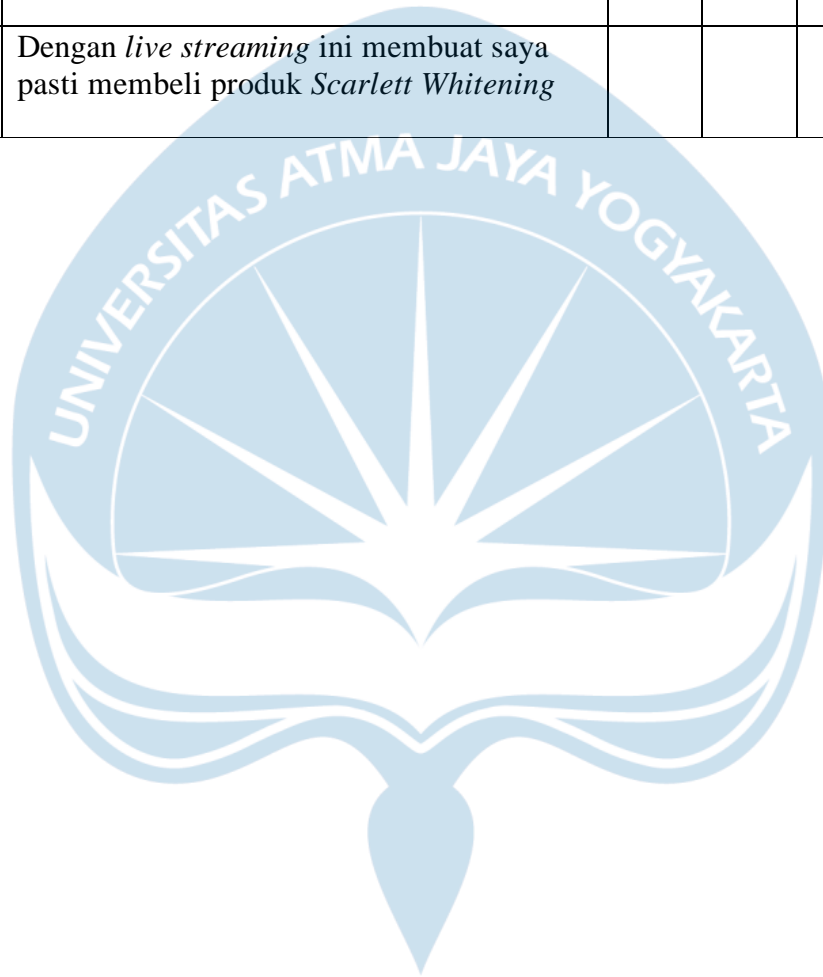
- SS : Sangat Setuju (5)  
 S : Setuju (4)  
 N : Netral (3)  
 TS : Tidak Setuju (2)  
 STS : Sangat Tidak Setuju (1)

#### Table Questionnaire

No	Social Presence	1	2	3	4	5
SP 1	Dalam video streaming <i>Scarlett Whitening</i> , interaksi penjual dilakukan secara langsung kepada pembeli					
SP 2	Dalam video streaming <i>Scarlett Whitening</i> , pembeli yang menonton disambut hangat oleh penjual					

No	Social Presence	1	2	3	4	5
SP 3	Dalam video streaming <i>Scarlett Whitening</i> , interaksi antara penjual dan pembeli berlangsung dekat					
SP 4	Dalam video streaming <i>Scarlett Whitening</i> , interaksi antara penjual dan pembeli berlangsung menyenangkan					
	<b>Immersive Experience</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
IE 1	Menonton <i>live streaming</i> <i>Scarlett Whitening</i> membuat saya sampai kelupaan waktu.					
IE 2	Menonton <i>live streaming</i> <i>Scarlett Whitening</i> membuat saya sampai melupakan lingkungan disekitar saya sendiri.					
IE 3	Menonton <i>live streaming</i> <i>Scarlett Whitening</i> membuat saya bisa melupakan rasa kekhawatiran saya.					
	<b>Positive Emotions</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
PE 1	Menonton <i>live streaming</i> membuat saya senang					
PE 2	Menonton <i>live streaming</i> membuat saya santai					
PE 3	Menonton <i>live streaming</i> membuat saya gembira					
PE 4	Menonton <i>live streaming</i> membuat saya terhibur					
PE 5	Menonton <i>live streaming</i> dapat menimbulkan ikatan relasi yang dekat antara penjual dan pembeli					
	<b>Purchase Intention</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
PI 1	Dengan <i>live streaming</i> ini membuat saya ingin membeli produk <i>Scarlett Whitening</i>					

No	Purchase Intention	1	2	3	4	5
PI 2	Dengan <i>live streaming</i> ini membuat saya memilih <i>Scarlett Whitening</i> sebagai pilihan prioritas produk untuk dibeli					
PI 3	Dengan <i>live streaming</i> ini membuat saya pasti membeli produk <i>Scarlett Whitening</i>					





**APPENDIX II**

**Questionnaire Data**

## APPENDIX II

### Questionnaire Data

No	Apakah anda mengetahui produk merk Scarlett Whitening?	Apakah anda pernah menonton live streaming e-commerce? (Tokopedia Play, Tiktok Shop live Streaming, Shopee Live,dll)	Apakah anda pernah berbelanja produk Scarlett Whitening melalui live streaming e-commerce?	Jenis Kelamin	Anggaran untuk belanja produk skincare dalam satu bulan
1	Ya	Ya	Ya	Pria	<Rp.500,000
2	Ya	Ya	Ya	Pria	<Rp.500,000
3	Ya	Ya	Ya	Pria	<Rp.500,000
4	Ya	Ya	Ya	Pria	<Rp.500,000
5	Ya	Ya	Ya	Pria	<Rp.500,000
6	Ya	Ya	Ya	Pria	<Rp.500,000
7	Ya	Ya	Ya	Pria	<Rp.500,000
8	Ya	Ya	Ya	Pria	<Rp.500,000
9	Ya	Ya	Ya	Pria	<Rp.500,000
10	Ya	Ya	Ya	Pria	<Rp.500,000
11	Ya	Ya	Ya	Pria	<Rp.500,000
12	Ya	Ya	Ya	Pria	<Rp.500,000
13	Ya	Ya	Ya	Pria	<Rp.500,000
14	Ya	Ya	Ya	Pria	<Rp.500,000
15	Ya	Ya	Ya	Pria	<Rp.500,000
16	Ya	Ya	Ya	Pria	<Rp.500,000
17	Ya	Ya	Ya	Pria	<Rp.500,000

No	Apakah anda mengetahui produk merk Scarlett Whitening?	Apakah anda pernah menonton live streaming e-commerce? (Tokopedia Play, Tiktok Shop live Streaming, Shopee Live,dll)	Apakah anda pernah berbelanja produk Scarlett Whitening melalui live streaming e-commerce?	Jenis Kelamin	Anggaran untuk belanja produk skincare dalam satu bulan
18	Ya	Ya	Ya	Pria	<Rp.500,000
19	Ya	Ya	Ya	Pria	<Rp.500,000
20	Ya	Ya	Ya	Pria	<Rp.500,000
21	Ya	Ya	Ya	Pria	<Rp.500,000
22	Ya	Ya	Ya	Pria	<Rp.500,000
23	Ya	Ya	Ya	Pria	<Rp.500,000
24	Ya	Ya	Ya	Pria	<Rp.500,000
25	Ya	Ya	Ya	Pria	<Rp.500,000
26	Ya	Ya	Ya	Pria	<Rp.500,000
27	Ya	Ya	Ya	Pria	<Rp.500,000
28	Ya	Ya	Ya	Pria	<Rp.500,000
29	Ya	Ya	Ya	Pria	<Rp.500,000
30	Ya	Ya	Ya	Pria	<Rp.500,000
31	Ya	Ya	Ya	Pria	<Rp.500,000
32	Ya	Ya	Ya	Pria	<Rp.500,000
33	Ya	Ya	Ya	Pria	<Rp.500,000
34	Ya	Ya	Ya	Wanita	<Rp.500,000
35	Ya	Ya	Ya	Wanita	<Rp.500,000
36	Ya	Ya	Ya	Wanita	<Rp.500,000

No	Apakah anda mengetahui produk merk Scarlett Whitening?	Apakah anda pernah menonton live streaming e-commerce? (Tokopedia Play, Tiktok Shop live Streaming, Shopee Live,dll)	Apakah anda pernah berbelanja produk Scarlett Whitening melalui live streaming e-commerce?	Jenis Kelamin	Anggaran untuk belanja produk skincare dalam satu bulan
37	Ya	Ya	Ya	Wanita	<Rp.500,000
38	Ya	Ya	Ya	Wanita	<Rp.500,000
39	Ya	Ya	Ya	Wanita	<Rp.500,000
40	Ya	Ya	Ya	Wanita	<Rp.500,000
41	Ya	Ya	Ya	Wanita	<Rp.500,000
42	Ya	Ya	Ya	Wanita	<Rp.500,000
43	Ya	Ya	Ya	Wanita	<Rp.500,000
44	Ya	Ya	Ya	Wanita	<Rp.500,000
45	Ya	Ya	Ya	Wanita	<Rp.500,000
46	Ya	Ya	Ya	Wanita	<Rp.500,000
47	Ya	Ya	Ya	Wanita	<Rp.500,000
48	Ya	Ya	Ya	Wanita	<Rp.500,000
49	Ya	Ya	Ya	Wanita	<Rp.500,000
50	Ya	Ya	Ya	Wanita	<Rp.500,000
51	Ya	Ya	Ya	Wanita	<Rp.500,000
52	Ya	Ya	Ya	Wanita	<Rp.500,000
53	Ya	Ya	Ya	Wanita	<Rp.500,000
54	Ya	Ya	Ya	Wanita	<Rp.500,000
55	Ya	Ya	Ya	Wanita	<Rp.500,000

No	Apakah anda mengetahui produk merk Scarlett Whitening?	Apakah anda pernah menonton live streaming e-commerce? (Tokopedia Play, Tiktok Shop live Streaming, Shopee Live,dll)	Apakah anda pernah berbelanja produk Scarlett Whitening melalui live streaming e-commerce?	Jenis Kelamin	Anggaran untuk belanja produk skincare dalam satu bulan
56	Ya	Ya	Ya	Wanita	<Rp.500,000
57	Ya	Ya	Ya	Wanita	<Rp.500,000
58	Ya	Ya	Ya	Wanita	<Rp.500,000
59	Ya	Ya	Ya	Wanita	<Rp.500,000
60	Ya	Ya	Ya	Wanita	<Rp.500,000
61	Ya	Ya	Ya	Wanita	<Rp.500,000
62	Ya	Ya	Ya	Wanita	<Rp.500,000
63	Ya	Ya	Ya	Wanita	<Rp.500,000
64	Ya	Ya	Ya	Wanita	<Rp.500,000
65	Ya	Ya	Ya	Wanita	<Rp.500,000
66	Ya	Ya	Ya	Wanita	<Rp.500,000
67	Ya	Ya	Ya	Wanita	<Rp.500,000
68	Ya	Ya	Ya	Wanita	<Rp.500,000
69	Ya	Ya	Ya	Wanita	<Rp.500,000
70	Ya	Ya	Ya	Wanita	<Rp.500,000
71	Ya	Ya	Ya	Wanita	<Rp.500,000
72	Ya	Ya	Ya	Wanita	<Rp.500,000
73	Ya	Ya	Ya	Wanita	<Rp.500,000
74	Ya	Ya	Ya	Wanita	<Rp.500,000

No	Apakah anda mengetahui produk merk Scarlett Whitening?	Apakah anda pernah menonton live streaming e-commerce? (Tokopedia Play, Tiktok Shop live Streaming, Shopee Live,dll)	Apakah anda pernah berbelanja produk Scarlett Whitening melalui live streaming e-commerce?	Jenis Kelamin	Anggaran untuk belanja produk skincare dalam satu bulan
75	Ya	Ya	Ya	Wanita	<Rp.500,000
76	Ya	Ya	Ya	Wanita	<Rp.500,000
77	Ya	Ya	Ya	Wanita	<Rp.500,000
78	Ya	Ya	Ya	Wanita	<Rp.500,000
79	Ya	Ya	Ya	Wanita	<Rp.500,000
80	Ya	Ya	Ya	Wanita	<Rp.500,000
81	Ya	Ya	Ya	Wanita	<Rp.500,000
82	Ya	Ya	Ya	Wanita	<Rp.500,000
83	Ya	Ya	Ya	Wanita	<Rp.500,000
84	Ya	Ya	Ya	Wanita	<Rp.500,000
85	Ya	Ya	Ya	Wanita	<Rp.500,000
86	Ya	Ya	Ya	Wanita	<Rp.500,000
87	Ya	Ya	Ya	Wanita	<Rp.500,000
88	Ya	Ya	Ya	Wanita	<Rp.500,000
89	Ya	Ya	Ya	Wanita	<Rp.500,000
90	Ya	Ya	Ya	Wanita	<Rp.500,000
91	Ya	Ya	Ya	Wanita	<Rp.500,000
92	Ya	Ya	Ya	Wanita	<Rp.500,000
93	Ya	Ya	Ya	Wanita	<Rp.500,000

No	Apakah anda mengetahui produk merk Scarlett Whitening?	Apakah anda pernah menonton live streaming e-commerce? (Tokopedia Play, Tiktok Shop live Streaming, Shopee Live,dll)	Apakah anda pernah berbelanja produk Scarlett Whitening melalui live streaming e-commerce?	Jenis Kelamin	Anggaran untuk belanja produk skincare dalam satu bulan
94	Ya	Ya	Ya	Wanita	<Rp.500,000
95	Ya	Ya	Ya	Pria	>Rp.1,000,000,
96	Ya	Ya	Ya	Wanita	>Rp.1,000,000,
97	Ya	Ya	Ya	Wanita	>Rp.1,000,000,
98	Ya	Ya	Ya	Wanita	>Rp.1,000,000,
99	Ya	Ya	Ya	Wanita	>Rp.1,000,000,
100	Ya	Ya	Ya	Wanita	>Rp.1,000,000,
101	Ya	Ya	Ya	Wanita	>Rp.1,000,000,
102	Ya	Ya	Ya	Wanita	>Rp.1,000,000,
103	Ya	Ya	Ya	Wanita	>Rp.1,000,000,
104	Ya	Ya	Ya	Wanita	>Rp.1,000,000,
105	Ya	Ya	Ya	Wanita	>Rp.1,000,000,
106	Ya	Ya	Ya	Wanita	>Rp.1,000,000,
107	Ya	Ya	Ya	Wanita	>Rp.1,000,000,
108	Ya	Ya	Ya	Wanita	>Rp.1,000,000,
109	Ya	Ya	Ya	Wanita	>Rp.1,000,000,
110	Ya	Ya	Ya	Pria	Rp.500,000 - Rp.1,000,000
111	Ya	Ya	Ya	Pria	Rp.500,000 - Rp.1,000,000
112	Ya	Ya	Ya	Pria	Rp.500,000 - Rp.1,000,000

No	Apakah anda mengetahui produk merk Scarlett Whitening?	Apakah anda pernah menonton live streaming e-commerce? (Tokopedia Play, Tiktok Shop live Streaming, Shopee Live,dll)	Apakah anda pernah berbelanja produk Scarlett Whitening melalui live streaming e-commerce?	Jenis Kelamin	Anggaran untuk belanja produk skincare dalam satu bulan
113	Ya	Ya	Ya	Pria	Rp.500,000 - Rp.1,000,000
114	Ya	Ya	Ya	Pria	Rp.500,000 - Rp.1,000,000
115	Ya	Ya	Ya	Pria	Rp.500,000 - Rp.1,000,000
116	Ya	Ya	Ya	Pria	Rp.500,000 - Rp.1,000,000
117	Ya	Ya	Ya	Pria	Rp.500,000 - Rp.1,000,000
118	Ya	Ya	Ya	Pria	Rp.500,000 - Rp.1,000,000
119	Ya	Ya	Ya	Pria	Rp.500,000 - Rp.1,000,000
120	Ya	Ya	Ya	Pria	Rp.500,000 - Rp.1,000,000
121	Ya	Ya	Ya	Pria	Rp.500,000 - Rp.1,000,000
122	Ya	Ya	Ya	Pria	Rp.500,000 - Rp.1,000,000
123	Ya	Ya	Ya	Pria	Rp.500,000 - Rp.1,000,000
124	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
125	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
126	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
127	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
128	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
129	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
130	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
131	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000

No	Apakah anda mengetahui produk merk Scarlett Whitening?	Apakah anda pernah menonton live streaming e-commerce? (Tokopedia Play, Tiktok Shop live Streaming, Shopee Live,dll)	Apakah anda pernah berbelanja produk Scarlett Whitening melalui live streaming e-commerce?	Jenis Kelamin	Anggaran untuk belanja produk skincare dalam satu bulan
132	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
133	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
134	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
135	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
136	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
137	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
138	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
139	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
140	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
141	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
142	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
143	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
144	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
145	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
146	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
147	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
148	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
149	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
150	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000

No	Apakah anda mengetahui produk merk Scarlett Whitening?	Apakah anda pernah menonton live streaming e-commerce? (Tokopedia Play, Tiktok Shop live Streaming, Shopee Live,dll)	Apakah anda pernah berbelanja produk Scarlett Whitening melalui live streaming e-commerce?	Jenis Kelamin	Anggaran untuk belanja produk skincare dalam satu bulan
151	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
152	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
153	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
154	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
155	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
156	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
157	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000
158	Ya	Ya	Ya	Wanita	Rp.500,000 - Rp.1,000,000

No	SP1	SP2	SP3	SP4	IE1	IE2	IE3	PE1	PE2	PE3	PE4	PE5	PI1	PI2	PI3
1	5	4	4	5	3	3	4	4	4	4	4	5	4	3	3
2	3	4	4	4	2	3	3	4	4	4	4	3	5	5	4
3	3	4	3	3	1	1	1	3	1	1	3	4	2	2	2
4	3	3	3	3	3	3	3	3	3	4	3	3	3	3	3
5	4	4	5	4	3	4	4	4	4	4	5	4	4	5	4
6	3	5	5	4	2	2	3	4	5	5	4	4	3	2	4
7	3	4	3	3	1	1	2	3	3	2	3	2	1	1	1
8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
9	5	4	3	4	1	1	1	4	4	4	4	5	3	4	3
10	4	4	4	4	1	1	2	3	3	4	4	3	4	3	3
11	4	5	4	4	1	1	4	4	5	4	4	3	5	4	5
12	4	4	5	5	1	1	3	5	4	5	4	4	3	4	4
13	4	5	4	5	3	2	3	3	3	3	4	3	4	4	3
14	4	3	3	2	3	3	3	5	3	3	3	4	2	2	5
15	3	3	4	3	4	3	3	4	4	4	3	4	3	3	4
16	4	5	3	5	1	1	2	3	5	3	4	5	3	4	3
17	4	4	4	4	3	1	2	3	2	2	1	3	2	2	2
18	3	4	2	3	1	1	1	1	1	1	1	1	5	1	3
19	4	4	3	2	4	5	5	5	1	2	1	1	3	1	2
20	4	4	4	5	4	5	4	4	4	4	4	4	4	4	4
21	4	4	4	4	3	3	3	4	4	3	3	4	4	4	4
22	4	4	3	2	1	1	1	2	2	2	2	3	2	2	3
23	5	4	5	5	4	5	4	5	4	4	5	5	4	5	5
24	3	2	4	3	1	2	1	3	3	4	4	4	4	4	3
25	4	4	4	4	2	2	4	4	4	4	4	4	4	4	4
26	1	1	1	1	1	1	1	3	3	3	3	3	3	3	3

No	SP1	SP2	SP3	SP4	IE1	IE2	IE3	PE1	PE2	PE3	PE4	PE5	PI1	PI2	PI3
27	5	5	5	5	5	3	4	5	5	5	5	5	5	5	5
28	5	5	5	5	3	2	4	3	4	4	4	4	4	4	3
29	3	4	4	4	4	2	3	3	3	3	4	2	4	3	3
30	4	4	4	4	1	1	1	3	2	2	3	3	4	4	4
31	4	3	5	4	4	4	3	4	5	4	4	4	5	5	4
32	3	5	3	3	3	3	3	3	3	3	3	3	3	3	3
33	4	5	5	4	3	3	3	4	4	5	5	4	5	4	4
34	4	4	4	4	4	4	2	4	4	4	4	4	4	4	4
35	4	4	5	5	5	5	5	4	5	5	5	5	4	4	4
36	3	3	3	3	1	1	1	1	2	3	2	2	2	1	1
37	5	5	5	5	5	4	4	5	5	5	5	4	5	5	5
38	3	3	3	3	3	3	3	3	3	3	3	3	4	3	3
39	4	4	4	4	3	1	1	4	3	4	4	3	4	4	4
40	4	4	4	4	4	3	3	4	3	3	3	4	3	3	3
41	4	4	4	3	3	3	3	4	4	4	4	3	3	3	3
42	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3
43	2	4	4	4	3	2	3	2	3	2	3	3	3	3	2
44	3	4	4	4	3	2	3	3	3	3	3	3	4	3	3
45	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4
46	4	4	3	3	2	2	2	3	3	3	3	4	4	3	3
47	4	4	4	4	4	4	4	3	3	3	4	5	4	4	4
48	3	5	4	4	3	2	3	3	4	4	3	3	5	5	3
49	4	4	4	4	1	1	3	4	3	4	3	4	4	4	4
50	3	3	3	3	3	3	3	3	3	3	4	3	3	3	3
51	4	4	4	4	4	2	4	4	4	4	4	4	4	4	4

No	SP1	SP2	SP3	SP4	IE1	IE2	IE3	PE1	PE2	PE3	PE4	PE5	PI1	PI2	PI3
52	3	3	3	3	5	1	1	1	2	1	2	1	3	2	1
53	4	4	4	4	4	1	4	5	5	2	3	5	5	5	5
54	4	4	4	5	3	3	3	5	4	4	4	4	5	4	4
55	2	2	2	2	2	1	1	1	4	1	1	1	1	1	1
56	3	4	4	4	2	1	1	3	3	3	3	4	4	3	2
57	4	4	4	4	3	4	4	4	4	4	4	4	5	5	4
58	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
59	3	4	4	4	2	2	4	3	3	3	3	4	4	3	3
60	5	5	5	5	4	4	4	4	5	5	5	5	5	5	4
61	5	5	3	4	2	1	1	3	3	3	4	5	4	3	3
62	4	5	5	5	4	4	4	4	4	4	2	4	4	4	4
63	5	3	3	3	1	1	1	1	1	1	1	1	1	1	1
64	4	4	4	4	2	2	1	4	4	4	4	4	4	4	4
65	4	4	4	4	5	4	5	5	5	5	5	5	5	4	4
66	4	4	4	4	2	1	1	3	3	3	3	3	3	3	3
67	3	3	3	3	2	2	2	3	3	3	3	4	3	3	3
68	4	4	4	4	3	3	4	4	3	3	3	4	4	4	4
69	4	4	4	4	2	2	2	3	3	3	3	3	4	4	4
70	5	5	5	5	4	4	4	5	4	4	5	4	5	4	4
71	3	4	4	4	4	3	4	4	4	4	4	4	4	4	4
72	4	4	3	3	3	2	2	2	3	2	3	3	3	2	2
73	4	4	3	1	3	1	3	3	3	3	4	4	4	4	3
74	4	4	3	4	2	2	2	3	3	3	3	4	4	4	3
75	3	4	4	3	4	4	3	4	3	2	2	2	3	3	4
76	4	4	4	4	1	1	1	3	3	2	2	3	3	2	3

No	SP1	SP2	SP3	SP4	IE1	IE2	IE3	PE1	PE2	PE3	PE4	PE5	PI1	PI2	PI3
77	4	4	5	5	5	4	3	4	5	4	4	5	5	3	4
78	4	5	4	4	2	2	2	5	4	4	3	4	4	4	4
79	4	4	4	4	2	2	2	3	3	3	3	5	5	4	4
80	4	4	3	5	5	5	3	3	3	3	4	2	3	3	4
81	4	3	3	4	2	1	2	3	4	3	3	4	5	4	3
82	4	4	4	4	2	2	3	3	3	3	3	3	4	3	3
83	4	2	2	2	2	1	1	2	3	2	2	2	4	3	1
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No	SP1	SP2	SP3	SP4	IE1	IE2	IE3	PE1	PE2	PE3	PE4	PE5	PI1	PI2	PI3
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125	3	3	3	4	2	2	2	4	4	4	4	4	3	3	3
126	4	4	4	4	2	2	2	4	4	4	4	3	4	4	4

No	SP1	SP2	SP3	SP4	IE1	IE2	IE3	PE1	PE2	PE3	PE4	PE5	PI1	PI2	PI3
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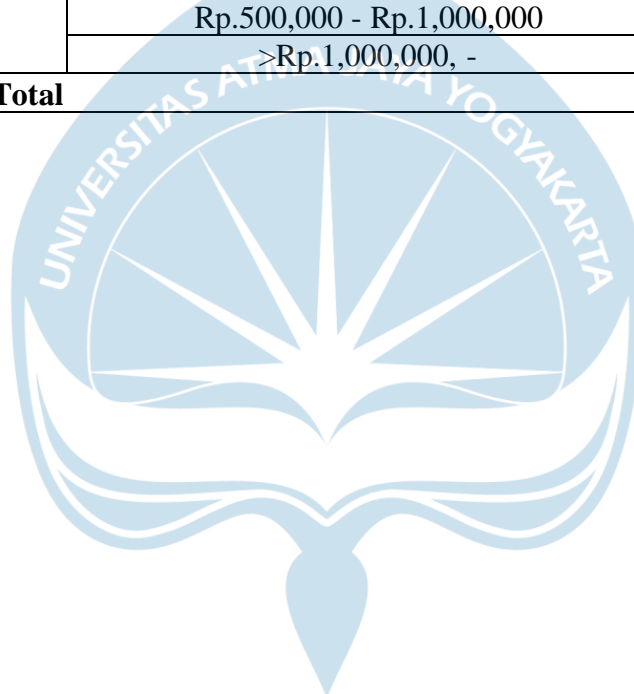
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158	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4

### Respondent Distribution Based on Gender

Characteristics	Gender	Frequency	Percentage (%)
Gender	Male	48	30.38
	Female	110	69.62
<b>Total</b>		<b>158</b>	<b>100</b>

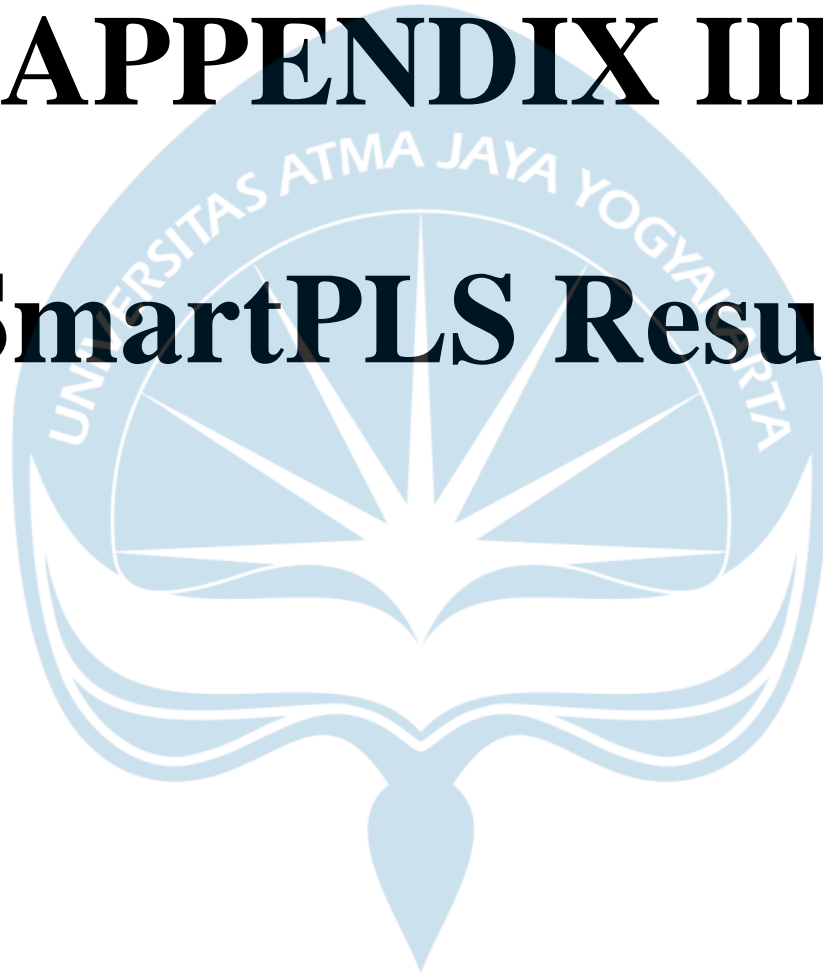
**Respondent Distribution Based on the Budget for Purchasing Skincare**

<b>Characteristics</b>	<b>Budget for purchasing skincare products in a month</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Budget for purchasing skincare products in a month	<Rp.500,000, -	<b>94</b>	<b>59.49</b>
	Rp.500,000 - Rp.1,000,000	<b>49</b>	<b>31.01</b>
	>Rp.1,000,000, -	<b>15</b>	<b>9.50</b>
<b>Total</b>		<b>158</b>	<b>100</b>



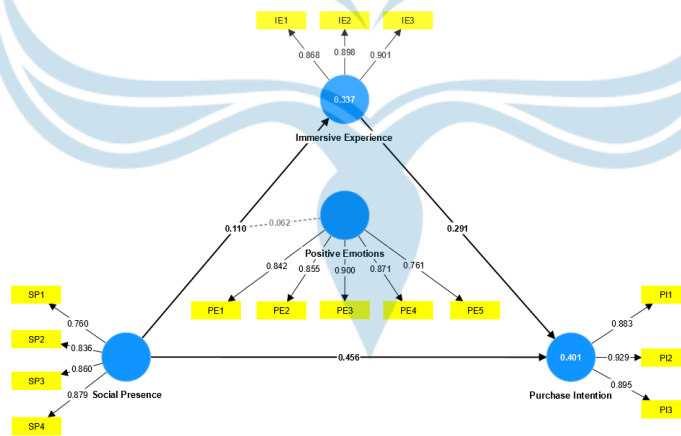
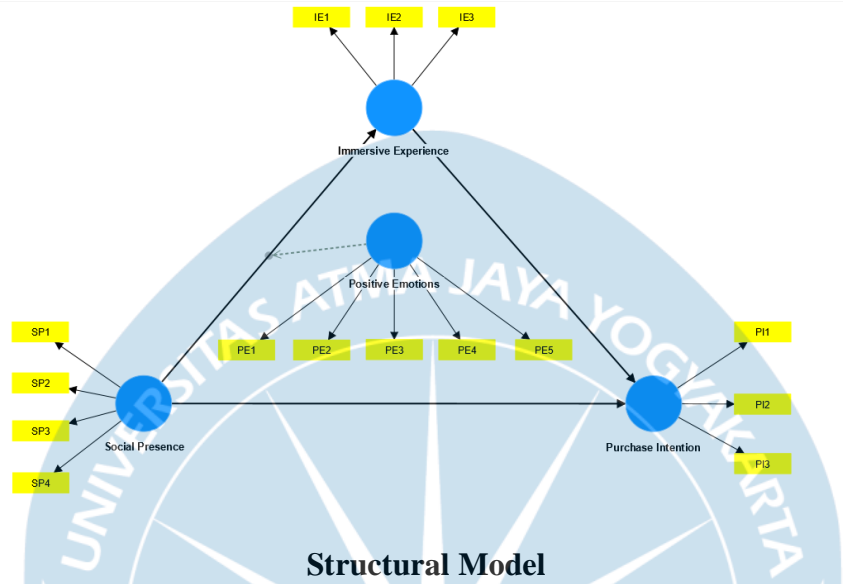
# **APPENDIX III**

## **SmartPLS Result**



# APPENDIX III

## SmartPLS Result



## Construct Model

### Outer Model

<b>Constructs</b>	<b>Indicators</b>	<b>Outer Loading</b>
Social Presence (SP)	SP1	<b>0.760</b>
	SP2	<b>0.836</b>
	SP3	<b>0.860</b>
	SP4	<b>0.879</b>
Immersive Experience (IE)	IE1	<b>0.868</b>
	IE2	<b>0.898</b>
	IE3	<b>0.901</b>
Positive Emotions (PE)	PE1	<b>0.842</b>
	PE2	<b>0.855</b>
	PE3	<b>0.900</b>
	PE4	<b>0.871</b>
	PE5	<b>0.761</b>
Purchase Intention (PI)	PI1	<b>0.883</b>
	PI2	<b>0.929</b>
	PI3	<b>0.895</b>

Source: Primary Data (2023)

### Average Extracted Variance (AVE)

<b>Variable</b>	<b>AVE</b>
Social Presence	<b>0.697</b>
Immersive Experience	<b>0.791</b>
Positive Emotions	<b>0.717</b>
Purchase Intention	<b>0.815</b>

Source: Primary Data (2023)

### Cross Loading

Indicators	Social Presence	Immersive Experience	Positive Emotions	Purchase Intention
SP1	<b>0.760</b>	<b>0.225</b>	<b>0.442</b>	<b>0.414</b>
SP2	<b>0.836</b>	<b>0.273</b>	<b>0.43</b>	<b>0.433</b>
SP3	<b>0.860</b>	<b>0.470</b>	<b>0.58</b>	<b>0.519</b>
SP4	<b>0.879</b>	<b>0.348</b>	<b>0.569</b>	<b>0.533</b>
IE1	<b>0.327</b>	<b>0.868</b>	<b>0.405</b>	<b>0.336</b>
IE2	<b>0.282</b>	<b>0.898</b>	<b>0.435</b>	<b>0.351</b>
IE3	<b>0.444</b>	<b>0.901</b>	<b>0.627</b>	<b>0.534</b>
PE1	<b>0.504</b>	<b>0.571</b>	<b>0.842</b>	<b>0.625</b>
PE2	<b>0.452</b>	<b>0.462</b>	<b>0.855</b>	<b>0.653</b>
PE3	<b>0.545</b>	<b>0.516</b>	<b>0.9</b>	<b>0.674</b>
PE4	<b>0.583</b>	<b>0.483</b>	<b>0.871</b>	<b>0.701</b>
PE5	<b>0.532</b>	<b>0.337</b>	<b>0.761</b>	<b>0.692</b>
PI1	<b>0.492</b>	<b>0.344</b>	<b>0.609</b>	<b>0.883</b>
PI2	<b>0.544</b>	<b>0.418</b>	<b>0.736</b>	<b>0.929</b>
PI3	<b>0.518</b>	<b>0.518</b>	<b>0.761</b>	<b>0.895</b>

Source: Primary Data (2023)

### Composite Reliability

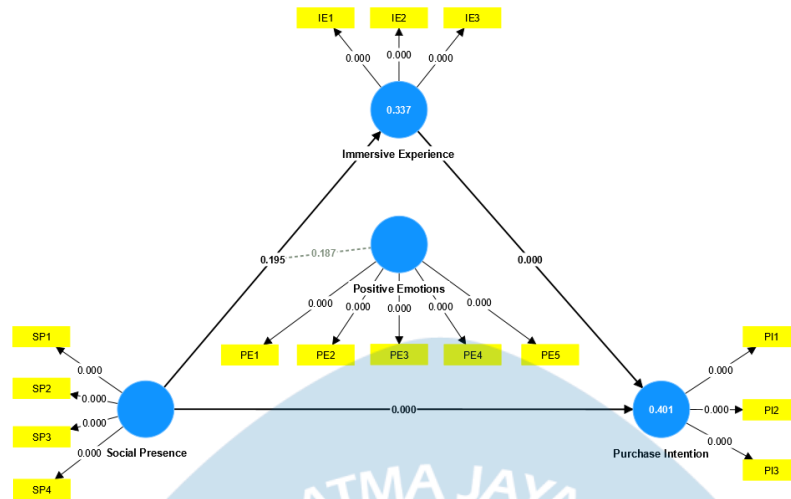
	Cronbach's Alpha	Composite Reliability
Social Presence	<b>0.856</b>	<b>0.877</b>
Immersive Experience	<b>0.872</b>	<b>0.928</b>
Positive Emotions	<b>0.902</b>	<b>0.917</b>
Purchase Intention	<b>0.886</b>	<b>0.893</b>

Source: Primary Data (2023)

### R-Square Result

Variable	R-Square Adjusted (%)
Immersive Experience	32.4%
Purchase Intention	39.4%

Source: Primary Data (2023)



**Bootstrapping Construct Model**

**Path Coefficients**

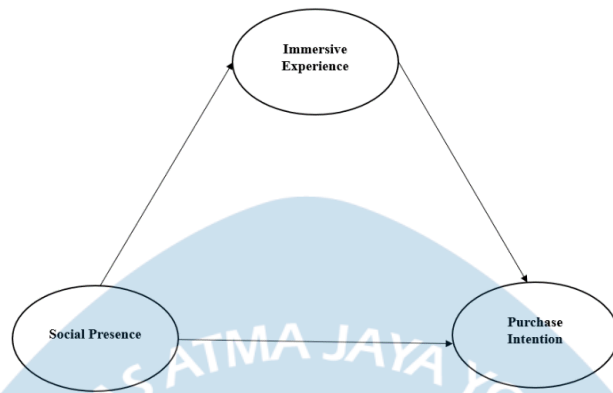
Hypothesis	Original Sample (O)	Sample Mean (M)	Standard deviation (STDEV)	T Statistics	P Value	Explanation
(H1) SP->PI	<b>0.456</b>	0.459	0.066	<b>6.856</b>	<b>0.000</b>	Significant
(H2) SP->IE	<b>0.110</b>	0.102	0.085	<b>1.295</b>	<b>0.195</b>	Insignificant
(H3) IE->PI	<b>0.291</b>	0.294	0.063	<b>4.653</b>	<b>0.000</b>	Significant
(H4) PE*SP->IE	<b>0.062</b>	0.062	0.047	<b>1.319</b>	<b>0.187</b>	Insignificant

Source: Primary Data (2023)

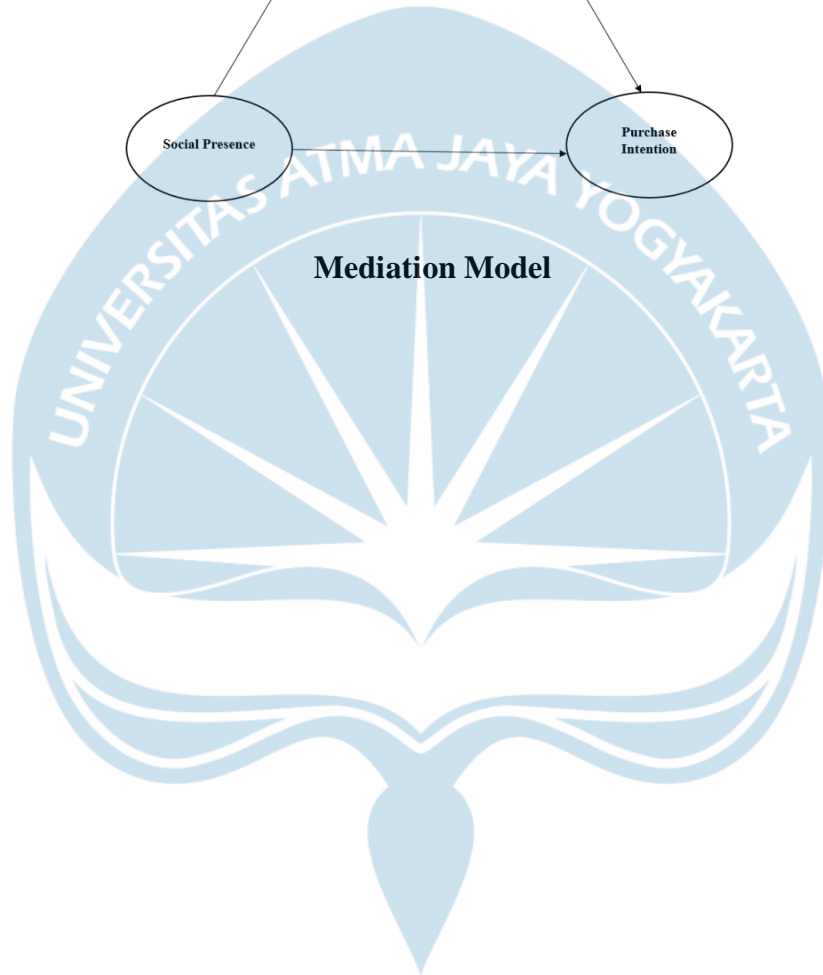
**Specific Indirect Effect**

Hypothesis	Original Sample (O)	Sample Mean (M)	Standard deviation (STDEV)	T Statistics	P Value
SP->IE->PI	0.032	0.030	0.026	1.217	0.224

Source: Primary Data (2023)



**Mediation Model**





# **APPDENDIX IV**

## **Journal Article**



# How social presence influences consumer purchase intention in live video commerce: the mediating role of immersive experience and the moderating role of positive emotions

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## Abstract

**Purpose** – This paper aims to examine the relationship between social presence and consumer purchase intention in the context of livestreaming commerce and test the mediating role of immersive experience and the moderating role of positive emotions.

**Design/methodology/approach** – The authors used a convenience sampling method to select 408 college students from a university in Ganzhou as the participants. They employed structural equation modeling to test the hypotheses, as well as Hayes' PROCESS to test the mediation and moderation effects.

**Findings** – The authors found that immersion experiences partially mediate the relationship between social presence and consumers' purchase intentions and positive emotions moderate the "social presence–immersion experience–consumer purchase intentions" path. Therefore, social presence constitutes a moderating mediating effect on consumer purchase intentions.

**Practical implications** – This study offers meaningful insights into how livestreamers and e-retailers can stimulate consumers' buying behavior in livestreaming environments. E-commerce platforms should strengthen consumer interactions and increase consumers' perceptions of social presence. In addition, companies should meet the social and psychological needs of consumers and generate positive emotional resonance.

**Originality/value** – This research sheds light on the effect of social presence on consumer purchase intentions in livestreaming commerce and extends the social presence literature by investigating the mediation mechanism of immersive experience.

**Keywords** Social presence, Positive emotions, Immersive experience, Consumer purchase intentions Paper type Research paper

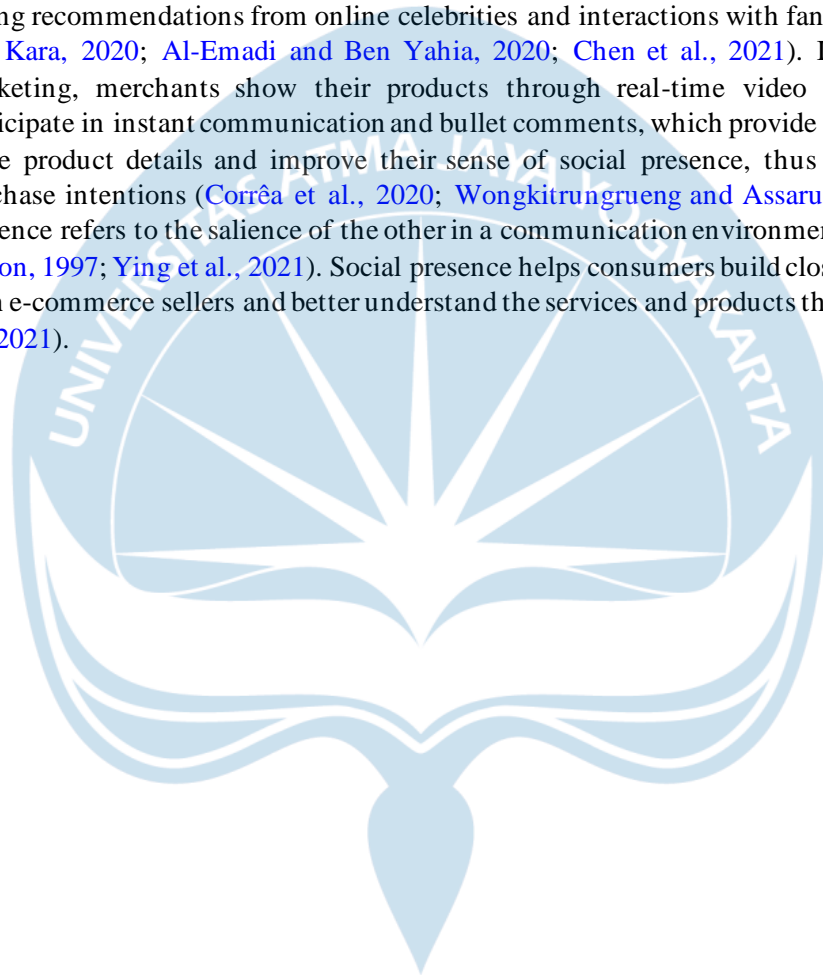
## 1. Introduction

Interactivity has become an indispensable part of contemporary interactive marketing practice (Wang, 2021). From virtual reality simulations, chatbots, voice-activated content, interactive short video and livestreaming to mobile and messaging apps, these can all be used to proactively contact customers, promote customer participation and interact with

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customers, thereby forming a two-way value creation marketing process. In recent years, online celebrities' livestreaming marketing, represented by the fast-developing online short video platforms such as TikTok, Kwai and Weibo, has become a major market for e-commerce companies, which mainly promote brand promotion and product sales through strong recommendations from online celebrities and interactions with fans (Akdevelioglu and Kara, 2020; Al-Emadi and Ben Yahia, 2020; Chen et al., 2021). In livestreaming marketing, merchants show their products through real-time video and consumers participate in instant communication and bullet comments, which provide consumers with more product details and improve their sense of social presence, thus enhancing their purchase intentions (Corrêa et al., 2020; Wongkitrungrueng and Assarut, 2020). Social presence refers to the salience of the other in a communication environment (Lombard and Ditton, 1997; Ying et al., 2021). Social presence helps consumers build closer relationships with e-commerce sellers and better understand the services and products they want (Kim et al., 2021).



The importance of social presence in livestreaming e-commerce practice has attracted the attention of the academic community. Existing research can be classified into two streams. One research stream has shown the impact of social presence on trust, customer loyalty and consumers' purchase intentions in several contexts such as online shopping, microblogging and e-commerce (Bao and Wang, 2021; Dash and Saji, 2014; Gefen and Straub, 2003; Hassanein and Head, 2007; Lu et al., 2016; Tsai et al., 2021). When making purchase decisions, consumers tend to be influenced by social interactions with other people, and this social presence is one of the main factors that facilitate consumer purchasing decisions (Kurt et al., 2011). Another research stream focuses on how social presence plays a critical role as a moderator (Bao and Wang, 2021; Jin et al., 2021; Rashid et al., 2022). It should be noted that a few studies have identified several moderating variables for the impact of social presence. Those variables include group identification (Fang et al., 2018) and self-construal (Zhang et al., 2021). While the moderating effect of positive emotions has not been examined in the social presence literature, some scattered evidence in the literature suggests that positive emotions may moderate the effect of social presence on consumer purchase intention. Past studies have shown that the presence of others has an arousal effect on individuals and affects their consumption attitudes and behaviors by changing their physical and emotional states (Kushnir, 1981; Zajonc, 1965). Therefore, the emotional state of consumers influences their consumption behavior (Guo et al., 2020). Because prior research has mostly focused on the direct impact of social presence (Bao and Wang, 2021) and little scholarly work has been dedicated to the possible intrinsic connection between social presence and positive emotions (Huang et al., 2014; Kang et al., 2020), this study has attempted to bridge this gap by examining the moderation effect of positive emotions on the relationship between social presence and consumer purchase intentions. Moreover, few studies have focused on the underlying mechanism of social presence on consumer purchase intentions in the context of livestreaming commerce (Fang et al., 2018; Zhang et al., 2021). In the live marketing environment, consumers cannot communicate with others face-to-face, but the virtual presence of others on the platform results in a kind of "social presence" (Li and Hua, 2021; Liu et al., 2020; Qin, 2020). Therefore, the influence mechanism of social presence on consumer purchase decisions needs further research and exploration in the context of livestreaming marketing.

To sum, this study makes several main contributions to the literature on livestreaming commerce. First, it examines the relationship between social presence and consumer purchase intention in the context of livestreaming commerce. Second, it investigates the moderating effect of positive emotions on the relationship between social presence and consumer purchase intention. Finally, it provides some practical suggestions for livestreaming managers to make better use of livestreaming to effectively interact with and attract consumers.

The rest of this paper is organized as follows: first, it reviews the theoretical relationships between key concepts and develops a set of hypotheses. Next, it describes the research methodology and results. The final section provides the theoretical and practical implications, limitations and avenues for future research.

## **2. Theoretical framework and hypotheses development**

### **2.1 Social presence and consumer purchase intentions**

The concept of social presence originated from interpersonal interaction theory in social psychology, and the early definitions were developed from the perspective of perceived presence of others. [Lombard and Ditton \(1997\)](#) defined this concept as two broad categories: physical and social presence. Physical presence reflects the feeling of “being there,” whereas social presence reflects the feeling of “being there with others” and communicating. [Hassanein and Head \(2005\)](#) referred to social presence as the warm feeling of human-like contact that users may have with a website, and their study indicated that increased levels of social presence have a positive effect on online consumers’ attitudes toward shopping websites. Compared with traditional offline shopping, the online shopping experience can be perceived as impersonal. Recognizing the value of “shopping as an experience,” many online stores have attempted to provide consumers with positive online shopping experiences. Despite the limitations of using the web as a shopping channel, intervening through social presence can establish meaningful and rich relationships for users. Electronic communication media, such as the internet, are often considered to have low social presence ([Miranda and Saunders, 2003](#)), and the lack of real social interaction and product information in online shopping makes consumers’ shopping process highly vulnerable to uncertainty, which in turn affects consumer purchase intentions. Purchase intention is used as the possibility and subjective probability that consumers will buy a product ([Dodds et al., 1991](#)). In the field of online shopping, purchase intention is the initial intention of consumers to purchase a product from an online store. The reduction of human and social factors leads to a decrease in social presence ([Hassanein and Head, 2007](#)).

Social presence has been examined in the context of interactive marketing and e-commerce. [Rashid et al. \(2022\)](#) examined social presence as a moderator, and their findings showed that social presence significantly moderated the association between social support and social commerce. Social presence moderated the relationship between trust toward brand microblog and participation ([Bao and Wang, 2021](#)). [Jin et al. \(2021\)](#) revealed the positive relationship between social presence and perceived trustworthiness of the endorsed fashion brand. [Attar et al. \(2022\)](#) examined the role of social presence and trust on customer loyalty. [Jiang et al. \(2019\)](#) identified the three dimensions of social presence: interactions between consumers, interactions between consumers and merchants and interactions between consumers and commodities. Extending the concept of social presence in online business-to-business (B2B) business, [Koponen and Rytty \(2020\)](#) revealed how social presence was embedded in B2B online chat conversations through buyers’ interactive, affective and relationship maintenance responses.

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Specifically, in the context of live video marketing, social presence experience is a kind of stimulating perception that can influence both consumers' purchase intentions and their purchasing behaviors. The important reason why consumers like and are willing to watch online celebrity videos is that they can experience warm feelings, view beautiful scenes and enjoy real interactions through watching videos. Social presence enhances the possibility that consumers will reuse or purchase recommended online products. Therefore, when consumers watch videos through the platform, if the images and content presented in the videos can make consumers feel like they are experiencing real, face-to-face communication or provide them with a warm experience, it can stimulate consumer purchase intentions.

Social presence has positive effect on perceived enjoyment (Liu et al., 2020) and has positive influence on social learning process (Li and Hua, 2021). Consumers' perceptions of social presence have been shown to have a positive impact on their purchase intentions (Gefen and Straub, 2003; Qin, 2020). Thus, the authors propose the following:

H1. Social presence is positively related to consumer purchase intentions.

## 2.2 The mediating role of immersive experience

Immersion is a state of mind in which individuals are fully engaged in an activity or thing, forgetting about the surrounding environment and subsequently the existence of time (Csikszentmihalyi, 2014). When people are in an immersive experience, they will experience a high degree of excitement and satisfaction because of the user experience of spatial presence perception. In this study, the authors define immersion as an unconscious experience, mainly the internal experience in which users are fully engaged and able to enjoy everything when watching a livestream. If the online experience is pleasant, users will experience an inherent sense of entertainment and will be immersed in it for a long time (Hoffman and Novak, 1996). Using the Immersion Tendency Questionnaire, Witmer and Singer (1998) found that different user immersion tendencies had an impact on their sense of presence. Previously, Korzaan and Boswell (2008) explored the positive impact of social presence on immersion experience. Yang et al. (2021) confirmed the effect of social presence on immersion in the context of vlogs. When consumers are immersed in a virtual shopping environment, they will experience a pleasant and immersive state (Sun et al., 2019). Thus, the authors hypothesize the following:

H2. Social presence is positively associated with consumer immersive experience.

Previous research has shown that immersive experiences involve intrinsic enjoyment and focus (Ming et al., 2021), and intrinsic enjoyment can increase customers' exploratory behavior, leading to purchase behavior. Consumers who focus on live shopping are more likely to be inspired by social media platforms (Izogo and Mpinganjira, 2020). Woodworth (1929) proposed the Stimulus, Organism, Response (SOR) model based on traditional stimulus response theory, which can be used to study consumer behavior, defining "stimulus" as an environmental factor that affects an organism's internal state (Vander Schee et al., 2020).

The online shopping environment serves as the environmental stimulus (stimulus), the immersive experience as the consumer's internal state (organism) and the purchase intention as the behavioral response (reaction). Consumers who have had an immersive experience are

more likely to make unplanned purchases (Koufaris, 2002). External stimuli can trigger a series of psychological and thinking activities and change consumers' emotions. In the case of live shopping, consumers are subjected to external stimuli that create immersive experiences that affect their purchase intentions. This model assumes that the social presence atmosphere of live marketing may influence consumers' purchase intentions through the intervention of immersion. Overall, immersive experiences increase consumers' propensity to buy (Liao et al., 2022). Thus, the authors propose the following:

H3. Immersive experience is positively related to consumer purchase intentions.

Website interactivity and vividness have an impact on purchasing through immersive experience (Lim and Childs, 2020). However, social presence cannot be improved without interactions with consumers. Immersive experience is one of the important mediators explaining the theoretical mechanism of how social presence may affect loyalty (Fang et al., 2018). In the context of e-tailing, the online retail environment affects consumers' emotional and cognitive states, which in turn affect their shopping outcomes (Eroglu et al., 2003). Therefore, the authors believe that, when social presence is high, consumers experience a high level of immersion, which may enhance their purchase intentions. Thus, they hypothesize the following:

H4. Immersive experiences mediate the relationship between social presence and consumer purchase intentions.

### 2.3 The moderating role of positive emotions

Positive emotion is a conscious process that includes multiple components such as pleasurable experiences, facial or physical expressions, evaluations and especially behavioral plans and activation states (Gable and Harmon-Jones, 2010). Positive emotions about a product or service during shopping can improve product perceptions, and positive emotions can lead to higher consumer purchase intentions (Guo et al., 2020).

Previous research has shown that social presence influences consumers' sense of pleasure and thus affects their purchase intentions (Huang et al., 2014). Positive emotions help reduce the complexity and vulnerability that consumers experience when shopping online. Customers with embedded positive emotions are positively associated with customer behaviors such as impulse buying (Babin et al., 1994). Research has shown that higher social presence has a more positive impact on positive emotions (Kang et al., 2020). Whether consumers do it offline or online, shopping is not just a simple act of buying and selling; it also has social and living connotations. The consumer's need for a pleasant emotional experience is more important than the purchase of the product itself. For online shopping, consumers cannot access real products and other people, so there is no real face-to-face communication during the shopping process. Consumers' trust in the people or products in an online shopping platform will decrease, and the pleasure of social interaction will weaken, thereby affecting consumers' willingness to buy online. Therefore, it is necessary for businesses to simulate the feeling of face-to-face communication in the real world, so consumers can feel the presence of others when shopping online, which can improve consumers' sense of social presence and enhance positive emotions.

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Specific online shopping experiences and their affective factors influence consumers (Mano, 2004). During the shopping process, consumers have emotional changes in response to the product information presented on the online shopping platform, which will affect the consumer purchase intentions. The consciousness–emotion–value model indicates that consumers with a higher level of presence may have a better understanding of a product, resulting in a clearer fantasy. This imagination will stimulate consumers’ emotions and enhance their purchase intentions (Ying et al., 2021). Positive emotions not only affect individuals’ psychological states and make them feel more pleasant (Wang et al., 2020) but also enhance their sense of understanding, meaning and control (Fredrickson and Barbara, 2013). The more consumers can feel the pleasure and joy in shopping, the easier it is for the sense of presence to play a role. Thus, the authors propose the following:

- H5. The relationship between social presence and immersive experience is moderated by positive emotions, such that this relationship is stronger, with a higher level of positive emotions.

Previous research suggests that providing higher entertainment value is likely to lead to an advantage for media users and prompt more frequent use of media (Luo, 2002). Continued intention can be predicted by users’ perceived enjoyment (Shiau and Luo, 2013). Research has shown that presence is moderated by attention (Witmer and Singer, 1998). In fact, if users are more focused on the virtual environment, they are more likely to be immersed in it.

Thus, H4 and H5 lead to a moderated mediating effect. Positive emotion is an important condition for social presence to indirectly affect consumer purchase intentions through immersive experiences. This moderated mediation effect implies that, as the level of positive emotions increases, the impact of immersive experiences as a potential mechanism to explain the positive relationship between social presence and consumer purchase intentions will increase. More specifically, higher levels of positive emotions increase the likelihood that social presence will be associated with consumer purchase intentions by enhancing the immersive experience. Conversely, consumers with fewer positive emotions are more likely to experience a less immersive experience, so, if their social presence is lower, they are less likely to purchase something. Thus, the authors hypothesize the following:

- H6. The indirect relationship between social presence and consumer purchase intention through immersive experience is moderated by positive emotions, such that this indirect relationship is stronger, with a higher level of positive emotions.

Based on the previous literature review and the development of these hypotheses, the authors propose the following theoretical model (see Figure 1). In this model, social presence is positively related to consumer purchase intentions, and the relationship between social presence and consumer purchase intention is mediated by immersive experience. Furthermore, the relationship between social presence and immersive experience is moderated by positive emotions. Finally, the indirect relationship between social presence and consumer purchase intention through immersive experience is moderated by positive emotions.

### 3. Methodology

#### 3.1 Samples and data collection

The authors collected data through both online and offline questionnaire surveys. An offline survey was conducted in Jiangxi province, which is considered to be the main region for the production and marketing of selenium-rich vegetables. They collected online survey data through Questionnaire Star (wjx.cn), an online survey platform in China. They received 408 completed questionnaires (online = 40.2 per cent).

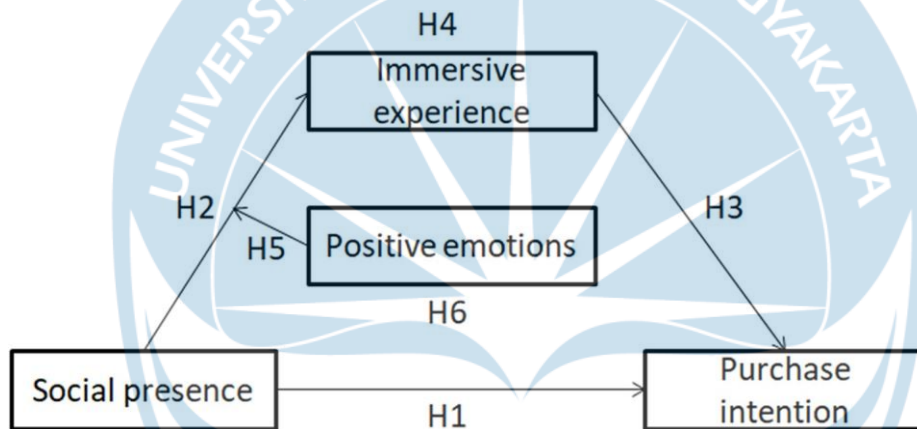


Figure 1.  
The conceptual model and hypothesized relationships

Among the participants, the number of men and women accounted for 41.7 per cent and 58.3 per cent, respectively. The majority were young people, with 6.4 per cent born in the 1980s, 52.2 per cent born in the 1990s and 34.8 per cent born in the 2000s. In general, young people are more educated, are better qualified and pay more attention to live videos; thus, they are the most appropriate demographic for this study. In terms of educational background, most of the participants had a medium or high educational background (91.03 per cent), mainly because most of the offline samples came from university districts, and most were students. Regarding marital status, the participants were mainly married and unmarried, which is in line with the general population. In terms of occupation, students were the majority, accounting for 67.9 per cent. In terms of average monthly consumption, most of them fell in the range of 1,000–3,000 yuan (65.4 per cent), mainly because most of the participants were students. Overall, the sample distribution was reasonable and representative. [Table 1](#) summarizes the sample descriptions.

#### 3.2 Measures

Social presence was measured by a four-item scale adapted from [Parker et al. \(1976\)](#) (On Li ZiQi's video site, the interactions with other users and fans were personal; On Li ZiQi's video site, the interactions with other users and fans were warm; On Li ZiQi's video site, the interactions with other users and fans were very close and On Li ZiQi's video site, the

Gender		
Male		170 (41.7%)
Female		238 (58.3%)
Education		
Middle school or less		13 (3.2%)
High school or junior college		26 (6.4%)
College		304 (74.5%)
Graduate or above		65 (15.9%)
Monthly income (RMB)		
3,000 or less		267 (65.4%)
3,001–5,000		45 (11.0%)
5,001–8,000		30 (7.4%)
8,001–10,000		12 (2.9%)
Above 10,001		38 (9.3%)
Year of birth		
Before 1970		4 (0.98%)
1970–1979		23 (5.6%)
1980–1989		26 (6.4%)
1990–1999		213 (52.2%)
After 2000		142 (34.8%)
Vocation		
Employees of government agencies		13 (3.1%)
Enterprise employee		5 (1.2%)
Farmer		6 (1.5%)
Self-employed or freelancers		22 (5.4%)
Students		277 (67.9%)
Others		35 (8.6%)
Note: RMB: renminbi		

Table 1.  
Sample demographics  
(n = 408)

interactions with other users and fans were humanized). Purchase intention was measured via a three-item scale (likely to buy, choice priority and definitely will buy) adapted from [Huang and Wang \(2017\)](#). Immersive experience was measured via a three-item scale (When I watch a video, I lose track of time; When I watch a video, I forget my surroundings and When I watch a video, I forget all my worries), adapted from the Immersion Scale developed by [Hoffman and Novak \(1996\)](#). Positive emotions were measured via a five-item scale (It makes me feel happy here; It makes me feel relaxed here; It makes me cheerful here; It makes me feel fun here and It makes me feel a sense of closeness), adapted from the Positive Emotions Scale developed by [Jorgensen and Stedman \(2006\)](#). All items were measured on a five-point Likert scale, ranging from (1) “strongly disagree” to (5) “strongly agree” (see [Table 2](#)).

## 4. Results

### 4.1 Variable correlations

[Table 3](#) shows that there are indeed differences between the data collected online and offline. The average values of the data collected offline are higher than those collected

Constructs and scale items	Loading	$\alpha$	CR	AVE
Social presence		0.95	0.89	0.69
On Li ZiQi's video site, the interactions with other users and fans were personal	0.81			
On Li ZiQi's video site, the interactions with other users and fans were warm	0.84			
On Li ZiQi's video site, the interactions with other users and fans were very close	0.83			
On Li ZiQi's video site, the interactions with other users and fans were humanized	0.83			
Immersive experience		0.93	0.86	0.68
When I watch a video, I lose track of time	0.83			
When I watch a video, I forget my surroundings	0.84			
When I watch a video, I forget all my worries	0.80			
Positive emotions		0.95	0.91	0.68
It makes me feel happy here	0.81			
It makes me feel relaxed here	0.81			
It makes me cheerful here	0.87			
It makes me feel fun here	0.84			
It makes me feel a sense of closeness	0.81	0.86	0.876	0.70
Purchase intention				
Likely to buy	0.83			
Choice priority	0.89			
Definitely will buy	0.80			

Notes: AVE: average variance extracted, CR: composite reliability

Table 2. Measurement items, reliability and validity assessment

Variables	Offline (n = 244)	Online (n = 164)	T
Immersive experience	3.15	2.91	2.16*
Purchase intention	3.39	3.06	3.59***
Positive emotions	3.64	3.61	0.28
Social presence	3.23	3.18	0.55

Notes: \*p < 0.05; \*\*\*p < 0.001

Table 3. Online and offline data difference

online, and there are significant differences in immersive experience and purchase intention. The authors think it may be that when the data was collected offline, the subjects answered the questions more seriously due to the presence of the tester.

Table 4 shows the correlation and descriptive statistics of the variables. As depicted in Table 4, social presence was positively and significantly related to immersive experience

( $r = 0.59$ ,  $p < 0.01$ ), positive emotions ( $r = 0.66$ ,  $p < 0.01$ ) and purchase intention ( $r = 0.49$ ,  $p < 0.01$ ). Immersive experience had a significantly positive relation with positive emotions Gender ( $r = 0.66$ ,  $p < 0.01$ ) and purchase intentions ( $r = 0.44$ ,  $p < 0.01$ ). Positive emotions were positively and significantly related to purchase intentions ( $r = 0.41$ ,  $p < 0.01$ ).

#### 4.2 Measurement model testing

To evaluate the measurement model, the authors assessed individual item reliability, internal consistency, composite reliability (CR), convergent validity and discriminant validity (Mostafa, 2021). Individual item reliability is assessed based on the factor loading of each item on its relevant construct. As shown in Table 2, all items' factor loadings are statistically significant and exceed the cutoff point of 0.70, demonstrating acceptable item reliability. The internal consistency of the construct measures is evaluated by the Cronbach's alpha values, which all surpassed the recommended 0.70 thresholds. Moreover, the CRs of each construct are evaluated, which exceeded the required threshold of 0.70 (Bagozzi and Yi, 1988). In addition, convergent validity was evaluated by calculating the average variance extracted (AVE) values which are all above the recommended 0.60 benchmark and therefore evidence a satisfactory convergent validity. Table 2 shows the measurement items, reliability and validity assessment. Discriminant validity was evaluated by checking the Fornell and Larcker (1981) criterion; the square root of the AVE exceeded all paired correlations shown in the diagonal of the correlation matrix in Table 4 (Payne et al., 2021).

In addition, the authors used Harman's one-factor test to check for common method variance (CMV), which may be caused by self-report single source data. Four factors with eigenvalues greater than one were reported, with the first factor accounting for 28.02 per cent of the total variance explained (Payne et al., 2021). In addition, if CMV is a serious problem, a single factor should emerge from a factor analysis (Scott and Bruce, 1994). This means that if the one-factor model fits the data well in confirmatory factor analysis (CFA), the authors would expect a severe impact of CMV on their results (Podsakoff et al., 2003). The CFA results (see Table 5) showed that the one-factor model did not fit the data adequately ( $\chi^2/df = 13.5$ , standardized root mean square residual (SRMR) = 0.01, root mean square error of approximation (RMSEA) = 0.18 and comparative fit index (CFI) = 0.99), suggesting that CMV might not be a significant issue in this study. To further reduce this concern, the authors followed past research (Podsakoff

	M	SD	1	2	3	4
1. Social presence	3.21	0.94	–	–		
2. Immersive experience	3.06	1.10	0.59**	0.66**		
3. Positive emotions	3.63	0.93	0.66**	0.44**	–	
4. Purchase intention	3.26	0.92	0.49**		0.41**	

Notes: SD, standard deviation  
\*\*p < 0.01

Table 4.  
Descriptive statistics  
and correlations

et al., 2003) to conduct a more rigorous test. Specifically, they tested the measurement model consisted of four latent factors (social presence, immersive experience, positive emotions and purchase intention) with the addition of an unmeasured latent method factor. In this method model, all items were loaded on their corresponding constructs as well as on this method factor. Results (see Table 5) demonstrated that the four-factor model fits the data better than the other models ( $\chi^2/df = 2.75$ , SRMR = 0.03, RMSEA = 0.07 and CFI = 0.98). The authors also

performed a CFA (five-factor model) in which a common method factor was added to the four-factor model. The results indicated that the inclusion of the CMV in the five-factor model did not improve the overall model fit of the four-factor model significantly (Table 5). These analyses indicated that CMV was less likely to severely distort this study's results.

#### 4.3 Tests of mediating effect

To examine the mediation effect of immersive experience, this study used PROCESS (Model 4, bootstrap samples = 5,000) (Hayes, 2013) to conduct the structural equation model test. At the level of  $p < 0.05$ , all the standardized path coefficients were statistically significant. More specifically, the effect of social presence on consumer purchase intention was significant ( $\beta = 0.33$ ,  $t = 6.62$ ,  $p < 0.001$ ). Therefore, H1 was supported. The path coefficient between social presence and immersive experience was significant ( $\beta = 0.59$ ,  $t = 14.72$ ,  $p < 0.001$ ), supporting H2. The effect of immersive experience on consumer purchase intention was significant ( $\beta = 0.23$ ,  $t = 4.61$ ,  $p < 0.001$ ), so H3 was supported. The indirect effect of social presence on consumer purchase intention through immersive experience was significant ( $\beta = 0.13$ , standard error (SE) = 0.04, 95% confidence interval (CI): [0.06, 0.21]), which suggests the immersive experience significantly mediated the relationship between social presence on consumer purchase intentions. Thus, H4 was supported.

The authors further examined the offline and online data separately for structural equation model test. Regarding the offline data, the results remained consistent with the overall data. About the online data, H1–H3 were supported; however, H4 was not supported.

#### 4.4 Tests of moderated mediation

The interaction between social presence and positive emotions on immersive experience was significant ( $\beta = 0.07$ ,  $p < 0.05$ ). To probe the nature of this interaction, the authors performed spotlight analyses. The results of the spotlight analysis (PROCESS model 1, bootstrap samples 5,000, Hayes, 2013) showed that, when positive emotions were low, social presence had a significant impact on immersive experience ( $\beta = 0.20$ ,  $p < 0.001$ , for 1 standard deviation (SD) below the mean). When positive emotions were high, the effect of social presence on immersive experience was also significant and the effect improved ( $\beta = 0.33$ ,  $p < 0.001$ , for 1 SD above the mean). Thus, H5 was supported.

Structure	$\chi^2/df$	CFI	TLI	RMSEA	SRMR
One-factor	13.50	0.99	0.96	0.18	0.01
Two-factor	3.69	0.99	0.98	0.08	0.02
Three-factor	3.33	0.98	0.97	0.08	0.02
Four-factor	2.75	0.98	0.97	0.07	0.03
Five-factor	2.78	0.98	0.97	0.07	0.07

Note: TLI: Tucker–Lewis index

Table 5. Goodness-of-fit information for the alternative factor models

By using 5,000 bootstrapping samples (Model 59, Hayes, 2013), the authors found that the index of moderated mediation was significant ( $\beta = 0.07$ , SE = 0.03, 95% CI: [0.01, 0.13]),

which indicated that positive emotions moderated the indirect relationship between social presence and consumer purchase intentions via immersive experience. Table 6 presents the analysis results. The authors also examined the conditional indirect effect at 1 SD above and below the mean and at the mean level of positive emotions. The indirect effect of immersive experience on the relationship between social presence and consumer purchase intention was significant when positive emotions were low ( $-1$  SD; indirect effect:  $\beta = 0.20$ ,  $SE = 0.06$ , 95% CI: [0.09, 0.32]), at mean level (Mean; indirect effect:  $\beta = 0.27$ ,  $SE = 0.05$ , 95% CI: [0.17, 0.36]) and high ( $+1$  SD; indirect effect:  $\beta = 0.33$ ,  $SE = 0.05$ , 95% CI: [0.23, 0.44]). These results suggest that the indirect effect of immersive experience on the relationship between social presence and consumer purchase intention was moderated by positive emotions, such that the indirect effect of immersive experience was stronger, with a higher level of positive emotions. Thus, H6 was supported. The authors further examined the offline data by using 5,000 bootstrapping samples; the results remained consistent with the overall data.

## 5. Discussion

This study examines, in the context of livestreaming marketing, the relationship between social presence and consumer purchase intention. In addition, this study also investigates the mediation effect of immersive experience and the moderating effect of positive emotions on the relationship between social presence and immersive experience. Research findings reveal that social presence has a positive influence on consumer purchase intention. Results also demonstrate that the relationship between social presence and consumer purchase intention is mediated by immersive experience. Furthermore, the moderating effect of positive emotions implies that the impact of social presence on immersive experience can be strengthened through the enhancement of positive emotions.

### 5.1 Theoretical contributions

This study has several theoretical contributions. First, almost all major e-commerce platforms have carried out live business marketing, and one of the key features of livestreaming commerce is presence; however, few studies have explored the effect of presence on consumer purchase behavior in livestreaming commerce (Ming et al., 2021). This research advances the field of interactive marketing by investigating the influence of social presence on consumer purchase intentions on livestreaming platforms (Wang, 2021). More specifically, the authors applied the SOR model to explain the relationship between

Variables	Mediator variable model (immersive experience)		Dependent variable model (purchase intention)	
	$\beta$	t	$\beta$	t
Social presence	0.27	5.54***	0.30	5.32***
Immersive experience			0.19	3.35***
Positive emotions	0.51	10.17***		
Social presence $\times$ positive emotions	0.07	2.18*		
R <sup>2</sup>	0.48		0.28	
F	124.79		31.77	

Table 6.  
Results of moderated  
mediation analyses

Notes: \* $p < 0.05$ , \*\*\* $p < 0.001$

social presence and consumer purchase intentions. This study reveals that immersive experience mediates the relationship between social presence and consumer purchase intentions. To the authors' knowledge, few studies have directly examined the mediating effect of immersive experience between social presence and consumer purchase intentions. In addition, the authors' findings are consistent with the results of previous studies, which confirmed the relationship between social presence and immersive experience (Dai and Liu, 2015), as well as the association between immersive experience and consumer purchase intentions (Lin, 2021).

Second, this study has taken a step forward, empirically investigating the moderating effects of positive emotions on these relationships. Only a few studies have been conducted on the impact of positive emotions in the context of social presence (Kushnir, 1981; Zajonc, 1965), and the evidence are scattered. This study is one of the earlier pieces that empirically explores the impact of positive emotions on the relationship between social presence and consumer purchase intention and has a positive guiding value for future research in this field. The findings reveal that positive emotions moderate the relationship between social presence and immersive experience. These findings not only help answer the question of how social presence can enhance consumer immersion experiences but also enable to further develop the ideas of presence theory and immersion theory.

Third, this research sheds light on the relationships between social presence and consumer purchase intentions by considering both the mediating and moderating process. Social presence is a hot topic that has recently attracted the attention of academia (Wang, 2020; Zhou et al., 2021). Previous research has mainly focused on realtime business trends, branding theories, and so on. However, few studies have considered both the mediating and moderating mechanisms of the relationship between social presence and consumer purchase intentions. The findings demonstrate that immersive experience can mediate the relationship between social presence and consumer purchase intentions, and positive emotions can moderate this mediating effect.

## 5.2 Practical implications

This study also has practical significance.

First, e-commerce platforms should strengthen consumer interactions and increase consumers' perceptions of social presence. Interactive engagement with consumers on e-commerce platforms is vital (Wang, 2021). The more interactive the process of watching a live webcast, the easier it is for consumers to create a higher level of immersion and forget the existence of time. Livestreaming managers should be aware that online interactions can effectively facilitate consumers' online impulse buying behavior. For example, streamers should take advantage of their visual and interactive nature to enhance consumer immersion. In addition, livestreaming managers should use multiple communication and interactive channels to interact with consumers. For example, Weibo is the main platform for consumers to interact with online e-commerce and express their opinions, so it can be used for activities such as sweepstakes to activate fan's consumption motivations. TikTok and Kwai can be used as the main means of short video promotion due to their wide audience and large user base. Bilibili is currently the most popular social platform for young people in China, so it can be used to attract young consumers.

Second, companies should meet the social and psychological needs of consumers and generate positive emotional resonance. Specifically, in the livestreaming business, video tagging can quickly attract consumer audiences, enhance consumers' sense of social presence and trust and generate a large community of potential customers. Drawing on Li ZiQi's successful experience, livestreaming managers should pay attention to the emotional needs of video audiences in the content and selection of video output and adjust the production positioning of video works in a timely manner, so that consumers can enhance their sense of identity, generate emotional resonance and experience the benefits brought by interpersonal interaction.

### 5.3 Limitations and directions for future research

This study has some limitations, which may shed light on future research.

First, this study only tested the mediating effect of immersive experience and the moderating effect of positive emotions. As such, it is necessary for further research to test whether there are other mediators and moderators that can explain the internal mechanism of social presence and consumer purchase intentions.

For example, previous research has shown that trust can mediate the effect of social presence on purchase intentions (Lu et al., 2016). Both social presence and trust can have positive effects on consumers' purchase intentions, and consumers may experience interactive communications on live e-commerce platforms. In addition, psychological distance can mediate the effect of online reviews with consumer purchase intentions (Zhou et al., 2015), and the social presence of livestreaming platforms cannot be enhanced without online reviews. Therefore, future researchers could investigate whether psychological distance and trust can mediate the relationship between social presence and purchase intentions.

Second, the replication validity of the research results may require further consideration. Future researchers could replicate the study in a larger, more diverse sample to enhance the generalizability and value of the research findings.

Third, this study involves cross-sectional research. Future research could consider longitudinal studies to control for possible confounders and confirm the causality between social presence and consumer purchase intention, as well as the underlying mechanisms.

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