

Understanding consumers' social media engagement behaviour: An examination of the moderation effect of social media context

Abstract

Social media has become a norm for retailers seeking to engage actively with consumers. There is also growing evidence that some consumers choose not to engage with social media marketing content; and that the depth of consumer engagement varies across different social media. However, there is a lack of empirical research on the effect of contextual factors that may contribute to such differences. Moreover, the variation of social media engagement behaviours, namely, *consumption*, *contribution*, and *creation* is underexplored. Hence, we seek to understand the various levels of engagement behaviours that are influenced by key social media contextual factors, namely *media richness* and *content trustworthiness*. We analyse 721 survey responses using PLS-SEM. Results reveal significant effects of media context on engagement behaviours. This research contributes to the growing body of literature on social media engagement, in particular, understanding the impact of social media contextual factors on various engagement behaviours.

Keywords: Social media engagement behaviour; Media richness; Content trustworthiness
Consumption; Contribution; Creation

1. Introduction

Consumers' Social Media Engagement Behaviour (SMEB) is defined in this study as consumer engagement behaviour with social media marketing content, including brand-generated and peer-generated content, on social media platforms such as Facebook and YouTube (Popovic, 2016). Previous studies have explored engagement with content generated by luxury fashion brands on social media platforms, where consumers 'Follow', 'Like', 'Comment' on or 'Share' content (Kumar et al., 2016; Pentina, Guilloux, & Micu, 2018). Social media users interact and network with peers in a brand social media community by 'Commenting' on peers' 'Posts' or responding to peers' 'Reviews' of their shopping experience (Schau, Muniz, & Arnould, 2009; Habibi, Laroche, & Richard, 2016). Consumers' SMEB within a social media community enables them to share information and build up their social networks (Dessart, Veloutsou, & Morgan-Thomas, 2015; Khan, 2017).

In the digital era, the use of social media platforms such as Facebook, Twitter, Instagram, Pinterest, and YouTube has become a norm for fashion retailers seeking to engage consumers actively. In their Social Media Marketing (SMM), retailers provide live updates via newsfeed, vlogs, tweets, photos and posts on arrivals of new products or services (Pentina et al., 2018). From consumer engagement through social media, fashion retailers gain brand association and increased brand performance (Rapp et al., 2013; Fulgoni, 2015; Habibi et al., 2016; Dessart, 2017), influencing purchase decisions and sales (Muralidharan & Men, 2015; Kumar et al., 2016; Pentina et al., 2018). Meanwhile, consumers are motivated to engage with SMM within a social media community to obtain and share information, to learn about the latest fashion trends and to keep themselves informed about new products from a favourite brand and event updates (Dessart, 2017; Mintel, 2018b).

While many consumers are motivated to interact with peer users on social media sites (Wang & Yu, 2017), there is also growing evidence that some consumers have chosen not to

trust or engage with SMM due to various forms of 'digital pollution', i.e. an overload of redundant, low-value information including spam and fake news (Fulgoni & Lipsman, 2017; Mintel, 2018a; BBC, 2018). Thus, one may wonder how consumers' trust in - or scepticism towards - SMM content affects their engagement behaviour on social media sites. This is a fundamental issue to be addressed by digital marketers seeking to encourage active consumer engagement. Understanding consumer engagement is critical for digital marketing companies in order to build and maintain customer loyalty and to attract new customers. However, there is a lack of empirical research on the effect of potentially important contextual factors, such as trustworthiness, associated with SMM. The richness of a medium is another such contextual factor, which must be considered in order to understand consumers' SMEB with different social networking sites. Studies show that the depth of consumer engagement varies on various social media such as Instagram and Twitter (Guidry et al., 2017), Facebook (Wang et al., 2017), and YouTube (Khan, 2017). For instance, Instagram, due to its unique attributes and functionality associated with high-quality visual content, appears to engage users more intensely, compared to other social networking sites such as Facebook and Twitter (Mintel, 2018a; Pentina et al., 2018). Therefore, digital marketers require a fuller understanding of how the attributes of social media, such as media richness and trustworthiness, can create variations in consumer engagement behaviour.

This research aims to understand the effects of media richness and content trustworthiness on the SMEB of consumers. To this end, we develop our research model by referring to the Theory of Planned Behaviour (TPB) (Ajzen & Fishbein, 1980; Ajzen, 1991; Venkatesh et al., 2003). It is important to point out that this study approaches SMEB from a social media contextual perspective, in order to provide fashion brands and social media marketers with a better understanding of how media richness and content trustworthiness influences the SMEB of consumers. Media richness and content trustworthiness are viewed as contextual factors in

the TPB model, moderating the relationship between engagement intention and engagement behaviour. A detailed discussion of the research model is presented in section 2.4.

Fashion social media marketing is an appropriate context for this study, as it aims to explain consumers' SMEB from the social media contextual perspective, which has been the subject of little research but of practical importance (Dahlan, 2005). The fashion industry is highly dynamic, and consumers' shopping behaviour is constantly changing. To react to the changing market, fashion retailers constantly seek new ways to rapidly understand emerging trends and engage with consumers (Bendoni, 2017). In an era of digital transformation, social media networking provides a new approach for fashion brands and fashion retailers to interact with consumers actively; it also represents a new trend in marketing and brand management practices for many fashion brands (Kim & Ko, 2012; Phan & Park, 2014).

This study makes theoretical contributions and offers practical implications regarding social media engagement with fashion SMM. *First*, we contribute to the current understanding of consumers' social media engagement as influenced by social media contextual factors, measured by media richness and content trustworthiness. Such contextual factors have remained underexplored in the existing literature, despite some investigation of antecedents of SMEB from other perspectives such as psychology (Hwong et al., 2017), personality (Lim et al., 2015), society (Lim et al., 2015), culture (Bail, 2016; Alt, 2017a), or a combination of these dimensions (see for instance Dessart, 2017; Zhang, Borden, & Kim 2018; Alt, 2017a). *Second*, there is a lack of empirical studies focusing on variations in SMEB. Drawing on the extant literature, we first conceptualise SMEB and then operationalise and empirically examine variations in SMEB by referring to TPB. *Third*, we contribute to the literature on TPB, which has thus far been applied to explain and predict human behaviour and behavioural intention (e.g., Cooke & French, 2008; Al-Debei, Al-Lozi, & Papazafeiropoulou, 2013). Empirical research has mostly investigated the antecedents of behavioural intention or actual behaviour;

little research has investigated variations in the relationship between behavioural intention and actual behaviour. Also, studies have typically focused on one single behavioural response while there could be several (Ajzen & Sheikh, 2013). Our research seeks to extend knowledge on TPB by addressing these two gaps. Therefore, we contribute to the understanding of social media engagement associated with digital media marketing, and also to the advancement of the TPB literature. Besides, the findings of our research will help fashion brands and social media marketers to manage consumer engagement with SMM more effectively. For instance, when selecting a social media platform, digital fashion marketers should consider the fit between their specific digital marketing purpose and the richness of the different media chosen. Our results also have implications for digital fashion marketers with regard to the content and trustworthiness of the material used to engage social media consumers.

The remainder of this study is structured as follows. In the next section, we develop hypotheses and formulate our research model. This is followed by the introduction of our research methods. Next, we report and discuss our findings. Finally, we conclude with the theoretical contributions and practical implications.

2. Research Hypotheses and Model Building

2.1. Social Media Engagement Behaviours

SMEB comprises two key elements, namely, social media and consumers' engagement behaviour. Social media is defined as a group of Internet-based applications that allow the creation and exchange of user-generated content (Kaplan & Haenlein, 2010). Numerous types of social media fall within this broad definition such as Facebook, Instagram, Pinterest, Twitter, Google Plus, WhatsApp, and YouTube. Scholars (Muntinga, Moorman & Smit, 2011; Dessart et al., 2015; Dessart, 2017) are generally in agreement that three dimensions - cognitive, affective and behavioural - constitute consumer engagement. Dessart (2017) conceptualises

cognitive engagement as being akin to the mental processes involved in focusing on intense attention and absorption. Affective engagement connotes emotional reactions, such as enthusiasm and enjoyment. Behavioural engagement is defined as the active manifestations of the engagement concept, which include sharing, learning and endorsing behaviours. This behavioural perspective is thought to be more practical and in line with the analytics metrics used to measure SMM performance; it also offers more actionable insights (Pentina et al., 2018), which this study seeks to follow and extend.

In an early attempt, Muntinga et al. (2011) introduced three types of brand-related social media usage, namely *consuming*, *contributing*, and *creating*. Schivinski, Christodoulides, & Dabrowski (2016) developed and empirically examined the same three-factor framework measuring consumers' engagement activities with brand-related social media content. Taking this scale further, Pentina et al. (2018) conducted a study that suggests that various consumer-brand engagement behaviours in social media sites represent different levels of engagement effort and creativity, e.g., from "following" (lower level) to "commenting" (higher level). 'Consumption' represents a minimum level of engagement, in which users passively consume SMM content, e.g. reading a fashion blog or watching a video posted by a fashion brand. *Contribution* entails a higher level of engagement, involving peer-to-peer and peer-to-content interactions on social networking sites, e.g. commenting on a post or forwarding it to peers. This level of engagement leads to the wider dissemination of social media content, which could be retailer-generated or peer consumer-generated. *Creation* is the highest level of engagement, in which consumer-generated content is published on social networking sites, e.g. consumers create and post a picture, vlog or publish a fashion review or opinion piece. This research considers all three levels of engagement behaviours - *consumption*, *contribution*, and *creation*.

The TPB logic (Cooke & French, 2008), supported by extant empirical studies (e.g., Muralidharan & Men, 2015; Oliveira, Huertas, & Lin, 2016), suggests that a specific

behavioural intention is positively related to the corresponding actual behaviour. However, whether the specific behavioural intention can explain and predict a number of relevant behaviours have rarely been examined in extant literature. In this research context, fashion consumers are likely to draw inspiration from online sources such as a brand's official websites or official accounts on social media sites. Engagement with fashion retailers and peers in a fashion brand's social media communities allows fashion consumers to share and communicate about fashion trends and new products. This research thus examines whether fashion consumers' engagement intention with fashion SMM is enacted to perform the three levels of engagement behaviours – *consumption*, *contribution*, and *creation*. We posit the following three hypotheses:

H_{1a}: Engagement intention is positively related to *consumption* behaviour.

H_{1b}: Engagement intention is positively related to *contribution* behaviour.

H_{1c}: Engagement intention is positively related to *creation* behaviour.

2.2. Moderation effects of Media Richness

The concept of media richness is rooted in the media richness theory (Brunelle, 2009). Media richness theory (MRT) is a widely cited information processing theory that explains media usage and communication effectiveness. Introduced by Daft and Lengel (1986), the MRT proposes a hierarchy of information media based on media richness. The four factors to distinguish the richness level of a medium are the feedback capability of the medium; the number of channels used such as email and face-to-face communication; the source of information - personal (e.g., relatives and friends) or impersonal (e.g., retailers); and finally, language variety such as verbal or non-verbal (e.g., body language and photos). MRT evaluates the ability of a medium to adequately communicate a complex message (Carlson & Zmud, 1999). The selection of a medium to effectively convey a message is mainly determined by the

characteristics of the message and the audience, e.g., complex vs simple, personal vs impersonal, single vs large audience (Daft & Lengel, 1986). Extant MRT literature has focused predominantly on media choices rather than media engagement behaviour (Kahai & Cooper, 2003). This research seeks to extend knowledge in the latter area. MRT originates from research based on traditional communication media such as emails and phone calls rather than interactive web-based social media. There is a lack of research that elucidates the meaning of ‘richness’ in the current context of digital communication and engagement.

According to the Mintel database (Mintel, 2018b), Facebook, Twitter, YouTube, Instagram and Pinterest are the most popular social media networks used by marketers to target consumers of online shopping in the UK. From the media richness point of view in a fashion context, these five platforms possess varied characteristics of richness in terms of their feedback capability (e.g., the immediacy of feedback), multiple information cues (e.g., text, video and audio), and available communication tools (e.g. like, share, comment, post). Among the five, Facebook is often considered the richest platform since it encompasses all of the above capabilities; Facebook is viewed as easy-to-use and engaging (Wang et al., 2017). Twitter is deemed to be less ‘rich’ due to its character limit. Information contained in tweets can also be quickly and easily ‘drowned out’ by new incoming messages. YouTube is a video network that does not feature highly regarding community interactivity and feedback. Instagram and Pinterest are gaining in popularity due to their high-quality visual information for SMM; however, they offer fewer opportunities for instant feedback or text comment in comparison to other social media platforms (Kim, Seely, & Jung, 2017).

The richness of social networking sites becomes increasingly important in the fashion context as it can foster social and interactive experiences beyond core purchase behaviour (Malthouse & Hofacker, 2010; Hollebeek, Glynn, & Brodie, 2014). The varying richness of the fashion social media platforms allows fashion consumers to use an array of tools and

resources on social media to engage with fashion brands, resulting in different levels of engagement. For example, consumers can choose to consume fashion brand-related media just by viewing the marketed content on Facebook; by further 'Commenting' on a fashion post or 'Liking' the post, they are moving from the role of a fashion consumer to a contributor to the social media content in the brand community. As Malthouse and Hofacker (2010) suggest, the richness of social media enables interactive marketing, such as value co-creation, which encourages long-term consumer engagement with fashion brands. The *creation* dimension represents the strongest level of online brand-related engagement, and the most likely to build up brand loyalty (Muntinga et al., 2011). At the same time, the richness of media enables fashion consumers' engagement within a virtual social setting, where fashion consumers can interact with other brand community members (Brodie et al. 2011; Kuo & Feng, 2013; Dessart et al., 2015; Habibi et al., 2016). From this discussion, the following three hypotheses are formulated:

H_{2a}: Media richness is positively related to *consumption* behaviour.

H_{2b}: Media richness is positively related to *contribution* behaviour.

H_{2c}: Media richness is positively related to *creation* behaviour.

From the empirical TPB literature, the extent to which an actual behaviour is determined by the corresponding behavioural intention seems to vary significantly (Ajzen & Sheikh, 2013). A meta-analysis of the empirical literature on TPB by Sandberg and Conner (2008) suggests that, on average, 54 per cent of intentions are predicted by existing models. In contrast, intentions can explain only 41 per cent of actual behaviours. These differences, and the potential paradoxes that are revealed between the intentions and actual behaviours of consumers, lead to calls for further research (e.g. Cao et al., 2019). Ajzen and Sheikh (2013) suggest that variations between behavioural intention and actual behaviour might be related to

alternative behaviours rather than a single act, while Wang et al. (2018) suggest that such differences might be due to the moderation effect of situational or conditional variables between intention and behaviour. Wang et al. (2018) also argue that, in the case of the responsible environmental behaviour (REB) of tourists, past studies have neglected the influence of situational factors on the relationship between REB intention and actual behaviour. In their study, the moderating role of environmental interpretations was verified.

In this study, we contend that the richness levels of the social media sites adopted by fashion brands and fashion marketers can play an important role in the translation of the engagement intention of fashion consumers and social media users into various levels of engagement behaviours in the fashion brand virtual community, that is, *consumption*, *contribution*, and *creation* activities associated with fashion SMM. Our statement is in line with the assertion of media richness theory that task performance will be improved when a task matches the richness of the chosen medium (Daft & Lengel, 1986). However, little is known about the moderation effect of the richness of social media on the relationship between fashion consumers' engagement intention and their corresponding engagement activities with a fashion social media community. Therefore, we formulate the following three hypotheses:

H_{3a}: Engagement intention is more likely to be related to *consumption* in a positive direction when media are richer than when media are leaner.

H_{3b}: Engagement intention is more likely to be related to *contribution* in a positive direction when media are richer than when media are leaner.

H_{3c}: Engagement intention is more likely to be related to *creation* in a positive direction when media are richer than when media are leaner.

2.3. Moderation effects of Content Trustworthiness

Content trustworthiness draws upon the source credibility theory (Chang, Yu, & Lu, 2015). Hovland and Weiss (1951) found that people tend to discount information from untrustworthy sources; the disassociation of content from its untrustworthy source is likely to result in higher acceptance of untrustworthy information. The source credibility theory has been applied in marketing and communication research, where studies have examined the effect of trustworthiness as a key source of credibility on various behavioural intentions and attitudes (e.g., Gefen, 2002; S. Kim & D. Kim, 2014; Ayeh, 2015). For example, people's attitudes toward a target issue became more favourable when they received a message from a source with higher credibility (Tormala & Clarkson, 2007).

Source credibility has become increasingly pertinent in the new media environment where information can be created and disseminated by amateurs and unverified sources. The freedom to publish in the public domain with no quality control and validation process, aided by the ease of and access to publishing, have affected the credibility of information disseminated and received. This has attracted increasing levels of attention from scholars interested in the source credibility of various social media (Braten et al. 2015). Research suggests that retail-generated marketing content, such as advertisements published on social media sites (e.g. Facebook and Twitter), is less credible than content on traditional media (e.g. TV and radio) (Prendergast, Liu, & Poon, 2009; Lai & Liu, 2020). A recent study of social media security and trustworthiness has suggested that trust between users is of vital importance for the establishment of a credible social networking site (Zhang & Gupta, 2018). However, there is a need to examine whether the trustworthiness of media content embedded on social media affects consumer engagement behaviour (Swani *et al.*, 2017).

In the instance of fashion retailing, the trustworthiness of fashion SMM content has been called into question partly because of representation issues. It is difficult for consumers to gain

complete and accurate information, such as the exact measurement or colour of a fashion item, or the 'feel' of the fabric, since they have to rely on images posted online by retailers, or peer-consumers' subjective comments (Fulgoni & Lipsman, 2017). Also, consumer-generated content is sometimes viewed with scepticism; peers are not considered to be a reliable source of information due to their perceived lack of expertise, according to the source credibility theory (Ayeh, 2015). Therefore, we expect that the trustworthiness of SMM content will positively influence all three levels of engagement behaviours. Hence, we propose the following three hypotheses:

H_{4a}: Content trustworthiness is positively related to *consumption* behaviour.

H_{4b}: Content trustworthiness is positively related to *contribution* behaviour.

H_{4c}: Content trustworthiness is positively related to *creation* behaviour.

Following on with the exploration of consumer engagement intention, we seek an explanation from the contextual factors on the variations in the relationship between the engagement intention and actual behaviour as advocated by Ajzen and Sheikh (2013) and Wang et al. (2018). In addition to media richness, we propose content trustworthiness as another contextual cue. The existing literature suggests that little is known about the mediating role played by the content or content characteristics of social media. In an early experimental study, Dahlen (2005) examined media as a contextual cue, and the results suggest that the creative media choice enhances perceived brand associations and increases the credibility of advertising and positive brand attitudes. In a recent study, Khobzi et al. (2019) examined the moderation effect of users' 'thumbs-up' and 'reply' on the relationship between message (i.e. advertisement post) framing and users' online social interactions within a social media brand community. The results suggested that when neutrally framed comments are left on a brand-generated post, this is not likely to help the post to obtain a higher level of engagement. Little

is known about the moderation effect of the content trustworthiness of social media on the relationship between fashion consumers' engagement intention and their corresponding engagement activities on a fashion social media community. Hence, we put forward the following three hypotheses:

H_{5a}: Engagement intention is more likely to be related to *consumption* in a positive direction when content is more trustworthy than when content is less trustworthy.

H_{5b}: Engagement intention is more likely to be related to *contribution* in a positive direction when content is more trustworthy than when content is less trustworthy.

H_{5c}: Engagement intention is more likely to be related to *creation* in a positive direction when content is more trustworthy than when content is less trustworthy.

2.4. Research Model

In the field of social media and digital marketing, many analytical tools and techniques are increasing in popularity, such as neural networks, big data analytics, trend analysis, and network analysis, many of which have contributed to exploration and visualisation of the domain phenomena (Richard, 2015). However, traditional SEM models and analytical techniques are still dominant in social and behavioural research due to their maturity and strong explanatory power in predicting human behaviour (Teng, Khong, & Goh, 2015).

TPB offers an appropriate reference point for the theoretical underpinnings and development of our model. TPB seeks explanations from the actors' cognitive, social, and psychological characteristics for a specific behavioural intention, which subsequently leads to the corresponding actual behaviour (Ajzen & Fishbein, 1980; Ajzen, 1991). Prior studies have provided valuable insights about explanatory factors for a certain behavioural intention, such as adoption and use of information technology (Venkatesh & Bala, 2008). However, such

studies have been criticised due to the weak predictive power of relationships suggested between behavioural intention and actual behaviour (Teng and Khong, 2015).

Drawing on the existing literature, we develop a conceptual model for this study, as shown in Figure 1. The dependent variable - engagement behaviour - is composed of three types of engagement behaviours, namely *consumption*, *contribution* and *creation* (Schivinski et al., 2016), in association with SMM (Figure 1). Here, we examine how the social media context influences the relationship between consumers' engagement intention and their realised engagement behaviour. Bronner and Neijens (2006) suggest that the social media context could include attributes of a social medium, as well as the content embedded in the medium. Media richness measuring characteristics of social media, and content trustworthiness measuring media content, are thus utilised as proxies of social media context, where these two factors are theoretically underpinned within the domain of Information and Communication Technologies (ICT).

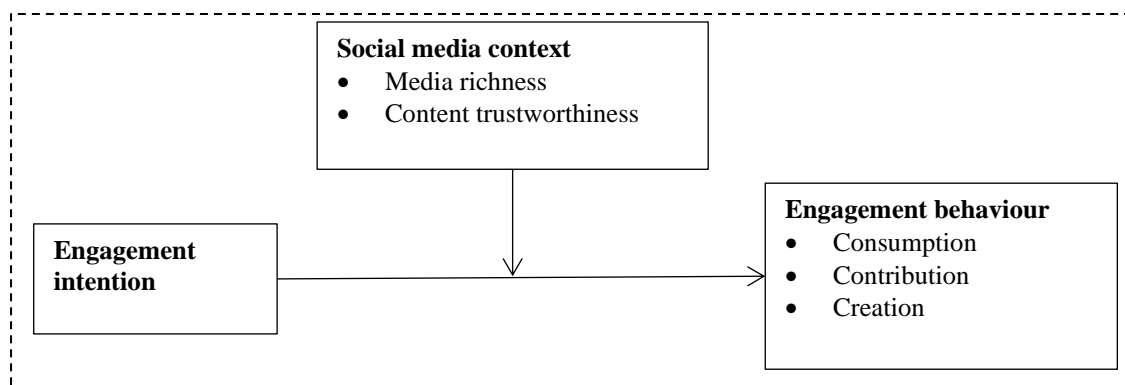


Fig. 1. Conceptual model.

3. Methodology

3.1. Measures

The measures of the constructs were drawn primarily from extant literature and adapted to the research context of fashion SMM. Five-point Likert or semantically differential scales were

used for measurement. Descriptive statistics in terms of means and standard deviations of the measures are displayed in Table 1.

For the four items measuring engagement intention, three out of the four were adapted from Taylor and Todd (1995). Paying attention to advice from the extant literature on the advantages of including more items in the reflective measurement in Structural Equation Modeling (Hair et al., 2014), we added the fourth item, 'I will not hesitate to engage ...', selected from Ayeh (2015). Five pairs of semantic phrases capturing content trustworthiness were also adopted from Ayeh (2015). Based on Daft & Lengel (1986) and Brunelle (2009), the media richness was operationalised as three items: feedback, communication tools, and message cues. Initially introduced by Daft and Lengel (1986), media richness was interpreted by indicators for the selection of a medium (e.g. either an email or a phone call for communication) to effectively convey a message. However, this study focuses on digital marketing communication and consumers' engagement activities by using media communication tools such as 'follow' and 'share'. Therefore, the three-item measurement used in this study were drawn on Brunelle's (2009) study of perceived media richness.

We devised twelve items to measure engagement behaviours (see Table 1). As explained in section 2, *consumption*, *contribution*, and *creation* are the three levels of engagement behaviour, and the categorisation of the three levels is based on the taxonomy of engagement activities by Schivinski *et al.* (2016). Items 1-4 describe the *consumption* activities, i.e., "read", "watch", "follow" and "click", of consumer engagement associated with fashion SMM content; items 5-8 describe the *contribution* activities, i.e., "comment", "share", "recommend" and "like/dislike"; items 9-12 describe the *creation* activities, i.e., "initiate a discussion", "post a selfie", "post a picture" and "write a review", which are associated with fashion SMM content.

Table 1

Constructs and Measures.

Engagement intention

I intend to engage with fashion SMM this year.

I intend to engage with fashion SMM more frequently this year.

I intend to engage with fashion SMM for information or communication with people this year.

I will not hesitate to engage with fashion SMM for information or communication with people.

Media richness

When the social network site enables instant feedback, I engage more.

When the social network site provides rich and varied communication and response tools such as 'like', 'comment', 'post' or 'share', I engage more.

When the social network site enables a variety of message cues such as video, audio, picture, or text, I engage more.

Content trustworthiness

Undependable vs. Dependable.

Dishonest vs. Honest.

Unreliable vs. Reliable.

Insincere vs. Sincere.

Untrustworthy vs. Trustworthy.

Consumption Behaviour (items 1-4)

I read a poster related to fashion goods.

I watched a video/ picture/graphics related to fashion goods.

I followed a poster/picture/graphics related to fashion goods.

I clicked on a product link posted on my MESM to get more information.

Contribution Behaviour (items 5-8)

I commented on a poster/video/picture related to fashion goods.

I shared/reposted/retweet a poster/video/picture/link initially posted on my MESM by the fashion brand.

I recommended fashion goods.

I "Liked"/"Disliked" a poster/video/picture/graphics related to fashion goods.

Creation Behaviour (items 9-12)

I initiated a discussion related to fashion goods.

I posted a picture/graphics/video related to fashion goods.

I posted a selfie relating to a new fashion item.

I wrote a review related to fashion goods.

3.2. Sample and Data

The primary data was collected via a survey questionnaire, administered online by Qualtrics, a leading global data service company. Our sample was sourced via Qualtrics's rigorous online sampling process from their actively managed market research panels. Survey respondents who are social media users were targeted. To ensure a sample with experience of engagement with social media with fashion SMM content, we designed one question to filter out those who did not have such experience: 'Do you interact with fashion via social media, in any of the following ways? Please tick all that apply'. The multiple-choice questions included seven items: 'Browsed fashion items', 'Recommended fashion items' 'Read or viewed fashion posts or images', 'Watched fashion videos', 'Followed Fashion brands', 'Posted pictures of fashion items', and 'None of the above'. If 'None of the above' was chosen, this terminated the survey, leaving an uncompleted questionnaire which was excluded from the data analysis. As a result, a total sample of 721 valid responses was collated for analysis after data cleaning.

Table 2 shows the demographic profile of the sample. Respondents aged between 18 and 69 years were split equally on the base of gender (male/female). All respondents in the final sample reported that they interacted with fashion SMM content on social media and that they spent at least one hour per week on social networking sites. Forty per cent of respondents reported that they spent over 13 hours engaging with social media each week, with 75 per cent spending more than seven hours per week.

Table 2

Sample demographics (n = 721).

Variable	Category	Frequency	Per cent
Age	18-29 years	159	22.1
	30-39 years	159	22.1
	40-49 years	159	22.1
	50-59 years	158	21.9
	60-69 years	86	11.9

Gender	Male	355	49.2
	Female	360	49.9
	Chose not to say	6	0.8
Engagement hours per week	1-3 hours	38	5.3
	4-6 hours	141	19.6
	7-9 hours	135	18.7
	10-12 hours	118	16.4
	13 hours and more	289	40.0
Education	Undergraduate or lower	341	47.3
	Graduate	285	39.5
	Postgraduate	9	13.2
Total	--	721	100.0

PLS-SEM (Partial Least Squares and Structural Equation Modelling) was utilised for the data analysis. The most commonly used covariance-based SEM (CB-SEM) was also considered but not adopted in this instance, for reasons explained below. Both CB-SEM and PLS-SEM allow the analysis of structural relationships between latent constructs based on the SEM technique. However, the two SEM approaches vary in computation procedures, assumptions, and the assessment of structural model fit (Hair et al., 2014). The rationale for the use of PLS-SEM is due to the advantages that PLS-SEM has over CB-SEM. PLS-SEM can be easily applied to provide a solution to complex models, for instance, models containing single-item constructs, a large number of constructs and hypotheses, and complex relationships such as mediation and or moderation (Hair et al., 2014; Astrachan, Petel, & Wanzenried, 2014). All of these conditions are met in this study.

Moreover, the PLS-SEM approach offers the researcher the flexibility to introduce new latent variables and new relationships to an established theory (Richter et al., 2016), which also applies to this research. For instance, we examined 15 hypotheses and the moderation effect of two contextual factors on the relationships between the engagement intention and the three behavioural responses. For these reasons, PLS-SEM was judged to be an appropriate choice for this study.

4. Results

4.1. Descriptive Statistics of Social Media Platforms

Table 3 reports consumers' most popular social media sites in a fashion context. Facebook sits at the top of the list, used by 56.4 per cent of the 759 participants. This result is no surprise due to the popularity of Facebook, and its dominant position among social media sites, However, instead of YouTube, Twitter, or LinkedIn, which are widely reported to be the most popular social media sites, our data indicates that following Facebook, Instagram and Pinterest are the second and fourth most engaged social media platforms (with YouTube in third place). This is a slightly surprising result; however, it is likely to reflect our particular interest in media richness and its role in influencing consumers' engagement online. This will be discussed further in section 5 (Discussion).

Table 3

Descriptive of the most engaged social media platforms in fashion.

Social media platforms	Frequency	Per cent	Cumulative Percent
Facebook	434	56.4	56.4
Instagram	94	12.2	68.6
YouTube	86	11.2	79.8
Pinterest	60	7.8	87.6
Twitter	57	7.4	95.0
Snapchat	6	.8	95.8
Tumblr	6	.8	96.6
Reddit	4	.5	97.1
LinkedIn	2	.3	97.4
Google+	2	.3	97.7
WhatsApp	1	.1	97.8
Other	17	2.2	100.0
Total	769	100.0	100.0

4.2. Construct Reliability and Validity

Before conducting factor analysis, we tested the normality of each scale in our study. Appendix A reports the mean, standard deviation, skewness, and kurtosis of all measures. Values of skewness and kurtosis are all acceptable (Tabachnick and Fidell, 2007). Collinearity refers to the instance that the variables in the set are very highly correlated (Tabachnick and Fidel, 2007, p. 88-90), which may cause statistical problems. Therefore, we examined collinearity statistics (VIF) for our dataset, and results showed no evidence of such violation in our measures, e.g., Inner VIF values ranging from 1.288 to 1.572, Outer VIF values ranging from 1.436 to 2.931. The test results of normality and collinearity gave confidence in proceeding to the next step of factor analysis.

We first ran the PLS algorithm for factor analysis using SmartPLS 3. Table 4 displays the results for construct reliability and validity testing. All outer loadings, ranging from 0.748 to 0.890, are above the threshold value of 0.70. All scores of Cronbach's α and Dijkstra-Henseler's rho (rho_A), ranging from 0.768 to 0.911, are above the threshold value of 0.70, indicating consistency and reliability. All scores of Average Variance Extracted (AVE) range from 0.612 to 0.745, suggesting the internal convergent validity of the constructs.

Table 4

Construct Reliability and Validity.

Indicator	Consumption	Contribution	Creation	Engagement Intention	Media Richness	Content Trustworthiness
EAct1	0.761					
EAct2	0.779					
EAct3	0.832					
EAct4	0.754					
EAct5		0.856				
EAct6		0.848				
EAct7		0.825				
EAct8		0.748				

EAct9			0.879			
EAct10			0.890			
EAct11			0.864			
EAct12			0.825			
EI1				0.815		
EI2				0.843		
EI3				0.805		
EI4				0.822		
MR1					0.838	
MR2					0.832	
MR3					0.806	
CT1						0.838
CT2						0.836
CT3						0.863
CT4						0.826
CT5						0.883
AVE	0.612	0.673	0.748	0.675	0.681	0.722
rho_A*	0.793	0.837	0.888	0.840	0.768	0.911
Crobach's α	0.788	0.837	0.888	0.840	0.768	0.904

Note: *Dijkstra-Henseler's rho (rho_A)

We also checked the discriminant validity of the constructs using Heterotrait-Monotrait Ratio Criterion (HTMT). All HTMT values (Table 5) except one are lower than the suggested value of 0.9 (Ringle, Wende, & Becker, 2015). The exceptional one, related to the discriminant validity between *consumption* and *contribution*, indicates a potential discriminant problem according to the $HTMT_{90}$ criterion. However, the confidence interval, CI [0.884; 0.962], as shown in PLS3, is between [2.5%, 97.5%], suggesting that these two constructs have no significant issue with discriminant validity. Therefore, the discriminant validity of all constructs was established (Henseler, Ringle, & Sarstedt, 2015).

Table 5

Heterotrait-Monotrait Ratio (HTMT) and Confidence Interval.

	1	2	3	4	5
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1.Consumption						
2.Content	0.460					
trustworthiness	CI[0.379;0.537]					
3.Contribution	0.925	0.419				
	CI	CI[0.344;0.497]				
	[0.884;0.962]					
4.Creation	0.732	0.309	0.889			
	CI[0.679;0.781]	CI[0.231;0.384]	CI[0.849;0.920]			
5.Engagement	0.727	0.531	0.702	0.565		
intention	CI[0.656;0.791]	CI[0.445;0.615]	CI[0.634;0.758]	CI[0.481;0.629]		
6.Media	0.645	0.343	0.565	0.378	0.628	
richness	CI[0.559;0.714]	CI[0.248;0.434]	CI[0.477;0.635]	CI[0.289;0.455]	CI[0.547;0.701]	

4.3 Common Method Bias

Our data was collected using a questionnaire, i.e. self-reported data from a single source. We are aware that this may cause common method bias due to consistency motif and social desirability (Podsakoff et al., 2003). To minimise the possibility, we followed the procedural remedies recommended by Podsakoff, MacKenzie, & Podsakoff (2012). First, we eliminated the ambiguity of item wording to get accurate answers from respondents to the questionnaire items (Podsakoff et al., 2003). Second, we conducted a post-hoc examination by employing the most commonly used method, Harman's one-factor test. The result showed that four factors were present, and the principal component extracted explained 39.78 percent of the variance of all 24 variables, which suggests that common method bias is unlikely to be a serious concern for this study (Podsakoff et al., 2003; Liang et al., 2007).

4.4 Model and Hypothesis Testing

Next, we examined the structural relationships and the model fit. Table 6 reports the results of the algorithm and bootstrapping tests (based on 5,000 samples), including the effect sizes (coefficient β), the corresponding significance of the effects (T values and p values) and conclusions of support for each hypothesis (Yes or No).

As shown in Table 6, engagement intention is significantly related to all three levels of engagement behaviours with medium-size effects, e.g., engagement intention -> consumption ($\beta = .414, \rho < .001$), engagement intention -> contribution ($\beta = .472, \rho < .001$), and engagement intention -> creation ($\beta = .462, \rho < .001$). These findings support H1a, H1b, and H1c.

Our results also support the moderation effect of media richness. *First*, the causal relationships between engagement intention and all three levels of engagement behaviours are statistically significant and positive, with small-to-medium-size effects, e.g., media richness -> consumption ($\beta = .280, \rho < .001$), media richness -> contribution ($\beta = .235, \rho < .001$), and media richness -> creation ($\beta = .123, \rho = .004$). We find support for H2a, H2b, and H2c. *Second*, the relationships between engagement intention (EI) and all three levels of engagement behaviours are positively moderated by media richness (MR), with small-size effects: MR * EI -> consumption ($\beta = .056, \rho = .038$), MR * EI -> contribution ($\beta = .113, \rho < .001$), and MR * EI -> creation ($\beta = .123, \rho < .001$). These findings support H3a, H3b, and H3c. Hence, our results confirm that media richness has a positive effect on consumer engagement behaviour in all three levels (*consumption, contribution, and creation*). In addition, media richness significantly moderates the effect of consumers' social media engagement intention on consumers' actual behaviour at all three levels.

Content trustworthiness is significantly related to *consumption* (H4a: $\beta = .128, \rho < .001$) and *contribution* (H4b: $\beta = .095, \rho = .007$) but insignificantly related to *creation* (H4c: $\beta = .048, \rho = .199$). Hence, H4a and H4b are supported while H4c is not supported. Further, the moderation effects of content trustworthiness (CT) are all statistically insignificant, e.g., CT * EI -> consumption ($\beta = -.003, \rho = .902$), CT * EI -> contribution ($\beta = .002, \rho = .930$), and CT * EI -> creation ($\beta = .038, \rho = .167$). Therefore, H5a, H5b and H5c are not supported. Hence, our findings confirm that consumers' trust in SMM content positively affects their *consumption* and *contribution* activities in social media communities. However, there is no evidence to

support the effect of content trustworthiness on consumers' *creation* activities; the moderating role of content trustworthiness is not statistically significant.

Table 6

Results of Algorithm and Bootstrapping Tests.

Hypothesis	Coefficient	T-value	ρ - value	Support
H _{1a} : Engagement intention → Consumption	.414	10.835	0.000	Yes
H _{1b} : Engagement intention → Contribution	.472	12.761	0.000	Yes
H _{1c} : Engagement intention → Creation	.463	11.454	0.000	Yes
H _{2a} : Media richness → Consumption	.280	7.152	0.000	Yes
H _{2b} : Media richness → Contribution	.235	6.029	0.000	Yes
H _{2c} : Media richness → Creation	.123	2.874	0.004	Yes
H _{3a} : MR * EI → Consumption	.056	2.070	0.038	Yes
H _{3b} : MR * EI → Contribution	.113	4.656	0.000	Yes
H _{3c} : MR * EI → Creation	.123	5.526	0.000	Yes
H _{4a} : Content trustworthiness → Consumption	.128	3.656	0.000	Yes
H _{4b} : Content trustworthiness → Contribution	.095	2.693	0.007	Yes
H _{4c} : Content trustworthiness → Creation	.048	1.285	0.199	No
H _{5a} : CT * EI → Consumption	-.003	0.123	0.902	No
H _{5b} : CT * EI → Contribution	.002	0.088	0.930	No
H _{5c} : CT* EI → Creation	.038	1.381	0.167	No

Model fit summary: SRMR=0.110; Chi-square=2,033.763; NFI=0.799; Consumption ($R^2 = 0.429$); Contribution ($R^2 = 0.415$); Creation ($R^2 = 0.287$).

Note: MR= Media richness; EI= Engagement intention; CT=Content trustworthiness.

Significant at 0.05 (two-tailed).

Table 6 also reports the model fit indicators, e.g., SRMR (0.110), Chi-square (2,033.76), and NFI (0.799). Figure 2 displays R square values for three dependent variables, i.e. *consumption* (0.429), *contribution* (0.415), and *creation* (0.287). When we make a comparison of these results with similar studies that have empirically examined the association between intention and actual behaviour but without moderation consideration in their models, we find that the R square values of past studies - e.g. 0.296 (Cao et al., 2019), and ranging from 0.35 to 0.39 (Venkatesh et al., 2003) - are lower than the R square values reported here, which range

from 0.287 to 0.429. This suggests that SMEB, in terms of *consumption*, *contribution*, and *creation*, is well explained by the model, and by the moderators in particular.

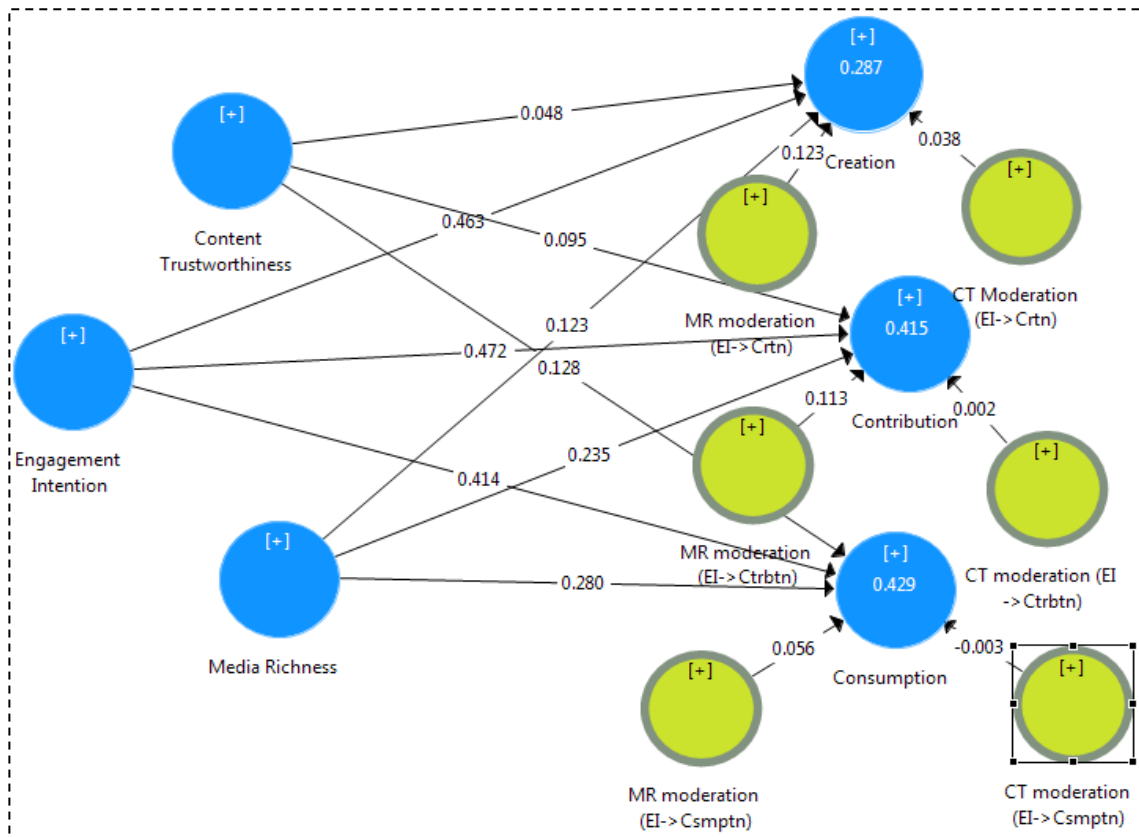


Fig. 2. SmartPLS output of the algorithm test.

5. Discussion

This research investigates the moderation effects of two social media contextual factors, namely, *media richness* and *content trustworthiness*, between *engagement intention* and *engagement behaviour* in the context of fashion SMM. Results suggest that engagement intention is the key determinant of all three levels of consumer engagement behaviours, with medium-size effects. This result is consistent with most TPB empirical studies (e.g., Cooke & French, 2008). For instance, Taylor and Todd (1995) studied the intention to act on information technology usage and found a comparable medium-size effect (0.38). Similarly, Al-Debei et

al. (2013) examined the relationship between continual participation intentions and behaviour on Facebook and identified a medium-size effect (0.414).

Our results also suggest that the *richness* of social media is positively related to consumer engagement behaviours at all three levels – *consumption*, *contribution*, and *creation*. The result supports a number of similar studies (e.g., Kim et al., 2017; Guidry et al., 2018). Guidry et al. (2018) investigated in their study how posts of refugees on two visual-based social media platforms, namely Instagram and Pinterest, differ in terms of content and engagement; their results suggest that the majority of the humanitarian- and security-concern variables presented a significant association with public engagement on one social media platform over another. For instance, security-concern expressions significantly associate with Pinterest, while humanitarian-concern expressions were found to associate with Instagram. Further, the study revealed that the association of public engagement behaviour with different social media platforms is related to the variation of the media richness of the two platforms. For instance, Instagram displayed more episodic framing, while Pinterest contained more thematic framing. Extant literature offers some insights as to why media richness might affect consumer engagement, i.e. the opportunity to engage in online brand communities or social-media based communities (Schau et al. 2009; Wirtz et al., 2013; Dessart et al., 2015). Media richness facilitates and enables social media users to enjoy social interactions with others sharing common interests within the social media environment (Kuo & Feng, 2013; Habili et al., 2016). However, our results also present some differences from the extant literature. For instance, according to Pentina et al. (2018), luxury consumers' SMEB is not related to the choice of social media platforms.

Moreover, our results suggest that media richness significantly moderates the intention-behaviour relationship. The moderation effect of media richness has rarely been explored in

the existing literature. Therefore, there is a need for further study, particularly in different industries or sectors other than fashion which is the research context for this study.

In contrast to previous studies (e.g., Kumar et al., 2016; Wang et al., 2017) using a single-medium context or examining a single behavioural response, we examined the richness of all possible social media used by respondents. This approach enhances our methodological robustness and builds a more substantial theoretical contribution. By using the multiple social media setting, we are able to conceptualise and operationalise media richness in terms of a variety of message cues, a variety of communication tools and instantaneous feedback. Also, we examined multiple behavioural responses rather than the single behavioural response used in most extant literature. This contributes to the advancement of TPB. The multiple behaviours setting in our study explain not only users' decision to engage but also the depth of engagement the users develop. The latter is critical for social media marketers to build up their retailing and brand performance. Further, our research supports the moderation effect of media richness; the relationship between engagement intention and action becomes stronger when a social medium is "richer" rather than "leaner". This is a novel finding and an essential contribution to the knowledge and understanding of SMEB and the various SMEB levels.

We also found that *content trustworthiness* affects *consumption* and *contribution*. It is understandable that trustworthy content encourages social media users to engage in activities that include making connections with other social media users such as "follow", "share", "comment" and "recommend". This supports the results of earlier studies (Swani et al., 2017; Zhang & Gupta, 2018). Swani et al. (2017) provide insights into the management of the content trustworthiness of SMM, suggesting that social media marketers use product brand names, emotional appeals, and direct-calls-to-purchase in their B2C Facebook posts to engage end-users with Facebook "likes" and "comments"; corporate brand names, functional appeals, and links or cues for information search are used in their B2B Facebook posts for more effective

engagement of their business users. Taking these insights further, we distinguish between the different levels of consumer behaviour within the SMM community, suggesting that content trustworthiness does not influence the highest level of consumer engagement behaviour, i.e. *creation*. Although an in-depth explanation of this result is beyond the scope of this research, we postulate that the creation of (new) content is independent of the trustworthiness of the original SMM message.

In contrast to media richness, we found that there is no evidence to support the moderation effect of content trustworthiness on any engagement behaviour. One plausible explanation could be that when social observation, social networking, or social identity become the main motives for users to engage in social media (Oliveira et al., 2016), what appeals to consumers most in enacting their engagement intention is the appeal of social networking itself rather than its embedded content. Under such circumstances, users have a greater interest in interacting and socialising with other community members than they do in content trustworthiness.

6. Conclusion

To sum up, media richness, as a social media contextual factor, positively affects various levels of consumers' engagement – *consumption*, *contribution*, and *creation* behaviours. Moreover, media richness moderates the relationship between engagement intention and behaviour. The consumer is more likely to engage with SMM when media platforms are richer rather than leaner. Similarly, content trustworthiness, as another social media contextual cue, also positively affects consumers' *consumption* and *contribution* behaviour. However, content trustworthiness does not appear to have a significant influence on *creation* behaviour. The moderation effect of content trustworthiness on the relationship between engagement intention and behaviour was also found to be insignificant.

6.1. Theoretical Contributions

The interactive nature of the social media context brings new dimensions to the relationship between engagement intention and engagement behaviour. Our **first** contribution is that we extend knowledge of TPB by exploring multiple behavioural responses rather than a single action. We examined the effect of social media engagement intention on three levels of actual engagement behaviours: *consumption*, *contribution*, and *creation* associated with SMM content. We also highlighted the moderation effect of social media contextual factors, namely, media richness and content trustworthiness, on the relationship between engagement intention and engagement behaviour. By doing so, we address a gap in the extant literature and contribute to the continuous development of behavioural theory, particularly TPB, in the contemporary landscape of social media. **Second**, the outcome of this research offers an enhanced understanding of consumer engagement with fashion SMM, a topical issue given the increasingly interactive and experiential nature of consumer-brand relationships in the digital marketing era (Hollebeek et al., 2014; Dessart et al., 2015; Habili et al., 2016). This study offers insights into how social media contextual factors such as media richness and content trustworthiness can support the extension of consumers' scope of engagement beyond core purchase or transactional relationships. As studies have demonstrated (Hollebeek et al., 2014; Vargo & Lusch, 2004), by being engaged, consumers are likely to develop a more profound notion of brand association. **Third**, this research focuses on the role of online social media context played in SMEB. Based on media richness theory and source credibility theory, we selected two factors, media richness and content trustworthiness, as the proxy of the study. Online social media, as a research context, has been increasingly popular in recent decades. However, understanding the setting itself and its role is yet minimal. This research, as one of the first studies, contributes to the understanding of the social media context.

6.2. Practical Implications

Our empirical results provide useful insights for fashion brands seeking to enhance consumer engagement with their SMM through managing content trustworthiness and media richness. Engagement intention is a critical factor in determining consumers' engagement activities. However, to what extent the intention affects actual consumer engagement is significantly moderated by social media contextual factors, i.e. media richness and content trustworthiness. Therefore, to achieve the most effective outcome from the use of SMM as a marketing strategy, the careful selection of media (for its richness) and careful generation of digital marketing contents should not be neglected.

Social media sites with instant feedback can encourage interaction. In particular, social media sites such as Facebook, Twitter and YouTube, with richer response tools, can enhance consumer engagement activities with fashion SMM content, using 'following', 'sharing', 'commenting', 'retweeting', 'posting' and 'reviewing'. Social media sites such as Instagram and Pinterest, with richer message cues in the form of video, audio, and high-quality pictures, can engage more fashion consumers, and this is reflected in our research. However, it is important to be aware that each social media site has its own unique 'flavour' of richness; fashion social media marketers have to select a particular social media site that serves their specific marketing strategy most effectively. For instance, to encourage communication and interaction around the design ideas behind fashion products with social media consumers, fashion marketers could consider sites such as Facebook and Twitter with instant feedback and live interaction. However, if they aim to launch a new product and encourage consumption, social media sites such as Instagram and Pinterest with higher-quality pictures and video could be prioritised. If the goal is to reach and inform a wider audience of consumers, the more 'traditional' and popular social media sites such as Facebook may remain a wise choice.

Social media marketers should also seek to enhance consumer engagement with SMM by building up the trustworthiness of SMM content embedded within their social network communities. To build up the trustworthiness of fashion marketer-generated content, instead of using emotion-focused appeals (e.g. using peers' word of mouth, or celebrity endorsements), fashion social media marketers should respect consumers' cognitive judgement and rational choices by focusing more on facts and features of their products or services when generating their SMM content. That is, informative, dependable, reliable and trustworthy social media content can work to build up trustworthiness and hence consumers' social media engagement. Moreover, although peers may be viewed as personally trustworthy, peer-generated content can be seen as less trustworthy due to their lack of expertise. However, messages from social media opinion leaders are more trustworthy due to their knowledge of specific products or services. Therefore, to choose the latter as the source of SMM may engage consumers more effectively.

6.3. Limitations and Future Research

There are several limitations to our study, which are viewed as offering the potential for future research. **First**, we used two fundamental constructs, trustworthiness and media richness, as proxies for a range of contextual factors. However, the media context is complex and multi-dimensional and, therefore, systematic exploration of the context dimensions and their conceptualisation could be a future research direction. **Second**, alongside consumer engagement, engagement with other stakeholders such as investors, local or national governments, and the broader public on online social media is also crucial for the performance management of firms (Yang *et al.*, 2020). This to date has been the subject of little research, and it therefore provides another research direction in the future. **Third**, it should be noted that our findings are based in the context of fashion social media, and care should be taken for the

generalisation to other industries or sectors. This also indicates another future research direction.

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Appendix A. Assessment of Normality

	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Media Richness1	3.95	.863	-.627	.091	.415	.182
Media Richness2	4.30	.862	-1.346	.091	1.895	.182
Media Richness3	4.17	.868	-1.024	.091	.951	.182
Engagement Act1	2.99	1.247	-.136	.091	-.929	.182
Engagement Act2	3.48	1.248	-.462	.091	-.766	.182
Engagement Act3	3.30	1.268	-.340	.091	-.889	.182
Engagement Act4	3.49	1.233	-.518	.091	-.686	.182
Engagement Act5	2.75	1.393	.216	.091	-1.219	.182
Engagement Act6	2.63	1.417	.283	.091	-1.274	.182
Engagement Act7	2.64	1.364	.248	.091	-1.190	.182
Engagement Act8	3.43	1.341	-.491	.091	-.940	.182
Engagement Act9	2.22	1.288	.692	.091	-.715	.182
Engagement Act10	2.33	1.365	.611	.091	-.920	.182
Engagement Act11	2.08	1.353	.935	.091	-.463	.182
Engagement Act12	2.14	1.336	.850	.091	-.589	.182
Content trustworthiness1	3.85	.934	-.780	.091	.682	.182
Content trustworthiness2	3.83	.909	-.604	.091	.315	.182
Content trustworthiness3	3.85	.908	-.552	.091	.146	.182
Content trustworthiness4	3.73	.990	-.522	.091	-.001	.182
Content trustworthiness5	3.79	.931	-.552	.091	.277	.182
Engagement intention1	4.06	.906	-1.025	.091	1.126	.182
Engagement intention2	3.47	1.020	-.202	.091	-.459	.182
Engagement intention3	3.98	.881	-.969	.091	1.279	.182
Engagement intention4	3.64	1.062	-.543	.091	-.209	.182