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**Interactive Communication with the Public: Qualitative Exploration of the Use of Social
Media by Food and Health Organizations¹**

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ABSTRACT

Objective: To examine the use and impact of social media on two-way communication between consumers and public organizations in the food safety and nutrition area.

Design: In-depth qualitative study, conducted between October 2012 and January 2013, using semi-structured interviews.

Setting: The United Kingdom (UK) and Ireland.

Participants: 16 professionals working on the public interface within five national organizations with a role in communicating on food safety and nutrition issues.

Analysis: Thematic analysis

Results: Five main themes were identified. These were: a gradual shift towards social media based queries and complaints; challenges and limitations of social media to deal with queries and complaints; benefits of using social media in query and complaint services; content redesign driven by social media use; and using social media to learn more about consumers.

Conclusion and Implications: Social media penetrated and brought new opportunities to food organizations' interactions with the public. Given the increasing use of social media by the public, food organizations need to explore such new opportunities for communication and research.

Interactive Communication with the Public: Qualitative Exploration of the Use of Social Media by Food and Health Organizations

INTRODUCTION

The process of communicating health-related food messages to the public has traditionally been depicted as a one-way, top-down flow of information where public authorities and experts seek to convey objective scientific information to the lay public.¹ This model has been criticized primarily because it gives little consideration to public perceptions and interpretations of scientific messages, which are influenced by a multitude of social, cultural, and individual factors.^{2,3} A more inclusive two-way communication model with interactive processes has been widely encouraged by food regulators and academics.⁴⁻⁶ This model suggests that communication practitioners need to engage with the public to discover their level of knowledge, attitudes, behavior patterns and information needs. To this end, communication channels that facilitate listening, feedback, participation and dialogue are considered a key resource not only to assure that the public's voice is being heard but also to provide substantive input that will improve the organization's information services and communication outcomes.^{2,7,8}

Traditionally, interaction with the public has occurred through channels such as telephone and email. With the recent proliferation of social media channels (e.g. Facebook, Twitter), food safety and nutrition communicators now have more opportunities than ever to enable interactive communications with the public.^{9,10} An increasing number of public organizations have set up social media accounts in recent years. However, it is evident that many organizations tend to use social media as a one-way communication tool neglecting to embrace the social and interactive capabilities of these platforms^{11, 12}. So far, the potential role of social media in the day-to-day practice of engagement and interaction with the public

in relation to food risks and benefits has not been examined. This study aims to increase our understanding of the adoption and use of social media by food and health organizations for two-way communication with the public. It explores the extent to which social media have reshaped and expanded dimensions of interactive communication between the public and food and health organizations in relation to food safety and nutrition issues.

METHODS

Study Design and Sampling

Food agencies and food associated public organizations are important actors in interacting with people around food safety and nutrition issues as the main developers of public awareness and education campaigns. The decision was made to interview those individuals within such organizations involved in direct interactions with the public. Ethical approval was sought and granted by the Brunel University Research Ethics Committee. Organizations targeted included food safety agencies, food related health promotion organizations, and organizations with a role in helping consumers make healthier food choices. To be included, the organization had to be operating at a national level and actively using at least one social media channel to communicate with the public. Following these criteria, a convenience sample of five organizations in the UK and Ireland were selected. The researchers first contacted the communication manager in each organization and asked if they would be interested in participating in the study. Additional participants were recruited until saturation of findings in each organization was achieved. In total, 16 people (2-4 people from each organization) participated: 3 marketing and communication managers, 3 information managers or officers, 3 social media managers, 4 social media operators, 1 media relations manager and 2 advice line executives.

Interview Procedure & Data Analysis

A protocol for semi-structured interviews was developed by the research team. The four main interview questions were: How does your organization hear from the public in relation to food safety and healthy eating issues? What is your organization's commitment in dealing with queries and comments? How have social media influenced the way your organization interacts with the public? Have social media brought any changes to your organization's responsiveness to the public's needs?

The interviews took place between October 2012 and January 2013. All interviews were transcribed verbatim. An inductive thematic analysis approach was implemented to analyze the data¹³ with Nvivo 10 (QSR International Pty Ltd, Victoria, Australia, 2012), a qualitative data analysis software, used for data management. The lead author who interviewed the Irish participants first carried out preliminary coding with a sample of transcripts, using the technique of constant comparison to merge similar codes and introduce new codes. This allowed for the generation of a coding framework which was then applied to the remaining transcripts. The process of constant comparison was continued and the coding framework was revised iteratively as required. To test inter-coder reliability, a second researcher was invited to code a sample of 20% of the interview transcripts. The inter-coder agreement was 85.7%. Any conflicting codes were discussed between the two coders until consensus was achieved. Following discussions amongst the research team, codes were finalized and themes were built up by merging codes.

RESULTS

All interviewed organizations had incorporated into their communication strategy at least three social media channels, of which Facebook, Twitter and YouTube were the most commonly used. Five main themes emerged from the data, in relation to the use and impact of social media on two-way communication.

A gradual shift towards social media based queries and complaints

Many of the interactions between food and health organizations and the public were triggered by consumers' information seeking needs or complaints. Some interview participants indicated that increasingly, consumer queries were coming into their organizations through Facebook and Twitter, with a reduction in telephone queries. An information manager suggested that:

...we would expect to see a reduction in the amount of calls that would be coming through the helpline, ...,if you've got a Facebook or a Twitter account, there's an implicit kind of statement, as an organization, that you are there to answer these kind of queries and to interact at any time of the day. So that is, you know, we get things through these channels quite a lot

Similarly another organization reported:

...certainly there were more telephone queries when I started with the organization just 6 years ago. But social media has kind of grown, the phone has kind of eased off...

However, participants did recognize that social media are not used by everyone and in some organizations, consumers' queries and complaints were still mainly coming in through email and telephone.

Challenges and limitations of using social media to deal with queries and complaints

Participants identified a number of challenges in using social media to handle consumer initiated interactions. The first challenge lies in social media operators' capabilities to cope with queries. In some organizations, Facebook and Twitter accounts were operated by communication professionals or employees with a food science background but no query service training. Hence, at times they do not have the necessary skills or expertise and so many require the support of helpline staff or particular information resources to address queries. Secondly, several participants revealed the difficulty of communicating via Twitter responses due to the limitation of 140 characters per post.

... sometimes I have to send a few tweets to one person. And people ask a lot more questions because they haven't got the space, so they keep coming back and coming back again.

Privacy and confidentiality was raised by participants as another important issue. Although most social media sites had included private messaging functions, one organization indicated that consumers seldom use them for very specific queries and questions regarding personal issues (e.g. weight loss). When such questions appeared publicly on Facebook, they would deal with them cautiously:

If they put up a question on a public wall that we feel sensitive, we actually privately answer them, so that they don't have to be exposed anymore the way they don't want to be.

Another organization reported that they did not perceive social media as a suitable channel for handling complaints due to its low confidentiality. They tended to redirect complaints to telephone and email, because firstly they needed personal details to follow up, and secondly, they were cautious regarding the potential impact on the reputation of food businesses.

Well, they choose to put it out there on Facebook, we discourage people for mentioning the names or food businesses, that's why we try to direct them to our online complaint form.

Benefits of using social media in query and complaint services

Although interacting through social media was constrained through considerations of complexity and privacy, a major strength of social media identified by several participants was that it could potentially help redirect queries that are outside the organization's expertise and shorten the distance between experts and the public in terms of answering queries, especially when the query is fairly complicated:

...we will be able to flag that up to the relevant person, who will then be able to answer that tweet or Facebook post directly, rather than us having the conduit in between.

Participants from one consumer organization considered publicity as another strength of social media. When consumers' complaints came in through Twitter, they replied back with sympathy rather than judgement, and then copied in the relevant company or restaurant's Twitter account to draw the matter to their attention, where appropriate. On many

occasions, companies and restaurants would respond and take action promptly. This transparent and public approach to solving problems was often considered beneficial for the organization itself:

If we help one person by email, then we never know – like no one will ever see that we've helped them, but if we help them on Twitter, and they then tweet saying 'Oh, ... [name of the organization] is so brilliant'

Content redesign driven by social media use

Participants widely acknowledged that social media are a set of channels to encourage engagement of key audiences in public health campaigns due to their interactive features. However to achieve this potential, a certain degree of content redesign was necessary to match each medium's informal, social and entertaining characteristics. Several participants pointed out that, on social media, they tended to keep the message short, personalized and easy to understand in order to engage the public. This was particularly important for Twitter. One participant suggested that people were less likely to engage with any 'robotic' feeds:

We used to have an account that ran off an RSS feed, and it was just automatically tweeting. We did an experiment where we stopped for a month, had a person tweeting, and she gained twice as many followers ...

Other techniques reported to be successful in arousing the audience's interest included the creation of a weekly block of Frequently Asked Questions (FAQs) on a Facebook site to highlight FAQs addressed via advice lines; the incorporation of visual information and applications (e.g. images, info-graphics, interactive advent calendars with food related tips, animated videos), and challenging the audience with questions:

...you can buy it [egg] at room temperature, but then it says on the box that proper storage is in refrigerator... We just put the question up on Facebook to get them thinking about it.... They are more likely to be very interested in the answer and then maybe to share it here and there as well

Using social media to learn more about consumers

Social media were not always used to provide information to or start conversations with the public. Participants also considered social media as a valuable tool to better

understand the audience and social context. This was achieved through two main methods: consumer research and social media monitoring.

In addition to traditional surveys and focus groups, one organization had launched a survey on Facebook to assess audience's satisfaction with its online weight loss community. Other examples included Facebook polls to understand public interest and use of social media posts to evaluate the awareness of campaign messages:

We've discussed running polls across social media about whether, you know, using Facebook polls, ...so we can kind of, understand what resonated best with people

We did one [Facebook post] at Christmas around washing your turkey: 'washing your turkey spreads ____'. And the word was 'germ'... So it was a nice way for them [food science team] to validate that their messages has been received

Although social media were thought to be less costly and less time intensive than conventional research tools, participants stated the need to tread carefully in this emerging area. They noted that social media based research had its limitations in inferring the views of the wider population because of the ambiguous representativeness of social media users. Technically, it was acknowledged that there are not yet well established rules regarding how to 'freeze' and analyze a dynamic flow of data where public feedback may constantly come in.

In addition to carrying out consumer research, many of the organizations interviewed had adopted monitoring tools (e.g. Facebook page insights, TweetDeck, Meltwater Buzz, Hootsuite) to analyze user-generated conversations for various purposes, such as to gauge public reactions to their communications and campaigns, and to become aware of, and respond to, emergent issues in real time:

... if there are people looking for information, like topics like breast feeding, making bottles for babies, to people talking about Salmonella...and then that can be used to formulate ideas, campaigns, to spot a knowledge gap. It can be something small or it can be something big, like ...[name of a campaign that encourages the use of food labels]

One organization recorded the number of ‘likes’, ‘shares’, ‘comments’, etc., across their social media channels in order to gauge public interest. Another felt that comments below their campaign posts, particularly when the campaign was controversial, were ‘worth analyzing as case studies’.

DISCUSSION

This study has shed light on the position of social media in two-way communication between the public and food and health organizations in the UK and Ireland. It is clear that social media, to varying degrees, has penetrated organizations’ long established query and complaint services. The agencies interviewed in this study maintained the more traditional channels, such as phone and email, due to concerns relating to privacy and confidentiality when dealing with certain queries and complaints, and the need for space when answering complicated queries. Participants’ apprehensions around privacy echoed previous research related to health information seeking behavior, which demonstrated that internet users were less likely than helpline users to request information on sensitive topics.¹⁴

As social media offer increased opportunities around interactivity compared with more traditional communication channels, they have the potential to transform the public from passive information recipients to more active and interactive players in the process of food related education and intervention.¹⁰ This study revealed that organizations recognized that in order to achieve this potential, content should be customized to fit in each social media channels’ characteristics in terms of language and information format variety. These concepts aligns with many scholars’^{11,15-17} and social media users’¹⁸ insights into the best practice of social media use, such as the importance of less formal language, visual appeal and open ended content that encourages conversations. This approach is likely to increase the impact and success of social media in two way communication.

Consistent with previous studies,^{10,19} social media proved promising for food agencies in helping them to understand their target audiences and detect upcoming issues through monitoring users' conversations. Participants suggested the possibility of using Facebook to implement consumer research, which echoes a recent study where Facebook was successfully used in recruiting low-income women for nutrition education research²⁰. The current study also revealed that the organizations interviewed did recognize the need to be careful not to generalize insights gained from social media to the wider public.

The present study is not without its limitations. The research was restricted to the UK and Ireland, which resulted in a restricted number of potential organizations and informants. However, the issues addressed by this research are not county specific, and the insights and examples participants provided are likely to have applicable value to other organizations. In addition, due to technology constraints, findings from this study were not triangulated for example, with public information service records or social media page analysis, which would have added strength to the results. Unfortunately, such data were not available or obtainable in many cases. In any case, research instruments for analyzing interactive communication have yet to be standardized and any website analysis would have been restricted to public messages, excluding private information exchanges.

IMPLICATION FOR RESEARCH AND PRACTICE

Public health agencies' use of social media is in the early stages of adoption. The exponential development of social media technologies has changed the landscape of public communication and education and this poses a range of challenges to food and health organizations. Many of them have 'ticked the box' of having a basic social media presence, but have yet to fully capitalize on its social and interactive functionalities for two-way communication. As indicated in the present research, social media practices should be considered alongside long established patterns of communication and interaction. To generate

applicable knowledge, results from this study were supported by factual examples and hands-on experiences from practitioners. Many of these insights could inform organizations' strategic planning and daily practice. Further research could elaborate on specific types of interactions that social media can enable for the purpose of nutrition education and health intervention.

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