The influence of Instagram usage on cosumers' choice of restaurants and meal preparation at home

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Introduction

Various examples showed that social media influences food habits both positively and negatively (Tobey & Manore, 2014; Park et al., 2017; Sidani et al., 2016). It is prooved that the healthy lifestyle accounts helped to develop healthy eating skills (Vassallo et al., 2018). However social platforms is also a good niche for consumer-influencer communication, just like various oter advertisements. Due to the rapid growth of social media, it is hard to keep track of social media use and its influence on consumers' food choice behaviour.. Therefore, it is important to explore this area with new studies focusing on consumers behavioral changes towards food preferences in relation to social media use. Thus, the objective of this study is to investigate whether usage of the social media platform Instagram influences consumers choice of restaurant and preparation of meals at home.

Methods

An online survey with 15 questions was used to unerstand consumers' choice in relation to Instagram. Based on the answers about following food-related content on Instagram and meal replicating/ restaurant visiting data were segmented into 8 clusters. The odds ratio and confidence intervals were calculated to determine which independent variables could be used to describe the different clusters. At last, all p-values below 0.05 were considered to be statistically significant.

	Does not follow food-related accounts on Instagram	Does follow food-related accounts on Instagram
Have not replicated meals from Instagram	Cluster 1	Cluster 2
Have replicated meals from Instagram	Cluster 3	Cluster 4
Have not chosen a restaurant on the basis of Instagram	Cluster 5	Cluster 6
Have chosen a restaurant on the basis of Instagram	Cluster 7	Cluster 8

Table 1. Data segmentation on the basis of the questionnaire

Results

The data collection resulted in a total of 247 respondents completing the survey. The sample included 67% females (Mean age 25 years, SD = 7) and 33% males (Mean age 25 years, SD = 8). 52% of the participants lived in Denmark while the rest of the participants were spread over many other countries (38% from other European countries, 10% from America, Australia or Asian countries).

Socio-demographic characterization of the clusters

Table 2 presents all of the socio-demographic characteristics for the defined clusters. Comparing the clusters (cluster 1-8) showed, that the mean age of respondents was fairly even distributed (ranging from 24±4 to 27±10). Further, the locality of residence in all of the clusters was dominated by urban areas, compared to suburbs and rural areas. There was a tendency in most of the clusters, for the respondents to be living with a partner or living with roommates). Slightly fewer lived alone or with their parents.

Gender and education were more randomly spread among the clusters, compared to the other variables.

References

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Key findings in the clusters

Gender, overall time spent on Instagram and frequency of meals prepared at home were related with meal replication from Instagram. Men are 68% more likely than women to be in cluster 1 (not following food-related accounts and not replicating meals), while women are 2.9 times more likely to belong to cluster 4, defined by following food-related accounts and replicating meals from Instagram. Overall time spent on Instagram was a significant factor too. Each hour spent on Instagram increases the odds of being in cluster 4 by 20% and almost bisects (OR = 0.53) chances to be in cluster 1. It was also found that people who replicate meals from Instagram posts have a tendency to cook at home more. With every home-prepared meal, odds to be in cluster 4 increases by 7%.

Results regarding restaurant choices showed that gender, overall Instagram usage and education were significant factors. Women are 3.35 times more likely to choose a restaurant based on information from Instagram (cluster 8). Men are 73% more likely to be in cluster 5 (not following food related accounts, not visiting restaurant). Each hour spent on instagram increases the likelihood that the respondent belongs to cluster 8 by 31% and simultaneously decreases the likelihood of belonging to cluster 5 by 59%. Respondents who had completed a high school education were found to be 87% less likely to belong to cluster 5.

Table 2. Key findings

Follow food/Change in behavior	Cluster 1 (n = 81) No/No				Cluster 2 (n = 18) Yes/No				Cluster 3 (n = 68) No/Yes				Cluster 4 (n = 80) Yes/Yes			
		Confidence interval				Confidence interval				Confidence interval				Confidence interval		
	OR	Lower	Upper	p-value	OR	Lower	Upper	p-value	OR	Lower	Upper	p-value	OR	Lower	Upper	p-value
Age (1 year increment)	1,01	0,98	1,05	0,379	1,01	0,95	1,06	0,617	0,95	0,88	0,99	0,066	1,01	0,98	1,05	0,493
Male gender (REF)																
Female	0,32	0,18	0,56	<0,001*	0,11	0,23	1,62	0,297	1,55	0,84	2,93	0,168	2,90	1,56	5,67	0,001#
Education (REF = Elementary school)																
High school	0,68	0,10	5,58	0,691	0,09	0,00	2,42	0,102	0,82	0,12	6,71	0,839	262344 8 432533	1,42E-23	NA	0,982
Vocational education	0,41	0,04	4,17	0,425	1,09	0,10	25,67	0,946	0,25	0,02	2,77	0,244	281366 4	5,59E-23	NA	0,981
University degree	0,77	0,12	5,95	0,777	0,31	0,04	6,33	0,312	0,53	0,09	4,12	0,494	9	1,27E-23	NA	0,982
Instagram use (1 hour increment)	0,53	0,37	0,72	<0,001	0,95	0,64	1,13	0,713	1,03	0,92	0,92	0,565	1,21	1,05	1,44	0,025*
Meal preparation (1 time increment)	0,97	0,92	1,01	0,128	0,98	0,91	1,07	0,700	0,98	0,93	1,02	0,310	1,07	1,02	1,13	0,007#
Eating out (1 time increment)	1,01	0,97	1,04	0,670	0,90	0,79	1,00	0,093	1,01	0,97	1,05	0,615	1,00	0,96	1,04	0,998

Follow food/Change in behavior	Cluster 5 (n = 63) No/No				Cluster 6 (n = 36) Yes/No				Cluster 7 (n = 50) No/Yes				Cluster 8 (n = 98) Yes/Yes			
		Confidence interval				Confidence interval				Confidence interval		p-value		Confidence interval		
	OR	Lower	Upper	p-value	OR	Lower	Upper	p-value	OR	Lower	Upper		OR	Lower	Upper	p-value
Age (1 year increment)	1,03	0,99	1,06	0,118	0,99	0,93	1,03	0,660	1,01	0,97	1,05	0,446	0,97	0,92	1,00	0,093
Male gender (REF)																
Female	0,27	0,15	0,50	<0,001*	0,75	0,36	1,58	0,434	1,20	0,62	2,41	0,591	3,35	1,86	6,27	<0,001*
Education (REF = Elementary school)																
High school	0,13	0,02	0,92	0,042*	3140837	2,78E-42	NA	0,989	1,19	0,15	24,5 5	0,882	3,11	0,42	63,30	0,326
Vocational education	0,11	0,01	1,05	0,065	6261936	2,82E-16	1,03E +147	0,988	1,60	0,16	36,6 1	0,710	1,60	0,16	36,61	0,710
University degree	0,26	0,03	1,59	0,143	2397651	1,11E-42	NA	0,989	0,93	0,13	18,5 3	0,950	2,67	0,38	52,73	0,385
Instagram use (1 hour increment)	0,41	0,26	0,60	<0,001*	0,94	0,72	1,09	0,568	1,01	0,87	1,13	0,887	1,31	1,10	1,61	0,006*
Meal preparation (1 time increment)	0,99	0,94	1,04	0,640	0,95	0,90	1,01	0,085	1,02	0,96	1,07	0,582	1,03	0,98	1,07	0,225
Eating out (1 time increment)	1,00	0,95	1,03	0,849	0,99	0,93	1,04	0,689	0,99	0,95	1,03	0,786	1,01	0,98	1,05	0,497

Conclusions

• This study showed that women are more likely to to replicate meals and visit restaurants, based on pictures posted on Instagram, compared to men.
• The more time participants spend on Instagram daily, the more likely they are to be influenced of posts they see on Instagram.
• Overall, this study contributes to research by proving that social media has the ability to change consumers behavior in relation to food preference.