An Exploratory Content Analysis of a Saudi Women's Beauty Products' Discussion Forum

Nahed Al-Haidari^{a,*}, Jane Coughlan^b

ABSTRACT

Online communities are an important source of electronic word-of-mouth (e-WOM). However, few studies have examined the use of such messages within the Middle Eastern context. This study focuses on Saudi women as members of an online beauty forum. Previous work suggested a mediating effect of gender, with women being more likely to trust word-of-mouth and follow it up with a purchase. A conceptual model with a theoretical underpinning from existing contributions in literature provides the basis of a coding framework for the message characteristics that influence members' e-WOM adoption. A total of 310 threads and 2200 messages coded into 5725 units were content analyzed to demonstrate cases where e-WOM was adopted and indicate further continuance intention with members returning to the forum. A new category of 'community bonding' was created from the content analysis given the prevalence of emotional aspects in messages. Emotion expressed in messages, often expressed in religious terms, is as influential and important as the cognitive aspects of community bonding.

Keywords: Electronic-Word-Of-Mouth, Online Community, Decision-Making, Saudi Arabia

I. Introduction

Electronic-word-of-mouth (eWOM) in its various forms of user-generated consumer opinion and review on bulletin boards, forums, blogs, social network sites and online communities (Lee and Yang, 2015; Pollach, 2006) can exert a strong impact on members and influence decision-making (Lis, 2013). It comprises positive and negative statements about a product, which are made consumer-to-consumer, which

if effectively leveraged can promote products and services (Yap et al., 2013). At a community level, there are benefits to facilitating online participation and increasing membership through the sharing of information, knowledge and experience content between members (Bickart and Schindler, 2001; Cheng and Meihua, 2010; Cheung et al., 2008; Okazaki, 2009; Sun et al., 2006; Sweeney et al., 2008; Teng et al., 2014). On-going research focuses on understanding the factors that influence members to: adopt

^a Ph.D. Candidate, Brunel University in the Computer Department, UK

^b Lecturer, Human-Computer Interaction at Brunel University London, UK

^{*}Corresponding Author. E-mail: nahed.alhaidari@brunel.ac.uk Tel: 0096522484030

the information; intend to act on the information received; and continue to participate in the online community (Hashim et al., 2011; Jin et al., 2009; Limayem et al., 2007). Many recent reviews have noted that few studies have explicitly assessed the relation between eWOM and continuance intention (Chen et al., 2012).

In this study we build on existing contributions to theory by developing a conceptual model for understanding eWOM in a Middle Eastern context, which offers a comparable perspective to our previous work focusing on Kuwaiti women (Alhaidari and Coughlan, 2014). We take into account the mediating effects of gender and how women adopt eWOM and may express continuance intention to act on eWOM. The research purpose is to examine the content of the messages posted by Saudi women on an online beauty forum in order to address the research question: What are the characteristics of the online community forum messages that influence females to adopt eWOM? The study therefore aims to address a significant gap in the literature on purchasing patterns for beauty care products among female Arab customers. This study remains one of few to investigate different characteristics of eWOM influencing the purchasing decision for beauty care products, which is a major market dominated by social and online activity for information in both Western and Asian countries.

The next section presents the research background and the context for the work. Section 3 presents the conceptual model and its derivation from existing theoretical contributions that describe the flow of information between consumers. Section 4 describes the research method, including a description of the case - a Saudi women's online beauty forum - along with details of the data collection, coding schema and analysis. Section 5 details the findings of the

study arranged by thematic categories. The findings suggest that community bonding and associated emotional expression play a key role in the adoption of eWOM and a member's continued use and participation in a forum. The conclusion and the specific contributions that can be drawn from the work are presented in Section 6.

Π . Research Background

There have been a growing number of contributions to the literature on the importance of eWOM. Researchers have increasingly attempted to distinguish the characteristics of eWOM and move beyond the basic understanding of it having either a positive or negative valence when applied to goods and services (Cheng and Meihua, 2010). Computer-mediated communications, including eWOM have evolved and are currently facilitated by a diverse range of online platforms, such as bulletin boards, forums, blogs, email, chat rooms, product reviews and other individual websites. Cheng and Zhou (2010) have added to the scholarship by suggesting that eWOM has extended and widened the range of networks, such as social network sites and online communities, which are key areas for marketing and promotion of goods and services. For example, Park and Kim (2009) assert that the importance of word-of-mouth communication lies in its effectiveness in providing the right type of information. In order to be effective, the word of mouth must support the decision-making process or the specific consumer segment and abilities at the opportune time. Gupta and Harris (2010) found that participants with less motivation to process information are however, willing to make decisions based on eWOM recommendations. Where consumers are more motivated and adopt a role, Meng, Wei, and Zhu (2011) found that opinion leaders act as influencers in the decision-making process for buying as their perceived knowledge as contributors had an impact on the spread of eWOM. Maher and Carter (2011) found that cultural cues can be contributory where they found consumers in Kuwait were influenced by affective components (i.e., admiration and contempt) when purchasing American products.

2.1. Cultural Effects

From a cultural perspective, few studies have investigated the effect of eWOM within a Middle Eastern context, despite the prevalence of online forums among Arab internet users. However, some scholars report online shopping and purchase intention. Almana and Mirza (2013) examined eWOM use among Saudi internet users and found that respondents were heavily dependent on eWOM in online forums when making purchasing decisions. Al-Maghrabi and Dennis (2010) investigated women's intention to continue e-shopping in three regions of Saudi Arabia. They argued that Saudi women view e-shopping as a form of enjoyment and leisure. Al-Maghrabi, Dennis and Halliday (2011) examined the e-shopping continuance intention of 465 respondents, two-thirds of whom were women. In common with the earlier study by Al-Maghrabi and Dennis (2010), enjoyment was identified as the strongest predictor of e-shopping continuance intention. Al-Rasheed and Mirza (2011) conducted a survey Saudi consumers' Internet searching behaviour on travel information and shopping for travel deals. Three-quarters were found to have used and purchased e-travel services at least once. Mansour and Abdul-Mumin (2013) explored Saudi consumers' reasons for shopping online and report the preference is to e-shop owing to poor availability of local products, wider product variety online and lower online

prices. In order to examine online shopping in Saudi Arabia, Sadi and Khalifah (2012) found that Saudi consumers were influenced by trust to shop online. Brosdahl and Almousa (2012) found that Saudi consumers were more likely than their US counterparts to view online shopping as risky because of the collective nature of Saudi culture, which places greater emphasis on risk perception. Saudi culture is also less ready to accept change, making people more likely to view online shopping as risky. Bahaddad, Hougton and Drew (2013) found that Saudi consumers were more likely to shop online according to the firm's size and brand name, which gave them the confidence to purchase online. Among the technical and environmental factors that also affected the decision to shop were website characteristics, delivery systems and safe payment methods. In a later study by Bahaddad, AlGhamdi and Alkhalaf (2014) they found the main factors to be education level, online trade awareness, safety of online payment systems and online shopping benefits. Al-Ghamdi, Drew and AlFaraj (2011) investigated the factors affecting Saudi customers' intention to purchase online from retailers in Saudi Arabia and identified nine inhibitors to buying on this platform (e.g., trust and privacy). Interestingly, all mentioned e-WOM as being instrumental in influencing them to buy online.

2.2. Gender Effects

Gender effects have been cited in relation to online participation and the uptake of eWOM. It has been found that participation in online discussion boards was greater amongst Saudi and Kuwaiti women than in other GCC countries, although the research base is limited in this context (Sharif and Al-Kandari, 2010). In other cultural contexts, research has found significant gender differences in consumers' use of

eWOM (Fan and Miao, 2012). In addition, Lim and Yazdanifard (2014) argued that women tended to react differently than males when participating online. More specifically, Rahim and Rosly (2014) found that Malaysian women demonstrate a higher level of purchase intention online than males. In addition, Lee et al. (2014) found that e-WOM has a significant influence on purchase intention among Taiwanese women. Moreover, Kim et al. (2011) found that women were more likely to read eWOM on hotel reviews for convenience, quality and risk reduction. Bae and Lee (2011) found that more positive consumer reviews had a greater effect on women, who were more likely to follow up with a purchase than males. Awad and Ragowsky (2008) found that women placed greater trust in eWOM than males, owing to the sense of social support that they value, which is punctuated by explicit information, tailored solution interactivity, and a quality of empathic listening (Hung and Lee, 2007).

2.3. The Arab Woman's Perspective

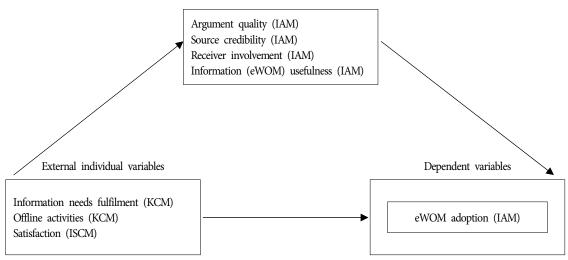
Focusing on the female perspective in this cultural context should add to the existing knowledge on understanding senders and receivers where eWOM is adopted. This is owing to the fact that even though the literature has shown that females present a higher level of purchasing intention, the number of consumers purchasing online in Saudi Arabia is low (AlMowalad and Putit, 2013). Saudi women are among the world's biggest consumers of beauty products and therefore their self-expression through products and brands and can reveal cues to their consumption activities (Alserhan et al., 2015). In particular, Saudi women's participation in online discussion forums can prove a fruitful focus for research into understanding self-expression and self-dis-

closure around a topic when social networking (Al-Saggaf, 2011). The motivation for the research has highlighted the importance of studying

and accessing single-gender online communities, particularly in the GCC countries. In this context, researchers can focus on the ways that eWOM is shaped and shared without the contribution of men to freely post their ideas and recommendations, seek and find information and express their preferences for brands, products and services.

Ⅲ. Conceptual Model

The following section describes the three models from which the conceptual model is derived and underpins the coding framework and analysis of the forum messages. Cheung and Thadani (2010) recommend that researchers build their own theories as no particular theory or set of theories currently dominates research on online communities and the phenomenon of eWOM. The conceptual model is presented in <Figure 1> and integrates components from existing models relevant to understanding eWOM behaviour. In brief, The Information Systems Continuance Model (ISCM) was selected because it captures continuance behaviour, which is a temporally and conceptually distinct.and possibly incongruent.phase, but explains the importance of the perceived usefulness of information system use. The Information Adoption Model (IAM) was selected because it addresses the weaknesses of comparable models that explicitly focused on technology rather than information adoption (e.g., Technology Acceptance Model - TAM). IAM integrates alternative models such as the Elaboration Likelihood Model (ELM) as well as TAM to understand the process by which individuals are influenced by the messages that they receive. The Knowledge



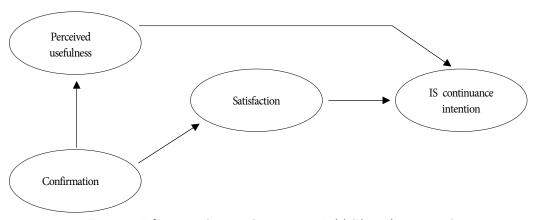
<Figure 1> Conceptual Model (Moderated from Alhaidari and Coughlan, 2014)

Contribution Model (KCM) was selected because it identifies two critical factors: offline activities and information need fulfilment and contributes to the theoretical underpinning for knowledge contribution in online communities.

3.1. Information System Continuance Model (ISCM)

The Information System Continuance Model

(Bhattacherjee, 2001) or ISCM predicts that the continued use of information systems is sustained by individual users over the long term (see <Figure 2>). The ISCM is adapted from Expectation Confirmation Theory (ECT) (Oliver, 1980). ECT is a behavioural theory that is used to predict consumer satisfaction and repurchase intention; it predicts that a consumer's intention to repurchase a product or to reuse a service is mainly determined by his or her level of satisfaction. This model has been applied in research on online

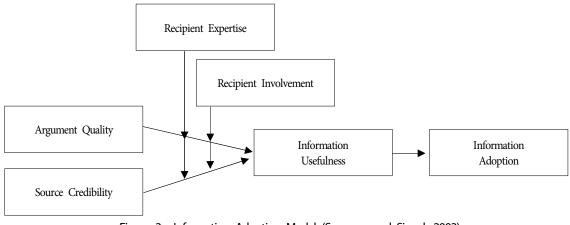


<Figure 2> Information Systems Continuance Model (Bhattacherjee, 2001)

communities. For example, Jin et al. (2009) used ISCM to investigate factors contributing to information continuance on online platforms in China and found that individuals will continue to use the information in a computer-supported social network when they are satisfied with their prior usage, and when they perceive that the information in the network is useful. Similarly, Wang and Lin (2010) examined the intention to continue using an online discussion forum at a University in Taiwan. They found that the more satisfied users were with the online community, the more they would spread positive eWOM and continue using the forum. More recently, Hashim (2012) found that knowledge-sharing continuance is influenced directly by satisfaction and perceived usefulness, concluding that most researchers have extended ISCM with other relevant theories (Hashim, 2012). For example, the use of ISCM to examine members' continuous knowledge sharing intention within an online community setting has also been identified (Cheung and Lee, 2007; Jin et al., 2009). Based on the empirical findings, this model has demonstrated its relevance to examine continuous knowledge sharing intention (Bhattacherjee et al., 2008).

3.2. Information Adoption Model (IAM)

The Information Adoption Model (Sussman and Siegel, 2003) or IAM is drawn from the Technology Acceptance Model (TAM) and the Elaboration Likelihood Model (ELM) (see <Figure 3>). TAM (Davis, 1989) proposes that system use is a response that can be explained or predicted by user motivation, which, in turn, is directly influenced by an external stimulus consisting of the actual features and capabilities of the technology system. Davis (1989) suggests that users' motivations can be explained by three factors: perceived ease of use, perceived usefulness and attitude toward using the system. ELM (Petty and Cacioppo, 1986) identifies two relatively distinct routes to persuasion. Firstly, there is the central route, which is persuasion induced by a person's careful and thoughtful consideration of the true merits of the information presented in support of a particular concept or idea. This route was found to have an impact among consumers within online communities, particularly with respect to argument quality. Wang et al. (2011) identified argument quality dimensions such as relevance, subjectivity, timeliness,



< Figure 3> Information Adoption Model (Sussman and Siegel, 2003)

and completeness that contributed to knowledge adoption; and Cheung et al. (2008) found that argument quality dimensions such as relevance and comprehensiveness had a significant impact on perceived information usefulness.

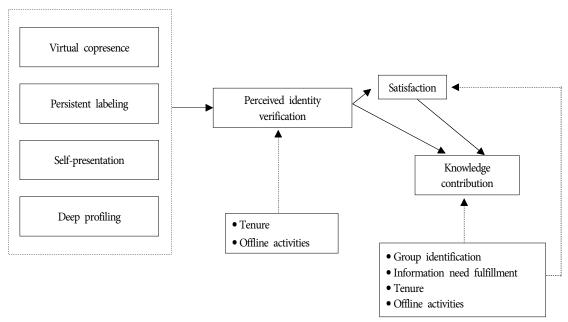
The second route, which does not necessitate scrutiny of the information presented and is mostly the result of a simple cue (e.g., source credibility), is referred to as the peripheral route. In an online environment, source credibility refers to a recipient's perception of messages as being trustworthy, expert, knowledgeable, and reliable. This route was found to be impactful among consumers in different online communities. Cheung et al. (2009) found that source credibility led to eWOM adoption in Chinese online forums and was an important factor in information receivers' cognitive processes. In contrast, Cheung et al. (2008) found that the source credibility (source expertise and source trustworthiness) of messages did not influence information usefulness in a Chinese online community and particularly in online forums. Others report that source credibility dimensions such as past experience, expertise, and trustworthiness improve knowledge adoption in online communities (Wang et al., 2011). Another key factor, information usefulness, reflects how the information is beneficial. helpful, and informative, in that it mediates the relationship between argument quality and online advice adoption.

Receiver involvement measures how involved a person is in the topic of a message context. Recipients' perceptions of message usefulness are the direct determinant of information adoption, mediating the ELM-based informational influence processes. Researchers have proposed that receiver involvement is a key factor; its potential to explain eWOM is because the message recipients' domain-based involvement serves as a moderator of the usefulness

of both credibility and argument quality. It is suggested that the greater the recipient's involvement in the topic of the message, the more argument quality affects perceived message usefulness. Receiver involvement tends to motivate the increased acceptance of messages. For example, Ha (2002) found that eWOM was more likely to influence individuals when they were in a high-involvement purchase situation, while Xue and Phelps (2004) suggest that individual reactions to consumer-generated product reviews from independent online forums are moderated by receiver characteristics such as product involvement.

3.3. Knowledge Contribution Model (KCM)

The Knowledge Contribution Model (Ma and Agarwal, 2007) or KCM is a theoretical framework to investigate the contribution of knowledge within an online community (see <Figure 4>). The framework applies two factors that are relevant for use in this study: Offline Activities, and Information Needs Fulfilment. The authors indicate that such offsite communication is an important aspect of any type of online community and strengthens relationship building within virtual communities. For example, Xue and Phelps (2004) found that individual reactions to consumer-generated product reviews on online forums (i.e., consumer-to-consumer eWOM) were moderated by offline consumer-to-consumer communication. In other words, the more contact the members had offline, the more they tended to be persuaded by eWOM. Information needs fulfilment can possibly influence the contribution of knowledge within online communities, as it can lead to reciprocation, where members contribute knowledge of their own if they find the information useful.



< Figure 4> Knowledge Contribution Model (Ma and Agarwal, 2007)

IV. Method

4.1. Study Context

Saudi Arabia is an oil-rich country in Southwest Asia, occupying four-fifths of the Arabian Peninsula with an area of about 2,217,949 square kilometres. It is bounded on the east by the Persian Gulf, Qatar, the UAE and Oman, on the west by the Red Sea, on the north by Jordan, Iraq and Kuwait, and on the south by Yemen¹). It is culturally conservative and strongly Islamic (Al-Saggaf and Williamson, 2004). Public access to the Internet in Saudi Arabia commenced in December 1998, a considerably late start compared to the rest of the world and even to neighbouring countries. The delay occurred because the authorities wanted to establish a system

to control the flow of information embedded in the Internet (Al-Saggaf and Williamson, 2004; Oshan, 2006). For this study, an anonymous online beauty discussion forum was chosen from those featured in the Saudi Women's online community. The online community targets women of all ages and was launched in 1998. It had 1211000 members at the time of this study. The online beauty forum meets the criteria for an online community, where members have a common and specific purpose and have ongoing and continuous interactions that facilitate the sharing of eWOM. This type of online discussion forum is also less biased than those run by sellers (Bickart and Schindler, 2001), where only sellers can interact and post positive eWOM, and where no interaction occurs between members. The forum was available to view by non-subscribers and the majority are Saudi women members.

¹⁾ https://www.cia.gov/library/publications/the-world-factbook/ geos/sa.html (accessed 30 September 2015)

4.2. Data Collection and Analysis

A total of 17320 messages in the original Arabic were collected over six months, from January to June 2013. This comprised 2199 threads. All threads containing only one message

or multiple messages by the same member avoiding interaction were removed (502 threads). The remaining 1168 threads were then converted to PDFs and uploaded to text analysis software. MAXQDA was chosen as the most appropriate tool because it has an Arabic language interface, which therefore avoids translation issues (Antaki et al., 2006). For the purposes of this study, we analysed 310 threads that were selected on the basis that they illustrate cases where eWOM was adopted, with 318 unique members returning to the forum to state adoption of eWOM and thereby demonstrating continuance intention. In total, this comprised 2200 messages, which were coded into 5725 units.

According to the literature (Cheng and Zhou, 2010; Fong and Burton, 2006), an appropriate method of evaluating eWOM is through content analysis. The coding scheme was derived from the conceptual model and the messages were coded according to the eight content categories of the model. The first author read and categorised all messages. In a process known as unitising (Krippendorff, 2012) when a single message covered several themes, one code was attributed to each theme. Images and emoticons were also treated as units of analysis that enriched the interaction through affective means and were coded separately into a new category: community bonding. A measurement was made of inter-rater reliability: messages were coded by two independent coders and Cohen's kappa was calculated to be above 0.88, which is considered highly acceptable (Neuendorf, 2002).

V. Results and Discussion

The weighting and frequency counts for each category are shown in <Table 1>.

5.1. Argument Quality

Argument quality was a crucial construct comprising several subcategories. The dominant subcategory was 'neutral', illustrated in the following quote of Member 1: "Use Roc cream for face (Neutral - argument quality), followed by instructions for use; Member 1: "Just apply it once a day" (Neutral argument quality). The next subcategory was positive eWOM, where there was a refinement of the coding to highlight the strength of positive units (on a scale of 1-5, 5 being highly positive). Strength was typically demonstrated by a lengthening of the words, as shown by Member 3: "Wow, it is fantastiiiiiiic" (Positive (5) - argument quality). The remaining subcategories were found at far lower frequencies, indicating the negativity, completeness, accuracy and inaccuracy of eWOM was not prevalent. The next sub-code is negative, where members tended to express the negative comments about their experiences using the beauty products. Saudi females were more likely to post positive comments rather than negative, thus it was low in frequency. The next sub-code was 'complete', indicating that seekers explicitly stated that they perceived comments as complete in those instances where they did adopt e-WOM. Some members when they tended to adopt e-WOM came back to the beauty online forum, suggestive of continuance intention, but some members did not indicate the completeness of the comments they read. The next sub-code denoting the accuracy of the comments was low in frequency as members did not comment on that characteristic. The last sub-code was 'not accurate',

<Table 1> Frequency and Weighting of Content Categories

Content Category (Overall weighting)	Frequency	Percentage
Argument Quality (40.6%)	2327	
Neutral	1193	51.2
Positive	628	26.9
Quotes	218	9.3
Negative	126	5.4
Complete	126	5.4
Accurate	28	1.20
Not accurate	8	0.343
Community Bonding (30.4%)	1745	
Religion	503	28.8
Thanks	248	14.2
Emoticons	245	14.0
Greeting	244	13.9
Emotional feeling	244	13.9
Luck	115	6.59
Links	52	2.97
Photo	51	2.92
Online activities	33	1.89
Jokes	10	0.57
Receiver Involvement (12.7%)	731	
Involved in the issue	390	53.4
Pushing up the topic to the top of the thread	330	45.1
Discussion in mind lately	11	1.50
Information needfulfilment (10.16%)	582	
Find eWOM	428	73.5
Solve problem	133	22.8
Help make decision	14	2.40
Learn new things	7	1.20
Information usefulness (5.15%)	295	
Beneficial	48	16.27
Informative	32	7.79
Valuable	8	2.71

<table 1=""> Frequency and Weighting of Content Categories (C</table>	<table 1=""> Freque</table>	ncv and Weigh	ting of Content	t Categories	(Cont.)
---	-----------------------------	---------------	-----------------	--------------	---------

Content Category (Overall weighting)	Frequency	Percentage
Source credibility (3.12%)	179	
Unknowledgeable	76	42.45
Expert	59	32.96
Knowledgeable	19	10.6
Trustworthy	16	8.9
Reliable	7	3.9
Untrustworthy	2	1.1
Satisfaction (< 1%)	12	
Satisfied with eWOM	12	100
Offline activities (< 1%)	2	
Contact by phone	1	50
Contact by exhibition	1	50

where members sometimes contradicted what others had posted. For example, Member 2 wrote, in thread number 700 on 2/4/2013, "I think your comment is not accurate, it's actually in Riyadh".

5.2. Community Bonding

Community bonding was a new coding category which emerged from the data and was found to contribute to eWOM. Religious expressions were most frequently coded. For example, Member 2 wrote: "Girls, May God bless you, help me to solve my problem", which included the religious expression 'God bless you' to persuade the other women in the online community to assist. The second most dominant subcategory was gratitude behaviour. Women clearly stated their feelings of thankfulness or appreciation in the conclusion of an inquiry about a product. The third subcategory was emoticons. For

example, Member 12 wrote: "Girls, Thank you for helping me in finding the information I need", which included the 'happy face' emoticon to represent her gratitude towards the other women in the online community. The fourth subcategory was greetings, usually expressions posted by members seeking eWOM who were returning to the forum. The fifth subcategory was emotional feeling; the dominant feeling was love towards the online community, and for products or services they tended to use. Other subcategories were found to a much lesser extent, such as wishing members luck, posting links, sharing photos, offering the chance for private messages as part of online activities, and sharing jokes.

5.3. Receiver Involvement

Receiver involvement was particularly common in the women's comments on their experiences with products or services. For example, Member 4 wrote: "I am really involved in the product you're talking about". Such terms were often explicitly used to describe the strength of their participation in the topic of the discussion. Another example is Member 15, who wrote: "I am interested in this product. What is your advice to me girls?" Member 16 replied: "Me too. Me too. I am involved in the same issue". In addition, other women often described their previous use of products or services by saying: "We were involved in the same issue, that's why we are using this product or services". Another significant subcategory is where members push each other's topics to the top of threads to encourage more posting.

5.4. Information Needs Fulfilment and Information Usefulness

The dominant element in information needs fulfilment is to find eWOM in the community. Examples are Member 20: "Good afternoon girls, I need your recommendation girls", and Member 5: "Peace be upon you girls (religious expression - community bonding). I need to solve my problem which is dry hair (solve problem . information need fulfilment) I need your recommendation girls (find eWOM. information need fulfilment). These examples illustrate the content of the messages in this category and subcategory. With respect to information usefulness, this category highlights those instances where women perceived eWOM as beneficial, informative and valuable, enabling them to continue using eWOM. For example, Member 25: "Your recommendations were beneficial for me and others (information beneficial. information usefulness).

5.5. Source Credibility

Source credibility is an indication of the believ-

ability of other members, as perceived by recipients of messages. A total of 179 units (frequency = 26; proportion = 3.11%) were found in which women cited lack of knowledge about a topic as the reason for seeking expertise from other women in an online beauty forum. Women clearly stated that other women in this online community were experts in beauty topics. In addition, the trustworthy sub-code (frequency = 16) represents 8.9% of the overall source credibility content category. For example, Member 20 wrote: "I need your trustworthy recommendations girls". The reliable sub-code (frequency = 7) represents 3.9% of the category, where women expressed the reliability of the recommendations. For example, Member 2 wrote: "Your recommendations are the most reliable".

5.6. Offline Activities and Satisfaction

'Offline activities and satisfaction' refers to how women share their mobile or personal contact numbers in order to share product information offline. The overwhelming majority of women did not express an intention to meet offline or a degree of satisfaction; the latter may be explained in that women may not wish to convey their satisfaction online. In other words, these two factors did not contribute towards eWOM continuance intention.

VI. Conclusion

This study has examined the characteristics of eWOM that influence members' adoption of information and expression of consumer opinion. The study applied a coding schema derived from a conceptual model. Few studies have undertaken a qualitative analysis of eWOM (Fong and Burton 2006; Gheorghe and Liao, 2012). Overall, it was found that women tended to rely on argument quality, which represents the primary way in which messages are evaluated. In terms of quality, they also tended to provide more neutral recommendations, without an expression of judgement such as how to use products, where to find them, prices and descriptions. However, in order to capture and code the emotional aspects of communication, a new category of 'community bonding' was created. Coding for this new category comprised comments in which primarily religious expressions, expressions of gratitude, emoticons, greetings, and emotional feelings frequently appeared. Moreover, this category seems to be as important as community bonding for eWOM adoption in this Middle Eastern women's online community. This outcome overlaps with the authors' previous work, which indicates that Kuwaiti women typically post more emoticons than Saudi women who tend to post more religious expressions. One explanation for this is that Saudi Arabia is more conservative in nature and Islam is prevalent (Long, 2005). The results of the study are more easily distinguishable as part of an exploratory content analysis, as opposed to tests of causal relationships between constructs. With respect to the conceptual model, we attribute this category as an internal individual variable, although future research should investigate the strength of its causal relationship with eWOM adoption.

The value of this study is that it contributes to the understanding of female buyer behaviour in three main ways. Firstly, with respect to theory the study proposes a new framework for understanding eWOM, but also addresses culture and gender effects to draw out the Arab woman's perspective when making decisions on products. In doing so it identified a new category of 'community bonding' and

further refined the sub-codes to the parsed messages to better identify the tone of comments, which is strongly related to the expression of emotion. Secondly, in relation to context, the qualitative analysis of eWOM in Middle Eastern online communities has not been rigorously undertaken in previous work and the developed coding schema is sensitive to the nuances of the cases and phenomenon therein. Thirdly, in terms of practice the study offers insight into the eWOM pattern of communication and the different characteristics that contribute to eWOM adoption. This is valuable for marketeers in understanding the key features of comments or reviews that impact on decision making; for example the importance of source credibility of a message can be transformed into measuring and capturing the trustworthiness of members and badged as trusted experts.

Limitations of this study are that firstly, it focuses on a single (albeit large) Saudi online community and the results may not be representative of all Middle Eastern women, Secondly, this study investigates messages posted to an online beauty forum and there may be some differences in exchange on other topics and industries. However, the study provides useful insights for marketers to design a strategy based on an increased understanding of the female Arab market and which advertising messages are more effective for beauty care products. Future research, therefore could examine eWOM in different consumer opinion platforms such as online review sites, to provide a richer understanding of consumers in this cultural context. Certainly a richer understanding of women's buying behaviour in this context could be found in applying the framework to online communities in other GCC countries such as Bahrain, United Arab Emirates, Qatar and Oman.

<References>

- Al-Ghamdi, R., Drew, S., and AlFaraj, O. (2011).
 Issues Influencing Saudi Customers' Decisions to Purchase from Online Retailers in the KSA: A Qualitative Analysis. European Journal of Scientific Research, 55(4), 580-593.
- [2] Alhaidari, N., and Coughlan, J. (2014). The Influence of Electronic-Word-of-Mouth on Consumer Decision-Making for Beauty Products in a Kuwaiti Women's Online Community. *Journal of Contemporary Eastern* Asia, 13(2), 3-14.
- [3] Al-Maghrabi, T., and Dennis, C. (2010). Driving Online Shopping: Spending and Behavioral Differences Among Women in Saudi Arabia. *International Journal* of Business Science and Applied Management, 1(5), 30-47.
- [4] Al-Maghrabi, T., Dennis, C., and Halliday. S.V. (2011). Antecedents of Continuance Intentions Towards E-Shopping: The Case of Saudi Arabia. *Journal of Enterprise Information Management*, 24(1), 85-111.
- [5] Almana, A.M., and Mirza, A. (2013). The Impact of Electronic Word of Mouth on Consumers' Purchasing Decisions. *International Journal of Computer Applications*, 82(9), 23-31.
- [6] Al-Mowalad, A., and Putit, L. (2013). Factors Influencing Saudi Arabian Women's Shopping Behavior in Online Purchase Activities. *Journal of Emerging Economies and Islamic Research*, 1(2).
- [7] Antaki, C., Ardevol, E., Nunez, F., and Vayreda, A. (2006). For She who Knows who She is: Managing Accountability in Online Forum Messages. *Journal* of Computer. Mediated Communication, 11(1), 114-132.
- [8] Al-Rasheed, A. A. and Mirza, A. A. (2011). Attitudes Towards E-Travel Services in Saudi Arabia. In Proceedings of the International Conference on E-business, Management and Economics IPEDR, Singapore, 134-141.
- [9] Al-Saggaf, Y. (2011). Saudi Females on Facebook: An Ethnographic Study. *International Journal of Emerging Technologies and Society*, 9(1), 1-19.

- [10] Al-Saggaf, Y., and Williamson, K. (2004). Online Communities in Saudi Arabia: Evaluating the Impact on Culture Through Online Semi-Structured Interviews. FQS, 5(9), 3-24.
- [11] Alserhan, B. A., Halkias, D., Boulanouar, A. W., Dayan, M., Alserhan, O. A. (2015). Expressing Herself Through Brands: The Arab Woman's Perspective. *Journal of Research in Marketing and Entrepreneurship*, 17(1).
- [12] Awad, N., and Ragowsky, A. (2008). Establishing Trust in Electronic Commerce Through Online Word of Mouth: An Examination Across Genders. *Journal of Management Information Systems*, 24(4), 101-121.
- [13] Bae, S., and Taesik, L. (2011). Gender Differences in Consumers' Perception of Online Consumer Reviews. Electronic Commerce Research, 11(2), 201-214.
- [14] Bhattacherjee, A., Perols, J., and Sanford, C. (2008). Information Technology Continuance: A Theoretical Extension and Empirical Test. *Journal of Computer Information Systems*, 49(1), 17-26.
- [15] Bickart, B., and Schindler, R.M. (2001). Internet Forums as Influential Sources of Consumer Information. *Journal of Interactive Marketing*, 15(3), 31-40.
- [16] Chen, S-C., Yen, D.C., and Hwang, M.I. (2012). Factors Influencing the Continuance Intention to the Usage of Web 2.0: An Empirical Study. Computers in Human Behavior, 28(3), 933-941.
- [17] Bahaddad, A.A., AlGhamdi, R., and Alkhalaf, S. (2014). Adoption Factors for e-Malls in the SME Sector in Saudi Arabia. *International Journal of Computer Science & Information Technologies*, 5(4), 5835-5856.
- [18] Bahaddad, A. A., Houghton, L., and Drew, S. (2013). Attracting Customer in Saudi Arabia to Buy from your Business Online. *International Journal of Business and Management*, 8(7), 1833-8119.
- [19] Brosdahl, D. J. C., and Almousa, M. (2013). Risk

- Perception and Internet Shopping: Comparing United States and Saudi Arabian consumers. Journal of Management and Marketing Research, 13(1), 2327-5340.
- [20] Cheng, X., and Meihua, Z., (2010). Study on Effect of e-WOM: A Literature Review and Suggestions for Future Research. In Proceedings of the International Conference in Management and Service Science (MASS), Wuhan, 1-4.
- [21] Cheng, X., and Zhou, M. H. (2011). Internet word of mouth for consumer decision-making behavior influence research. Jiangsu Commercial Forum, Jingsu, China.
- [22] Cheung, C. M. K., and Lee, M. K. O. (2007). Information Adoption in an Online Discussion Forum. In Proceedings of the International Joint Conference on e-Business and Telecommunications, Barcelona, Spain.
- [23] Cheung, C. M. K., Lee, M. K. O., and Rabjohn, N. (2008). The Impact of Electronic Word-of-Mouth: The Adoption of Online Opinions in Online Customer Communities. Internet Research, 18(3), 229-247.
- [24] Cheung, C. M. K., Luo, C., Sia, C. L., and Chen, H. (2009). Credibility of Electronic Word-of-Mouth: Informational and Normative Determinants of On-Line Consumer Recommendations. International Journal of Electronic Commerce, 13(4), 9-38.
- [25] Cheung, C. M. K., and Thadani, D. R. (2010). The Effectiveness of Electronic Word of Mouth Communication: A Literature Analysis. In Proceedings of BLED, Bled, Slovenia.
- [26] Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. MIS Quarterly, 13(3), 319-339.
- [27] Fan, Y-W., Miao, Y-F. (2012). Effect of Electronic Word-of-Mouth on Consumer Purchase Intention: The Perspective of Gender Differences. International Journal of Electronic Business Management, 10(3), 175-181.
- [28] Fong, J., and Burton, S. (2008). A cross-cultural comparison of electronic word-of-mouth and

- country-of-origin effects. Journal of Business Research, 61(3), 233-242.
- [29] Gheorghe, I. R., and Liao, M. N. (2012). Investigating Romanian Healthcare Consumer Behaviour in Online Communities: Qualitative Research on Negative eWOM. Procedia - Social and Behavioral Sciences, 62(2), 268-274.
- [30] Gupta, P., and Harris, J. (2010). How e-WOM Recommendations Influence Product Consideration and Quality of Choice: A Motivation to Process Information Perspective. Journal of Business Research, 63(9), 1041-1049.
- [31] Ha, H-Y. (2002). The Effects of Consumer Risk Perception on Pre-Purchase Information in Online Auctions: Brand, Word of Mouth, and Customized Information. Journal of Computer Mediated Communication, 8(1).
- [32] Hashim, K. (2012). Understanding the Determinants of Continuous Knowledge Sharing Intention Within Business Online Communities. PhD thesis, Auckland University of Technology.
- [33] Hashim, K. F., Tan, F. B., and Andrade, A. (2012). The Role of Trust and Commitment in Continuous Knowledge Contribution Intention Within Business Online Communities. In Proceedings of CONF-IRM 2012.
- [34] Hung, K. H., and Li, S. Y. (2007). The Influence of e-WOM on Virtual Consumer Communities: Social Capital, Consumer Learning, and Behavioral Outcomes. Journal of Advertising Research, 47(4), 485-95.
- [35] Jin, X. L., Cheung, C. M., Lee, M. K., and Chen, H. P. (2009). How to Keep Members Using the Information in a Computer-Supported Social Network. Computers in Human Behavior, 25(5), 1172-1181.
- [36] Kim, E. E. K., Mattila, A. S., and Baloglu, S. (2011). Effects of Gender and Expertise on Consumers' Motivation to Read Online Hotel Reviews. Cornell Hospitality Quarterly, 52(4), 399-406.
- [37] Krippendorff, K. (2012). Content Analysis: An Introduction to its Methodology. Sage.

- [38] Lee, Y. C., Wu, W. L., Lin, Y. C., and Lee, C. K. (2014). The Effect of Word-of-Mouth, Knowledge, and Promotions on Purchase Intention of Medical Cosmetics. The International Journal of Organizational Innovation, 6(3), 96-110.
- [39] Lee K. Y., and Yang, S. B. (2015). The Role of Online Product Reviews on Information Adoption of New Product Development Professionals. *Internet Research*, 25(3), 435-452.
- [40] Lim, L., and Yazdanifard, P. R. (2014). Does Gender Play a Role in Online Consumer Behavior? Global Journal of Management and Business Research, 14(7), 1-9.
- [41] Limayem, M., Hirt, S. G., and Cheung, C. M. (2007). How Habit Limits the Predictive Power of Intention: The Case of Information Systems Continuance. MIS Quarterly, 31(4), 705-737.
- [42] Lis, B. (2013). In eWOM we trust A Framework of Factors that Determine the eWOM Credibility. Business & Information Systems Engineering, 5(3), 129-140.
- [43] Long, D. E. (2005). Culture and Customs of Saudi Arabia. Penn State Press.
- [44] Maher, A. A., and Carter, L. L. (2011). The Affective and Cognitive Components of Country Image: Perceptions of American Products in Kuwait. International Marketing Review, 28(6), 559-580.
- [45] Meng, M., and Agarwal, R. (2007). Through a Glass Darkly: Information Technology Design, Identity Verification, and Knowledge Contribution in Online Communities. *Information Systems Research*, 18(1), 42-67.
- [46] Meng, F., Wei, J., and Zhu, Q. (2011). Study on the Impacts of Opinion Leader in Online Consuming Decision. In Proceedings of the International Joint Conference on Service Sciences (IJCSS), Taipei, 140-144.
- [47] Neuendorf, K.A. (2002). *The Content Analysis Guidebook*. Sage.
- [48] Okazaki, S. (2009). Social Influence Model and Electronic Word of Mouth: PC Versus Mobile Internet. *International Journal of Advertising*, 28(3),

- 439-472.
- [49] Oliver, R.L. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research*, 17(4), 460-469.
- [50] Oshan, M.S. (2006). Saudi Women and the Internet: Gender and Culture Issues. PhD thesis, Loughborough University.
- [51] Park, D. H., and Kim, S. (2008). The Effects of Consumer Knowledge on Message Processing of Electronic Word-of-Mouth via Online Consumer Reviews. Electronic Commerce Research and Applications, 7(4), 399-410.
- [52] Petty, R. E., and Cacioppo. J. T. (1989). The Elaboration Likelihood Model of Persuasion. Springer, New York.
- [53] Pollach, I. (2006). Electronic Word of Mouth: A Genre Analysis of Product Reviews on Consumer Opinion Web Site. In Proceedings of the 39thHawaii International Conference on System Sciences (HIICS-06), Hawaii.
- [54] Rahim, H. L., and Rosly, H. E. (2014). Psychographic Characteristics Influencing Consumer Behaviour Towards Online Purchase Intention: A Study on Gender Differences. *Journal of Technology Management* and Business, 1(2), 101-112.
- [55] Sadi, M. A., and Al-Khalifah, A. M. (2012). Factors Influencing Trust in On-Line Shopping: A Case of Saudi Arabian Consumer Behavior. *Journal of Emerging Trends in Economics & Management Sciences*, 3(5), 517-522.
- [56] Sharif, A. A., and Al-Kandari, A. A. (2010). The Use of Online Bulletin Boards by Females in the Gulf Cooperation Council Countries. *Telematics and Informatics*, 27(1), pp. 42-50.
- [57] Sun, T., Youn, S., Wu, G., and Kuntaraporn, M. (2006). Online Word-of-Mouth (or mouse): An Exploration of its Antecedents and Consequences. *Journal of Computer Mediated Communication*, 1(4), 1104-1127.
- [58] Sussman, S. W., and Siegal, W. S. (2003). Informational Influence in Organizations: An Integrated Approach

- to Knowledge Adoption. Information Systems Research, 14(1), 47-65.
- [59] Sweeney, J. C., Soutar, G.N., and Mazzarol, T. (2008). Factors Influencing Word of Mouth Effectiveness: Receiver Perspectives. European Journal of Marketing, 42(4), 344-364.
- [60] Teng, S., Wei Khong, K., Wei Goh, W., and Yee Loong Chong, A. (2014). Examining the Antecedents of Persuasive eWOM Messages in Social Media. Online Information Review, 38(6), 746-768.
- [61] Wang, S-C., and Lin, Y-H. (2010). Examining the Post-Adoption Behavioral Intention of Online Knowledge Groups Through Multi-Dimensional Customer Value. In Proceedings of the 7th International Conference on Service Systems and Service Management (ICSSSM).
- [62] Wang, G., Liu, X., and Fan, W. (2011). A Knowledge Adoption Model Based Framework for Finding Helpful User-Generated Contents in Online Communities. In Proceedings of the Thirty Second International Conference on Information Systems, Shanghai.
- [63] Xue, F., and Phelps, J.E. (2004). Internet-Facilitated Consumer-to-Consumer Communication: The Moderating Role of Receiver Characteristics. International Journal of Internet Marketing and Advertising, 1(2), 121-136.
- [64] Yap, K. B., Soetarto, B., and Sweeney, J. C. (2013). The Relationship Between Electronic Word-of-Mouth Motivations and Message Characteristics: The Sender's Perspective. Australasian Marketing Journal, 21(1), 66-74.

◆ About the Authors ◆



Nahed Al-Haidari

Nahed Al-Haidari is Ph.D student in Brunel University in the Computer Department, My research interests focus on electronic business, electronic word of mouth, online community, and digital libraries



Jane Coughlan

Dr Jane Coughlan is currently a Lecturer in Human-Computer Interaction at Brunel University London. She received a B.A. (Hons) degree in Psychology and an MRes in Informatics both from the University of Manchester. She is interested in User Experience (UX) and behaviour change in the area of persuasive design and creating technologies that influence or nudge people's decision-making processes in e-commerce and e-health contexts. She also has an interest in social media for education, particularly in the relationship between social capital and employability for enhancing the student experience. Recently, her teaching and research has moved into gamification and serious games for health.

Submitted: April 30, 2015; 1st Revision: August 31, 2015; 2nd Revision: October 31, 2015; Accepted: November 5, 2015