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Social media celebrities and new world order: What drives purchasing behavior among social media followers?

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Abstract:	Social media celebrities (SMCs) and social media platforms (SMPs) have become indispensable in today's business and marketing settings. Drawing on the celebrity influence model (CIM), this study examines the impact of SMCs on their followers' purchase intention and the moderating influence of SMP usage on the relationships between (a) SMCs and their followers' purchase intention, (b) para-social relationships (PSR) and purchase intention and (c) identification and purchase intention. We used 665 valid responses collected via an online questionnaire in China and then employed partial least squares structural equation modelling (PLS-SEM) to examine the proposed relationships between the variables. The findings revealed that SMCs do not significantly influence their followers' purchase intention directly; however, they do exert such influence through PSR and identification. The results further indicated that SMP usage moderates the effect of PSR and identification on purchase intention. Our study offers both theoretical and managerial contributions. Theoretically, the incorporation of CIM into this study's model augments the PSR and identification literature in the context of SMCs. Again, the moderating effect we reveal of SMP usage is novel in the social media literature. In practice, marketers in China should consider the credibility and rapport a particular social media celebrity has with his or her followers before contracting that particular celebrity to endorse their products.
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Response Letter

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Dear Editor,

We wish to sincerely acknowledge the editor and the reviewers for the constructive feedback and sincere efforts towards improving the manuscript. We appreciate your comments, feedback, and suggestions. They are specific and helpful. We believe that this manuscript has become significantly better through this collaborative effort shared by the reviewers and the authors. The revisions are highlighted in red font in the revised manuscript. The following are our responses to each of the reviewer's comments. Kindly inform us if we have not interpreted the comments correctly.

Reviewers' comments:

******** Reviewer # 1********

General Comment: Thanks for addressing the previous comments and for your overall efforts in improving the manuscript. It definitely looks better now, Good Luck.

Response: Thank you so much for your encouraging words and constructive feedback. We sincerely appreciate your support in improving our manuscript.

******** Reviewer # 2********

General Comment: Thank you for the revision work, I have seen your remarkable effort to follow my previous comments to improve the manuscript. Yet, I have several following comments that would help to further enhance this paper's quality.

Response: Thank you so much for your words, encouraging feedback, and insightful observations. Indeed, your constructive comments help us a lot to improve the quality of the manuscript. We have addressed your concerns in this version, as detailed in the following responses.

Comment 1: As para-social relationship is the key theoretical novelty of this paper, you argued that you wanted to examine this in general rather than limiting within Chinese cultural context, and thus not linking to guanxi or collectivism in China.

- First, I think the norm of social media celebrities is more popular in China due in part to the collective culture where consumers are more interdependent and thus social influence is more salient here. Thus, I still believe it would enhance the paper's values if culture is somehow discussed in the Introduction.
- Second, in your second theoretical contribution, you stated that as most of previous research on SMC has been conducted in Western contexts and little attention has been paid to Chinese context. This is in fact a weak gap. Only saying that China is an emerging social media market is not sufficient enough to provide a good justification. Thus, I think it would be helpful to partly link your main construct of para-social relationship to unique cultural features in China, highlighting the contextual uniqueness of China will show clearly the motivation and rationale for undertaking this research.

Response: Thank you for the insightful advice. Following your constructive suggestions. We have linked the Chinese cultural context (collectivism and guanxi) in the introduction of the study (please see the red font text in the introduction on page 4). Accordingly, the theoretical contribution of the study has been revised.

Comment 2: Also, if you want to study para-social relationship in general, you have to provide good justification why Chinese context is relevant and appropriate for studying para-social relationship in your Introduction and discuss whether your model can be replicated in other contexts in the Discussion.

Response: Thank you for the insightful advice. Following your suggestion, as mentioned in the above comment, we have linked the Chinese cultural context in the introduction of the study. In line with your view, we also believe it enhances the paper's values. Regarding your comment on model replication— we agree— it would be interesting to highlight in the manuscript. Accordingly, we discussed it in the implication of the study since we kept the discussion only limited to the study findings (please see the second paragraph on page 22).

Comment 3: Your first theoretical contribution is weak, social media celebrities or social media influencing are certainly not a nascent area, simply using Google Scholar will generate a large number of papers on this area, I thus suggest revising this first contribution.

Response: Thank you so much for your words. In light of the comment, we have revised the first contribution of the study. For example, the revised implication mainly focused on the Chinese culture and uniqueness—and the potential for replicability of the model (please see the first paragraph on page 22).

To sum up, we would like to thank you for your helpful feedback again. We benefit very much from your comments. We believe the manuscript has greatly improved and hope you like this revised version.

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Abstract

Social media celebrities (SMCs) and social media platforms (SMPs) have become indispensable in today's business and marketing settings. Drawing on the celebrity influence model (CIM), this study examines the impact of SMCs on their followers' purchase intention and the moderating influence of SMP usage on the relationships between (a) SMCs and their followers' purchase intention, (b) para-social relationships (PSR) and purchase intention and (c) identification and purchase intention. We used 665 valid responses collected via an online questionnaire in China and then employed partial least squares structural equation modelling (PLS-SEM) to examine the proposed relationships between the variables. The findings revealed that SMCs do not significantly influence their followers' purchase intention directly; however, they do exert such influence through PSR and identification. The results further indicated that SMP usage moderates the effect of PSR and identification on purchase intention. Our study offers both theoretical and managerial contributions. Theoretically, the incorporation of CIM into this study's model augments the PSR and identification literature in the context of SMCs. Again, the moderating effect we reveal of SMP usage is novel in the social media literature. In practice, marketers in China should consider the credibility and rapport a particular social media celebrity has with his or her followers before contracting that particular celebrity to endorse their products.

Keywords: social media celebrities; para-social relationships; identification; social media platforms; and purchase intention

1. Introduction

China is among the most active social media environments globally, with nearly 926 million social media users in 2020 (Statista, 2021). That figure is expected to reach 1279 million by the end of 2026 (Statista, 2021). In addition, approximately 73% of the Chinese population were Internet users at the end of 2021 (Statista, 2022). Internet users include users of microblogging and social media platforms (SMPs), such as QQ, Sina Weibo, WeChat and video sharing platforms (e.g. Youku, Meipai and TikTok). The boom in Internet and social media use in China has led to the emergence of Internet celebrities and social media celebrities

(SMCs) who have become key opinion leaders (KOLs) in society (Tao et al., 2019; Zou & Peng, 2019). While the prior literature has utilised the terms Internet celebrities and SMCs interchangeably (Rogers, 2020; Zafar, Qui & Shahzad, 2020), our use of the term SMCs encompasses both Internet celebrities and SMCs.

Unlike traditional celebrities (e.g. those famous on TV and radio), SMCs become famous due to their active efforts to create content, including pictures, stories and videos on SMPs (Hwang & Zhang, 2018; Zafar, Qui & Shahzad, 2020). The recent literature has asserted that followers perceive SMCs to exhibit a high level of sincerity and trustworthiness compared to traditional celebrities (Lee & Eastin, 2020). Furthermore, SMC-related emotional attachment and perceived information value result in positive word-of-mouth for the brands SMCs endorse; this positive word-of-mouth, in turn, increases followers' purchase intentions (Sánchez-Fernández & Jiménez-Castillo, 2021). Consequently, SMCs earn far more than do celebrities engaged in traditional advertising models (Pan, 2017). Recognising that the position of SMCs as KOLs can augment the content of any brand, businesses have become increasingly reliant on SMCs for endorsements (i.e. influencer marketing; Shan et al., 2020). For example, many Chinese organisations promote their brands through SMCs, such as Taobao and Tmall, two leading Chinese online retail platforms that capitalised on the popularity of SMCs by making them a core part of their promotional strategy (Cheung, 2018). Thus, mirroring the steady growth in the number of SMC followers, the number of SMCs in China has likewise surged (Hwang & Zhang, 2018).

Because SMP advertisements save money and are highly effective, moreover, marketers now consider SMPs to be crucial advertising channels connecting marketers to their target audiences (Dehghani & Tumer, 2015). Via SMPs, users acquire knowledge, interact with familiar brands, share information and make purchases (Qualman, 2012), and the evidence indicates that these behaviours are stronger for SMC followers who spend a considerable amount of time on SMPs (Zafar, Qiu, Li, et al., 2021). For example, a recent study found that almost 35% of young people (e.g. aged 16–34) extremely like to purchase products online, especially products promoted by their SMCs on SMPs (GRIN, 2021). A recent study further reported that the longer followers remain on SMPs to interact with content created by SMCs, the stronger are those followers' identification with the respective celebrities (Jin & Phua, 2014). Scholars have termed this continuous interaction and identification of followers' with SMCs as a para-social relationship (PSR; Tao et al., 2019). PSR is conceptualised as a

psychological association in which users can establish one-sided relationships with celebrities on a particular media platform (Hartmann & Goldhoorn, 2011).

Past influencer marketing studies on social media have primarily emphasised the credibility of endorsers' source attributes, including the crucial role of trustworthiness, attractiveness and expertise (Gong & Li, 2019; Lou & Yuan, 2019). For example, a recent study showed that SMCs' perceived sincerity can influence consumers' evaluations of those influencers and of the brands they endorse (Lee & Eastin, 2020). Djafarova and Rushworth (2017) found that celebrities' credibility positively influences product evaluation. Shan et al. (2020) focused on the relationship-building process between consumers and SMCs and its impact on consumers' evaluation of endorsement content. While a growing body of research has addressed SMCs' traits (e.g. Kay et al., 2020; Zafar, Qiu, Li, et al., 2021), the role of SMCs in establishing PSRs with their audiences remains relatively understudied (Hwang & Zhang, 2018; Jin & Ryu, 2020; Shan et al., 2020; Sokolova & Kefi, 2020).

This is a significant lacuna in the existing research on the relationship between SMCs and their followers' PSRs, especially because the prior literature reveals contrasting findings. On the one hand, some studies have asserted that PSRs with bloggers and other digital celebrities increase followers' purchase intentions (Kim et al., 2015; Sokolova & Kefi, 2020; Zafar, Qui & Shahzad, 2020). Meanwhile, other studies have found that the PSR that followers establish with SMCs ultimately leads to celebrity identification (Tao et al., 2019; Wahab & Tao, 2019). Although scholars have studied the connection between traditional celebrities, PSRs and celebrity identification (Fraser & Brown, 2002; Kosenko et al., 2016; Wen, 2017), they have not conducted similar studies in the context of SMCs. This represents a gap in the existing knowledge regarding the pathways through which SMCs influence their followers' behaviour. In simple terms, the links between SMCs, PSRs and celebrity identification remain underexplored.

Additionally, empirical research on SMCs and their effectiveness in emerging markets (e.g. China) is lacking to the best of our knowledge. Scholars have reported that Chinese firms' marketing campaigns often approach indigenous SMCs to promote their products and increase their sales (Hwang & Zhang, 2018). For instance, a famous Chinese celebrity, Gogoboi, promotes up to 15 brands via WeChat campaigns (Jing-Daily, 2019). Because the Chinese SMCs market is growing rapidly around the globe, it is imperative to investigate why their followers purchase or consider purchasing the recommended products. In our view, such

investigation is even more required owing to China's unique cultural aspects, which significantly influence business operations and relationship maintenance in this economy. Cultural factors are important since individuals usually adopt the rules, values, and norms of the society they find themselves in—and these automatically influence individuals' choice of behaviours to adopt and neglect (Hofstede, 1984). The cultural dimension of collectivism is especially significant in China's context (Cho et al., 1999), which stresses the importance of the collective and the community. Additionally, *guanxi*, another unique cultural characteristic of China, refers to social networks or relationships that may assist an individual to deal or cope with problems experienced in their lives and also potentially impact the individual's decision-making process (Zhao & Castka, 2021). Due to the importance granted to relationships in the Chinese culture, we believe it is vital to understand how these relationships form on social media platforms and influence these platform users' relationships with SMCs, as such relationships may inform users' purchase and consumption intentions. For example, *guanxi* is one form that has been indicated to impact international joint venture formations in China (Zhao & Castka, 2021). Thus, we focus on investigating how and why relationships develop between social media users and SMCs, which is a topical issue in today's social media marketing-driven business scenario. We believe such investigations would provide us with essential insights into how organizations can leverage PSRs, and use SMCs for product or brand-related collaborations effectively.

Apart from the apparent gaps in our knowledge about the ways in which SMCs influence followers' behaviour, scholars have paid little to no attention to the role of SMP usage in this relationship. These are important gaps, which, if addressed, could offer a more nuanced understanding of SMCs' impact on product marketing and purchases. For example, SMP usage might influence consumers' purchasing behaviour (Zafar, Shen et al., 2021). SMCs' followers may spend more time on SMPs to receive updates about products SMCs have recently endorsed. This behaviour, in turn, may ultimately increase those users' purchase intentions.

The current study attempts to fill these aforementioned gaps by adapting the celebrity influence model (CIM; Fraser & Brown, 2002)—originally proposed for traditional celebrities—to explore the direct impact of SMCs on their followers' purchase intentions as well as the indirect impact of SMCs through PSRs and identification between SMCs and their followers on SMPs. This study also delves into the ways in which SMP usage motivates Chinese social media users to develop purchase intentions via their PSRs and identification

with the SMCs they follow. We, therefore, raise the following research questions: ***RQ1.*** Do social media celebrities impact their followers' purchase intentions? ***RQ2.*** Do para-social relationships between social media celebrities and their followers lead to purchase intentions? ***RQ3***. Do social media platforms moderate the relationships between para-social relationships and purchase intentions, identification and purchase intentions, and social media celebrities and purchase intentions?

The remainder of the paper is organised as follows. Section 2 briefly discusses the theory and relevant literature. Section 3 presents the model and develops the hypotheses. Section 4 describes the methodology, including the sampling procedure and data collection technique, questionnaire design and scale description, and selection of the control variables. Section 5 presents the statistical analysis techniques and results. Section 6 discusses the key findings, theoretical and managerial implications, and discusses the study's limitations and directions for future research.

2. Theoretical underpinning: Celebrity influence model

Fraser and Brown (2002) developed the celebrity influence model (CIM). According to Wen (2017), the CIM proposes four relationships: (a) exposure to a mediated (or traditional) celebrity influences followers' PSRs with the celebrity, (b) followers' PSRs with the celebrity influence those followers to identify with the celebrity, (c) celebrity identification prompts followers to compare their behaviour with that of the celebrity and, finally, (d) continuous identification with a traditional celebrity encourages followers to imitate the celebrity's behaviours and beliefs. The model emphasises the ways in which individuals are influenced by media exposure (Brown & Fraser, 2004). The model also claims that audiences can develop a liking for certain celebrities through PSRs (Fraser & Brown, 2002; Wen, 2017). As a result of their PSRs, audiences may aspire to look, think or even behave like the celebrities they follow, which could further promote their identification with those celebrities (Chia & Poo, 2009; Fraser & Brown, 2002).

Prior studies have employed the CIM to determine the impact of traditional celebrities on their audiences (Chia & Poo, 2009; Wen, 2017). Recognising that SMCs share similar characteristics with traditional celebrities, we applied the CIM to understand SMCs' impact on their followers. This endeavour is novel, however, with few previous scholars utilising the CIM in the context of SMCs. For example, Wahab and Tao (2019) determined the positive influence of online celebrities on their followers' purchasing decisions. Extrapolating from the existing

literature, we developed our research model by integrating the CIM, which addresses PSR and identification concepts in the social media context. Both PSR and identification are psychological constructs critical to our hypothesised framework. Our model did not consider compliance, however, because SMCs (or influencers) on social media do not exert direct influence over their followers when considering the SMP environment, or structure (Gass, 2015). In other words, although SMCs can be understood as endorsers of products on SMPs, they cannot directly reward their followers for making a purchase nor reprimand them for not making a purchase (Sokolova & Kefi, 2020).

3. Study model and hypotheses development

Our framework proposes that SMCs influence followers' PSRs, identification and purchase intentions. More specifically, the model proposes that PSRs influence identification, which also impacts followers' purchase intentions. Further, we conceptualise SMP usage to moderate the relationships of PSRs, identification and SMCs with purchase intentions. Figure 1, which defines SMCs as individuals with many followers and strong perceived social influence on social media, illustrates our study's conceptualised research framework (Zafar, Qui & Shahzad, 2020). SMCs are also known as Internet celebrities, social media influencers and digital celebrities (Zafar, Qui & Shahzad, 2020). PSR refers to followers' psychological association with SMCs, which drives them to establish a sense of familiarity and linkages (Zafar, Qui & Shahzad, 2020). Identification describes the extent to which followers associate themselves with SMCs (Agnihotri & Bhattacharya, 2021). Purchase intention refers to a mental stage in the decision-making process in which individuals develop a concrete willingness to act towards SMC-endorsed products or brands (Hutter et al., 2013). SMP usage, finally, refers to individuals' frequent use of SMPs to follow SMCs and their activities (Zafar, Qui & Shahzad, 2020; Zafar, Shen et al., 2021).

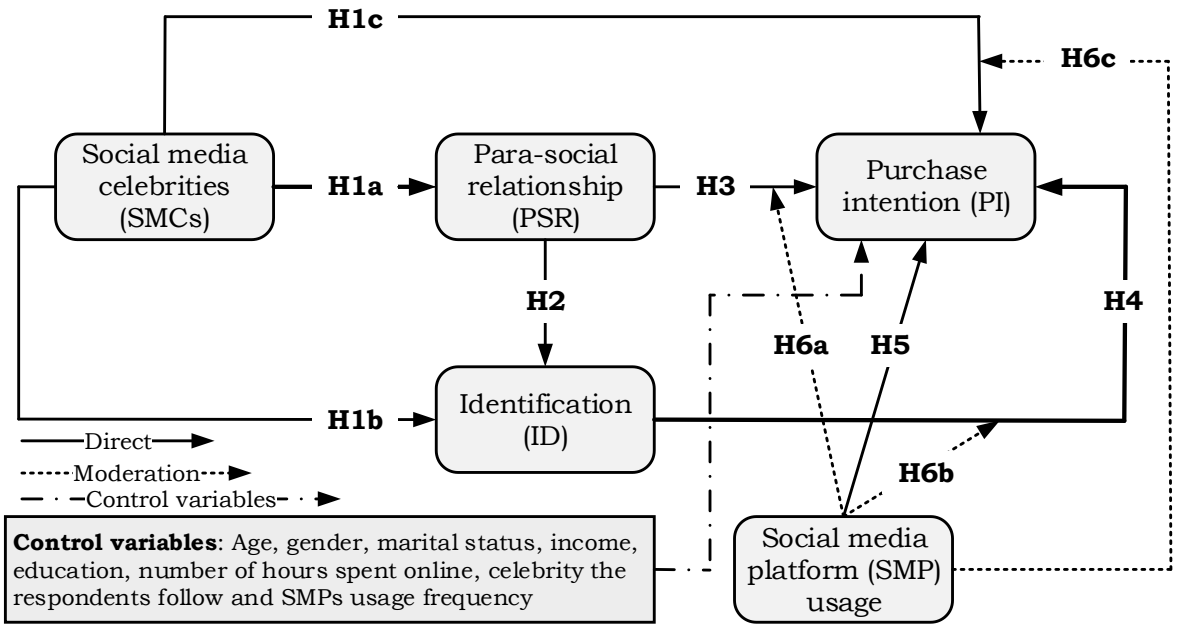

Figure 1. Conceptual framework

Note: The bold arrows show the paths in the celebrity influence model.

3.1 Influence of SMCs on PSR, identification and purchase intention

While the same is not true on traditional media, identity traits appear responsible for individuals' popularity on social media (Khamis et al., 2017) and their popularity as SMCs (Wahab & Tao, 2019). Djafarova and Rushworth (2017) argued that SMCs are perceived as trustworthy and influential, and they gain followers on SMPs due to their perceived trustworthiness (Pittman & Reich, 2016; Sheldon & Bryant, 2016). Zafar, Qiu, Li et al. (2021) further stated that SMCs' activities such as posts, likes, shares and comments on social media typically influence their followers' behaviour and emotions. Based on existing studies in the context of traditional celebrities, however, we contend that SMCs' influence on their followers emerges from followers' PSRs (Wahab & Tao, 2019) with these celebrities. For example, Schickel (1985) posited that followers of celebrities often feel that they know celebrities personally and usually entertain a 'fantasy of closeness' with them. Others have shown that followers' exposure to celebrities results in perceived close relationships with them (Brown & De Matviuk, 2010; Kosenko et al., 2016) and, subsequently, PSRs.

Importantly, such PSRs arise not from face-to-face social interaction (Wen, 2017) but from the mediated interaction of followers with celebrities through some form of social media use (Perse & Rubin, 1989), such as SMPs in our study context. Despite the celebrities' lack of

active knowledge (Giles, 2002) or contribution to such PSRs, these one-sided relationships can encourage followers to admire, imitate and become obsessed with celebrities (McCutcheon et al., 2002). Extrapolating from the extant research, we believe that, like traditional celebrities, SMCs influence their followers via such PSRs and hypothesise as follows:

H1a: SMCs' influence is positively related to their followers' PSR.

Many previous studies have indicated that individuals who spend a significant amount of time watching television are more likely to identify with the celebrities they frequently encounter when watching (Boon & Lomore, 2001; Fraser & Brown, 2002; Tao et al., 2019). For instance, Fraser and Brown's (2002) research revealed that Elvis Presley's fans identify with him and thus often become engrossed in issues about him in the media. They also tend to adopt his values and conduct, which indicates a strong social and personal transformation rooted in their high levels of identification. In a study pertaining to Magic Johnson, Basil (1996) concluded that individuals who heavily rely on television identify strongly with him and have strong feelings for him.

Relatedly, followers' identification with a celebrity contributes to the development of their self-identity because an individual's own identity is akin to his or her perceptions of others and vice versa (Cohen, 2001; Wen, 2017). Importantly, identifying with SMCs allows followers to consider social reality from different standpoints; hence, this identification helps to transform their social behaviour and self-identity (Jin & Phua, 2014; Kelman, 2006). The same can be said of SMCs' followers. Those individuals who depend heavily on numerous SMPs for news regarding their favourite SMCs are likely to identify strongly with those celebrities, see them as their personal role models, feel they can easily relate to them and adopt their values and even behaviour. We, therefore, hypothesise as follows:

H1b: SMCs' influence is positively related to their followers' identification.

Prior research has examined various SMC attributes, such as their reputation (Kim et al., 2015; Sokolova & Kefi, 2020), physical attractiveness (Sokolova & Kefi, 2020), perceived sincerity (Lee & Eastin, 2020) and authenticity, expertise and communication skills (Ryu & Han, 2021), all of which can favourably influence their followers' purchase intentions. Some scholars have even determined that celebrities trigger positive emotions in their followers, thereby demanding greater attention from them while also increasing the perceived social value of the products the celebrities endorse (Park & Yang, 2010). This influence on products' value and perhaps on followers' purchase intentions may be more evident in followers with lower

self-esteem (Zafar, Qiu, Li et al., 2021) or in those more inclined to imitate SMCs (Dinh & Lee, 2021). The prior literature provides evidentiary support for our contention that SMCs' influence is positively associated with their followers' purchase intentions (Dinh & Lee, 2021; Kim et al., 2015). Compared to non-celebrity endorsements, moreover, celebrity endorsements appear to instigate stronger positive attitudes towards brands and a comparatively higher rate of purchase intentions (Erdogan, 1999; Zafar, Qiu, Li et al., 2021). In other words, SMCs may play crucial roles as marketers by introducing their followers to brands, encouraging them to make purchases (Hwang & Zhang, 2018) and possibly increasing products' social value (Park & Yang, 2010). Hence, we posit the following relationship:

H1c: SMCs' influence is positively related to their followers' purchase intentions.

3.2 Para-social relationships, identification and purchase intentions

According to R. B. Rubin and McHugh (1987), social attraction, task attraction and a particular level of relationship are important for developing PSRs. Studies have suggested that traditional media personalities should be empathetic towards their audiences by embracing their audience's opinions and creating monologues that encourage audience members' participation (Hartmann & Goldhoorn, 2011). As Hartmann and Goldhoorn (2011) explained, "The audience responds [on TV performers] with something more than mere running observation; it is, as it were, subtly insinuated into the programme's action and [...] transformed into a group which observes and participates in the show by turns" (p. 1105). As a result of this type of participation, the audience may experience para-social interactions that are quite similar to their real-life social interactions (Hartmann & Goldhoorn, 2011).

According to the CIM, PSRs between mediated celebrities and their audiences can promote the audience's identification with those celebrities (Wen, 2017). Scholars posit that this psychological phenomenon encourages audiences to behave, think and aspire to look like the celebrities they follow (Chia & Poo, 2009). Furthermore, during the identification process, audience members may—as a result of their perceived commonalities with a traditional celebrity—espouse the celebrity's identity and role (Cohen, 2001; Wen, 2017). The same can be said for online SMCs and their followers. For instance, Wahab and Tao (2019) found that PSRs between followers and their favourite SMCs serve as antecedents to celebrity identification. Based on this evidence, we hypothesise as follows:

H2: PSRs with SMCs are positively related to followers' identification.

Many studies have determined that followers' PSRs with SMCs can positively influence followers' purchase intentions in various contexts, such as fashion products (Kim et al., 2015) and fast-moving consumer goods (Zafar, Qiu, Li et al., 2021). For example, Colliander and Dahlén (2011) found that bloggers and their followers develop strong PSRs as a result of the bloggers' activities; further, these PSRs enhance followers' purchase intentions towards products the bloggers promote. According to Sokolova and Kefi (2020), PSRs with SMCs impact followers' purchase intentions through their belief in the SMCs; this finding highlights the importance of the processes of internalisation and affectivity experienced by followers who are more inclined to purchase a product due to their PSRs. Compared to traditional celebrities, SMCs on SMPs more strongly impact the purchase behaviours of female followers between the ages of 18 to 30 years as a result of followers' perceived trustworthiness and social closeness (Djafarova & Rushworth, 2017). Based on the extant evidence, we also expect PSRs to be positively related to SMCs followers' purchase intentions and hypothesise as follows:

H3: PSR with SMCs is positively related to their followers' purchase intention.

3.3 Identification and purchase intentions

According to Kelman (2006), celebrity identification is a psychological state in which an individual seeks to initiate and maintain a pleasant relationship with a celebrity who is held publicly in high esteem by adopting the beliefs and mannerisms of the celebrity. Basil (1996) reported that followers' identification with celebrities contributes immensely to the impact of the messages they receive from those celebrities; this effect, moreover, results from PSRs. For example, scholars have determined that celebrity identification positively influences individuals' intentions towards genetic testing (Kosenko et al., 2016) and their attitudes towards cosmetic surgery (Wen, 2017). Kosenko et al. (2016) observed a particularly strong association between identification and intentions towards genetic testing among Angelina Jolie's followers. We extrapolate from these studies underscoring identification's influence on specific forms of followers' behaviour to hypothesise that identification in our study context will increase followers' purchase intentions for products endorsed by SMCs. Hence, we propose the following hypothesis:

H4: Followers' identification with SMCs is positively related to those followers' purchase intentions.

3.4 Social media platform usage

The use of SMPs has enabled individuals to create and share content on an unprecedented level (Kaur et al., 2021; Tandon, Dhir et al., 2022; Zafar, Shen et al., 2021), especially in the context of COVID-19 pandemic-related lockdowns (Elmer et al., 2020). Consequently, scholars and practitioners alike have acknowledged the crucial role that SMPs play in the current social and economic environment (Tsiotsou, 2015)—for example, by enabling individuals to maintain social connectivity (Tandon, Dhir et al., 2022; Zafar, Shen et al., 2021). Moreover, scholars have found that SMP usage in the post-COVID-19 environment encourages users to amass products and supplies (Reuters, 2020). For example, as online information sources, SMPs influence consumers' panic-buying of products in the midst of the pandemic (Hall et al., 2021; Yuen et al., 2021). Considering the effectiveness and efficiency of SMPs in reaching their target audiences and encouraging users' purchases of promoted products, firms are increasingly adopting such platforms for content or product promotion (Kietzmann et al., 2011; Schwemmer & Ziewiecki, 2018) and brand advertising (Shareef et al., 2019). Following prior research, we propose the following hypothesis:

H5: SMP usage is positively related to purchase intentions.

With many studies highlighting the importance of SMP usage in enhancing consumers' purchase intentions towards certain products (Babić Rosario et al., 2016; Zafar, Shen et al., 2021), this study further examines whether SMP usage moderates the associations of PSRs, identification and SMCs with purchase intentions.

In recent years, SMPs have become the primary channel people use to create online relationships (Al-Emadi & Ben Yahia, 2020; Upadhyay & Khemka, 2020). As internet-based virtual communities, SMPs make it possible for users to create and share information and ideas and communicate or interact with family, friends and even strangers who also use the virtual environment to share their stories and interests (Tang & Koh, 2017). Thus, we believe that the influence of SMCs on purchase intentions will depend on individual followers' SMP usage, which can be considered an index of the extent to which a follower uses social media technologies (Shaikh et al., 2021; Zafar, Shen et al., 2021). Our contention aligns with previous studies that have found SMP usage intensity to positively moderate the associations between bonding and social identity (Upadhyay & Khemka, 2020), electronic word-of-mouth and online purchase intentions (Bilal et al., 2021) and cyberbullying intentions and behaviour (Shaikh et al., 2021). Further, scholars have observed that netzines exhibit their own priorities

and patterns when using SMPs; accordingly, the influence of encountered stimulators varies among them due to differences in their cognitive and affective processing (Bilal et al., 2021; Zafar, Shen et al., 2021). For instance, SMC followers who devote more time to SMPs may have perceive that they have more informational, or better interactions with celebrities because they are more exposed to such celebrities. Thus, these followers are highly likely to process the element of celebrities' identification effectively. However, buying intention will vary for users who do not frequently use SMPs.

Zafar, Shen et al. (2021) demonstrated that individuals exhibit distinctive patterns of SMP usage (e.g. some people spend more time on SMPs compared to others) and adoption (e.g. some utilise only one SMP, while others maintain a presence on several). Accordingly, individuals' purchase intentions towards SMC-recommended products vary (Zafar, Qiu, Li et al., 2021). For instance, individual who are more inclined to use SMPs are likely to encounter more SMC activities, which will shape their purchase intentions differently than is the case for those who do not use SMPs as frequently. On this basis, we believe that the association between PSRs and purchase intentions will also depend on SMP usage, and we thus formulate the following hypotheses:

H6a: SMP usage moderates the impact of PSRs on followers' purchase intentions such that the positive relationship between PSRs and purchase intentions will be stronger (weaker) among followers with higher (lower) SMP usage.

H6b: SMP usage moderates the impact of identification on purchase intentions such that the positive relationship between identification and purchase intentions will be stronger (weaker) among followers with higher (lower) SMP usage.

H6c: SMP usage moderates the impact of SMCs' influence on followers' purchase intentions, such that the positive relationship between SMCs and purchase intentions will be stronger (weaker) among users with higher (lower) SMP usage.

4. Methodology

4.1 Sampling procedure and data collection technique

Aiming to develop and test the hypotheses based on already established theories, we employed Bryman's (2007) deductive research approach. To identify the SMCs for this study, we randomly selected 40 Chinese social media users and asked them to write down four (i.e. two male and two female) Chinese SMCs that came to mind (Pornpitakpan, 2004). Papi Jiang

(n = 22) and Zhang Dayi (n = 14) were the two most frequently listed females, whereas Brother Sharp (n = 19) and Aikelili (n = 12) were the two most frequently listed males. We, therefore, chose these four SMCs to ensure the subjects' degree of familiarity and prior exposure. These SMCs have millions of followers on Weibo (Chinese Twitter). For example, Papi Jiang has approximately 32 million followers, followed by Zhang Dayi with approximately 12 million followers. A recent report published in 2020 indicated that WeChat, Sina Weibo and Tencent QQ are the top three SMPs in China (DragonSocial, 2020), so we chose these platforms for our study.

We conducted a cross-section survey from June to August 2019, using both purposive and snowball sampling techniques to collect data. We created a self-administered questionnaire via an online platform (the Wenjuanxing platform) and shared the link to the questionnaire through WeChat, Sina Weibo and Tencent QQ (Ashfaq et al., 2021). Recognising that a small group of respondents can help to generate a large sample via their established SMPs (Bryman & Bell, 2011), we employed a snowball sampling technique to maximise the response rate through WeChat. After we deleted incomplete and inappropriate responses (e.g. some respondents did not follow any SMCs), a total of 665 valid responses remained (Appendix A).

Notably, SMCs can be categorised into four main types based on the number of their followers (Campbell & Farrell, 2020): celebrities with less than 10000 followers are considered nano, celebrities with 10000 to 100000 followers are considered micro, celebrities with 100000 to 1 million followers are considered macro and celebrities with 1 million or more followers are considered mega (Campbell & Farrell, 2020). Because brands primarily consider mega-influencers in their marketing strategies (Campbell & Farrell, 2020) and because we sought to explore followers' purchase intentions, we focused on these mega-influencers.

Usakli and Kucukergin (2018) recommend that PLS-SEM-based studies use statistical power analyses to determine the minimum sample size. Accordingly, we utilised the G*Power application to estimate the appropriate sample size (Erdfelder et al., 2009), with G*Power parameters containing 0.15 value for the f^2 (effect size), 0.05 for the α (error type) and 0.95 for the power, and including five predictors. The analysis indicated that a sample of 138 respondents was required for model testing. The number of valid responses for the current study was 665. Because this number exceeded the minimum threshold of 138, we deemed the sample adequate for analysis. In addition, we applied Hair et al.'s (2010) ten times rule to ascertain the number of respondents. According to the rule, the minimum sample size should

be 10 times the highest number of structural paths directed at a particular construct in the structural model. The number of structural paths in our model is 10, so testing the model required a sample size of 100. We exceeded this sample size recommendation as well.

4.2 Questionnaire design and scale description

We originally developed the questionnaire in English before translating it to Chinese with the help of some Ph.D. candidates who were fluent in both languages. In addition, focus-group interviews with five Chinese students (marketing majors) helped us to improve the questionnaire's clarity and readability (Hwang & Zhang, 2018). Finally, we sent the questionnaire to three Chinese professors who were bilingual and fluent in both languages to determine the clarity of each statement in the questionnaire (Ashfaq, Yun, Waheed et al., 2019). Based on their comments, we modified the wording of some questionnaire items.

To ensure the constructs' content validity, we adapted the items for the questionnaire from the literature to align with this study's context. To measure identification, we adapted four items from Basil (1996). The PSR construct, which we adapted from scales developed by prior scholars (Auter, 1992; Rubin et al., 1985), had five items, while we measured the impact of SMCs with five items adapted from a study on role model influence (Rich, 1997). Four items were adapted to measure purchase intention (Zeithaml et al., 1996). Finally, we adapted four items to measure SMPs (Ellison et al., 2007; Leong et al., 2018). In all, the questionnaire included 22 items (Appendix A), which were anchored on a five-point modified Likert scale (1 = strongly disagree and 5 = strongly agree).

4.3 Control variables

The study controlled for certain demographic and SMP usage variables that had the potential to impact the results. Specifically, we controlled for age, gender, marital status, level of education and monthly income level (Ali et al., 2020; Ashfaq, Yun, Yu & Loureiro, 2020; Ashfaq, Yun, et al., 2021; Kaur et al., 2021; Tandon, Kaur et al., 2021). We also controlled for the number of hours spent online, the frequency of SMP usage, the celebrity the respondents followed and the SMPs they used.

5. Statistical analysis techniques and results

We employed PLS-SEM via SmartPLS version 3.2.7 to test the hypothesised model (Ringle et al., 2015) and IBM SPSS Statistics version 24.0 to store and analyse the data. We selected the PLS-SEM technique because it is the most recommended and utilised approach in

exploratory studies (Sarstedt et al., 2017). PLS-SEM assesses the best estimate of relationships among constructs while simultaneously considering the structural model's measurement error (Sarstedt et al., 2017). Further, we employed a two-step approach, which involved analysing the measurement model before evaluating the structural model (Anderson & Gerbing, 1988). Finally, we used a two-way linear interactions effect for the moderation template (Dawson, 2014) to plot the moderating effects of SMPs in the relationships between SMCs and purchase intentions, PSR and purchase intentions, and identification and purchase intentions.

5.1 Common method bias

Following the recommendation of Kock (2015), we used the VIF values to ascertain possible CMB issues among the constructs of interest in the conceptual model. The highest VIF value in the model—2.207 (Table 1)—fell below the threshold value of 3.3 (Kock, 2015). Hence, we did not deem CMB an issue in this study.

5.2 Measurement model analysis

We evaluated the measurement model using guidelines from Hair et al. (2019). This involved ascertaining the convergent validity, internal consistency, reliability, discriminant validity and HTMT of correlations (Henseler et al., 2015). The Cronbach's alpha and composite reliability values exceeded the threshold of 0.70 (Hair et al., 2019), and the average variance extracted (AVE) of all constructs exceeded 0.50 (Hair et al., 2019). Following Hair et al. (2010), we removed the items that loaded below 0.70 to make the model more parsimonious. The remaining items and scale, thus exhibited good reliability and validity (Avkiran, 2018). Table 1 details the results of the reliability and confirmatory analysis.

Using the Fornell and Larcker (1981) criterion (Table 2) for discriminant validity, we determined that the AVE square roots exceeded the projected correlation values among the variables. However, to further confirm discriminant validity, we conducted the HTMT analysis suggested by Henseler et al. (2015). The HTMT values in Table 3 all fell below the acceptable level of 0.85, further confirming that discriminant validity was not an issue in our research (Henseler et al., 2015).

Table 1. Reliability and validity

Constructs	Items	Loadings	VIF	Cronbach's α	AVE	CR
Social media celebrities	SMCs1	0.777	1.690	0.849	0.624	0.892
	SMCs2	0.793	2.075			
	SMCs3	0.797	2.042			

	SMCs4	0.761	1.800			
	SMCs5	0.820	2.055			
Para-social relationship	PSR1	0.722	1.401	0.771	0.521	0.845
	PSR2	0.719	1.459			
	PSR3	0.734	1.423			
	PSR4	0.714	1.527			
	PSR5	0.719	1.515			
Identification	ID1	0.788	1.668	0.773	0.594	0.854
	ID2	0796	1.688			
	ID3	0.714	1.370			
	ID4	0.782	1.438			
Social media platforms	SMP1	0.764	1.530	0.814	0.641	0.877
	SMP2	0.824	1.872			
	SMP3	0.795	1.891			
	SMP4	0.818	1.710			
Purchase intention	PI1	0.793	1.781	0.814	0.644	0.878
	PI2	0.865	2.207			
	PI3	0.831	1.931			
	PI4	0.714	1.474			

Table 2. Discriminant validity

Latent constructs	1	2	3	4	5
1. Identification	**0.771**				
2. Purchase intention	0.505	**0.803**			
3. Para-social relationship	0.684	0.497	**0.722**		
4. Social media celebrities	0.522	0.398	0.593	**0.790**	
5. Social media platforms	0.436	0.419	0.417	0.376	**0.801**

Note: The bold values represent the square roots of the AVE.

Table 3. Heterotrait-monotrait ratio (HTMT)

Latent constructs	1	2	3	4	5
1. Identification					
2. Purchase intention	0.633				
3. Para-social relationship	0.877	0.625			
4. Social media celebrities	0.633	0.471	0.727		
5. Social media platforms	0.549	0.509	0.521	0.457	

5.3 Model fit

We used Tenenhaus et al.'s (2005) recommendation to ascertain the goodness-of-fit (GoF) index and confirmed the model fit by computing the average R^2 and AVE values. Lacking any specific thresholds, Wetzels et al. (2009) posited that 0.1 represents small, 0.25 represents medium, and 0.36 represents large fit, and these values can be used to evaluate the GoF. With 0.488 as the GoF index value in our study, we determined that the model had a good fit.

We further utilised the standard root mean square residual (SRMR) to correct the misspecification of the model as a goodness of fit measure for PLS-SEM (Henseler et al., 2015). Hu and Bentler (1998) suggested that a value less than 0.08 indicates a good fit. With an SRMR value of 0.068, our study complied with this threshold. Finally, the result indicated the model's significant and viable explanatory power (R^2; Figure 2).

5.4 Structural model analysis

The results of the hypotheses testing, which are detailed in Figure 2 and Table 4, indicated that the associations of SMCs with PSR (β = 0.593, t = 19.95, $p < 0.001$) and identification were significant (β = 0.179, t = 3.973, $p < 0.001$). However, SMCs did not significantly influence purchase intention (β = 0.082, t = 1.574, $p > 0.05$). Therefore, H1a and H1b were supported, while H1c was rejected. Moreover, PSR was significantly associated with identification (β = 0.577, t = 14.89, $p < 0.001$) and purchase intention (β = 0.224, t = 4.231, $p < 0.001$), and identification had a direct and positive association with purchase intention (β = 0.215, t = 4.283, $p < 0.001$). The effect of SMPs on purchase intention was also statistically significant (β = 0.212, t = 4.890, $p < 0.001$). Therefore, H1 was partially supported, while H2–H5 were fully supported in our study. The control variables (except for the SMPs, such as Weibo, QQ and WeChat, the participants used to follow celebrities) did not exert any significant influence.

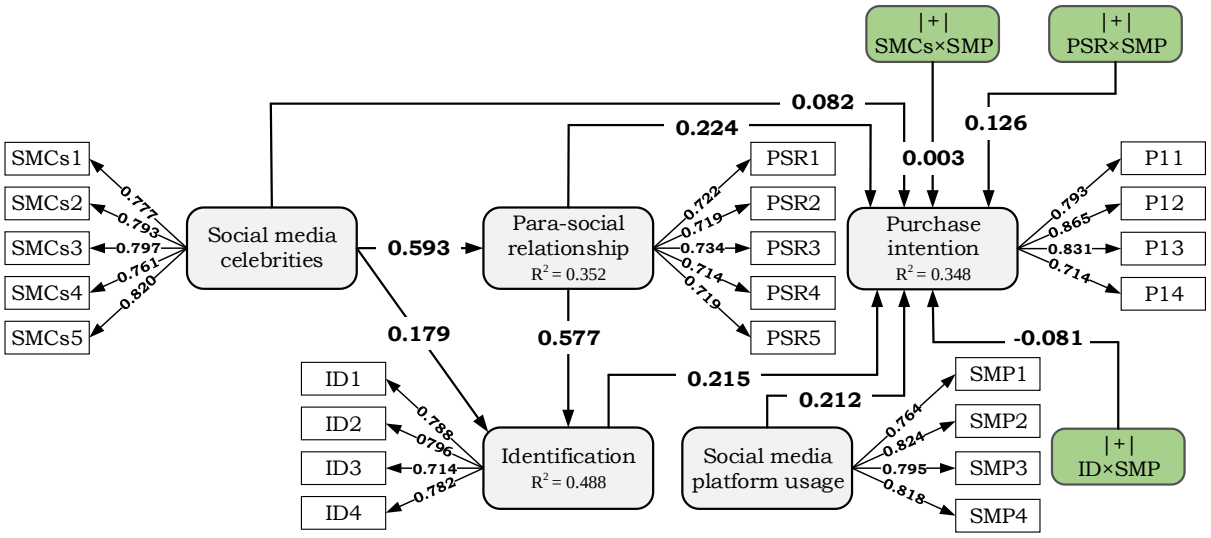

Figure 2. Results of the structural model

Table 4. Results of hypotheses testing

	Path	Beta (β)	*t*-values	*p*-values	Decision
H1a	SMCs → PSR	0.593	19.95	0.000	Supported
H1b	SMCs → Identification	0.179	3.973	0.000	Supported
H1c	SMCs → Purchase intention	0.082	1.574	0.115	Rejected
H2	PSR → Identification	0.577	14.89	0.000	Supported
H3	PSR → Purchase intention	0.224	4.231	0.000	Supported
H4	Identification → Purchase intention	0.215	4.283	0.000	Supported
H5	SMPs → Purchase intention	0.212	4.890	0.000	Supported

Note: SMCs: social media celebrities, PSR: para-social relationship, SMPs: social media platforms.

5.5 Moderation effects of social media platforms

We performed the moderation analysis based on the bootstrapping of 5000 resamples. Table 5 and Figures 3–5 depict the tested moderating roles of SMPs on the relationships of purchase intention with PSR (H6a), identification (H6b) and SMCs (H6c). Of the three hypothesised moderation effects, two were statistically significant and thus supported: H6a (β = 0.126, t = 2.885, $p < 0.01$) and H6b (β = -0.081, t = 2.095, $p < 0.05$). However, H6c was unsupported, with the results revealing no moderation effect of SMPs on the relationship between SMCs and purchase intention (β = 0.003, t = 0.057, $p > 0.05$).

Table 5. The moderating effect of SMCs

Hypothesis	Relationship	Beta (β)	t-values	*p*-values	Decision
H6a	PSR × SMPs → PI	0.126	2.885	0.004	Supported

H6b	Identification × SMPs → PI	-0.081	2.095	0.043	Supported
H6c	SMCs × SMPs → PI	0.003	0.057	0.957	Rejected

Note: PI: purchase intention.

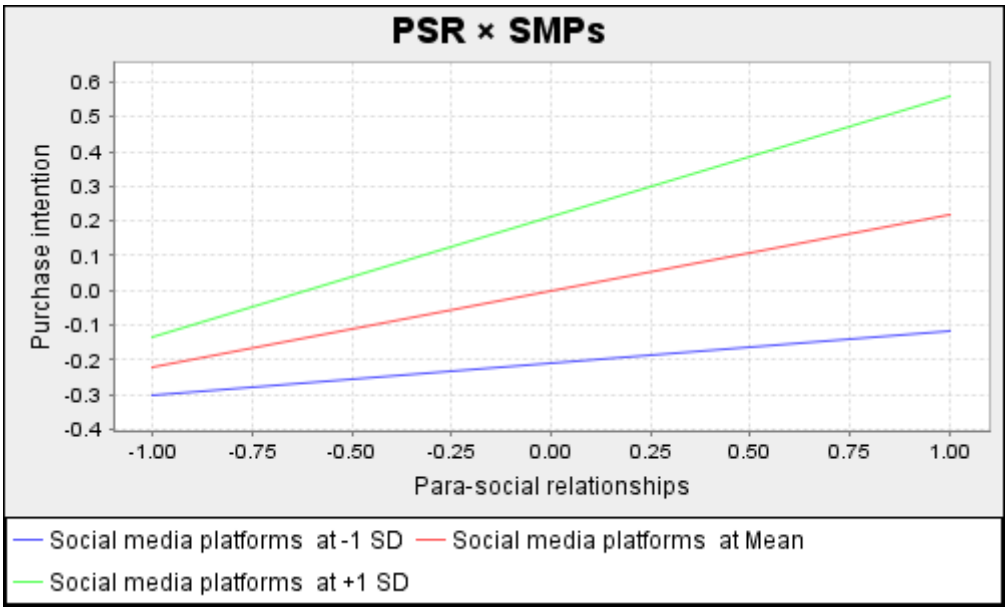

Figure 3. Moderating effect of SMPs on the relationship between PSR and purchase intention

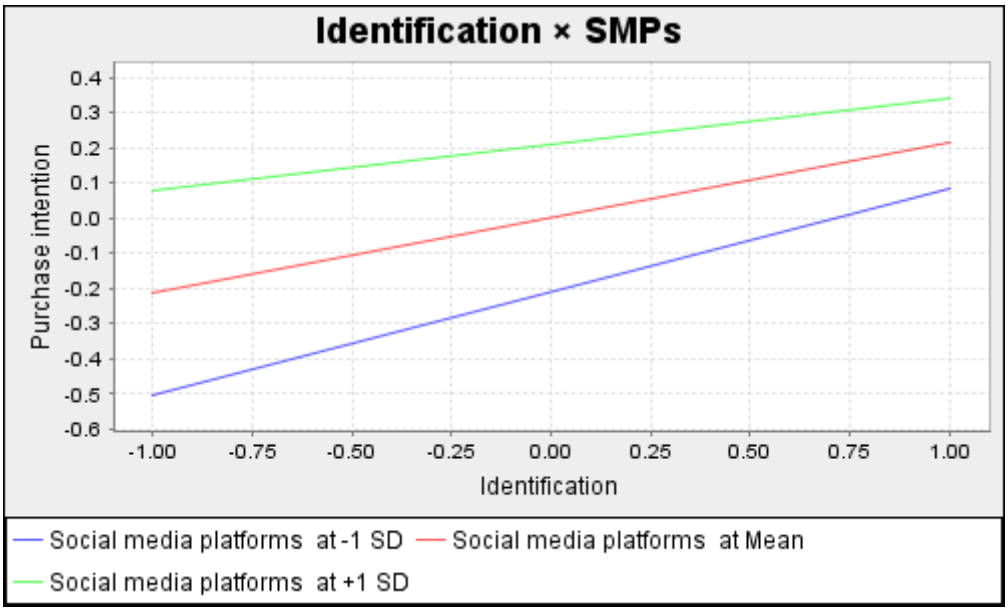

Figure 4. Moderating effect of SMPs on the relationship between identification and purchase intention.

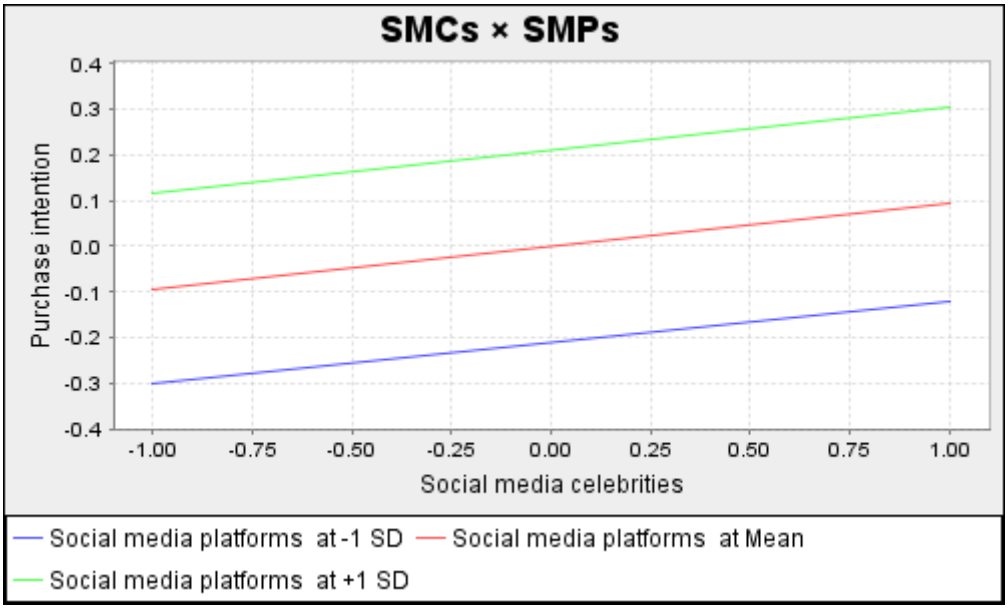

Figure 5. Moderating effect of SMPs on the relationship between SMCs and purchase intention

6. Discussion and implications

First, we investigated whether SMCs influence PSRs (H1a), identification (H1b) and purchase intentions (H1c). The results indicated that SMCs were a statistically significant predictor of PSRs and identification, supporting H1a and H1b. This is consistent with prior findings on celebrity influence and PSRs (Kosenko et al., 2016; Sokolova & Kefi, 2020; Wen, 2017) and could be the result of SMCs' positive actions. The findings suggest that when SMCs develop trust in their followers by setting positive examples for others, working ethically and being kind, their followers begin liking them and consider them to be role models. This liking establishes strong PSRs, which ultimately enhance followers' purchase intentions towards SMC-endorsed products (Sokolova & Kefi, 2020). Further, our results did not support H1c because SMCs did not directly influence followers' purchase intention. This contradicts the findings of prior studies (Kim et al., 2015). The insignificance indicated in our study may be explained by the different types of celebrities, such as micro, macro and mega and, in particular, on our study's focus on mega-celebrities; in fact, studies have reported that micro-celebrities are more credible than mega-celebrities (Campbell & Farrell, 2020).

H2 and H3 examined whether PSRs result in identification and purchase intentions. Our findings confirm a positive and direct influence of PSR on identification and purchase intentions, supporting H2 and H3, respectively. These findings align with those of prior scholars (Kim et al., 2015; Sokolova & Kefi, 2020; Wen, 2017), implying that followers' PSRs

with their favourite SMCs play a vital role in their decision-making process. For example, followers give significant weight to their favourite SMCs' opinions when deciding whether to purchase a product or brand, and they adopt behaviours and values that are similar to those of their favourite SMCs. In addition, PSRs with SMCs help to expand followers' social networks, negating the chance of rejection and allowing followers to model and identify with those who naturally elicit an empathetic reaction. Consequently, followers relate to their favourite SMCs, consider them good friends and exhibit favourable purchasing behaviour towards SMC-endorsed products (Wahab & Tao, 2019).

Our study also found a direct and positive effect for followers' identification with SMCs on their purchase intentions (H4). A critical element underlying behaviour change, identification is simply a form of social recognition, which occurs as a result of an individuals' understanding of a fulfilling self-defining relationship with another person (Tao et al., 2019). Therefore, followers who strongly identify with Chinese SMCs are more likely to react positively to SMCs' product endorsements and to purchase their recommended products (Tao et al., 2019). Furthermore, we found that SMP usage directly and significantly impacts followers' purchase intentions (H5). Additionally, we observed that SMP usage moderates the relationships between PSRs (H6a), identification (H6b) and purchase intentions. We attribute this result to the time that followers spend seeking information about their favourite SMCs, those SMCs' reviews of products or the products that they endorse (Zafar, Qiu, Shahzad et al., 2021). Because the moderating variable strengthens the direct relationships between PSRs, identification and purchase intentions, the strength of these relationships may be attributed to followers' SMP usage patterns (e.g. the number of social media group friends, memberships, time spent reading and writing posts). The findings also find some support in prior research. For example, Zafar, Shen et al. (2021) posited that the higher an individual's intensity of social media use (e.g. the amount of time spent on SMPs) and the more friends an individual has on SMPs, the stronger will be the individual's purchasing behaviour. We believe that followers' investment of time on SMPs may incline them to purchase SMC-endorsed products because they might consider such purchases a viable outcome of the time they invested. Thus, our findings confirm SMPs as an effective and indispensable tool for marketers and individuals alike to advertise and promote their products, services and brands to their target audiences.

6.1 Theoretical contributions

This study offers several theoretical contributions. First, with the existing literature focusing primarily on traditional celebrities (Kosenko et al., 2016; Wen, 2017), we have, to our knowledge, pioneered the empirical application of the CIM to the SMC context by revealing the influence of SMCs on PSRs, identification and followers' purchase intentions in the Chinese context. We feel that this study makes an essential contribution owing to the cultural uniqueness of China and the importance of relationships therein. For example, China has a high power-distance culture (Zhao & Castka, 2021), which means that individuals defer to others who are perceived to have high authority. In our study context, SMCs could be viewed by social media users as authoritarian figures; hence, these users may be intrinsically inclined to follow SMCs' lead in purchasing products that these SMCs endorse. Additionally, China has a collectivist culture with the unique attribute of *guanxi*, due to which Chinese persons may showcase a high commitment to reciprocity towards individuals connected by social network ties (Zhao & Castka, 2021). In our study, social media users' perceived close relationships (i.e., PSRs) with SMCs could be extrapolated to be understood as a micro-level form of *guanxi* wherein the users may be inclined to give preference to the SMCs' suggestions for purchasing products.

Additionally, while our findings indicate strong relationships among the tested variables of SMCs, PSRs, and identification—it would be beneficial to investigate these relationships in the context of other cultures, such as the United States of America, which are diametrically opposite to the Chinese culture. We imply the need to investigate our tested model to verify whether it shows similar strengths of associations or obtains similar statistical support in the context of other economies. Such cross-cultural investigations could indicate whether social media-based relationships follow (or not) the cultural norms observed in real life.

Second, although a large body of research has examined the influence of SMP usage on social media browsing (Zafar, Shen et al., 2021), conspicuous product consumption (Thoumrungroje, 2014), sustainable purchasing attitude (Zafar, Shen et al., 2021) and purchase intentions (Pöyry et al., 2013), we address the lacuna of investigations on the influence of SMP usage on SMC-endorsed products. Our findings indicate the importance of SMP usage patterns as an intervening variable, which, in turn, implies that SMP usage may determine the pathways that influence a user to purchase products advertised on such platforms. While our study

specifically considered the influence of mega SMCs, we believe that SMP usage may play a similar role via other influencers, such as in beauty and fashion, who have gained user trust.

Additionally, we believe that our findings can be extended to investigate the influence of specific aspects of SMP usage (e.g. the time of use, active vs passive modes of use) and the artefacts of various platforms (e.g. image sharing vs audio-visual sharing) on product purchase intentions. Thus, we call for such future research to investigate the nuances of SMPs as a marketing and advertising tool while also considering specific type of influencers (nano, micro and macro) in various product categories (e.g. general home improvement, beauty, fashion and health, etc).

Finally, because our study underscored the importance of PSRs and identification, we urge scholars to delve more deeply into the ways they are established. For example, scholars could investigate the impact of specific SMC characteristics as well as followers' demographics and life situations on the establishment of PSRs. Such nuanced investigations could assist researchers in developing more comprehensive models and frameworks to further examine the role of SMPs users' exposure to SMCs and other influencers in the development of users' purchase intentions.

6.2 Managerial implications

This study offers several practical implications that can assist SMCs, product owners (i.e. business organisations) and marketers in utilising SMPs as a viable platform for product promotion. First, we believe that while developing their product promotion strategies, marketers should consider the types of SMCs (e.g. mega, macro and micro) in terms of the number of their followers, those followers' loyalty and their propensity to purchase SMC-endorsed products. In fact, if their followers show an increased inclination to purchase endorsed products, even micro SMCs may act as critical promoters. Moreover, recent reports indicate that Chinese customers primarily judge celebrities on their behaviour and morals rather than on their work and awards (Retail in Asia, 2021). Thus, marketers should conduct their own studies to identify the type of SMCs that would be best suited to their own brand image and, in particular, to identify those SMCs who share similar characteristics and have followers similar to the brand's targeted users.

Second, our findings are especially significant for marketers in China, where celebrities seem to be more effective than in the Western market in promoting products (Retail in Asia, 2021). We urge product owners and marketers to strengthen SMCs' influence by establishing

a social media marketing team that could assist SMCs in responding to followers who show interest in an endorsed product—for example, by requesting more information on product ingredients or sales channels. These teams could, in our view, help to enhance PSRs because followers would likely perceive their communication with SMCs to be more open and thus be more inclined to trust them.

Third, we urge SMCs interested in product promotions to work with marketers to invest in the marketing tactics best suited to their own styles—for example, by offering time-bound and promoter code-specific discounts. Moreover, SMCs could identify their most active followers (in terms of purchases) and provide them with loyalty-based monetary and non-monetary incentives. For example, SMCs could refer to their most loyal followers in their live streams or product reviews and offer giveaways to them. SMCs could also request that followers who buy their endorsed products share screen space in a live video or offer a shared review of experiences with a purchased product. Such initiatives could help to incorporate a co-creation component into marketing strategies and encourage interactive dialogue between SMCs and their followers, which could, in turn, increase product sales.

Fourth, because SMCs are considered trustworthy, we extrapolate our findings to suggest that product developers (i.e. owners) and marketers consider integrating SMCs as KOLs to relaunch and rebrand stagnant products (Retail in Asia, 2021). Thus, these SMCs' reviews and opinions could also help to revive product sales and establish a more contemporary brand image for product owners. For this purpose, product owners could consider utilising SMCs as core brand/product ambassadors with a distinct presence on organisational websites and product-specific web pages.

Finally, we believe that product owners could use SMCs as evangelists to promote new brands and products among their target audiences. Becerra and Badrinarayanan (2013) propounded the concept of brand evangelism, which they defined as 'the active behaviour and vocal support of a brand by a customer, which includes actions that have to do with purchasing the brand, disseminating positive information about the brand through referrals and convincing others about the uniqueness of the brand against competing brands' (p. 372). By utilising SMCs as evangelists, product owners may gain an active strategic advantage in capturing consumers. Because SMCs typically have a loyal core group of followers, these followers can even be seen as a captive consumer segment for product owners and marketers, which they can gain without expending much effort or monetary investments. This acknowledgement of 'captive

consumers', in turn, can motivate SMCs' to offer positive remarks about the brands or products on their social media pages or walls.

6.3 Limitations and directions for future research

Despite our attempts to conduct rigorous research, our study has certain limitations that future studies should address. First, our findings are only applicable to the Chinese context due to our focus on SMCs and SMPs that are popular in this geographical context. In the future, scholars can expand the applicability of our model by testing it with more universally popular SMPs (e.g. Instagram or Facebook) and SMCs, such as Huda Kattan for beauty products or Mariano Di Vaio for fashion products. Along similar lines, while the SMPs we considered—i.e. WeChat, Sina Weibo and Tencent QQ—are the most popular in China, they are also quite similar in nature as messaging-based platforms. Scholars can advance the applicability of our framework by extending its application to the context of SMPs that offer other affordances (e.g. Instagram is more visual, and YouTube provides audio-visual benefits).

Second, livestreaming would be an interesting and emerging topic in the Chinese context; nonetheless, this study is not connected to this; we call future researchers to conduct studies on it, particularly in the Chinese context. Additionally, our study utilised purposive sampling, which can be subject to researcher- and sampling-related biases (Podsakoff et al., 2003). Scholars can address these potential biases in future studies by utilising well-regarded respondent recruitment platforms, such as *Prolific Academic*, *Credamo* and *MTurk*, to introduce randomness into the data collection process.

Third, the current study focused on mega influencers, which also limits the generalisability of our findings. With recent studies indicating that micro-influencers may be considered more authentic than mega influencers (Campbell & Farrell, 2020), we implore scholars to test our framework in the context of micro-influencers.

Fourth, we did not consider any specific products or brands endorsed by the SMCs included in our study. In the future, scholars can conduct comparative studies to understand the differences, if any, that may occur in the tested associations across different product categories (e.g. cosmetics vs clothing) and brands (luxury vs local brands).

Finally, our use of SEM hinders the determination of causality among the study variables, and we implore future scholars to build upon our findings by conducting experiment-based and observational research. Furthermore, since the female sample in our study was higher

than the male sample, future research can test the study model by including the same sample size for males and females to check whether results come different across the groups.

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Appendix A. Survey instruments

Social media celebrity
SMCs1: My favourite social media celebrity provides a good model for me to follow.
SMCs2: My favourite social media celebrity leads by example.
SMCs3: My favourite social media celebrity sets a positive example for others to follow.
SMCs4: My favourite social media celebrity exhibits the kind of work ethic and behaviour that I try to imitate.
SMCs5: My favourite social media celebrity acts as a role model for me.
Para-social relationship
PSR1: My favourite social media celebrity keeps me company when he or she is live on social media.
PSR2: I would like to meet my favourite social media celebrity in person.
PSR3: I see my favourite social media celebrity as a natural, down-to-earth person.
PSR4: My favourite social media celebrity seems to understand things I know.
PSR5: I like to compare my ideas with what my favourite social media celebrity says.
Identification
ID1: I think of my favourite social media celebrity as a good friend.
ID2: I have no doubt my favourite social celebrity and I would work together.
ID3: I will be very sad if any scandal befalls my favourite social media celebrity.
ID4: I see my favourite social media celebrity as a personal role model.
Social media platform usage
SMP1: Using this online social media platform is so absorbing that I forget about everything else sometimes.
SMP2: I am immersed in this online social media platform.
SMP3: I am enthusiastic about this online social media platform.
SMP4: I am excited when using this online social media platform.
Purchase intention
PI1: The opinion of my favourite social media celebrity influences me to say positive things about products or brands to other people.
PI2: The opinion of my favourite social media celebrity influences me to recommend products or brands to someone who seeks my advice.
PI3: The opinion of my favourite social media celebrity influences me to encourage friends or relatives to buy certain products or brands.
PI4: The opinion of my favourite social media celebrity influences me to continue to do business with a certain company even if it increases its prices.

Appendix B. Respondents' demographic profile

Measure	Items	Frequency	%
Age	18–22	299	45
	23–26	254	38.2
	27–30	74	11.1
	31–35	38	5.8
Gender	Male	207	31.1
	Female	458	68.9
Monthly income (RMB)	<2500	575	86.5
	2,501–5,000	60	9.0
	5,001–10,000	19	2.9
	10,001–20,000	6	0.9
	>20,000	5	0.8
Marital status	Married	---	---
	Single	665	100
Educational level	Bachelor's degree	471	70.7
	Master's degree	184	27.7
	Doctorate	10	1.5
Social media usage frequency	Everyday	597	89.8
	Once a week	23	3.5
	Two times a week	21	3.2
	Once a month	6	0.9
	Not sure	18	2.7
Social media platforms used to follow celebrities	Weibo	406	61.1
	QQ	128	19.2
	WeChat	131	19.7
Number of hours spent online	1–2	343	51.6
	2–3	160	24.1
	3–4	80	12.0
	4–5	11	1.7
	>5	71	10.7
Celebrity (followed)	Zhang Dayi	123	18.5
	Papi Jiang	329	49.5
	Brother Sharp	132	19.8
	Aikelili	81	12.2
Celebrity (identified with)	Aikelili	77	11.57
	Brother Sharp	84	12.63
	Papi Jiang	340	51.12
	Talented Little Panda	6	0.9
	Zhang Dayi	132	19.84
	Naicha Meimei	26	3.90