Dirasat: Human and Social Sciences, Volume 53, No. 10, 2026, 10998

Deanship of Scientific Research

Role of Celebrities in Enhancing Parasocial Interactions among Fans Using Facebook, X, and Instagram: A Case of Saudi Arabia and the Arab Gulf

Mohammed Alasmari*

Department of Media and Communication, King Khalid University, KSA.

Received: 2/3/2025
Revised: 20/4/2025
Accepted: 22/5/2025
Published online: 23/7/2026

* *Corresponding author:*
Moabalasmari@kku.edu.sa

Citation: Alasmari, M. (2026). Role of Celebrities in Enhancing Parasocial Interactions among Fans Using Facebook, X, and Instagram: A Case of Saudi Arabia and the Arab Gulf. *Dirasat: Human and Social Sciences*, 53(10), 10998. https://doi.org/10.35516/Hum.2026.10998

© 2026 DSR Publishers/ The University of Jordan.

This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY-NC) license https://creativecommons.org/licenses/by-nc/4.0/

Abstract

Objectives: The current paper aims to explore the role of celebrities in enhancing parasocial interactions among fans using social media—Facebook, X, and Instagram—in the Kingdom of Saudi Arabia and the Arab Gulf.

Methods: The methodology involves using descriptive and analytical approaches for their suitability for the scope of the research problem. The research sample consists of a total of 615 participants aged 18 to 79 years. Using the snowball sampling method, the research participants were primarily selected to conduct the current study. The research instrument used in this study is an item-based questionnaire consisting of 45 related items.

Results: The results demonstrate the significant role of celebrities in enhancing parasocial interactions among fans on Facebook, X, and Instagram in Saudi Arabia and the Arab Gulf. The findings also confirm that more time spent on these platforms results in greater parasocial interaction. However, following a higher number of celebrities does not lead to more parasocial interactions. Additionally, respondents' loneliness levels contribute to parasocial interaction.

Conclusions: This study contributes to our current understanding of parasocial interaction between social media influencers and their audiences. It is of high significance, as it opens new avenues for future research to conduct comparative studies of parasocial interactions with social media celebrities across various cultures.

Keywords: Parasocial Interaction, Celebrities, Social Media, Fans, Loneliness, Saudi Arabia, Arab Gulf

دور المشاهير في تعزيز التفاعلات الاجتماعية بين المعجبين باستخدام فيسبوك وإكس وإنستغرام: دراسة حالة المملكة العربية السعودية والخليج العربي

محمد الأسمري*

قسم الإعلام والاتصال، جامعة الملك خالد، المملكة العربية السعودية

ملخّص

الأهداف: تهدف هذه الورقة البحثية إلى استكشاف دور المشاهير في تعزيز التفاعلات الاجتماعية غير الرسمية بين المعجبين الذين يستخدمون وسائل التواصل الاجتماعي "فيسبوك، إكس، وإنستغرام" في المملكة العربية السعودية والخليج العربي.

المنهجية: تعتمد المنهجية على استخدام المنهجين الوصفي والتحليلي لملاءمتهما لنطاق مشكلة البحث. تتكون عينة البحث من إجمالي (615) مشاركًا تتراوح أعمارهم بين (18) و(79) عامًا. باستخدام أسلوب أخذ العينات المتتالية، تم اختيار عينة البحث "المشاركين" بشكل أساسي لإجراء الدراسة الحالية. أداة البحث المستخدمة في هذه الدراسة هي استبانة قائم على البنود يتكون من (45) بندًا مترابطًا.

النتائج: تُظهر النتائج الدور الكبير للمشاهير في تعزيز التفاعلات الاجتماعية غير التقليدية بين المعجبين باستخدام منصات التواصل الاجتماعي "فيسبوك، إكس، وإنستغرام" في المملكة العربية السعودية ودول الخليج العربي. كما تؤكد النتائج أن قضاء وقت أطول على منصات التواصل الاجتماعي "فيسبوك، إكس، وإنستغرام" يؤدي إلى مزيد من التفاعل الاجتماعي غير التقليدي. علاوة على ذلك، تشير النتائج أيضًا إلى أن متابعة عدد أكبر من المشاهير لا يؤدي إلى مزيد من التفاعلات غير التقليدية. وبالمثل، وُجد أن مستويات الشعور بالوحدة لدى المشاركين تُسهم في التفاعل غير التقليدي.

الخلاصة: تُسهم هذه الدراسة في فهمنا الحالي للتفاعلات الاجتماعية غير التقليدية بين مؤثري مواقع التواصل الاجتماعي وجماهيرهم. وتكتسب هذه الورقة أهمية بالغة، إذ تفتح آفاقًا جديدة لأبحاث مستقبلية لتطوير دراسات مقارنة حول التفاعلات الاجتماعية غير التقليدية مع مشاهير مواقع التواصل الاجتماعي وجماهيرهم في مختلف الثقافات.

الكلمات الدالة: التفاعل الاجتماعي، المشاهير، وسائل التواصل الاجتماعي، المعجبون، الوحدة، المملكة العربية السعودية، الخليج العربي

1. Introduction

While literature involving parasocial phenomena has focused on connecting people via radios, movies, and mainly TV personalities, digital technologies present a new platform form establishing, sustaining, and even strengthening parasocial interactions (Alassaf, 2025; Ledbetter & Redd, 2016). Celebrity interactions in previous years were limited and cautiously managed by personalities for promotional and advertising purposes. However, this one-sided relationship seems to shift into a more interactive and reciprocal relationship (Al-Ghammaz et al., 2025; Escalas & Bettman, 2017).

Social networks such as Facebook and X make more significant contributions to parasocial interactions (Rasmussen, 2018). Parasocial interactions through social media have thus become everyday people's way of life Korean Wave fans in Singapore (Chung & Cho, 2017). Celebrities' professional self-disclosure, personal self-disclosure and fans' retweeting behavior, enhances fans' feelings of social presence, thus positively impacting parasocial interaction with celebrities (Kim & Song, 2016). The audience responds by following their preferred celebrity, peeking into their secretive lives and knowing them intimately (Chung & Cho, 2017). These interactions create a potential opportunity for the development of greater feelings of intimacy with celebrities (Xiang et al., 2016).

Previous studies have examined the interactions between fans and celebrities around the world (Lueck, 2015; Ward, 2016). Few studies have focused on the Middle East (Kim & Song, 2016; Krause, North & Heritage, 2018), and almost none do so in Saudi Arabia. The study, therefore, examines the social interactions between users of social media and their celebrities by addressing three important variables, i.e. demographic, interaction behavior, and interaction motive. With this in mind, this paper aims at exploring the role of celebrities in enhancing parasocial interactions among fans using social media "Facebook, X, and Instagram" in Kingdom of Saudi Arabia and the Arab Gulf.

2. Research Problem

The collectivist's cultures of the nations that make up the Gulf Cooperation Council (GCC) present a unique cultural condition for parasocial interaction effect. According to (Al-Sharekh, 2016), the growing significance of digital identity in the GCC as a means of self-expression and form of socio-political activity can never be undervalued. As Gulf leaders look out for online approvals, and Gulf citizens are encouraged to understand the humane side to their leaders, a new sense of judgement emerges, changing the present social bond amongst GCC governments and their nationals in ways not revealed (Al-Sharekh, 2017).

Parasocial interaction states that audiences form relationships with personalities they like through various digital media as they form relationships in real life (Stever, 2017). Research looks at three different variables related to parasocial interaction (Frederick et al., 2012; Walsh et al., 2016) demographics, interaction behavior and interaction motive (Stever, 2017). Previous parasocial studies have examined media characters (Knoll et al., 2015). The study added to the current literature on parasocial interactions and celebrities on audiences and media relations.

According to Usher (2015), the phenomenon of parasocial interaction (PSI) explains the relationships between media personalities and celebrities. Social media increases the opportunity for celebrity-fan interaction, increasing the audience's engagement. Organizations have responded quickly by seizing this marketing potential (Xiang et al., 2016). Some celebrities perceived inaccessible are interacting openly with their followers via online platforms, sharing personal lives in a more unclarified way (Krause, North, & Heritage, 2018). Within this world full of celebrity endorsement, the intimacy social media providers can be appealing to brands, which may be necessary to different industries.

Celebrity is important as it is a commercial culture at work which reflects the direction of the democratic life a country takes. Accordingly, the research problem lies in answering the following question stipulating "What is the role of celebrities in enhancing parasocial interactions among fans using social media "Facebook, X, and Instagram" in Kingdom of Saudi Arabia and the Arab Gulf?

3. Research Hypotheses

Given the research objectives, questions, and problem, the following hypotheses are formulated:

H1: Higher social media use will be positively correlated with loneliness.

H2: Higher social media use will be positively correlated with parasocial interaction.

H3: Higher levels of loneliness will be positively correlated with parasocial interaction.

4. Literature Review

Developed by Horton and Wohl (1956), the parasocial interactions (PSI) model describes the virtual intimate relationships between the audiences and media characters. The concept is widely used in developing powerful and innovative public relations and marketing strategies. Different scholars have used parasocial interactions to explain relationships that develop between users and media personalities (Knoll et al. 2015; Xiang et al. 2016). The common belief has been that fans respond to interactions more than just observations (Dai & Walther, 2018). Dibble, Hartmann & Rosaen (2016) defined parasocial interaction as the reaction of media users to media performers where the users perceive the performers as intimate conversational partners. The experience is usually stimulated when the media personality addresses the viewers through body orientation in a camera (Baldauf-Quilliatre & De Carvajal, 2015). However, contemporary communication scholars have studied parasocial interactions in a broader context past televisions and radios (Brown, 2015). These studies demonstrate that individuals develop imaginary relationships with personalities through various channels including social media (Gleason, Theran, & Newberg, 2017; Hu, 2016).

Parasocial interactions make the audience see celebrities as individuals of contact. This intimate connection provides emotional and social gratifications motivating fans to hunt for more interactions (Bond, 2016). Entertainment managers are known to use this model to raise viewership, develop loyalty, improve sales and generate revenue (Lueck, 2015). Organizations apply different persuasion tools to develop parasocial interactions hoping to gain sponsorships and advertising. Additionally, organizations use media personalities to influence the viewers to purchase products that impersonate celebrities (Kim, Ko, & Kim, 2015). Due to the scope of the research problem and objectives, the literature review is articulated to address the concept of celebrity, social media and parasocial interaction, demographic variables, loneliness scale and parasocial interaction, and the collectivist culture of Saudi Arabia and the parasocial interaction.

4.1 Celebrity

Celebrity can be defined as "a renowned, determined, and constructed character whose private and real-life attracts much media and audience attention as professional endeavors" (Van den Bulck, Paulussen & Bels, 2017, p. 46). Harmon-Kizer (2017) defined celebrity as a renowned individual who attracts masses and public attention, or attention from other individuals. Some have regarded celebrities as a sign of a disturbing cultural change towards beliefs which value short-lived, graphical and dramatic issues over the lasting, patterned and rational (Turner & Larson, 2015). Consumers and investors have viewed celebrities as an inborn or 'natural' superiority possessed exclusively by few extraordinary entities and exposed by talent promoters. Meanwhile, scholars of culture have focused on celebrities as products with some cultural and economic processes (Rasmussen, 2018). Some of these processes amount to what is termed by Burgess, Mitchell & Münch (2018) as a celebrity industry, commodifying individual celebrities through promotions, public relations, and advertising. The implication of the process becomes cultural identity which is negotiated and formed through the representative strategies applied by the media when handling celebrities (Martin & Tao-Peng, 2017).

4.2 Social Media and Parasocial Interaction

Social media platforms provide exceptional opportunities to study parasocial interactions due to their facilitation of connecting a user to a substantial number of fans, elevating their status to celebrity. The spread of visual media has sped up some of these social (Brown, 2015). Technological advancements in internet connectivity are rapidly changing the fan-celebrity dynamics, as social networking sites develop new ways for fans to connect (Chung & Cho, 2017). These features could lead to interactions and relationships, which are both real and imagined while online and offline.

Fictional relationships likely lead to the perception of a friend-like connection between fans and celebrity (Clark, 2016;

Kim & Song, 2016). These friend-like connections are traced through the steady development of shared experiences and self-disclosure, spontaneously bonding individuals together. Clark (2016) found that just like pioneers on a new land, social media users connect to create a universe. This is affirmed by Kim & Song (2016) who examined how celebrities' self-disclosure on personal social media accounts affects fans' perceptions. The results established that celebrities' professional and personal self-disclosure as well as fans' re-tweeting behavior enhances feeling of social presence, thus significantly impacting on the parasocial interaction with celebrities. Further, Ingram and Luckett (2017) define a fictional character as an imaginary persona characterized in works of fiction. The study found that interpersonal aspects of reading and sociable aspects of watching movies lead to a larger experience of the dimensions of parasocial interaction.

Various studies have found that parasocial relationships can be developed via conventional tools such as print and mass media (Savage & Spence, 2014) and internet and social networking sites (Kim, Ko, & Kim, 2015). Social media interactions remain a prominent characteristic of expectations of fans regarding celebrities and can relate to the parasocial relationship between the followers and their favorite artists (Krause, North & Heritage, 2018). Fans' celebrity attitudes and relationship attachments are vital in projecting the degree at which fans use social networks to relate to celebrities; thus, fan behaviors have a visibly psychological element.

4.3 Demographic Variables

Previous research identified the relationships between social media use and demographic variables such as age and gender (Ahmad, Mustafa, & Ullah, 2016; Murthy, Gross, & Pensavalle, 2015).

Age: Adults may have less use of social networks compared to younger individuals, possibly due to less knowledge of technology or focus of other social objectives (Liu & Baumeister, 2016). The adoption of social media is increasingly growing every day among the aging population (Hutto et al., 2015). However, SNS remains the most popular amongst the young generation aged 18-29 years (Duffett, 2017). This is in line with the time when celebrity taste has developed rapidly leading to social cognition (Gabriel, Valenti & Young, 2016).

Gender: Parasocial interactions between two genders also vary, as men are known to constantly use online platforms to search for content or information. A study on social comparison with celebrities among adolescents has revealed that female adolescents significantly associated with body image dissatisfaction and the determination to become slim (Tiggemann & Zaccardo, 2015). However, celebrity involvement has a significant relationship with male body image dissatisfaction (Ho, Lee, & Liao, 2016). Besides, Instagram is rapidly gaining popularity as a preferred social channel with more than 600 million active users. Al-Kandari, Fahad, and Ahmed (2017) conducted a study on gender motivational differences in Instagram use, and their study revealed that while both genders used Instagram mostly for entertainment, the priority of other intentions varied. Females are less expected to possess public accounts, post personal images, and reveal personal data. This means that females are more likely to run private accounts than males. Likewise, self-perfectionists in both genders exceptionally modified their personal images before posting them and are more likely to use Instagram for self-presentation (Al-Kandari, Fahad, & Ahmed, 2017).

4.4 Loneliness Scale and Parasocial Interaction

Parasocial interactions have theoretically substituted normal social interactions, implicating that engaging in parasocial interactions can improve any loneliness triggered by social deprivation (Lim & Kim, 2018). However, Using Loneliness Scale (ULS-6) from a sample of Palestine's students, Nazzal, Cruz, and Neto (2018) found that people who receive more support report less loneliness. Rasmussen (2018) found that lower levels of loneliness have strong parasocial relationships. Similarly, Stever (2017) argues that watching one's favorite programs and engaging in parasocial interactions leads to reduced levels of loneliness. Gleason, Theran, and Newberg (2017) parasocial interactions, one-sided connections imaginary, are common in young people and play a role in the formation of adolescent identity and autonomy development. This could be essential in shaping the level of loneliness. For instance, Rubenking and Bracken (2018) found that watching a favorite program on a television buffer against feelings of loneliness more than other aspects such as feeding, web surfing, listening to music, and viewing anything broadcasted on TV. Hu (2016) found that loneliness has a positive relationship with parasocial breakup distress. An individual engaging in parasocial interactions via television to combat loneliness would

experience greater distress following parasocial breakup dissolutions (Hu, 2016).

4.5 The Collectivist Culture of Saudi Arabia and the Parasocial Interaction

Artistic and film festivals are progressively becoming popular, with increased global attention and interest, an equal amount of global criticism arises. Therefore, Gulf states are in a conflicting state of promoting and protecting their cultural values (Mirgani, 2017). Gulf Cooperation Council (GCC) seems to promote its collectivist culture (Abokhodair & Vieweg, 2016). Collectivist cultures emphasize the needs and goals of a whole group rather than those of an individual. Relationships with other group members and the interconnections amongst people play a fundamental role in the respective person's identity (Van Hoorn, 2015). Saudi Arabia is a member of the GCC, which is an alliance of six Middle East countries. The alliance was formed to bring unity and empower their people politically and economically (Britannica, 2019). The collective culture of the GCC makes one think that the parasocial interactions would function differently in Saudi Arabia. Parasocial interaction effect claims that social media connects members of the audience with personalities that were unknown before their appearance on the platforms. Research shows that the Arab countries are regarded to have a collective and less of an individualistic culture (Jabeen, Friesen, & Ghoudi, 2018). Thus, Arabs tend to prioritize the concerns of a group over their personal self-interests. Technology advancement over the years has changed the way individuals interact, build and maintain relationships.

5. Method

The methodology involves using descriptive and analytical approaches for their suitability for the scope of the research problem. The descriptive method is one of the basic scientific methods used in scientific research. It aims to describe phenomena and problems as they are, without the researcher intervening or attempting to change them. This approach depends on accurately collecting and analyzing data and information about the phenomenon to be studied to arrive at a comprehensive understanding. The descriptive approach is one of the most common approaches in social and humanities research, as it helps collect quantitative and qualitative data that provides a comprehensive picture of a topic.

Furthermore, the analytical approach is a research method that aims to study phenomena by analyzing and interpreting data to reach accurate conclusions. In this approach, the researcher goes beyond simply describing the phenomenon to explaining its causes, details, and influencing factors. The analytical approach is widely used in research that aims to study relationships between variables and understand the complex interactions between them.

Research Sample and Instrument

The research sample consists of a total of (615) participants from (18) to (79) years old. With the use of snowball sampling method, the research sample “participants” were primarily selected to conduct the current study. The research instrument used in this study is an item-based questionnaire consisting of (45) related items.

An institutional review board approved an item-based questionnaire consisting of (45) items. Participants for this study were primarily selected through snowball sampling. A link to an Internet-based survey was posted on X and Facebook by social media influencers in the GCC area. A total of (915) respondents checked the survey on Qualtrics. Of the (915) respondents, (302) did not respond to the first question in the study, requesting them to identify the nation in which they are based. Therefore, a (33.0%) nonresponse rate is attained. These responses were removed from the dataset, lowering the sample size to (613) responses.

Research Variables

The current study examines parasocial interaction as it relates to three important variables: interaction behavior, interaction motive and demographics. A parasocial group interaction can trigger group motives instead of personal motives (Cohen & Tyler, 2016). For instance, an individual may not dislike a group's adored celebrity during parasocial interact with them in such a group. Number of interactions and the number of times of visitation to social media platforms for a given timespan can be established through the frequency of interactions (Ledbetter & Redd, 2016).

Demographics are represented by characteristics of the given population based on factors such as gender, age, marital status and education levels. Interaction behavior is concerned with the interactions themselves. Interaction behavior encompasses the frequency and nature of interactions (Ruddle et al., 2015). An individual’s attitude, beliefs, or feelings in

relation to orientation represents a measurement for interactional behavior, and it has been used by Yang (2016) for exploring the associations between loneliness and various roles of social comparison orientations. Personal attitudes, beliefs and feelings have been found to drive most of social media interactions (Chung & Cho, 2017). Parasocial interaction, perceived celebrity integrity, and attitudes towards conversations are key predictors of audiences' tendency to engage with celebrities (Valkenburg, 2017).

Parasocial interaction was conceptualized as a sense of affective interpersonal involvement with media personalities. An item analysis adapted from Rubin and Perse (1987) indicated that the original 20-item scale could effectively be reduced, producing a 10-item Revised Parasocial Interaction Scale (PSI). Quintero Johnson & Patnoe-Woodley (2016) adapted the 10-item parasocial relationship scale to explore the influence of parasocial relationships and experiences on radio listeners' consumer behaviors. Therefore, the study adopts a 10-item revised parasocial interaction scale to examine how celebrities enhance fans' parasocial interactions through social media. The scale reported a Cronbach alpha of 0.87, which demonstrates the reliability of this scale. All items will be measured using a 5-point Likert scale, with response items ranging from 1 "strongly disagree" to 5 "strongly agree".

The study uses UCLA Loneliness Scale developed by Russell (1996). This scale comprises a 20-item question where the respondents are required to respond to them. This scale has a scale of 1 to 4 where 1 represents never and 4 represents always. This scale was selected because it has demonstrated strong validity and reliability with Russel (1996), arguing that it has a coefficient alpha ranging from (.89) to (.94).

Dependent Variable

The parasocial interaction scale was measured on a 5-point Likert scale. The 10 items produced a Cronbach's alpha of 0.85, which is within the ideal reliability range for a scale. These items were recorded such that a higher score represents more parasocial interaction. Then, they were compiled into an index by being added together and divided by the number of items. The index also ranged between 1-5, with 5 representing the most parasocial interactions. The mean score for the respondents was 3.27 with a standard deviation of 0.79.

Independent Variables

The loneliness scale consisted of 20 items, and 9 of which had to be reversed such that a higher score indicates more loneliness. The responses were a 4-point scale indicating that they felt they never, rarely, sometimes or always could relate to the content of each item. The items were then added together and divided by 60 to develop an index that ranged between 0 to 1. It is a reliable score, with a Cronbach's alpha of 0.86. The minimum score was 0.25 and the maximum was 0.94. The mean score was 0.55 and the standard deviation was 0.11.

Participants were asked to check any celebrities they follow on Instagram, and a list of 10 per Arab Gulf state were included. These celebrities were popularized by a diverse set of interests and dummy variables were later developed to indicate their area of expertise: music, religion, sports or acting. All had a high number of followers to be included in the list. Further, the authors tried to include both male and female celebrities, in addition to their different areas of interests. This was done through a process of examining magazines and market research data from ViralStat.com that was relevant in addition to looking up the accounts to examine the content for the number of followers and authenticity. Further, 50% of all the celebrities selected were male and the other 50% were female. An index was then formulated by adding up the scores for each participants' number of celebrities followed. Table (1) shows the Instagram influencers selected for each country.

Table 1: Instagram Accounts of Celebrities Included and Number of Followers

Bahrain	**# of Followers**	**Kuwait**	**# of Followers**	**KSA**	**# of Followers**	**Oman**	**# of Followers**	**UAE**	**# of Followers**	**Qatar**	**# of Followers**
@bovlix	**1m**	**@essa_al marzoug**	**1.7m**	**@ahmadal shugairi**	**11.7m**	**@malsh7**	**1m**	**@faz3**	**9.7m**	**@g_almuftah**	**1.1m**
@jamal_collection	973k	@aziz	1.6m	@ibrahimbasha	6.7m	@malizy.99	580k	@bin_baz	5.2m	@hamad_albraidi	715k

Bahrain	# of Followers	Kuwait	# of Followers	KSA	# of Followers	Oman	# of Followers	UAE	# of Followers	Qatar	# of Followers
@khaled_janahi	375k	@faisalalbasri	1m	@m000966	3.8m	@hanood.1	589k	@fadel.almazrooei	300k	@ms3don	580k
@khaled_hamad_alkhalifa	334k	@hasanalballam	1m	@lojain_omran	8.9m	@kamil_alsaid	531k	@3fretoo	1.4m	@hassanalhaydos	546k
@7assan911	79.4k	@faisalalhashme	1m	@afnan1993	2.9m	@hmaky128	482k	@waseem_yousef	3.3m	@m34f	273k
@hananredha	639k	@shamsofficial_	1.3m	@thehala	2.5m	@amiratalkoon952222	358k	@taimalfalasi	12.6m	@khawlamortazawi	20k
@shomo5.bh	61.6k	@sondos_aq	2.6m	@njoudsh1	1.6m	@alzadjali_ghada	830k	@mim_design	664k	@najwaqatar	1.7m
@hind_bh	537k	@dalalid	2.7m	@hatoonkadi	98.8k	@thenaeema	693k	@fatimaabdullrahim	621k	@shailasabt	3m
@sabrinbushaid	1m	@leh_meta	2.4m	@go_ne88	3.5m	@tajn00r	564k	@saraindubai	18.3k	@hadeeelghassan	131k
@layaly.bh	8,3k	@asmaa_makeup	1.2m	@6ar8o	8.6m	@fakhriya_khamis	667k	@khulood_almaleh	1m	@_anwaar.qtr	10k

An index for media use was developed by averaging questions related to three questions measuring the amount of time spent on media per day. These measures include the number of hours one reads or watches media content on one's smartphone, the amount of time one watches media content and the frequency of checking one's social media accounts. The index ranged from 1 to 5, with a higher score indicating more media use. The mean score was 3.299 and the standard deviation was 1.058. Another measure, the social media index, factored in the number of social media platforms one uses. If the respondent had an X, Instagram, Facebook, Snapchat or WhatsApp account, they would indicate. These were summed and developed into an index ranging from 0 to 1. The mean score was 0.669 and the standard deviation was 0.308.

As for the demographic variables, the ages of respondents ranged from 18 to 79 years old. The mean age was 32.652 and the standard deviation was 10.305. In terms of gender, approximately 22.5% of the sample did not respond by providing their gender. Of the 475 respondents that did, 63.2% (N=300) were male and 36.8% (N=175) were female. Similarly, 475 respondents reported their marital status. Of those who responded, 58.9% (N=280) were married, 35.6% (N=168) were single, and very few were separated (2.3%, N=11), divorced (2.1, N=10) or widowed (1.1, N=5).

Of the 475 respondents who provided their level of education, 38.9% (N=185) had a degree from a four-year college or university. Approximately 21.5% (N=102) had graduated from high school and a minority had some high school (2.7%, N=13) or had less than high school (1.9%, N=9). Approximately 16.8% (N=80) completed a postgraduate degree, and 5.1% (N=24) had some postgraduate or professional schooling experience.

6. Results

The first hypothesis predicts that higher social media use will be positively correlated with loneliness. To test this hypothesis, a multiple regression was conducted to assess how the media use and social media index contribute to loneliness as well as demographic variables including level of education and age. Dummy variables were included for being female and being married. These variables statistically significantly predicted loneliness $F(df=6,469) = 1.94$, $p=0.072$, adjusted $R^2 = 0.012$. The media use index ($B=0.006$, $p=0.25$) and the social media index ($B=-0.02$, $p=0.37$) did not contribute to loneliness in this model statistically and significantly. Being female ($B=0.08$, $p=0.50$), age ($B<0.001$, $p=0.50$) and the level of education ($B=0.03$, $p=0.27$) also did not statistically contribute to parasocial interaction in this model. Unexpectedly, the dummy variable indicating that a respondent is being married ($B=-0.028$, $p<0.05$) was the only statistically significant variable in the model.

The second hypothesis predicts higher social media use will be positively correlated with parasocial interaction. In testing the second hypothesis, a multiple regression was conducted to assess how the media use and social media index contribute to parasocial interaction while controlling demographic factors. Two demographic factors were continuous: level of education and age. Two demographic factors were dummy variables: female and married. These variables statistically significantly predicted parasocial interaction $F(df=6,469) = 3.21$, $p=0.004$, adjusted $R^2 = 0.027$. The media use index ($B=0.81$, $p<0.05$) and the social media index ($B=-0.24$, $p<0.1$) statistically significantly contributed to parasocial interaction in this model. Being female ($B=0.11$, $p=0.13$), being married ($B=-0.10$, $p=0.27$) and the level of education ($B=0.01$, $p=0.61$) did not statistically contribute to parasocial interaction in this model. Age ($B=-0.08$, $p<0.10$) did contribute to parasocial interaction in the model.

The third hypothesis predicts that higher levels of loneliness will be positively correlated with parasocial interaction. Finally, the third hypothesis was tested by a multiple regression in which loneliness, age, level of education, and dummy variables for being female and being married predicted higher parasocial interaction. These variables statistically significantly predicted parasocial interaction $F(df=5,469) = 5.94$, $p<0.001$, adjusted $R^2 = 0.05$. The loneliness index ($B=1.21$, $p<0.001$) statistically significantly contributed to parasocial interaction in this model. Being female ($B=0.09$, $p=0.21$), being married ($B=-0.05$, $p=0.52$) and the level of education ($B=0.007$, $p=0.70$) did not statistically contribute to parasocial interaction in this model. Age ($B=-0.08$, $p<0.10$) did contribute to parasocial interaction in the model.

7. Discussion

This section gives an insight into the discussion of the three hypotheses formulated in this study to examine the research question. Regarding the first hypothesis, it was not supported as loneliness was not statistically significantly related to either the media use index or the social media index. These findings contradict the findings of Pittman and Reich (2016) that state that loneliness is a byproduct of social media use of image-based media. One possible explanation for this contradiction is that the sample in Pittman and Reich's study came from the northwestern region of the United States and the data in our sample came from a collectivist culture in the Arab world. According to Al-Kandari, Melkote, and Sharif (2016), the patriarchal culture manifested in social media just as they did in the national culture of Kuwait. Similarly, Al-Kandari, Al-Sumait, and Al-Hunaiyyan (2017) argue that social needs are exhausted offline in Kuwait--one of the countries in our sample.

In terms of demographic variables, the only predictor of loneliness in our model was the dummy variable indicating marriage, which showed a very slight increase (-0.028) in loneliness when the respondent was married. This is consistent with the findings of Wang, Fink and Cai (2008) that found that the gender of the respondent did not moderate the relationship between loneliness and parasocial interaction.

Concerning the second hypothesis, it was partially supported as the scores for parasocial interaction increased when the media use index increased. This is consistent with the findings of Cole and Leets's finding (1999) that increased internet dependence can lead to increased parasocial interactions, given the fact that users have continuous access to media content. Similarly, Horton and Wohl (1956) suggested that television and radio personalities promote an illusionary parasocial interaction with an audience. Stever (2017) found that parasocial interaction is more likely to occur on X when celebrities engage with fans by liking or retweeting their tweets.

On the contrary, the social media index was negatively related to the parasocial interaction score. This indicates that following fewer celebrities over a longer period may enhance the parasocial interaction effect. This is a plausible explanation because Al-Habash and Ma's study (2017) found that the intensity of the use of Instagram and Snaochat was related to the network size, which was defined by both the number of followers and the numbers of accounts followed.

Age was the only demographic variable that contributed to the effect in addition to the media variables. Many social media studies study younger adults for various reasons. In the United States, Pittman and Reich (2016) justify studying young adults in the United States because they are the "loneliest generation" (p. 155). In Kuwait, the justifications often have to do with their openness to Western culture (Al-Kandari, Al-Sumait, & Al-Hunaiyyan, 2017). Overall, in the Arab

world, youth movements have been instrumental in shaping the Arab spring using social media as well (Al-Kazemi, Bowe, & Blom, 2012). Yet, fewer studies sample a wide range of age in their analyses. Our study shows that the increase of parasocial interaction corresponds with a very small decrease in age (B=-0.08).

The third hypothesis was supported, as loneliness contributes to the parasocial interaction effect. Age was negatively related to parasocial interaction, but very slightly (B=-0.08). Uses and gratification research has demonstrated that social connection is among the motivation for the use of some social media platforms (Al-Habash & Ma, 2017). There is a lacuna of studies that examine social media to examine uses and gratification as they relate to parasocial interactions. While Wang, Fink and Cai (2008) attempted to do so, they concluded that loneliness did not contribute to parasocial interaction. However, their study predates the days of instantaneous and continuous social media interactions.

8. Conclusion

In a nutshell, as this paper aims to explore the social interactions between users of social media and their celebrities in Kingdom of Saudi Arabia and the Arab Gulf, this study can help the current understanding of social media use beyond the descriptive uses and gratification approach to examine the effect on followers of celebrities. Moreover, this study contributes to our current understanding of the parasocial interaction between social media influencers and their audiences. It is among the first of its type to do so by examining individual-level characteristics, including the level of loneliness one is experiencing.

In addition, it gathers a snowball sample from social media platforms from an understudied population: those living in the GCC. This is an especially interesting population because of the collective nature of the culture in the GCC states. Nevertheless, all studies have limitations. The current study is limited in that it does compare respondents in the GCC to those in more individualistic societies. Further, there are limitations to the generalizability of snowball samples, which may differentiate the findings of this study from future studies.

Regarding future research work, future researchers should develop comparative studies of parasocial interactions with social media celebrities and their audiences in various cultures. Further, future researchers may select to analyze the audience interactions to develop a deeper understanding of the interactions. Finally, future researchers should interview celebrities to examine their perception of parasocial interactions.

REFERENCES

Abokhodair, N &Vieweg, S. (2016). Privacy & social media in the context of the Arab Gulf. In *Proceedings of the 2016 ACM Conference on Designing Interactive Systems* (pp. 672-683). ACM.

Ahmad, S., Mustafa, M., & Ullah, A. (2016). Association of demographics, motives, and intensity of using Social Networking Sites with the formation of bonding and bridging social capital in Pakistan. *Computers in Human Behavior*, *57*, 107-114.

Alassaf, H. (2025). Computerized exams use in enhancing the credibility of the education system. *International Journal of Innovative Research and Scientific Studies, 8*(1), 394–406. https://doi.org/10.53894/ijirss.v8i1.4172

Al-Ghammaz, S., Alassaf, H., Alsalti, M., Almomani, H., & Hleiban, T. (2025). The role of e-learning in enhancing digital thinking skills among university students. *International Journal of Innovative Research and Scientific Studies, 8*(1), 451–457. https://doi.org/10.53894/ijirss.v8i1.4178

Al-Habash, S & Ma, M. (2017). A tale of four platforms: Motivations and uses of Facebook, Twitter, Instagram, and Snapchat among college students? *Social Media + Society, 3*(1), 1-13.

Al-Kandari, A. A., Al-Sumait, F. Y., & Al-Hunaiyyan, A. (2017). Looking perfect: Instagram use in a Kuwaiti cultural context. *Journal of International and Intercultural Communication, 10*(4), 273-290.

Al-Kandari, A., Melkote, S. R., & Sharif, A. (2016). Needs and motives of Instagram users that predict self-disclosure use: A case study of young adults in Kuwait. *Journal of Creative Communications, 11*(2), 85-101.

Al-Kazemi, M. F., Bowe, B. J., & Blom, R. (2012). Facilitating the Egyptian Uprising: A Case Study of Facebook and Egypt's April 6th Youth Movement. In Cases on Web 2.0 in Developing Countries: Studies on Implementation, Application, and Use (pp. 256-282). IGI Global.

Al-Sharekh, A. (2016). Social media and the struggle for authority in the GCC. *The Canadian Journal for Middle East Studies*, *1*(2), 8-33.

Al-Sharekh, A. (2017). *GCC States and Social Media Disruption in an Era of Transition*. Global Governance: retrieved on 27 April 2017 from https://www.globalpolicyjournal.com/blog/27/04/2017/gcc-states-and-social-media-disruption-era-transition

Baldauf-Quilliatre, H & De Carvajal, I. C. (2015). Is the avatar considered as a participant by the players? A conversational analysis of multi-player videogames interactions. *PsychNology Journal*, *13*(2).

Bond, B. J. (2016). Following your "friend": social media and the strength of adolescents' parasocial relationships with media personae. *Cyberpsychology, Behavior, and Social Networking*, *19*(11), 656-660.

Brown, W. J. (2015). Examining four processes of audience involvement with media personae: Transportation, parasocial interaction, identification, and worship. *Communication Theory*, *25*(3), 259-283.

Brown, W. J. (2015). Examining four processes of audience involvement with media personae: Transportation, parasocial interaction, identification, and worship. *Communication Theory*, *25*(3), 259-283.

Burgess, J., Mitchell, P., & Münch, F. (2018). Social media rituals: The uses of celebrity death in digital culture. In *A Networked Self: Birth, Life, Death* (pp. 224-239). Taylor & Francis Group, LLC.

Chung, S & Cho, H. (2017). Fostering parasocial relationships with celebrities on social media: Implications for celebrity endorsement. *Psychology & Marketing*, *34*(4), 481-495. https://doi.org/10.1002/mar.21001

Cole, T & Leets, L. (1999). Attachment styles and intimate television viewing: Insecurely forming relationships in a parasocial way. *Journal of Social and Personal Relationships, 16*(4), 495-511.

Clark, N. (2015). Connecting in the scandal verse: The power of social media and parasocial relationships. In *Digital Technology and the Future of Broadcasting* (pp. 199-213). Routledge.

Cohen, E & Tyler, W. (2016). Examining perceived distance and personal authenticity as mediators of the effects of ghost-tweeting on parasocial interaction. *Cyberpsychology, Behavior, and Social Networking*, *19*(5), 342-346.

Dai, Y & Walther, J. (2018). Vicariously Experiencing Parasocial Intimacy with Public Figures Through Observations of Interactions on Social Media. *Human Communication Research*, *44*(3), 322-342.

Dibble, J. L., Hartmann, T., & Rosaen, S. F. (2016). Parasocial interaction and parasocial relationship: Conceptual clarification and a critical assessment of measures. *Human Communication Research*, *42*(1), 21-44.

Duffett, R. G. (2017). Influence of social media marketing communications on young consumers' attitudes. *Young Consumers*, *18*(1), 19-39.

Escalas, J & Bettman, R. (2017). Connecting with celebrities: how consumers appropriate celebrity meanings for a sense of belonging. *Journal of Advertising*, *46*(2), 297-308.

Frederick, E. L., Lim, C. H., Clavio, G., & Walsh, P. (2012). Why we follow: An examination of parasocial interaction and fan motivations for following athlete archetypes on Twitter. *International Journal of Sport Communication*, 5(4), 481-502.

Gabriel, S., Valenti, J., & Young, A. F. (2016). Social surrogates, social motivations, and everyday activities: The case for a strong, subtle, and sneaky social self. In *Advances in experimental social psychology* (Vol. 53, pp. 189-243). Academic Press.

Gleason, T. R., Theran, S. A., & Newberg, E. M. (2017). Parasocial interactions and relationships in early adolescence. *Frontiers in psychology*, *8*, 255.

Harmon-Kizer, T. R. (2017). The effects of schema congruity on consumer response to celebrity advertising. *Journal of Marketing Communications*, *23*(2), 162-175.

Ho, S. S., Lee, E. W., & Liao, Y. (2016). Social network sites, friends, and celebrities: The roles of social comparison and celebrity

involvement in adolescents' body image dissatisfaction. *Social media+ Society*, *2*(3), 1-16. https://doi.org/2056305116664216.

Hu, M. (2016). The influence of a scandal on parasocial relationships, parasocial interaction, and parasocial breakup. *Psychology of Popular Media Culture*, *5*(3), 217.

Hutto, C. J., Bell, C., Farmer, S., Fausset, C., Harley, L., Nguyen, J., & Fain, B. (2015). Social media gerontology: Understanding social media usage among older adults. In *Web Intelligence*, *13*(1), 69-87.

Ingram, J & Luckett, Z. (2017). My Friend Harry'sa Wizard: Predicting Parasocial Interaction with Characters from Fiction. *Psychology of Popular Media Culture*, *8*(2), 148-158.

Jabeen, F., Friesen, H. L., & Ghoudi, K. (2018). Quality of work life of Emirati women and its influence on job satisfaction and turnover intention: Evidence from the UAE. *Journal of Organizational Change Management*, *31*(2), 352-370.

Kim, H., Ko, E., & Kim, J. (2015). SNS users' para-social relationships with celebrities: social media effects on purchase intentions. *Journal of Global Scholars of Marketing Science*, *25*(3), 279-294.

Kim, J & Song, H. (2016). Celebrity's self-disclosure on Twitter and parasocial relationships: A mediating role of social presence. *Computers in Human Behavior*, *62*(2), 570-577.

Knoll, J., Schramm, H., Schallhorn, C., & Wynistorf, S. (2015). Good guy vs. bad guy: The influence of parasocial interactions with media characters on brand placement effects. *International Journal of Advertising*, *34*(5), 720-743.

Krause, A. E., North, A. C., & Heritage, B. (2018). Musician interactions via social networking sites: Celebrity attitudes, attachment, and their correlations. *Music & Science*, *1*(2), 1-22.

Ledbetter, A. M., & Redd, S. M. (2016). Celebrity credibility on social media: a conditional process analysis of online self-disclosure attitude as a moderator of posting frequency and parasocial interaction. *Western Journal of Communication*, *80*(5), 601-618.

Lim, M & Kim, J. (2018). Facebook users' loneliness based on different types of interpersonal relationships: Links to grandiosity and envy. *Information Technology & People*, *31*(3), 646-665.

Liu, D & Baumeister, R. F. (2016). Social networking online and personality of self-worth: A meta-analysis. *Journal of Research in Personality*, *64*, 79-89.

Lueck, J. A. (2015). Friend-zone with benefits: The parasocial advertising of Kim Kardashian. *Journal of Marketing Communications*, *21*(2), 91-109.

Martin, F & Tao-Peng, F. (2017). Morality matters? Consumer identification with celebrity endorsers in China. *Asian Business & Management*, *16*(4-5), 272-289.

Mirgani, S. (2017). Introduction: Art and Cultural Production in the GCC, *Journal of Arabian Studies*, 7(1), 1-11. http://doi.org/10.1080/21534764.2017.1358939

Murthy, D., Gross, A., & Pensavalle, A. (2015). Urban social media demographics: An exploration of Twitter use in major American cities. *Journal of Computer-Mediated Communication*, *21*(1), 33-49.

Nazzal, F. I., Cruz, O., & Neto, F. (2018). Psychometric analysis of the short-form UCLA Loneliness Scale (ULS-6) among Palestinian university students. *An International Journal on Personal Relationships*, 11(2), 113–125.

Neto, F. (2014). Psychometric analysis of the short-form UCLA Loneliness Scale (ULS-6) in older adults. *European journal of ageing*, *11*(4), 313-319.

Pittman, M & Reich, B. (2016). Social media and loneliness: Why an Instagram picture may be worth more than a thousand Twitter words. *Computers in Human Behavior*, *62*, 155-167.

Quintero Johnson, J. M., & Patnoe-Woodley, P. D. (2016). Exploring the influence of parasocial relationships and experiences on radio listeners' consumer behaviors. *Communication Research Reports*, *33*(1), 40-46.

Rasmussen, L. (2018). Parasocial Interaction in the Digital Age: An Examination of Relationship Building and the Effectiveness of YouTube Celebrities. *The Journal of Social Media in Society*, *7*(1), 280-294.

Rubenking, B & Bracken, C. C. (2018). Binge-watching: A suspenseful, emotional, habit. *Communication Research Reports*, *35*(5), 381-391.

Rubin, A & Perse, E. M. (1987). Audience activity and soap opera involvement a uses and effects investigation. *Human Communication Research*, *14*(2), 246-268.

Ruddle, R. A., Thomas, R. G., Randell, R. S., Quirke, P., & Treanor, D. (2015). Performance and interaction behaviour during visual search on large, high-resolution displays. *Information Visualization*, *14*(2), 137-147.

Russell, D. W. (1996). UCLA Loneliness Scale (Version 3): Reliability, Validity, and Factor Structure. *Journal of Personality Assessment, 66*(1), 20–40.

Savage, M. & Spence, P. R. (2014). Will you listen? An examination of parasocial interaction and credibility on radio. *Journal of Radio & Audio Media*, *21*(1), 3-19.

Stever, G. S. (2017). Parasocial Theory: Concepts and Measures. *The International Encyclopedia of Media Effects*, 2(4), 1-12.

Tiggemann, M & Zaccardo, M. (2015). Exercise to be fit, not skinny": The effect of fitspiration imagery on women's body image. *Body image*, *15*(1), 61-67.

Turner, F & Larson, C. (2015). Network celebrity: Entrepreneurship and the new public intellectuals. *Public Culture*, *27*(1 (75), 53-84.

Usher, B. (2015). Twitter and the celebrity interview. *Celebrity Studies*, *6*(3), 306–321. http://doi.org/10.1080/19392397.2015.1062641

Valkenburg, P. M. (2017). Understanding self-effects in social media. *Human Communication Research*, *43*(4), 477-490.

Van den Bulck, H., Paulussen, S., & Bels, A. (2017). Celebrity news as hybrid journalism: An assessment of celebrity coverage in Flemish newspapers and magazines. *Journalism*, *18*(1), 44-63.

Van Hoorn, A. (2015). Individualist–collectivist culture and trust radius: A multilevel approach. *Journal of Cross-Cultural Psychology*, *46*(2), 269-276.

Wang, Q., Fink, E. L., & Cai, D. A. (2008). Loneliness, gender, and parasocial interaction: A uses and gratifications approach. *Communication Quarterly*, *56*(1), 87-109.

Ward, J. (2016). A content analysis of celebrity Instagram posts and parasocial interaction. *Elon Journal of Undergraduate Research in Communications*, *7*(1), 1-12.

Xiang, L., Zheng, X., Lee, M. K., & Zhao, D. (2016). Exploring consumers' impulse buying behavior on social commerce platform: The role of parasocial interaction. *International Journal of Information Management*, *36*(3), 333-347.

Yang, C. C. (2016). Instagram use, loneliness, and social comparison orientation: interact and browse on social media, but don't compare. *Cyberpsychology, Behavior, and Social Networking*, *19*(12), 703-708.