**UNIVERSITY OF PADOVA**

**Department of Philosophy, Sociology, Education and Applied Psychology**

**Master's Degree in Clinical, Social and Intercultural Psychology**

**Final dissertation**

# Understanding the Influence of Parasocial Relationships on Social Anxiety, Loneliness and Well-being

***Supervisor***
**Professor** Alberto Voci

***Candidate:*** Sabahat Arya Kaya
***Student ID number:*** 2069502

Academic Year 2024/2025

*Here's to the fools who dream.*
- La La Land, 2016.

**Acknowledgments**

I would like to acknowledge and give my warmest thanks to my supervisor Professor Alberto Voci who made this work possible. His guidance and advice carried me through all the stages of writing this project.

I would also like to express my appreciation to all of the people who have supported me since the beginning of my personal and academic journey; my dear mother Esin for her endless love, my partner Berat for his encouragement, my good friend and colleague Ananda for being there when I needed advice, and all of my friends and family as a whole for their continuous support.

**Table of Contents**

**Abstract** ..... 5

**1.Introduction** ..... 6

1.1. The Difference Between Parasocial Relationships and Parasocial Interaction ..... 8

1.2 Parasocial Connections in Historical and Religious Contexts ..... 9

1.3. New Age of PSR with the Addition of Social Media ..... 11

1.4. Positive Impact of PSR ..... 13

1.5. Loneliness ..... 15

1.6. Well-being ..... 18

1.7. Social Anxiety ..... 20

1.8. Predictors of Parasocial Relationships ..... 23

**2. Research Question** ..... 27

**3. Methodology** ..... 28

3.1. Participants ..... 28

3.2. Procedure ..... 29

**4. Analysis and Results** ..... 31

4.1 Descriptive Statistics and Differences from the Midpoint ..... 33

4.2 Correlational Analyses ..... 35

4.3 Hypothesis Testing ..... 35

4.4 Moderated Mediation Analysis ..... 39

**5. Discussion** ..... 45

**6. Limitations** ..... 48

**7. Conclusion** ..... 49

**8. Bibliography** ..... 50

**Abstract**

This study investigates the relationship between parasocial relationships (PSR) and loneliness, social anxiety, well-being, self-esteem, independent-interdependent self-construal, and attachment styles. Specifically, it explores whether PSR can positively impact well-being, loneliness, and social anxiety, while examining the potential predictive effects of attachment, self-esteem, and self-construal. A correlational design was used, examining 105 participants who completed an online survey consisting of 8 scales. Three primary hypotheses were tested: (1) PSR would be negatively correlated with social anxiety and loneliness, (2) PSR would be positively correlated with well-being, and (3) PSR would be positively correlated with anxious attachment, low self-esteem, and interdependent self-construal. The results did not support the primary hypotheses. The well-being scale was excluded due to poor internal reliability. However, significant positive correlations emerged between loneliness and the Intimacy and Familiarity subscales of PSR, suggesting that lonelier individuals may feel stronger intimacy and familiarity with media figures. The moderation analyses showed that loneliness strongly predicted familiarity for those with low independent self-construal but was non-significant for highly independent individuals. Additionally, loneliness negatively predicted self-esteem, while familiarity had a positive effect. Furthermore, moderated mediation analysis examined whether independent self-construal moderates the indirect effect of loneliness on self-esteem through familiarity. At low independence levels, familiarity significantly mediated this relationship. Despite the non-significant findings for the primary hypotheses, the study suggests that PSR, particularly familiarity, may influence self-esteem, especially for individuals with lower independent self-construal. Limitations, including sample size and scale reliability issues, point to the need for larger, more diverse samples and longitudinal studies to further explore the impact of PSRs.

## 1. Introduction

Parasocial Relationships (PSR) have been defined as "one-sided relationships that individuals develop with characters they encounter in mass media" by Horton and Wohl in 1956. These relationships can manifest with various figures, ranging from celebrities such as musicians, actors, and athletes, to micro-celebrities online, or even fictional characters in literature, films, or television shows. The idea was formulated because of the premise that viewers seem to develop friendships and a sort of emotional bonding with particular television characters even in the absence of any real face-to-face contact with them. Some people describe certain actors as frequent "guests" in their homes due to the movies they watched, forming memories associated with these actors. Others might say they "grew up" with a celebrity of a similar age, following their lives through the media over the years. These people inevitably become a part of our lives, whether it is through the music they create and the personal stories they share, or through their presence in publications, advertising, movies, sporting events, or books. In some ways, they influence our everyday experiences, shape our memories, conversations, and even our sense of connection to the world around us.

The effect of celebrity deaths could be an excellent example of this, since some of them cause mass grief among the entire world like Michael Jackson and Princess Diana who people only knew through the media. In a paper called “From people power to mass hysteria”, Thomas (2008), describes the aftermath of Princess Diana’s tragic death as, “While some aspects of the popular media presented Diana as a woman who was ‘BORN A LADY, BECAME A PRINCESS [and] DIED A SAINT’ (*Daily Mirror*, 1 September 1997), popular reactions saw in her something closer to their own experience” (p. 376). Knowing that the funeral was the most watched event in history, with an estimated 2.5 billion people watching in 200 countries (Brown et al., 2003, p.588), shows us how these relationships are more common than we think and they can have substantial effects on people’s lives and emotions.

Over time, researchers such as Rubin and Perse (1987) elaborated on the concept of parasocial relationships, investigating how these relationships influence people's behaviors, emotions, and attitudes. Their study was named "Audience Activity and Television News Gratifications" and it included 329 participants. It investigated how local television news consumers interact with content. It focused on two types of news consumption; instrumental use, in which viewers seek amusing and engaging information, and ritualized use, which is defined by habitual viewing. The findings showed that motivations for passing time and perceived realism affect how selective or distracted viewers are. Instrumental use is connected to higher perceived news realism and viewer engagement, whereas ritualized use leads to distractions and poorer engagement (pp. 76-77). Overall, the study demonstrates significant links between how audiences use media and their viewing habits, providing insight into the influence of media consumption.

With the rise of social media, the study of PSR has grown in popularity, as people form similar connections with online influencers, celebrities, and even fictional characters. A study done by Bond in 2016 examined 316 adolescents to investigate the link between the strength of their parasocial relationships with the media persona that they follow on Twitter and social media surveillance. They ended up finding a significant positive relationship especially in the case of Twitter compared to other social media platforms because of how posts on Twitter felt more "authentic" or "intimate" to the individuals (p.4). This shows us how the authenticity and reciprocity of communication changed the core of PSRs due to changes in media and how people can connect with each other more easily.

The term "Parasocial Relationship" has become a critical tool for understanding the complicated interactions between media and people's social lives (Horton & Wohl, 1956; Rubin & Perse, 1987). On the other hand, given PSR's importance in psychology, consumer behaviour, and marketing research, much of the literature examining these relationships seem

to focus on the negative consequences or aspects and reasons which cause the establishment of such relationships. On the contrary, this study aims to explore the potential positive impacts of parasocial relationships on individual well-being, loneliness, and social anxiety levels, while examining the possible predictor effects of adult attachment, self-esteem and independent-interdependent self-construal.

### 1.1 The Difference Between Parasocial Relationships and Parasocial Interaction

Even though the terms Parasocial Relationships (PSR) and Parasocial Interaction (PSI) sound similar, they represent different aspects of our connections with media figures. As it has been elaborated above, Horton and Wohl's (1956) PSR originates from the one-sided relationship of the individuals who have encountered a character or a personality through mass media. On the other hand, Parasocial Interaction, as improved and described by Rubin et al. (1985), focuses more on the behaviors and actions individuals engage in while consuming media. It encompasses activities like talking to the TV during a show, feeling emotional reactions to characters, or seeking out information about a media figure. Rubin et al. (1985) mentioned how in the past there has not been a fundamental distinction between these two terms since they were first used by Horton and Wohl in 1956. While both terms are incredibly connected, they can be measured together and refer to a form of connection with media, PSRs are built on emotional bonds and long-term attachments, whereas PSIs refer to the immediate interactive behaviors during media consumption (Horton & Wohl, 1956; Rubin et al., 1985). In their 1985 paper Rubin et al. introduced the 20 items scale called "Parasocial Interaction Scale" (PSI-Scale) which included items such as; "I look forward to watching my favorite newscaster on tonight's news", "I would like to meet my favorite newscaster in person", "When I am watching the newscast, I feel as if I am part of their group" (p.167). With time

researchers created more scales on these topics to explore more detailed situations and behaviours and they continue to do so. Some of these newer scales that are used for studies of Parasocial Relationships include; Celebrity-Persona Parasocial Interaction Scale (Bocarnea & Brown, 2007), Experience of Parasocial Interaction (EPSI) Scale (Hartmann & Goldhoorn, 2011), Parasocial Interaction Dimensions and Items (Tsay & Bodine, 2012).

Recognizing the differences between these two concepts is essential for understanding their unique psychological and social effects. By exploring not just the bonds formed but the interactive processes involved, we gain deeper insight into how people relate to media figures and how these relationships influence behavior and well-being.

### 1.2 Parasocial Connections in Historical and Religious Contexts

The modern age is not the first time parasocial relationships can be observed. We can argue that in the past, societies interacted with religious leaders, saints, and mythical heroes in a similar manner. As Cusack (2022) examines in her chapter "Religion and Celebrity," the origins of modern celebrity culture may also be found in ancient times and the Middle Ages, when social and religious life relied heavily on the devotion of inspirational people. In past centuries, religious texts, literature, and oral traditions frequently turned historical figures into mythological characters. For instance, Alexander the Great was heavily mythologized in subsequent novels, in addition to being a military leader (Cusack, 2022, p. 1). Similarly, hagiographies, which are biographies written about saints, were written in everyday languages to appeal to a broader audience and make them the subject of widespread adoration (Cusack, 2022, p. 1). These traditions helped people idolize these figures.

Furthermore, in terms of their capacity to elicit devotion and influence cultural narratives, religious leaders have traditionally held positions that are similar to those held by

contemporary celebrities. According to Cusack (2022), the worship of saints and devotion to celebrities have many similarities. In the past, people gathered artifacts, made journeys, and assigned supernatural attributes to the figures that they worshipped (p. 3). Today, modern celebrities have taken the places once occupied by religious figures. Modern fandoms frequently operate as quasi-religious groups in which followers indulge in similarly inspired rituals, including going to events, gathering memorabilia, and following the private lives of their idols (p. 4). These behaviours are easily explained by the concept of "parasocial interaction". Thus, it is possible to see religious and historical adoration as an early form of parasocial involvement, in which followers developed an emotional attachment to people who represented their idealized values and perceived them as role models (p.3). In this context, parasocial relationships with media figures or characters can be understood as a secular continuation of the human tendency to form deep and emotional bonds with distant figures. As Cusack (2022) writes “Humans historically have venerated culturally appropriate exemplars approved by religious institutions; in the twenty-first century the retreat of institutional religion has permitted individuals to admire, emulate, cherish, love, and form devoted parasocial relationships with their role models of choice, and celebrities now occupy the space formerly given to religious figures including saints, gods, shamans, and spirit protectors” (p.7).

Finally, we know that humans are fundamentally social and in need of deep interpersonal connections, which should explain why people would be in search of meaningful connections with their role models even without having a face-to-face interaction. We can conclude that parasocial relationships are a long-standing aspect of human social and cultural life rather than a recent development. By knowing the historical origins of parasocial relationships, we can better understand their significance in modern culture and their possible effects on social belonging and identity formation.

### 1.3 New Age of PSR with the Addition of Social Media

TV newscasters were the very first individuals with whom people began forming one-sided parasocial relationships within the modern age, which then led Horton and Wohl to create the definition of PSRs. However, this category of real or fictional figures has evolved with the change of media especially with the rise of social media. Since Horton and Wohl defined PSRs in 1956, both the nature of these relationships and the parties involved have changed. With social media, it is no longer just athletes (Hartmann, Stuke, & Daschmann, 2008), TV show characters (Daniel & Westerman, 2017), or celebrities who are the focus of these relationships, but also micro-celebrities like influencers, YouTubers, and streamers. The most significant change brought by social media is the reciprocity of communication. The definition of "micro-celebrity" was coined by Theresa Senft in 2008, "micro-celebrity is best understood as a new style of online performance that involves people 'amping up' their popularity over the Web using technologies like video, blogs and social networking sites" (p.25). The era of untouchable and unattainable celebrities now shares the spotlight with micro-celebrities who constantly engage with their fans through comments, messages, and videos. As Tosta (2024) explains, the rise of social media has dramatically intensified these parasocial connections, making them feel more personal and reciprocal. Unlike traditional media, where interactions were limited to viewing performances or reading about public figures, social media allows for direct engagement. Tosta notes, "In the past, a celebrity's interaction with their followers was limited by their PR team or even the character they were playing on a television show, but now individuals are able to get a closer look into the lives and even minds of their favorite celebrities or influencers" (p.22). This shift has enabled fans to form stronger bonds not only with celebrities but also with their respective communities. This change somewhat contradicts the traditional "one-sided relationship" definition of PSRs, as interaction with the person in question can make the relationship no longer entirely one-

sided. This is why Kowert and Daniel (2021) conducted a study titled “The one-and-a-half sided parasocial relationship: The curious case of live streaming”. In this study, Kowert and Daniel explore how live streaming platforms like Twitch have transformed PSRs into what they term “one-and-a-half sided” relationships. These relationships are distinguished by the possibility of reciprocal communication, where viewers can interact with streamers in real time, creating a stronger sense of community affiliation and emotional engagement (pp. 2-3). They firmly stated, “It is important to note here that the potential for reciprocal communication can be just as powerful as the communication itself” (p.2). The study found that the opportunity for such reciprocal communication significantly influences how viewers perceive their relationships with streamers, leading to a heightened sense of connection and presence (p. 4). Additionally, the study highlights how these interactions blur the lines between traditional parasocial relationships and actual social interactions, making the PSR more dynamic and multifaceted than ever before (p. 5). This evolution of PSRs challenges the notion of them being purely one-sided and opens up new paths for understanding the emotional and social impacts of these relationships on viewers (p. 6). This study, along with many others, shows how parasocial relationships are constantly changing as technology advances and people find new ways to interact.

Social media interactions are not only beneficial for micro-celebrities but they are also used as a tool for traditional celebrities to connect to their fans and to heighten the reciprocity of communication. Chung and Cho (2017) did a study titled “Fostering Parasocial Relationships with Celebrities on Social Media: Implications for Celebrity Endorsement”, which aimed to investigate how social media interactions with celebrities’ influence endorser effectiveness while focusing on the roles of PSRs, self-disclosure, and source trustworthiness. Their first hypothesis, which is the one that relates to this chapter the most, was “Social media interactions and parasocial relationships are positively associated with each other" (p.483).

This suggests that increased engagement with celebrities online strengthens emotional connections between the individuals and the celebrity. The results have shown that the interactivity, immediacy, and intimate communication style that comes with social media, helped celebrities to develop significant relationships with consumers (p.489). The findings show that social media interactions have changed PSRs greatly. With the increase of studies that research the effects of social media, we learn more and more about the power of online communications; parasocial relationships are only one single side of this phenomenon.

To conclude, the rise of social media has fundamentally transformed the nature of parasocial relationships. The shift from untouchable celebrities to accessible celebrities has blurred the lines between traditional one-sided PSRs and interactive social relationships. The introduction of platforms where real time communication can occur such as Twitch and YouTube has created a new kind of relationship where the connections cannot be determined as only one sided. Now, these are relationships that can be called 'one-and-half sided.' This evolving industry challenges the definition of PSRs and makes them dynamic as well as multi-faceted. Moreover, relations with media figures and communities will eventually change as technology develops, which calls for a more detailed study of these relationships and their psychological outcomes.

### 1.4 Positive Impact of PSR

When we look at the limited amount of research that studies the positive impacts that PSRs can have, we see that these relationships can help fulfill social needs and reduce loneliness, in times of social deprivation such as the COVID-19 quarantine (Jarzyna, 2020). The study by Coddaire (2015) named "Correlates of Parasocial Interactions Across Various Media Figures" found that parasocial relationships are associated with lower levels of

loneliness and social anxiety, as well as a positive correlation with anxious attachment. The researchers initially hypothesized that people with strong parasocial relationships would feel lonelier, more socially anxious, and have an anxious attachment style. They also wanted to see if these relationships were influenced by factors such as co-viewing habits, including how often and where people watch and discuss their favorite media figures, the type of media figure, such as an actor, musician, or fictional character, and the person's romantic relationship status, including whether they are in a relationship, living with their partner, and the duration of the relationship. The study had a total of 307 respondents, 41.2% were females and 22.8% were ethnic minorities and their ages ranged from 19 to 73. Participants shared their information on Amazon Mechanical Turk (MTurk), a site that seeks data from huge audiences. The study reports an unusual finding, in that individuals who reported stronger parasocial interactions were also less lonely and socially anxious. In addition, there was a positive link between strong parasocial interactions and anxious attachment style, but this was found when other factors like loneliness and social anxiety were controlled for. For the moderating factors, they found that the strength of these parasocial relationships was influenced by whether people lived with a romantic partner and how much they talked about their favorite media figures with others. The study found that people who lived with their partners showed a stronger negative relationship between parasocial interactions and loneliness, suggesting that cohabiting can help prevent these interactions from leading to loneliness. However, the opposite was found regarding social anxiety levels. For those not living with their partners, the relationship between parasocial relationships and social anxiety was more negative. This indicates that living with a partner might increase social anxiety related to parasocial interactions. In conclusion, the study suggested that having parasocial relationships with media figures might help people feel less lonely and socially anxious. However, they also highlighted potential limitations, such as the risk of survey fraud and non-

response distortion in online studies, and the specific characteristics of MTurk users that might differentiate them from the general population, potentially affecting the generalizability of the results. The study concluded by suggesting that "in several situations, engaging in parasocial interactions is actually adaptive for those experiencing social deprivation" (p.24).

Furthermore, Hoffner (2022) reviewed how PSRs can promote healthy attitudes and behaviors, lower health-related stigma, and enhance feelings of community but can also lead to negative self-comparisons and adverse mental health outcomes Throughout the research, it is stated that PSRs on social media offer frequent and close connections with media figures, which improves well-being. However, they finish the paper by stating that more research into elements such as user demographics, motivations, and media person self-presentation is required to understand and gather the benefits of PSRs (p.4). As a result, while parasocial relationships can improve well-being, it is critical to consider every element of a person's life.

### 1.5 Loneliness

Despite the widespread belief that those who engage in PSR experience more loneliness, research indicates that parasocial relationships might have a complex relationship with loneliness. Wang (2008) argues that "For some types of loneliness, parasocial interaction does serve as a functional alternative to actual interaction and does so differently for men and women." (p. 105). The study looked at the association between loneliness, gender, and parasocial interaction, and discovered that different levels of loneliness predict different kinds of parasocial interaction. Social loneliness was found to be adversely connected to parasocial interaction, and the use of parasocial interaction differed by gender and loneliness type. Greater family loneliness predicted more parasocial interaction among women, but chronic loneliness predicted more parasocial interaction among men (p.105). These findings suggest

that while parasocial relationships may provide some relief from loneliness; the type of loneliness and the individual's social context play a significant role in this relationship.

A newer study called “Effects of Online Fan Community Interactions on Well-Being and Sense of Virtual Community” by Kim et al. (2023) investigated how the loneliness factor affected online interactions and PSRs with celebrities during COVID-19 on a platform called Weverse. On top of that, they looked at how these online interactions impacted mental well-being and the sense of virtual community (SOVC). The participants were composed of global fans of the South Korean music group, BTS. With the 202 valid data the researchers had, they found that both interaction with other fans and PSRs significantly increased well-being and sense of virtual community (p.14). Kim et al. add, “Fan interactions centered around shared interests and passions, providing fans with opportunities to express themselves, share their enthusiasm, and receive positive reinforcement from like-minded individuals. Fans can also form a supportive network that offers emotional encouragement, understanding, and a sense of acceptance, all contributing to improved mental well-being and SOVC” (p.14). Additionally, Kim et al. reported that, even though their results showed that higher levels of loneliness increased online interactions with fans, it did not show a significant influence on PSRs with celebrities (p.13). This could be a solid point to investigate in terms of how loneliness could be involved in online interactions that are related to PSRs, but it does not necessarily mean that it is a predictor of PSRs. Besides, since they found that these interactions increased well-being and SOVC, it strengthens our research question about whether PSRs have a positive impact on loneliness, social anxiety and well-being. Some limitations were mentioned by the researchers like the questionable external validity of the sample as it only includes English and Korean-speaking BTS fans, which may not represent all the fandoms. Future research should explore diverse and larger samples, translate surveys into more languages, and study other fandoms and platforms.

Another aspect to consider when discussing loneliness is the importance of community building in this situation. Individuals can make significant connections across the world thanks to the advent of technology and social media, which is assisted by shared interests in musicians, athletes, movies, or books. Parasocial relationships play a major part in fostering long-distance connections by providing a platform for people to bond over their common admiration for a specific figure or narrative. Blight (2017) explores the role of parasocial relationships in fostering a sense of community (SOC) on social media platforms, specifically Instagram and Twitter. The study found that Instagram users' sense of community was found to be associated with both expressive information sharing and companionship motives, due to parasocial relationships. Users with greater motivation for utilizing Instagram reported higher PSR and SOC (p.318). Yet, people have been forming communities long before the advent of social media. One notable example is the community of Beatles fans, which emerged between 1963 and 1966. They even coined the term “Beatlemania” to describe the intense devotion to the band. Rohr (2017) writes, “Thus, the experience of Beatlemania, both in its personal intensity and expression of fandom as a collective force, was a meaningful and generative historical development” (p.2). According to research, music fans frequently create parasocial relationships with musicians, with the level of involvement on social networking sites impacted by psychological factors such as attachment styles and celebrity attitudes (Krause, 2018). These relationships are distinct from those developed with traditional media characters and are frequently strengthened by exposure (Kurtin, 2019). The birth of music fans is frequently motivated by a desire for self-identification and a sense of belonging, which leads to the formation of fan communities. Social media has altered fan-artist interaction, with online involvement playing an important role in the development of fan communities (Herrera, 2017). Some fans form community connections and relationships with each other through their shared fandom, distinct from any direct parasocial relationship with the artist.

Yates (2015) discovered that Bruce Springsteen fans use the internet to create social relationships with one another, rather than engaging in parasocial interactions with the artist himself. This is reinforced by Heidemann (2015), who claims that fans create mediated interactions with Springsteen through his music rather than direct interaction with him.

Finally, parasocial relationships have a complex link with loneliness, with evidence indicating that PSR can serve as a viable alternative to interpersonal connections, especially for certain types of loneliness. Additionally, PSRs enhance the sense of community on social media platforms, fostering connections among users through shared interests. While some fans engage in PSRs with the artist, others form connections with fellow fans through shared fandom, independent of direct parasocial relationships with the artist. This is why this study will examine the influence of PSRs on loneliness. Contrary to popular belief, it might help some individuals feel connected and form meaningful relationships.

### 1.6 Well-being

In regard to well-being, the existing research has shown that its relationship with PSRs can depend on the context, (Kim et al., 2023), as are the other variables this study will examine. One key factor this study will investigate is how the complex nature of PSRs affects individuals' well-being in various ways. Since there is a common bias that these relationships lead to social isolation, deterioration of social cohesion, and life dissatisfaction, even though many findings suggest otherwise, we aim to explore the truth behind these preconceptions and find how PSRs could positively impact people’s lives.

Kim and Kim (2020) investigated how parasocial relationships between fans and celebrities on social media affect fans' real-life life satisfaction and perceived well-being in their study titled “How does a celebrity make fans happy? Interaction between celebrities and

fans in the social media context". They found that certain variables affected the levels of friendship and self-congruity with their favorite celebrity on social media, which led to fans perceiving higher levels of real-life satisfaction and well-being. These particular variables were fans' perception of language and interest similarities to their favorite celebrity (p.10). The study points out that, "... fans perceive high levels of life satisfaction and well-being through feelings of self-congruity and friendship with their favorite celebrity on social media" (p.10).

Moreover, according to Hoffner (2022), developing parasocial relationships with media figures who demonstrate confidence or overcome challenges, can inspire individuals and increase their sense of self-efficacy in similar circumstances (p.3). For example, if someone is struggling with a substance abuse problem, observing a public figure who has maintained sobriety for an extended period may serve as a source of inspiration and motivation. In Hoffner's view "People often adopt interests or activities of social media figures with whom they have a PSR, and this can contribute to a sense of self-congruity and greater well-being" (p.3). In addition, the study also emphasizes that LGBTQ youth are more likely to develop a strong bond with a media figure who is also a member of the LGBTQ community, as this connection helps them feel less alone in their experiences and increases their well-being (p.3). For this reason, the study of well-being in relation to PSRs is a crucial point to learn more about.

A paper titled "Social surrogacy: How favored television programs provide the experience of belonging" by Derrick et al. (2009), consisted of 4 studies, focused on how parasocial relationships with favored television programs could provide a sense of belonging. The first study found that people tend to watch their favorite shows when feeling lonely, which in turn reduces loneliness (p.354). Study 2 showed that when people's need for belonging is triggered, they spend more time reading descriptions of their favorite programs

(p.355). Study 3 revealed that thinking about these favored programs helps maintain self-esteem, mood, and reduces feelings of rejection (p.356). Derrick et al. highlighted the positive effects of these parasocial relationships on mood, stating, “In other words, participants who were given the opportunity to call to mind parasocial relationships that commonly appear in favorite television programs were protected against the negative mood effects of a relationship threat (p.358)”. Lastly, Study 4 indicated that thinking about favored programs lessens the activation of rejection-related thoughts (p.358). This research suggests that favorite television programs not only evoke a sense of belonging but also enhance well-being in various ways.

To summarize, the link between parasocial relationships and well-being is complex. While some argue that PSRs lead to social isolation and life dissatisfaction, research consistently shows that these relationships can increase well-being and provide emotional support. According to studies, PSRs involving media characters and favorite television series can make people feel more connected, boost their self-esteem, and reduce feelings of loneliness and rejection. Kim and Kim (2020) and Derrick et al. (2009) show that the nature of PSRs can have a considerable impact on real-life satisfaction. Understanding the complexity of PSRs is critical because they can be useful social resources that enhance people's lives by giving comfort and a sense of belonging in media-driven environments. This study intends to go deeper into these processes and determine the extent of PSRs' impact on well-being.

### 1.7 Social Anxiety

When it comes to social anxiety and its relation to PSRs, we are faced with a very multifaceted connection. American Psychiatric Association, describes social anxiety as, “The essential feature of social anxiety disorder is a marked, or intense, fear or anxiety of social

situations in which the individual may be scrutinized by others." (p.231), in DSM-5-TR (2022). The definition leads us to consider how socially anxious people may find it challenging to create and sustain real-life connections because they are afraid of being judged or rejected. Moreover, this fear can lead to the formation of parasocial relationships to fulfill their needs to socialize and connect with others.

Even though existing research has been focusing on social anxiety as a predictor for parasocial relationships (Tatem, 2022), there is an exciting question lying behind how parasocial relationships can influence social anxiety levels of an individual. As we mentioned before, the study done by Coddaire (2015) found a negative correlation between parasocial relationships and social anxiety, and also loneliness. The variety of findings regarding this relation is quite interesting to look at. A study done by De Bérail et al. (2019) investigated the relationship between social anxiety, YouTube addiction and parasocial relationships with YouTubers. This study collected data from 932 participants, used Liebowitz Social Anxiety Scale (Liebowitz, 1987) to measure social anxiety, and the 10-item version of the Parasocial Interaction Scale (Rubin et al., 1985) to measure parasocial relationships. Out of 6 hypotheses they worked on with this study, the most relevant to our study is the third hypothesis, "H3: Social anxiety will be positively associated with the parasocial relationship with a favorite YouTuber." (p.192) The findings showed that the degree of social anxiety influenced the levels of individuals' PSRs with YouTubers (p.198). However, they further discussed an interesting point about how "parasocial networking" helped fulfill the need to belong of individuals in the same way "social networking" does to fulfill fundamental human needs (p.199). This point opens up an interesting path for exploration, suggesting that while social anxiety may predict parasocial relationships, these relationships can also serve as a way to fulfill individuals' need to belong, much like traditional social networking does.

On another note, many different communities exist today, mainly thanks to social

network sites, that bring people together, such as fan communities of movies on apps like "Letterboxd," or for book lovers on "Goodreads" (Jensen et al., 2021). Additionally, there are fan clubs for musicians and sports teams created on platforms like X, Facebook, or Instagram, as well as big events like "Comic-cons" across the USA, Europe, and Asia, with the biggest one in Europe being in Lucca, Italy. However, being a fan does not always mean that you engage with your community. The parasocial relationship could be beneficial even when there is not a strong connection with the community itself. According to Derbaix (2019), being a fan, even if it is done alone and without community involvement, can lead to beneficial practices for both fans and the object of their PSR, in their study's case, a musician. This shows that the PSR can be rewarding even without the involvement of the community, with a sense of connection with the musician and their love for their art. However, it still can bring people together and help them share a common interest which can increase their sociability; Derbaix (2019) clears this point with a comment made by a Radiohead fan, "It's funny when I play Radiohead music to some people who had never heard the band before. I like it when I help people discover some less famous Radiohead songs, it's contagious: 'If you love what I love, I love you.' It's a bit egoistic, you don't share what your friend loves, you share what you love. But I don't get mad over that either, if it doesn't work, I switch to something else. (Miguel, 32, Radiohead fan)" (p.115).

So, do individuals with higher social anxiety levels tend to form parasocial relationships, and does it help them cope? If so, it suggests that parasocial relationships can function as a coping mechanism for social anxiety. Given the benefits of engaging in hobbies or shared interests (Takiguchi, 2022; Nielsen, 2021), it raises the question: Can parasocial relationships serve as a coping mechanism or a means of connection? This study will explore the correlation between PSRs and social anxiety, although establishing causality requires a longitudinal study.

### 1.8 Predictors of Parasocial Relationships

Since the formation of the term “Parasocial Relationship” in 1956, the reasons that lead people to form these relationships have been a topic of interest (Levy, 1979). As mentioned, the most talked about reasoning in the literature is the loneliness factor (Rubin et al., 1985). It was suggested that people start to feel the need to form these one-way relationships when they feel lonely and cannot find a way to create intimate interpersonal relationships. For instance, Greenwood (2009) found that specific types of loneliness experiences were related to increased parasocial interaction and the need to belong was related to these interactions. However, this hypothesis is not proven by every study that has investigated this (Kim et al., 2023; Rubin et al., 1985). Rubin et al. (1985) did not find a correlation between parasocial interaction and loneliness. Rubin et al. (1985) wrote “…lonely persons were less likely to communicate interpersonally. They were more likely to turn to television when they experienced loneliness. This latter association, though, did not manifest itself in levels of television viewing or in parasocial interaction with television news personalities” (p.173). Similar to this study, a range of studies have explored the predictors of parasocial interaction. Turner (1993), with a final sample of 281 participants, found that certain dimensions of a person's self-esteem helped to predict and explain parasocial interaction (p.449). One of the main findings was that the category of "Positive Self-Evaluation" in the self-esteem assessment was a significant predictor of parasocial interaction with the "Comedians” group (p.449). These studies collectively suggest that a combination of interpersonal and psychological factors, including self-esteem, loneliness, and media involvement, can influence the development of parasocial interaction with television performers. Our study will look into adult attachment, self-esteem and independent-interdependent self-construal of individuals to see if they act as predictors of PSR.

A study by Cole (1999) named “Attachment Styles and Intimate Television Viewing:

Insecurely Forming Relationships in a Parasocial Way", expanded on the predictor role of attachment styles of individuals who tend to form PSRs and found that anxious-ambivalent and mistrusting secure styles were most likely to form a parasocial relationships with their favorite TV personalities (p.507). Anxious attachment is characterized by insecurity in relationships, fear of rejection, and a strong desire for intimacy. These characteristics indicate that those suffering from real-life relationships may seek compensatory relationships with media characters. People with strong anxious attachments, for example, have been reported to have higher levels of imagined intimacy in real-life relationships and greater parasocial intensity with media personalities (Greenwood & Long, 2011). Avoidant attachment, on the other hand, is either unrelated to PSRs or has a negative correlation. Avoidant attachment is defined as avoiding connection in relationships, maintaining emotional distance, and promoting self-sufficiency. As a result, individuals with a high avoidant attachment may avoid building long-term connections with media characters, just as they would in real life (Rosaen, 2015, p.13). Furthermore, Rosaen (2015) found that anxious attachment style is the most common attachment style in terms of PSRs, particularly when the individual is lonely. As Rosaen (2015) puts it, "If we consider the interaction between anxious attachment and loneliness and its connection to PSRs with disliked characters, this suggests that an already needy person who also feels lonely will seek a connection with anyone and, in this case, any media persona, even a disliked persona" (p.13). In conclusion, the evidence demonstrates that anxious attachment has an encouraging effect on PSRs, but avoidant attachment has a more complex relationship, potentially resulting in a decrease. This study will investigate whether this hypothesis holds true or not.

On the topic of self-esteem, Derrick (2008), in the study titled "Parasocial relationships and self-discrepancies: Faux relationships have benefits for low self-esteem individuals", suggests that low self-esteem is not the cause of PSRs; however, individuals

with low self-esteem might benefit more from these relationships. These relationships can help them move closer to their ideal self, a benefit they may not experience in real relationships (p.262). According to the study, those with low self-esteem felt closest to celebrities who matched their ideal self, which made them become more like their ideal self when primed with their favorite celebrity (p.275). In Derrick's words, "... parasocial relationships can have self-enhancing benefits for low self-esteem people that they do not receive in real relationships" (p.276). These findings create a link to the well-being of individuals with higher levels of PSRs, whether they are more likely to have them because of their low self-esteem levels or not. In addition, the interesting research of Bi and Zhang (2022) on the effects of PSRs and self-esteem on purchase intentions found that individuals with lower self-esteem and strong PSRs with influencers tend to purchase the endorsed products. However, if they have higher self-esteem, they become less likely to buy the endorsed products (pp.167-168). These studies provide further justification for examining the predictive effects of self-esteem on PSRs. Our study seeks to address the gap in understanding the role of self-esteem as a predictor of parasocial relationships.

Lastly, we will examine the role of self-construal which is a term introduced by Markus and Kitayama in 1991, distinguishing between independent and interdependent self-construals. Independent self-construal emphasizes individuality and personal traits, with individuals viewing themselves as autonomous and unique. On the contrary, interdependent self-construal focuses on connectedness and relationships, where individuals see themselves as part of a larger group and prioritize group harmony and social roles (pp.226-227). The research by Kim et al. (2021) named "Self-construal on brand fan pages: The mediating effect of para-social interaction and consumer engagement on brand loyalty" found that individuals with high interdependent self-construal, have high PSI. This interesting study shows that parasocial interactions are not limited to only celebrities and they can be used in marketing

strategies in different fields. Kim et al. (2021) described consumers with interdependent self-construal as "Consumers with interdependent self-construal tend to think and act to link with groups or strengthen existing relationships. Those with strong interdependent self-construal pay attention to the opinions and thoughts of others and focus more on building relationships while exchanging opinions; they prioritize social harmony in their interpersonal relationships" (pp.258-259). These findings strengthen our study's hypothesis regarding the relationship between PSRs and independent-interdependent self-construals.

Finally, parasocial relationships are influenced by complicated interactions of interpersonal and psychological elements such as loneliness, self-esteem, attachment styles, and self-concept. While loneliness has frequently been highlighted as a primary motivator for establishing PSRs, the evidence is contradictory, with other research indicating that other variables like self-esteem and attachment style play essential roles. As research has shown, anxious attachment and low self-esteem can lead to greater PSRs, whereas self-construal influences the nature of these connections, specifically how people perceive themselves in relation to others. This chapter has identified key features that may predict PSRs, laying the groundwork for our research, which aims to investigate how adult attachment, self-esteem, and self-construal influence the establishment and intensity of these relationships. Understanding these variables will provide further insight into the psychological basis of PSRs and their wider social influence.

## 2. Research Question

The primary research question of this study is: What is the relationship between engagement in parasocial relationships and levels of social anxiety, loneliness, and well-being, while considering the potential predictor roles of adult attachment, self-esteem and independent-interdependent self-construal?

Based on the research question, the following hypotheses will be tested:

H1: Individuals with higher levels of parasocial relationships will exhibit lower levels of social anxiety and loneliness, indicating a negative correlation.

H2: Higher levels of parasocial relationships will be positively correlated with higher levels of well-being.

H3: There will be a positive correlation between parasocial relationships and anxious attachment, low self-esteem and interdependent self-construal.

In summary, this study seeks to explore the complex aspects of parasocial relationships and examine how they might positively influence individuals' well-being and social life. By investigating these areas, it aims to provide a better understanding of how parasocial relationships can be beneficial in today's world.

## 3. Methodology

### 3.1 Participants

This study used an online survey to examine the correlation between parasocial relationships, social anxiety, loneliness, and well-being. The survey was shared through social media platforms, such as Instagram, Twitter (X), WhatsApp, and Facebook, so that it could be accessible to as many people as possible and to have a diverse group. A total of 105 participants completed the survey, with eligibility limited to adults aged 18 and older who accepted an informed consent. The participants were consisted of 79 females (75,24%), 24 males (22,86%) and 2 others (1,9%), The age range was between 18 to 58 years (M= 26.50, SD= 7.79). The experiment was anonymous; the participants were only asked about their age, gender and nationality.

Participants from 28 different nationalities completed the survey, including Turkish (45,71%), American (7,61%), British (6,66%), German (4,76%) etc. Furthermore, they were asked to indicate the media personality or character they felt the most connected to. The list of media personalities and characters consisted of singers (35,23%), fictional characters (24,76%), influencers (15,23%), actors (9,52%), authors (5,71%), historical figures (3,80%), athletes (1,90%), psychologists (1,90%) and directors (1,90%).

The survey was created and distributed using Google Forms. It began with an informed consent page, outlining the study's purpose, procedures, and participants' rights, including their ability to withdraw at any time. However, once the survey was submitted, no further modifications or withdrawals were possible due to its anonymous nature. The survey took approximately 15 minutes to complete, and data collection occurred over 7 weeks. Participants answered the survey in either English or Turkish. The Turkish version underwent a back-translation process to ensure accuracy and consistency. To improve the accuracy of the data, incomplete responses were not allowed; so, all submitted surveys were fully completed.

### 3.2 Procedure

**Psychological Measures**

The survey consisted of 111 items, organized by scale without displaying the scale titles to participants. It included 8 validated self-report measures:

1. Parasocial Interaction Dimensions and Items (Tsay & Bodine, 2012): This scale has 18 items and is measured on a 7-point Likert scale ranging from “strongly disagree” to “strongly agree”. It examines the relationship between audiences and their favorite media personalities or characters across various media platforms. It aims to capture key dimensions of this interaction, including guidance (viewing the personality as a role model and learning from them), desire for face-to-face contact (wanting to meet them in person), intimacy (feeling an intimate connection), and familiarity (feeling like personally knowing this figure).

2. UCLA Loneliness Scale (Russell et al., 1978): This is a 20-item questionnaire that assesses individuals' subjective feelings of loneliness and social isolation. Participants rate each item based on how frequently they experience these feelings, using a 4-point scale: Often (O), Sometimes (S), Rarely (R), or Never (N).

3. Psychological Well-Being Scale (Ryff & Keyes, 1995): This scale consists of 18 items and the items are measured on a 7-point Likert scale, ranging from “strongly agree” to “strongly disagree”. The scale includes 6 subscales; Autonomy, Environmental Mastery, Personal Growth, Positive Relations with Others, Purpose in Life and Self-Acceptance.

4. Severity Measure for Social Anxiety Disorder (Social Phobia) - Adult (LeBeau et al., 2016): This scale is a 10-item measure designed to assess the severity of social anxiety symptoms in individuals aged 18 and older. Individuals rate the severity of their

symptoms over the past 7 days on a 5-point scale (0=Never; 1=Occasionally; 2=Half of the time; 3=Most of the time; and 4=All of the time).

5. Rosenberg Self-Esteem Scale (Rosenberg, 1965): This is a 10-item measure of global self-worth, assessing both positive and negative perceptions of oneself. Also, it is a widely used scale to evaluate self-esteem levels. The items are rated on a 4-point Likert scale ranging from “strongly agree” to “strongly disagree”.

6. Experiences in Close Relationships (ECR)-Short Form (Wei et al., 2007): This scale is a 12-item measure assessing two dimensions of adult attachment: Anxiety and Avoidance. Individuals rate items on a 7-point Likert scale, “strongly disagree” to “strongly agree”, indicating how well each statement reflects their typical experiences in romantic relationships.

7. Relational-Interdependent Self-Construal Scale Items (Cross et al., 2000): RISC Scale is a measure that assesses the extent to which individuals define themselves through close relationships. It includes 11 items focused on aspects like incorporating close relationships into one's self-concept, identifying strongly with close friends or family etc. Individuals rate each statement on a 7-point scale ranging from "strongly disagree" to "strongly agree".

8. Self-Construal Scale (Singelis, 1994): This scale is designed to measure two distinct aspects of self-construal: independent and interdependent self-construal. It consists of 24 items, equally divided into two subscales. For our study, we used the 12 items that measure the independent self-construal, and the items are rated on a 7-point Likert scale ranging from "strongly disagree" to "strongly agree”.

These scales were chosen for their relevance to the study’s objectives.

## 4. Analysis and Results

The primary statistical measure used in this study was Pearson's correlation analysis (r), which examines the strength and direction of the relationships between Parasocial Relationships (PSR) and different psychological variables. Pearson's r assesses the degree to which two continuous variables are linearly related, ranging from -1 to +1, with negative values indicating an inverse relationship and positive values indicating a direct relationship.

Correlational analyses were conducted to determine whether PSR was associated with social anxiety, well-being, loneliness, self-esteem, anxious and avoidant attachment, and independent and interdependent self-construal. The significance of these correlations was evaluated using p-values, with $p < .05$ indicating statistical significance. In addition to examining the correlations the study also explored mediating and moderating processes to understand how these relationships operate. Specifically, we investigated whether parasocial familiarity mediates the link between loneliness and self-esteem and whether independent self-construal moderates this mediation. These analyses were conducted using PROCESS Model 8 (Hayes, 2022) to examine conditional indirect effects. They aimed to provide deeper insight into how parasocial relationships may indirectly relate to psychological functioning and self-perception.

Cronbach's alpha was computed to assess the internal consistency of all scales. While the other measures demonstrated acceptable reliability, the Well-Being scale showed moderate internal consistency ($\alpha = .69$), since it was below the threshold of $\alpha = .70$ (Cronbach, 1951). However, the major problem concerning this scale was that alpha was higher when items that express a lack of well-being were included in the analyses without having been recorded. This finding may be due to factors such as participants misinterpreting items or instructions in the online survey or inconsistent response patterns. As a result, the Psychological Well-Being scale was excluded from further statistical analyses.

**Table 1**

*Reliability Analysis (Cronbach's Alpha)*

| Scales | Number of items | Cronbach's Alpha (α) |
|---|---|---|
| Parasocial Relationship | 18 | .93 |
| Guidance | 8 | .93 |
| Face-to-Face Desire | 4 | .87 |
| Intimacy | 3 | .80 |
| Familiarity | 3 | .88 |
| Loneliness | 20 | .94 |
| Well-Being | 18 | .69* |
| Social Anxiety | 10 | .93 |
| Self-Esteem | 10 | .89 |
| Avoidant Attachment | 6 | .81 |
| Anxious Attachment | 6 | .75 |
| Interdependent Self-Construal | 11 | .77 |
| Independent Self-Construal | 12 | .81 |

### 4.1 Descriptive Statistics and Differences from the Midpoint

Before testing the hypotheses, descriptive statistics, including means (M) and standard deviation (SD), were calculated for all key variables; PSR, subscales of PSR (Guidance, Face to Face Desire, Intimacy, Familiarity), Social Anxiety, Loneliness, Self-Esteem, Anxious and Avoidant Attachment Styles, and Independent-Interdependent Self-Construal. Table 2 presents these descriptive statistics, as well as the difference of each score from the midpoint of the response scale.

**Table 2**
*Descriptive Statistics and Differences from the Midpoint*

| Variable | M | SD | Midpoint | Difference from Midpoint | t(104) | p-value |
|---|---|---|---|---|---|---|
| Parasocial Relationship | 4.35 | 1.26 | 4.00 | .356 | 2.89 | .005 |
| Guidance | 4.52 | 1.45 | 4.00 | .527 | 3.71 | <.001 |
| Face-to-Face Desire | 5.27 | 1.61 | 4.00 | 1.27 | 8.05 | <.001 |
| Intimacy | 3.04 | 1.57 | 4.00 | -.955 | -6.23 | <.001 |
| Familiarity | 3.99 | 1.81 | 4.00 | -.006 | -.04 | .972 |
| Loneliness | .87 | .65 | 1.50 | -.623 | -9.81 | <.001 |
| Social Anxiety | 1.08 | .99 | 2.00 | -.912 | -9.44 | <.001 |
| Self-Esteem | 2.96 | .64 | 2.50 | .465 | 7.34 | <.001 |
| Avoidant Attachment | 2.83 | 1.30 | 4.00 | -1.16 | -9.18 | <.001 |
| Anxious Attachment | 3.91 | 1.31 | 4.00 | -.087 | -.68 | .497 |
| Interdependent Self-Construal | 5.22 | 1 | 4.00 | 1.22 | 12.5 | <.001 |
| Independent Self-Construal | 4.77 | 1.06 | 4.00 | .779 | .779 | <.001 |

In addition to these overall statistics, it is beneficial to look at the parasocial relationship (PSR) scores for several celebrity categories. Table 3 shows the descriptive statistics for PSR scores categorized by media personality of character type, which shows how their PSR scores vary depending on who they associate with.

**Table 3**
*Descriptive Statistics of PSRs by Media Personality or Character Category*

| Category | n | M | SD |
|---|---|---|---|
| Singers | 37 | 84.08 | 25.34 |
| Fictional Characters | 26 | 79.42 | 17.51 |
| Influencers | 16 | 68.19 | 19.71 |
| Actors | 10 | 72.10 | 27.36 |
| Writers | 6 | 75.50 | 18.25 |
| Historical Figures | 4 | 83.75 | 34.64 |
| Athletes | 2 | 74.00 | 5 66 |
| Directors | 2 | 88.50 | 6 36 |
| Psychologists | 2 | 66.50 | 33.23 |

As shown in Table 3, the Directors category (n=2) shows the highest mean score of 88.50, although this result is less dependable due to the small sample size. The Singers category however, with 37 participants, has a high mean of 84.08, suggesting a strong parasocial connection. When comparing the celebrity categories to the overall PSR score (M = 78.42, SD = 22.74), the Singers category stands out with a mean score above the overall average. This indicates that this group likely represents the strongest parasocial relationships, especially considering it has the highest participant score as well (n=37).

### 4.2 Correlational Analyses

To test the hypotheses, Pearson's correlation analysis was conducted to examine the relationships between PSR, subscales of PSR, Social Anxiety, Loneliness, Self-Esteem, Attachment Styles, and Self-Construal. The results are presented in Table 4.

**Table 4**
*Correlational Analysis*

| | PSR | G | FF | Int | Fam | L | SA | SE | Avo | Anx | Inter |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PSR | — | | | | | | | | | | |
| G | .881** | — | | | | | | | | | |
| FF | .745** | .511** | — | | | | | | | | |
| Int | .748** | .504** | .446** | — | | | | | | | |
| Fam | .755** | .497** | .443** | .647** | — | | | | | | |
| L | .116 | .017 | .037 | .193* | .236* | — | | | | | |
| SA | .090 | .072 | .022 | .073 | .134 | .546** | — | | | | |
| SE | .091 | .072 | .122 | .026 | .057 | -.481** | -.538** | — | | | |
| Avo | -.153 | -.140 | -.153 | -.058 | -.108 | .188 | .235* | -.323** | — | | |
| Anx | .076 | -.003 | .146 | .064 | .094 | .403** | .301** | -.340** | .254** | — | |
| Inter | -.027 | -.083 | -.047 | .119 | .016 | .052 | .089 | -.144 | -.167 | .181 | — |
| Indep | .040 | .066 | .042 | .024 | -.047 | -.096 | -.102 | .269* | -.072 | -.193 | .017 |

### 4.3 Hypothesis Testing

H1: Individuals with higher levels of parasocial relationships will exhibit lower levels of social anxiety and loneliness, indicating a negative correlation.

This hypothesis predicted that PSR would have a negative correlation with Social Anxiety and Loneliness. However, the correlation between PSR and Social Anxiety was weak and non-significant ($r = .090$, $p = .360$), indicating a slight positive rather than negative relationship. Similarly, PSR and Loneliness were weakly and non-significantly correlated ($r =$

.116, $p$ = .239). Thus, H1 was not supported.

H2: Higher levels of parasocial relationships will be positively correlated with higher levels of well-being.

As mentioned before, due to the low reliability of the Well-Being scale ($\alpha$ = .69), it was excluded from further analysis. This could be the result of the sample size or participants misunderstanding the instructions or items. As a result, H2 was not tested.

H3: There will be a positive correlation between parasocial relationships and anxious attachment, low self-esteem and interdependent self-construal.

This hypothesis expected a positive correlation between PSR and Anxious Attachment and Interdependent Self-Construal, and a negative correlation with Self-Esteem. However, PSR showed weak, non-significant correlations with Anxious Attachment ($r$ = .076, $p$ = .442) and Self-Esteem ($r$ = .091, $p$ = .357). Additionally, the correlation between PSR and Interdependent Self-Construal was a non-significant negative correlation ($r$ = -.027, $p$ = .781), contradicting the hypothesis. Thus, H3 was not supported.

We conducted a power analysis to determine if our study had enough participants to detect significant effects. The results showed that our sample size was too small for some correlations. For example, the correlation between parasocial relationships and loneliness would have required 542 participants to reach 80% power. The correlation with social anxiety would have required 966 participants. Since our study had only 105 participants, it is likely that these effects did not reach significance because of low statistical power rather than the absence of a real relationship. Future studies should include more participants to better understand these connections.

While the primary hypotheses were not supported, some significant correlations were observed between Loneliness and specific subscales of PSR. Loneliness showed a significant

positive correlation with Intimacy ($r$ = .193, $p$ = .049; see Figure 1), indicating that individuals with higher loneliness scores reported stronger levels of intimacy with their favorite media figures. The Intimacy subscale assesses the emotional closeness individuals feel toward their favorite media figure. Items include, “I have an intimate connection with my favorite media personality or character” and “I see my favorite media personality or character as a close friend”. A similar significant positive correlation was found between Loneliness and Familiarity ($r$ = .236, $p$ = .015; see Figure 2), suggesting that lonelier individuals may experience a stronger sense of familiarity with the media persona they have a parasocial relationship with. The Familiarity subscale reflects the extent to which individuals feel they know their favorite media figure personally. Items include, “I am familiar with the habits of my favorite media personality or character” and “My favorite media personality or character makes me feel comfortable, as if I am with friends”.

**Figure 1**

*Scatterplot depicting the correlation between Loneliness and Intimacy*

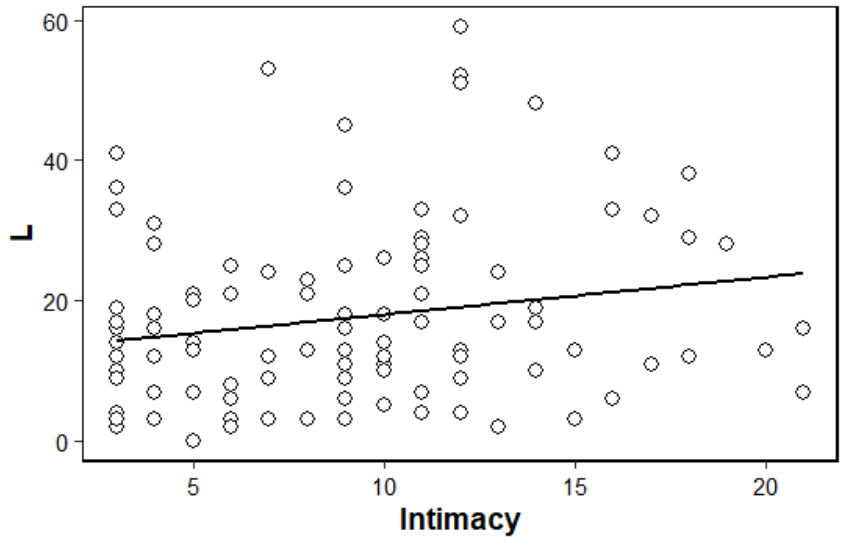
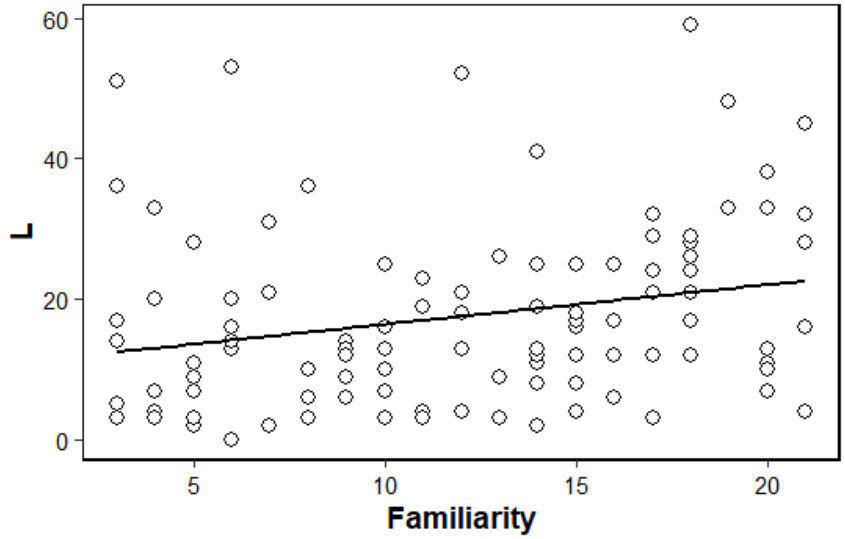



**Figure 2**

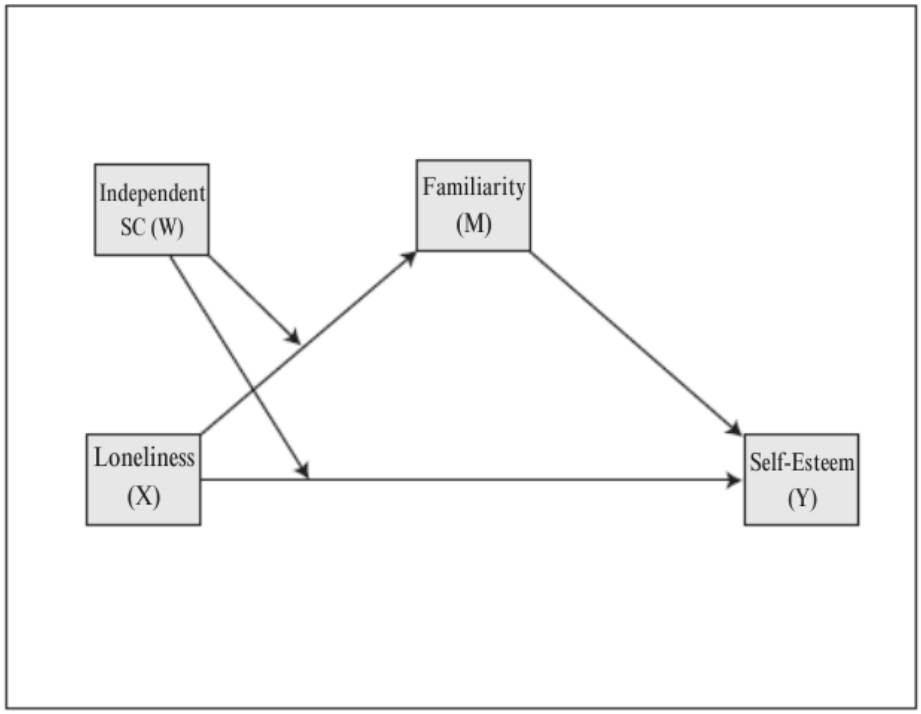
*Scatterplot depicting the correlation between Loneliness and Familiarity*



### 4.4 Moderated Mediation Analysis

To examine whether parasocial familiarity explains the link between loneliness and self-esteem, and whether independent self-construal influences this relationship, a moderated mediation analysis was conducted using PROCESS Model 8 (Hayes, 2022). In this model, loneliness (X) was the predictor, parasocial familiarity (M) was the mediator, self-esteem (Y) was the outcome variable, and independent self-construal (W) was the moderator (see Figure 3).

**Figure 3**
*Moderated Mediation Model of Loneliness Predicting Self-Esteem via PSR-Familiarity, Moderated by Independent Self-Construal*




### Moderation Analysis 1: Predicting Familiarity

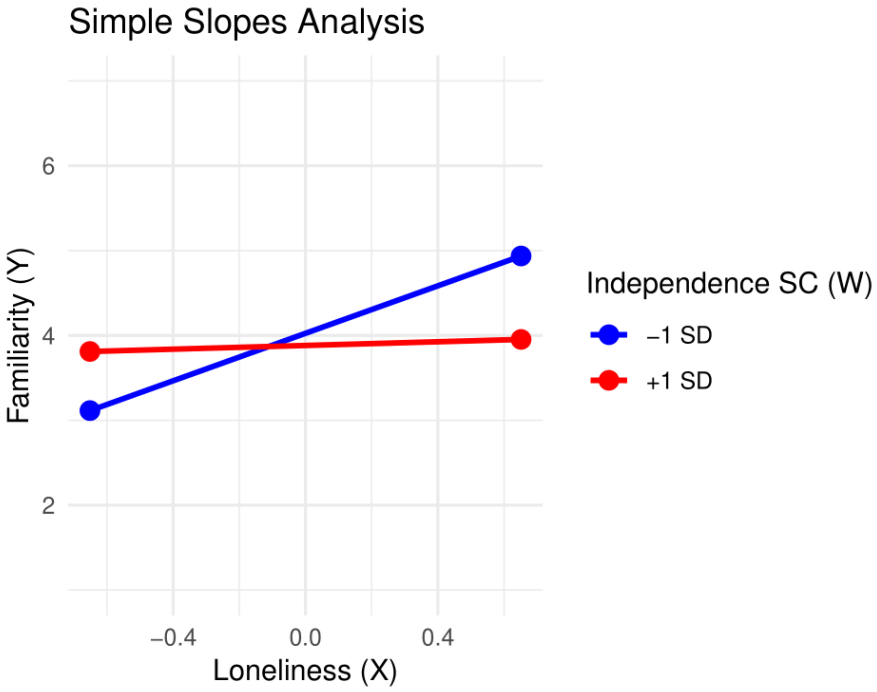
Our first moderation analysis examined the relationship between loneliness and familiarity while considering the moderating effect of independent self-construal. We found that loneliness significantly predicted parasocial familiarity (*b = .754, SE = .268, t = 2.81, p*

= *.006*). This suggests that people who feel lonelier tend to develop stronger parasocial familiarity. Independent self-construal did not have a direct effect on parasocial familiarity (*b =-.067, SE = .162, t = -.415, p = .678*), meaning that how independent someone is does not directly impact their level of familiarity. However, the interaction between loneliness and independent self-construal was significant (*b =-.606 SE = .274, t = -2.20 p = .029*), suggesting that the positive relationship between loneliness and familiarity is weaker for people with higher independent self-construal. In other words, loneliness leads to stronger familiarity with a media figure, but this effect is less pronounced for those who see themselves as more independent.

We also did a Simple Slope analysis to see how loneliness affects familiarity at different levels of independent self-construal (see Figure 4). We found that at a low level of independent self-construal (−1.0636), loneliness has a strong positive effect on familiarity (*b = 1.39, SE = .429, t = 3.25, p = .001*), meaning that when people have low independence, loneliness is strongly linked to greater familiarity. However, at a high level of independent self-construal (1.0636), loneliness no longer has a significant effect on familiarity (*b = .109, SE = .361, t = .302, p = .763*), meaning that for people with high independence, loneliness does not significantly predict familiarity with a media figure.

**Figure 4**

*Moderating Effect of Independent Self-Construal on the Relationship Between Loneliness and Familiarity*



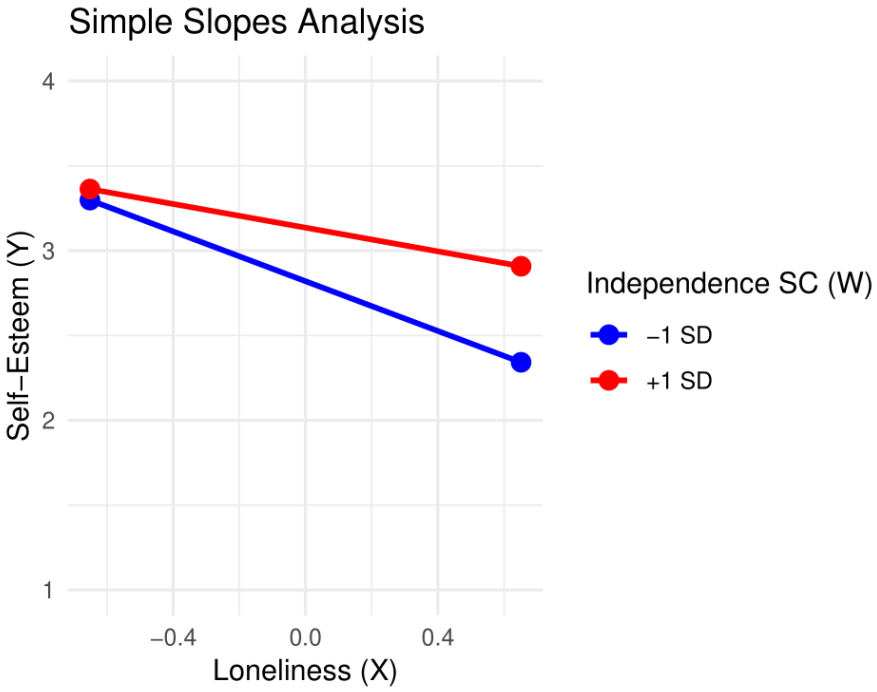

**Moderation Analysis 2: Predicting Self-Esteem**

We ran the same moderation analysis for self-esteem, and we found that loneliness was a strong negative predictor of self-esteem (*b =-.541, SE = .085, t =-6.32, p <.001*), meaning that lonelier people tend to have lower self-esteem. Familiarity had a small but significant positive effect on self-esteem *(b = .080, SE = .030, t = 2.63, p = .0100*), suggesting that engaging in parasocial relationships may slightly boost self-esteem. Independent self-construal was also positively related to self-esteem (*b = .148, SE = .049, t = 2.97, p = .0037*), meaning that people who see themselves as independent tend to have higher self-esteem. Importantly, the interaction between loneliness and independent self-construal was significant (*b = .180, SE = .086, t = 2.09, p = .039*), suggesting that the negative effect of loneliness on self-esteem was weaker for individuals with higher independent self-construal. That is to say, while loneliness generally lowers self-esteem, this effect is less strong for people who have a stronger independent self-construal.

The second simple slope analysis examined whether the relationship between loneliness and self-esteem changes at different levels of independent self-construal (see Figure 5). At low levels of independence (-1.0636), the effect of loneliness on self-esteem is negative (*b =-.733, SE = .138, t =-5.28, p <.001*). This means that as loneliness increases, self-esteem decreases when independent self-construal is low. At high levels of independence (1.0636), the effect of loneliness on self-esteem is significantly weaker and negative (*b =-.349, SE = .111, t =-3.14, p = .002*) suggesting that higher levels of independence lead to a weaker relationship between loneliness and self-esteem. Overall, the analysis indicates that the negative relationship between loneliness and self-esteem is strongest at low levels of independence and weakens at higher levels of independence.

**Figure 5**

*Moderating Effect of Independent Self-Construal on the Relationship Between Loneliness and Self-Esteem*




**Moderated Mediation Analysis**

We then ran our full model in which familiarity mediated the relationship between loneliness and self-esteem, with independent self-construal moderating this mediation. At low levels of independent self-construal, the indirect effect of loneliness on self-esteem through familiarity was b = .112, BootSE = .061, 95% CI [.017, .253], indicating a significant mediation effect. At high levels of independent self-construal, the indirect effect was much weaker and non-significant b = .008, BootSE = .036, 95% CI [-.059, .089], suggesting that familiarity does not mediate the relationship at high levels of independent self-construal. The index of moderated mediation was b =-.048, BootSE = .035, 95% CI [-.129, .007], meaning the moderation effect on the indirect path was not statistically significant.

Since this analysis was not significant with 95% CI, we ran the same analysis with 90% confidence intervals. With 90% confidence intervals, the direct effect of loneliness on self-esteem remained significant across all levels of independent self-construal. At low levels

of independent self-construal, loneliness had a strong negative effect on self-esteem (*b =-.733, SE = .138, t =-5.29, p < .001, 90% CI [-.963, -.503]*), while at high levels, the effect was weaker but still significant (*b = -.349, SE = .111, t = -3.15, p = .002, 90% CI [-.533, -.165]*).

For the indirect effect through familiarity, at low levels of independent self-construal, loneliness significantly influenced self-esteem via familiarity (*b = .112, BootSE = .061, 90% CI [.028, .224]*), whereas at high levels, the mediation effect was non-significant (*b = .008, BootSE = .036, 90% CI [-.046, .072]*). Importantly, the index of moderated mediation was marginally significant (*b =-.048, BootSE = .035, 90% CI [-.112,-.0006], p <.10*), suggesting a potential moderating role of independent self-construal in the indirect pathway. This suggests that independent self-construal may indeed shape the extent to which familiarity mediates the loneliness–self-esteem link, and further investigation with a larger sample or slightly relaxed significance thresholds could provide stronger support for this effect.

## 5. Discussion

The primary goal of this study was to examine whether parasocial relationships (PSR) could have positive impacts on the levels of loneliness, social anxiety and well-being while studying the effects of self-esteem, attachment styles, and self-construal on PSRs. Using Pearson's correlation analysis, we tested three main hypotheses; however, none were supported by the results.

Our first hypothesis (H1) predicted that PSR would be negatively correlated with social anxiety and loneliness. However, the results showed weak and non-significant correlations ($r = .090$, $p = .360$ for social anxiety; $r = .116$, $p = .239$ for loneliness). These findings do not support previous research, such as Kim et al. (2023), which suggested that PSRs may have a positive impact on loneliness, rather than loneliness serving as a predictor of PSRs. Since we know from previous studies that there are definite correlations between these variables; one possible explanation is that our sample size was too small to predict a correlation.

Our second hypothesis (H2) proposed that PSR would be positively correlated with well-being; however, the Psychological Well-Being Scale was excluded due to poor reliability ($\alpha = .69$). This limitation prevents us from drawing conclusions regarding this relationship. The low reliability may have stemmed from misunderstandings of instructions, sample size or respondent fatigue.

Our third hypothesis (H3) predicted that PSR would be positively associated with anxious attachment and interdependent self-construal and negatively associated with self-esteem. However, our results showed non-significant correlations ($r = .076$, $p = .442$ for anxious attachment; $r = -.027$, $p = .781$ for interdependent self-construal; $r = .091$, $p = .357$ for self-esteem). These findings do not align with research suggesting that individuals with anxious attachment tendencies form stronger parasocial bonds Cole (1999), individuals with

higher interdependent self-construal, have higher parasocial interactions (Kim et al. (2021), or individuals with low self-esteem felt closest to celebrities who matched their ideal self Derrick (2008). The reasons for the insignificant findings are most likely the same ones for H1.

While the primary hypotheses were not supported, loneliness was significantly correlated with the intimacy ($r = .193$, $p = .049$) and familiarity ($r = .236$, $p = .015$) subscales of PSR. This suggests that individuals experiencing loneliness may develop stronger feelings of intimacy and familiarity with media figures or characters. This aligns with previous research of Derrick et al. (2009) which proposes that media figures or characters can provide a sense of companionship and reduce feelings of social isolation. Future studies should further explore the role of specific PSR dimensions in relation to psychological well-being.

Given the weak and non-significant correlations observed between parasocial relationships and key psychological variables, further analyses were conducted to explore potential mediating and moderating effects. This approach allowed us to investigate whether indirect relationships existed, providing insight into how parasocial relationships may still be relevant to psychological outcomes despite the lack of strong direct correlations. Using a moderated mediation model, we explored how loneliness predicts self-esteem through familiarity and whether independent self-construal influences these relationships. Our findings offer important insights into the complex interplay between loneliness, parasocial relationships, self-construal, and self-esteem. As mentioned above, our results showed that loneliness significantly predicted parasocial familiarity. However, our moderation analysis revealed that this effect was dependent on independent self-construal. Specifically, loneliness was a strong predictor of familiarity for individuals with low independent self-construal but was not significant for those with high independence. This suggests that individuals who perceive themselves as highly independent may be less inclined to form parasocial

relationships as a response to loneliness.

Our findings further demonstrated that loneliness negatively predicted self-esteem, where familiarity had a positive effect on it. This finding is particularly interesting because it aligns with Derrick's (2008), in which the study suggested that individuals with low self-esteem could benefit from parasocial relationships. While parasocial interactions may not replace real social connections, they might contribute positively to self-perception. Interestingly, the interaction between loneliness and independent self-construal showed that the effects of loneliness on self-esteem were weaker for people with higher independent self-construal.

Our full model tested whether independent self-construal moderates the indirect effect of loneliness on self-esteem through familiarity. At low levels of independent self-construal, familiarity significantly mediated the relationship between loneliness and self-esteem, indicating that parasocial familiarity played a compensatory role in maintaining self-esteem for those with lower independence. However, at high levels of independent self-construal, this indirect effect was non-significant, reinforcing the idea that independent individuals do not rely on parasocial familiarity to the same extent as those with lower independence.

Interestingly, while the index of moderated mediation was not significant at the conventional 95% confidence intervals, it reached marginal significance at 90% confidence intervals. This suggests that independent self-construal may shape the extent to which parasocial familiarity mediates the loneliness and self-esteem link, although with weaker statistical support. Future research with larger sample sizes or alternative statistical approaches could provide stronger evidence for this effect.

## 6. Limitations

The primary limitation of this study is the potential for self-report bias, as participants may have underreported or overreported their experiences due to social desirability or personal interpretation of the survey items. Another important limitation was the sample size. Since the sample consisted of only 105 participants which was predominantly female (75.24%), the results are less generalizable. Additionally, the exclusion of the well-being scale due to poor reliability limited our ability to examine one of the key research questions. To avoid these outcomes, future research should aim for larger and more gender-balanced samples. Lastly, our study had a correlational design, preventing causal interpretations. Longitudinal studies could provide insight into how parasocial relationships develop and change over time in relation to psychological and environmental changes.

## 7. Conclusion

Despite the limitations mentioned above, this study provided valuable insights into the complexity of parasocial relationships and their relationship to psychological variables. Even though the study did not prove our hypothesis, it still aimed to put a light on the otherwise neglected topic of the positive impacts of parasocial relationships on individuals' overall psychological well-being and social interactions whether it be in real life or online. The significant correlation between loneliness and intimacy, and also familiarity in PSR highlights the potential function of these relationships. The findings of the moderated mediation analysis suggest that independent self-construal may influence how parasocial familiarity mediates the relationship between loneliness and self-esteem, with a stronger effect for those with lower independence. While moderated mediation was only marginally significant, it still provides motivation for further research. In conclusion, future research should continue exploring these dynamics using longitudinal studies, diverse and large samples to deepen our understanding of the psychological role of parasocial relationships and interactions in modern society.

## 8. Bibliography

American Psychiatric Association. (2022).

Bi, N. C., & Zhang, R. (2022). "I will buy what my 'friend' recommends": The effects of parasocial relationships, influencer credibility and self-esteem on purchase intentions. *Journal of Research in Interactive Marketing, 17*(2), 157-175. https://doi.org/10.1108/jrim-08-2021-0214

Blight, M. G., Ruppel, E. K., & Schoenbauer, K. V. (2017). Sense of community on Twitter and Instagram: Exploring the roles of motives and Parasocial relationships. *Cyberpsychology, Behavior, and Social Networking, 20*(5), 314-319. https://doi.org/10.1089/cyber.2016.0505

Bocarnea, M. C., & Brown, W. J. (2007). Celebrity-persona Parasocial interaction scale. In *Handbook of Research on Electronic Surveys and Measurements* (pp. 309-312). https://doi.org/10.4018/978-1-59140-792-8.ch039

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. https://doi.org/10.1089/cyber.2016.0355

Brown, W. J., Basil, M. D., & Bocarnea, M. C. (2003). Social influence of an international celebrity: Responses to the death of Princess Diana. *Journal of Communication, 53*(4), 587-605. https://doi.org/10.1111/j.1460-2466.2003.tb02912.x

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

Coddaire, C. P. (2015). *Correlates of parasocial interactions across various media figures* (Honors thesis, University of Vermont). UVM Honors College Senior Theses. https://scholarworks.uvm.edu/hcoltheses/58

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. https://doi.org/10.1177/0265407599164005

Cross, S. E., Bacon, P. L., & Morris, M. L. (2000). The relational-interdependent self-construal and relationships. Journal of Personality and Social Psychology, 78(4), 791-808. https://doi.org/10.1037//0022-3514.78.4.191

Cusack, C. M. (2022). Religion and celebrity. The International Encyclopedia of Anthropology, 1-9. https://doi.org/10.1002/9781118924396.wbiea2500

Daniel, E. S., & Westerman, D. K. (2017). Valar Morghulis (All Parasocial men must die): Having Nonfictional responses to a fictional character. *Communication Research Reports, 34*(2), 143-152. https://doi.org/10.1080/08824096.2017.1285757

De Bérail, P., Guillon, M., & Bungener, C. (2019). The relations between YouTube addiction, social anxiety and parasocial relationships with YouTubers: A moderated-

mediation model based on a cognitive-behavioral framework. *Computers in Human Behavior, 99*, 190-204. https://doi.org/10.1016/j.chb.2019.05.007

Derbaix, M., & Korchia, M. (2019). Individual celebration of pop music icons: A study of music fans relationships with their object of fandom and associated practices. *Journal of Consumer Behaviour, 18*(2), 109-119. https://doi.org/10.1002/cb.1751

Derrick, J. L., Gabriel, S., & Hugenberg, K. (2009). Social surrogacy: How favored television programs provide the experience of belonging. *Journal of Experimental Social Psychology, 45*(2), 352-362. https://doi.org/10.1016/j.jesp.2008.12.003

Derrick, J. L., Gabriel, S., & Tippin, B. (2008). Parasocial relationships and self-discrepancies: Faux relationships have benefits for low self-esteem individuals. *Personal Relationships, 15*(2), 261-280. https://doi.org/10.1111/j.1475-6811.2008.00204.x

Greenwood, D. N., & Long, C. R. (2011). Attachment, belongingness needs, and relationship status predict imagined intimacy with media figures. *Communication Research, 38*(2), 278-297. https://doi.org/10.1177/0093650210362687

Greenwood, D. N., & Long, C. R. (2009). Psychological predictors of media involvement. *Communication Research, 36*(5), 637-654. https://doi.org/10.1177/0093650209338906

Hartmann, T., & Goldhoorn, C. (2011). Horton and Wohl revisited: Exploring viewers' experience of Parasocial interaction. *Journal of Communication, 61*(6), 1104-1121. https://doi.org/10.1111/j.1460-2466.2011.01595.x

Hartmann, T., Stuke, D., & Daschmann, G. (2008). Positive Parasocial relationships with drivers affect suspense in racing sport spectators. *Journal of Media Psychology, 20*(1), 24-34. https://doi.org/10.1027/1864-1105.20.1.24

Heidemann, A. (2015). The ties that bind: Forming parasocial relationships with 'The Boss'. *IU South Bend Undergraduate Research Journal, 14*, 77-83. https://scholarworks.iu.edu/journals/index.php/iusburj/article/view/13524/19759

Herrera, D. (2017). Parasocial engagement for musicians and artists: A systemic review of theoretical foundations with applications. *Journal of the Music and Entertainment Industry Educators Association, 17*(1), 13-30. https://doi.org/10.25101/17.1

Hoffner, C. L., & Bond, B. J. (2022). Parasocial relationships, social media, & well-being. *Current Opinion in Psychology*. https://doi.org/10.1016/j.copsyc.2022.101306

Horton, D., & Wohl, R. (1956). Mass communication and para-social interaction. *Psychiatry, 19*(3), 215-229. https://doi.org/10.1080/00332747.1956.1102304

Jarzyna, C. L. (2020). Parasocial interaction, the COVID-19 quarantine, and digital age media. *Human Arenas, 4*, 413-429. https://doi.org/10.1007/s42087-020-00156-0

Jensen, S. K., Mousavi, N., & Tornborg, E. (2021). Intermediality and social media. *Intermedial Studies*, 282-308. https://doi.org/10.4324/9781003174288-16

Kim, E., Yoo, D., & Doh, S. (2021). Self-construal on brand fan pages: The mediating effect of para-social interaction and consumer engagement on brand loyalty. *Journal of Brand Management, 28*(3), 254-271. https://doi.org/10.1057/s41262-020-00211-9

Kim, M. S., Wang, S., & Kim, S. (2023). Effects of online fan community interactions on well-being and sense of virtual community. *Behavioral Sciences, 13*(11), 897. https://doi.org/10.3390/bs13110897

Kim, M., & Kim, J. (2020). How does a celebrity make fans happy? Interaction between celebrities and fans in the social media context. *Computers in Human Behavior, 111,* 106419. https://doi.org/10.1016/j.chb.2020.106419

Kowert, R., & Daniel, E. (2021). The one-and-a-half sided parasocial relationship: The curious case of live streaming. *Computers in Human Behavior Reports, 4*, 100150. https://doi.org/10.1016/j.chbr.2021.100150

Krause, A. E., North, A. C., & Heritage, B. (2018). Musician interaction via social networking sites. *Music & Science, 1*, 205920431876292. https://doi.org/10.1177/2059204318762923

Kurtin, K. S., O'Brien, N. F., Roy, D., & Dam, L. (2019). Parasocial relationships with musicians. *Social Media & Society, 8*, 30-50. https://thejsms.org/index.php/JSMS/article/view/502/305

LeBeau, R. T., Mesri, B., & Craske, M. G. (2016). The DSM-5 social anxiety disorder severity scale: Evidence of validity and reliability in a clinical sample. Psychiatry Research, 244, 94-96. https://doi.org/10.1016/j.psychres.2016.07.024

Levy, M. R. (1979). Watching TV news as para-social interaction. *Journal of Broadcasting, 23*, 69-80. https://doi.org/10.1080/08838157909363919

Markus, H., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*, 224–253. https://doi.org/10.1037//0033-295x.98.2.224

Nielsen, L., Hinrichsen, C., Madsen, K. R., Nelausen, M. K., Meilstrup, C., Koyanagi, A., Koushede, V., & Santini, Z. I. (2021). Participation in social leisure activities may benefit mental health particularly among individuals that lack social connectedness at work or school. *Mental Health and Social Inclusion*. https://doi.org/10.1108/mhsi-06-2021-0026

Rohr, N. (2017). Yeah yeah yeah: The sixties screamscape of Beatlemania. *Journal of Popular Music Studies, 29*(2), e12213. https://doi.org/10.1111/jpms.12213

Rosaen, S. F., & Dibble, J. L. (2015). Clarifying the role of attachment and social compensation on parasocial relationships with television characters. *Communication Studies, 67*(2), 147-162. https://doi.org/10.1080/10510974.2015.1121898

Rosenberg, M. (1965). Rosenberg self-esteem scale. PsycTESTS Dataset. https://doi.org/10.1037/t01038-000

Rubin, A. M., & Perse, E. M. (1987). Audience activity and television news gratifications. *Communication Research, 14*(1), 58-84. https://doi.org/10.1177/009365087014001004

Rubin, A. M., Perse, E. M., & Powell, R. A. (1985). Loneliness, parasocial interaction, and local television news viewing. *Human Communication Research, 12*(2), 155-180. https://doi.org/10.1111/j.1468-2958.1985.tb00071.x

Russell, D., Peplau, L. A., & Ferguson, M. L. (1978). Developing a measure of loneliness. Journal of Personality Assessment, 42(3), 290-294. https://doi.org/10.1207/s15327752jpa4203_11

Ryff, C. D., & Keyes, C. L. (1995). The structure of psychological well-being revisited. Journal of Personality and Social Psychology, 69(4), 719-727. https://doi.org/10.1037//0022-3514.69.4.719

Senft, T. M. (2008). *Camgirls: Celebrity and community in the age of social networks.* Peter Lang.

Singelis, T. M. (1994). The measurement of independent and interdependent self-construals. Personality and Social Psychology Bulletin, 20(5), 580-591. https://doi.org/10.1177/0146167294205014

Takiguchi, Y., Matsui, M., Kikutani, M., & Ebina, K. (2022). The relationship between leisure activities and mental health: The impact of resilience and COVID-19. *Applied Psychology: Health and Well-Being, 15*(1), 133-151. https://doi.org/10.1111/aphw.12394

Tatem, C. P., & Ingram, J. (2022). Social media habits but not social interaction anxiety predict Parasocial relationships. *Journal of Social Psychology Research,* 198-211. https://doi.org/10.37256/jspr.1220221496

Thomas, J. (2008). From people power to mass hysteria. *International Journal of Cultural Studies, 11*(3), 362-376. https://doi.org/10.1177/1367877908092590

Tosta, H. E. (2024). Parasocial relationships with public figures through the lens of social media (Master's thesis). California State University, Northridge. ScholarWorks California State University Repository. https://scholarworks.calstate.edu/downloads/1z40m207t

Tsay, M., & Bodine, B. M. (2012). Exploring parasocial interaction in college students as a multidimensional construct: Do personality, interpersonal need, and television motive predict their relationships with media characters? *Psychology of Popular Media Culture, 1*(3), 185-200. https://doi.org/10.1037/a0028120

Turner, J. R. (1993). Interpersonal and psychological predictors of parasocial interaction with different television performers. *Communication Quarterly, 41*(4), 443-453. https://doi.org/10.1080/01463379309369904

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. https://doi.org/10.1080/01463370701839057

Yates, B. L. (2015). It's social, not Parasocial: Understanding the impact of the internet on building community among Bruce Springsteen fans. *Atlantic Journal of Communication, 23*(5), 254-268. https://doi.org/10.1080/15456870.2015.1090438