Investigating the Association Between Celebrity Worship and Heteronormative Attitudes Among Heterosexual and LGB+ Individuals

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Abstract

Evidence was found that perceived similarity with a famous person in gender, age, cultural background and attitudes increases the attraction towards this celebrity. Previous studies have also revealed that sexual minority individuals and those with a sexual attraction towards a famous person of the opposite gender are more likely to become obsessed with their favorite celebrity. Based on these findings, this study aimed to explore how heteronormative attitudes—gender role and behavioral expectations for men and women—are associated with celebrity worship in LGB+ and heterosexual individuals. An online questionnaire was administered to 1,763 Hungarian adults (66.4% male, 14.7% LGB+ individuals, $M_{age} = 37.2$ years, $SD = 11.4$). Heterosexual individuals with a favorite celebrity of the same gender reported stronger heteronormative attitudes in terms of gender roles and behaviors than LGB+ individuals. Furthermore, this aspect of heteronormative attitudes predicted higher levels of celebrity worship in individuals with a favorite celebrity of their own gender, irrespective of sexual orientation. However, heteronormative attitudes explained only a small proportion of the variance of celebrity worship (1–6%), indicating that heteronormativity has no substantial impact on celebrity admiration.

Keywords Attitude · Celebrity worship · Heteronormativity · Homosexuality · Sexual orientation

Introduction

Individual differences in celebrity admiration have been of considerable research interest in the past two decades (Brooks 2018). These studies have mainly focused on the psychological harms (Sansone and Sansone 2014), cognitive deficits (McCutcheon et al. 2012) and social difficulties related to excessive celebrity

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worship (Houran et al. 2005). However, little attention has been paid to attitudes and beliefs that can possibly alter the extent of celebrity admiration. Recent studies have revealed that lesbian, gay, bisexual and other sexual minority (LGB+) individuals with increased feelings of loneliness (Bond 2018) and those with a favorite celebrity of the opposite gender (Greenwood et al. 2018) tend to exhibit higher levels of celebrity admiration. This study seeks further support for the individual differences in celebrity worship levels among LGB+ and heterosexual individuals by extending the investigation to gender-based celebrity selection. Furthermore, considering the influential role of LGB+ media personae in the identity formation of LGB+ individuals (e.g., Craig et al. 2015; DiFulvio 2011; Gomillion and Giuliano 2011), this study endeavors to address the question of whether existing heteronormative attitudes and beliefs are associated with the level of celebrity admiration in LGB+ or heterosexual individuals.

Individual Differences in Celebrity Worship

Celebrity worship is defined as an intense, one-sided emotional attachment to a famous person (McCutcheon et al. 2002, 2004), which can range from benign forms of enthusiasm (e.g., the person follows the news about his/her favorite celebrity) to more compulsive feelings and behaviors (e.g., the person feels compelled to learn the personal habits of his/her favorite celebrity). The Absorption–Addiction model developed by McCutcheon et al. (2002) provides a theoretical framework for this construct. The model postulates that individuals with a poorly integrated identity structure have a generally higher tendency to admire celebrities. These individuals identify with their favorite celebrities in an attempt to increase their self-integrity. However, some individuals may need to intensify the psychological absorption with a celebrity in order to achieve the desired effect. Hence, they may engage in more extreme behaviors in order to maintain the sense of fulfillment (addiction).

Several studies have investigated possible differences in celebrity worship levels based on major demographic characteristics (see Brooks 2018 for a review). Although gender-based comparisons produced mixed findings (Ashe et al. 2005; Maltby and Day 2011; Swami et al. 2011), celebrity worship decreased slightly with age (Houran et al. 2005; Maltby et al. 2005). Furthermore, a recent study reported that lonely LGB+ individuals had a higher tendency to develop one-sided emotional bonds towards famous media personae than heterosexual individuals (Bond 2018). Additionally, females (Greenwood et al. 2018; Hoffner 2011) and LGB+ individuals (Bond 2018) were more likely to select a favorite celebrity of the opposite gender compared with males and heterosexual individuals.

Recent studies investigating differences in celebrity worship levels across opposite- and same-gender celebrity selection have reported inconsistent findings. Greenwood et al. (2018) found that individuals with a fascination towards an opposite-gender celebrity had higher levels of celebrity worship. By contrast, Collisson et al. (2020) found no difference in celebrity worship across opposite- and same-gender celebrity selection. In a similar vein, Lin and Lin (2007) proposed that younger individuals with romantic feelings towards an opposite-gender celebrity may express

higher levels of admiration. Based upon these findings, it can be hypothesized that females, younger and LGB+ individuals are more likely to select an opposite-gender favorite celebrity than males, older and heterosexual individuals. Furthermore, LGB+ individuals and those with a favorite celebrity of the opposite gender may express higher levels of celebrity worship.

Heteronormativity and Role Models in the Media

Heteronormativity refers to social and cultural practices that “derive from and reinforce a set of taken-for-granted presumptions relating to sex and gender” (Kitzinger 2005, p. 478). These presumptions involve theories such as there are two sexes (i.e., male and female) and “normative behavioral expectations for men and women in relationships” (Habarth 2015, p. 3). Another presumption is that heterosexual relationships are natural, while same-sex attraction is beyond the margins of normality; therefore, sexual minority individuals are less likely to hold heteronormative attitudes compared with heterosexual individuals (Habarth 2015). Thus, it can be hypothesized that heterosexual individuals hold stronger heteronormative attitudes than LGB+ individuals.

Previous studies have also revealed that influential LGB+ media personae can serve as a role model for LGB+ audiences (Craig et al. 2015; Gomillion and Giuliano 2011). In a similar vein, Bond (2018) found that a favorite celebrity can be a major source of information about romantic relationships for LGB+ youth, which can further strengthen the emotional attachment for the celebrity. Recent studies have also indicated that gender roles and behaviors represented in media products of contemporary popular culture can influence consumers’ attitudes and beliefs about masculinity and femininity (Allen et al. 2015; Camacho 2017), and celebrities play a central role in the formation of gender identity among youth (Allen and Mendick 2013). Considering that heterosexual individuals are expected to hold stronger heteronormative attitudes, it can be assumed that there is a stronger association between heteronormativity and celebrity admiration among heterosexual individuals compared to LGB+ individuals.

The uses and gratifications theory (UGT) postulates that personal gratifications “attract and hold audiences to the kinds of media and the types of content that satisfy their social and psychological needs” (Ruggiero 2000, p. 3). Consistent with this approach, it was found that perceived similarity with a celebrity based on gender, race, physical properties and social status enhances the attraction towards the famous person (Giuliano et al. 2007; Sciappa et al. 2007). Furthermore, similarities with a celebrity in terms of cultural background, preferences and attitudes were also identified as indicators of stronger attachment to the celebrity (Klimmt et al. 2006). An early study by Greene and Adams-Price (1990) reported that adolescents perceived celebrities of the opposite gender as more attractive in comparison with celebrities of their own gender. In relation to this finding, individuals who found a famous person attractive also developed a stronger emotional attachment to that person (Bond 2018; Sciappa et al. 2007). Therefore, it can be hypothesized that individuals who are fascinated with a celebrity of the opposite gender express stronger

romantic and erotic feelings for their favorite celebrity, specifically in cases when fans hold stronger heteronormative attitudes. In such cases, there is a consistency between individuals' attitudes and their preference for an opposite-gender celebrity, which can possibly increase the strength of emotional attachment (Giuliano et al. 2007; Sciappa et al. 2007).

Needs for integrity and structure were identified as fundamental psychological needs (Neuberg and Newsom 1993): audiences are expected to seek media content and figures that are consistent with their personal needs (Ruggiero 2000; Sciappa et al. 2007). Furthermore, celebrity worshippers are assumed to have a poorly integrated identity structure (McCutcheon et al. 2002), so we hypothesized that heterosexual individuals, who hold more heteronormative attitudes and beliefs, will develop a stronger attachment to their favorite celebrity in order to maintain the consistency of their attitudes, which can contribute to the development of their identity structure. To gain a more nuanced understanding of the association between heteronormative attitudes and the quality of attachment to a favorite celebrity, romantic and erotic attraction was also investigated in the present study.

Hypotheses

Based on the literature, the following hypotheses are proposed:

H1 Females, younger and LGB+ individuals will be more likely to select an opposite-gender favorite celebrity than males, older and heterosexual individuals.

H2 LGB+ individuals and those with an opposite-gender celebrity selection will exhibit higher levels of general celebrity worship than heterosexual individuals and those with a same-gender celebrity selection.

H3 Heterosexual individuals will be more likely to hold heteronormative attitudes and beliefs than LGB+ individuals.

H4 Heteronormative attitudes will predict higher celebrity worship levels only in heterosexual individuals.

H5 Heteronormative attitudes will predict stronger romantic and erotic feelings for a favorite celebrity of the opposite gender, irrespective of sexual orientation.

Methods

Participants and Procedure

The call for participation in the survey was advertised on one of the most popular Hungarian news websites (444.hu). According to the statistics, this website had more than 600,000 visits per day in 2020 (thepitch.hu 2020). The administrator agreed to

cooperate with the research team and advertised the call for participation two times within three weeks in September 2019. The participation was voluntary and anonymous. Participants were informed about the aims of the research (i.e., investigating the psychological characteristics associated with the interest in celebrities) and were requested to provide informed consent if they agreed to the terms. Ethical approval was obtained from the Institutional Review Board of the research team's university, and the research was carried out in accordance with the Declaration of Helsinki.

A total of 1,763 adult participants (66.42% male, $M_{age}=37.22$ years, $SD=11.38$, age ranged from 18 to 79 years) completed the questionnaire without missing information with regards to the relevant study-variables (i.e., celebrity worship and heteronormative attitudes and beliefs). More than two-thirds of participants reported having a college degree or higher ($n=1,244$; 70.56%), while approximately one-third obtained a secondary school certification ($n=497$; 28.19%) and only a small minority of participants received only primary school education ($n=22$; 1.25%). With regard to sexual orientation, the vast majority of participants reported being heterosexual ($n=1,504$; 85.31%) and further 150 (8.51%) participants reported being heterosexual with some homosexual orientation. Only a small proportion of participants reported being bisexual ($n=35$; 1.99%), homosexual with some heterosexual orientation ($n=16$; 0.91%) or homosexual ($n=34$; 1.93%). Furthermore, a few individuals reported being unsure about their sexual orientation ($n=12$; 0.68%) and used the category of "other" to describe their sexual orientation ($n=12$; 0.68%).

Measures

Celebrity Worship

First, participants were introduced to the definition of a celebrity described by McCutcheon et al. (2004) (i.e., a celebrity is a famous living person or one who died during the respondent's lifetime) and were asked to name their favorite celebrity. Second, the 23-item Celebrity Attitude Scale was administered (CAS; McCutcheon et al. 2002, 2004). The CAS comprises three subscales, which assess the level of admiration towards a celebrity. A typical item from the Entertainment–Social subscale states: "Keeping up with news about my favorite celebrity is an entertaining pastime" (ten items; $\alpha=0.84$). The Intense–Personal subscale contains items such as "I consider my favorite celebrity to be my soul mate" (nine items; $\alpha=0.83$). Finally, the Borderline–Pathological subscale comprises items such as "If I were lucky enough to meet my favorite celebrity, and he/she asked me to do something illegal as a favor, I would probably do it" (four items; $\alpha=0.55$). Participants rated each item using a five-point Likert scale ranging from 1 = "strongly disagree" to 5 = "strongly agree". The total CAS score was calculated by summing the items ($\alpha=0.91$). Higher scores indicate higher levels of celebrity worship. Although the internal consistency of the Borderline–Pathological subscale was low, authors of the present study decided not to exclude this factor from further data analysis for two reasons: (1) the reliability of this subscale was generally lower in previous studies, which was explained by the decreased number of items (see Brooks 2018 for a review), (2)

Schmitt (1996) suggested that scales with lower reliability indices can also be used when a theoretical construct with the respective item components is still interpretable. However, findings relating to this subscale should be interpreted with caution in the present study.

Romantic and Erotic Feelings Towards a Favorite Celebrity

To assess participants' romantic and erotic attraction towards their favorite celebrity, three items were constructed in the present study. Participants rated their agreement with each statement using a five-point Likert scale ranging from 1 = "strongly disagree" to 5 = "strongly agree". The three items stated: (1) "If I met personally with my favorite celebrity and he/she flirted with me, I would flirt back", (2) "If I met personally with my favorite celebrity and he/she asked me for a one-night stand, I would be in", and (3) "If my favorite celebrity knew me personally and fell in love with me, I would start a romantic relationship with him/her". Correlations among the items were high (mean $r=0.79$), so these items were merged into one variable named "Romantic–Erotic" ($\alpha=0.91$). The total score was calculated by summing the items. Higher scores on this scale indicate stronger romantic and erotic feelings towards a favorite celebrity. Applying principal component analysis (PCA), the three items loaded on a single factor with factor loadings above 0.90, and explained 85.77% of the total variance. KMO was 0.76 ($df=3$, $p<0.001$); the eigenvalue was 2.57. Correlations of the three items with the total score of the Romantic–Erotic variable were high (mean $r=0.93$, ranging between 0.92 and 0.94; $p<0.001$), and the correlations with total score of the CAS were also significant (mean $r=0.25$, ranging between 0.24 and 0.26; $p<0.001$). The correlation between the total score of the CAS and the Romantic–Erotic variable was again significant ($r=0.25$; $p<0.001$).

Heteronormative Attitudes and Beliefs

Participants' heteronormative attitudes and beliefs were explored using the 16-item Heteronormative Attitudes and Beliefs Scale (HABS; Habarth 2015). The HABS comprises two subscales. A typical item from the Essential Sex and Gender subscale states: "Masculinity and femininity are determined by biological factors, such as genes and hormones, before birth" (eight items; $\alpha=0.82$). The Normative Behavior subscale includes items such as "There are particular ways that men should act and particular ways that women should act in relationships" (eight items; $\alpha=0.86$). Participants indicated their level of agreement with the items on a seven-point Likert scale ranging from 1 = "strongly disagree" to 7 = "strongly agree". Scores for the respective subscales were calculated by averaging the item scores. Higher scores indicate higher levels of heteronormativity.

Statistical Analysis

Data analysis was performed using SPSS version 20 (IBM SPSS Inc., Chicago, Illinois). Multiple indicators multiple causes (MIMIC) models were tested using Mplus

6.0 (Muthén and Muthén 1998–2017). The variable of sexual orientation was transformed into a binary variable following the protocol by Bøthe et al. (2018). Hence, individuals who selected the category of “heterosexual” to describe their sexual orientation were considered “heterosexual individuals” ($n=1504$; 85.31%), while the categories of “heterosexual with some homosexual orientation”, “bisexual”, “homosexual with some heterosexual orientation”, “homosexual”, “unsure” and “other” were merged into the category of “LGB+ individuals” ($n=259$; 14.69%). Furthermore, if individuals reported having a favorite celebrity of their own gender (i.e., males selecting a male favorite celebrity and females selecting a female favorite celebrity), this matching was considered as “same-gender celebrity worship”. If participants reported having a favorite celebrity of the opposite gender (i.e., females selecting a male favorite celebrity and males selecting a female favorite celebrity), this mismatch was considered as “opposite-gender celebrity worship”. The four main categories were constructed from these two binary variables in the following way: 1) heterosexual individuals with same-gender celebrity worship ($n=1101$; 62.45%), 2) heterosexual individuals with opposite-gender celebrity worship ($n=403$; 22.86%), 3) LGB+ individuals with same-gender celebrity worship ($n=143$; 8.11%), and 4) LGB+ individuals with opposite-gender celebrity worship ($n=116$; 6.58%).

To test H1, H2 and H3, group comparisons were investigated using t-tests, one-way ANOVA and χ^2 -tests. Effect sizes are interpreted in the following way: 0.2=small effect, 0.5=medium effect, 0.8=large effect for Cohen’s d (Cohen 1988), while 0.1=small effect, 0.3=medium effect, 0.5=large effect for the Phi-value (Field 2013).

To test H4, regression models were constructed exploring possible differences in the association of heteronormative attitudes and beliefs with celebrity worship across groups based on sexual orientation and opposite/same-gender celebrity worship. Provided that significant differences were found between the four major groups in terms of gender and age in the present sample, gender and age were added to the models as control variables. The three subscales of the CAS correlated highly (r s ranged from 0.63 to 0.73); therefore, when the different dimensions of celebrity worship were investigated in relation to heteronormativity, a multiple indicators multiple causes (MIMIC) model was constructed in which the dimensions of celebrity worship were outcome variables, while the dimensions of heteronormativity were predictor variables. The association of heteronormativity with the total scores of the CAS was investigated using linear regression in which celebrity worship was an outcome variable. In the regression analyses, a fully saturated model was estimated using maximum likelihood estimation with robust standard errors (MLR).

Results

Descriptive Statistics and Group Comparisons

The favorite celebrities selected by participants showed a large variety; no celebrities were named by at least 5% of participants. Most participants selected a favorite celebrity of their own gender ($n=1,244$; 70.56%), while another

considerable proportion of participants selected a favorite celebrity of the opposite gender ($n=519$; 29.44%).

Supporting H1, LGB+ individuals were more likely to select a favorite celebrity of the opposite gender ($n=116$; 44.79%) compared to heterosexual individuals ($n=403$; 26.80%) ($\chi^2(1)=34.43$; $p<0.001$; $\Phi=0.14$). Additionally, females ($n=432$; 72.97%) and younger individuals ($M=36.29$; $SD=11.08$) were also more likely to select a favorite celebrity of the opposite gender than males ($n=87$; 7.43%) ($\chi^2(1)=813.21$; $p<0.001$; $\Phi=0.68$) and older individuals ($M=39.45$; $SD=13.23$) ($t(835.78)=-4.79$; $p<0.001$; Cohen's $d=0.27$). Gender differences were large, while the effect size relating to age was small.

In the following step, group comparisons were conducted across the four major groups based on sexual orientation and opposite/same-gender celebrity worship (see Table 1). Results indicated significant differences in gender and age between groups. In more details, the greatest proportion of males was observed in the groups of heterosexual (89.46%) and LGB+ individuals (69.23%) with same-gender celebrity worship. Additionally, the LGB+ groups were younger compared to the groups of heterosexual individuals.

With regard to celebrity worship levels, H2 postulated that LGB+ individuals and those with an opposite-gender celebrity selection will exhibit higher levels of celebrity worship. According to the results, LGB+ individuals with opposite-gender celebrity worship yielded higher scores on the total CAS than heterosexual individuals, and the differences were small-to-medium (Cohen's d s were 0.41 and 0.44). However, no significant difference was found between heterosexual and LGB+ individuals with same-gender celebrity selection in celebrity worship. Furthermore, no significant differences could be found between individuals with opposite-gender and same-gender celebrity selection in the level of celebrity worship in either heterosexual individuals or LGB+ individuals. Therefore, the second hypothesis was not supported.

In relation to romantic-erotic feelings towards a favorite celebrity, heterosexual individuals with same-gender celebrity worship scored significantly lower than all other groups on this scale, and the differences were large (Cohen's d s ranged from 1.30 to 2.05). Additionally, LGB+ individuals with opposite-gender celebrity worship exhibited stronger romantic and erotic feelings towards their favorite celebrity than LGB+ individuals with same-gender celebrity worship. However, the effect size was small (Cohen's d was 0.32).

With regard to heteronormative attitudes, H3 postulated that heterosexual individuals will hold stronger heteronormative attitudes and beliefs than LGB+ individuals. According to the results, heterosexual individuals with same-gender celebrity worship reported stronger heteronormativity than all other groups. The differences were medium-to-large (Cohen's d s ranged from 0.43 to 0.98). However, no significant difference was found between heterosexual individuals with opposite-gender celebrity worship and LGB+ individuals with same-gender celebrity worship in the scores of the Essential Sex and Gender subscale of the HABS. Therefore, the third hypothesis was only partially supported.

Table 1 Group comparisons across categories of sexual orientation and opposite/same-gender celebrity worship

	Total (<i>N</i> = 1763)	Group 1: Heterosexual + same-gender CW (<i>n</i> = 1101)	Group 2: Heterosexual + opposite-gender CW (<i>n</i> = 403)	Group 3: LGB + same-gender CW (<i>n</i> = 143)	Group 4: LGB + opposite-gender CW (<i>n</i> = 116)	χ^2/F /Welch	Effect size (Phi, Cohen's <i>d</i>)
Demographics							
Gender (male)							
<i>n</i> (%)	1171 (66.42%)	985 (89.46%) _a	48 (11.91%) _b	99 (69.23%) _c	39 (33.62%) _d	855.47 ^{***}	1–2: 0.74 1–3: 0.19 1–4: 0.45 2–3: 0.57 2–4: 0.24 3–4: 0.35
Age (years)							
<i>Mean</i> (SD)	37.22 (11.38)	36.86 (11.16) _a	41.04 (13.50) _b	31.92 (9.40) _c	33.93 (10.59) _{cd}	28.79 ^{***}	1–2: 0.35 1–3: 0.45 1–4: 0.26 2–3: 0.73 2–4: 0.55
Celebrity worship							
CAS Entertainment–Personal <i>Mean</i> (SD)	22.46 (7.20)	22.20 (7.15) _a	22.33 (6.87) _a	22.97 (7.70) _{ab}	24.79 (7.20) _b	4.86 ^{**}	1–4: 0.36
CAS Intense–Personal <i>Mean</i> (SD)	14.57 (5.71)	14.14 (5.24) _a	14.75 (5.80) _a	15.35 (6.71) _{ab}	17.01 (5.71) _b	7.09 ^{***}	2–4: 0.35 1–4: 0.54
CAS Borderline–Pathological <i>Mean</i> (SD)							2–4: 0.39
2–3: 0.40	6.36 (2.48)	6.36 (2.47) _a	5.96 (2.23) _b	6.91 (2.78) _a	6.97 (2.67) _a	8.05 ^{***}	1–2: 0.17
2–4: 0.43							

Table 1 (continued)

	Total (<i>N</i> = 1763)	Group 1: Heterosexual + same-gender CW (<i>n</i> = 1101)	Group 2: Heterosexual + opposite-gender CW (<i>n</i> = 403)	Group 3: LGB + same-gender CW (<i>n</i> = 143)	Group 4: LGB + opposite-gender CW (<i>n</i> = 116)	χ^2/F /Welch	Effect size (Phi, Cohen's <i>d</i>)
CAS Total							
<i>Mean</i> (SD)	43.39 (13.85)	42.71 (13.30) _a	43.04 (13.38) _a	45.23 (15.75) _{ab}	48.77 (16.56) _b	5.66**	1–4: 0.44 2–4: 0.41
Romantic–Erotic							
<i>Mean</i> (SD)	4.68 (3.25)	3.42 (1.55) _a	6.86 (4.09) _{bc}	6.06 (4.17) _b	7.40 (4.11) _c	138.24***	1–2: 1.38 1–3: 1.30 1–4: 2.05 3–4: 0.32
Heteronormativity							
HABS Essential Sex and Gender							
<i>Mean</i> (SD)	3.58 (1.30)	3.83 (1.29) _a	3.29 (1.22) _b	3.09 (1.26) _{bc}	2.86 (1.00) _c	47.90***	1–2: 0.43 1–3: 0.58 1–4: 0.77 2–4: 0.37

Table 1 (continued)

	Total (<i>N</i> = 1763)	Group 1: Heterosexual + same-gender CW (<i>n</i> = 1101)	Group 2: Heterosexual + opposite-gender CW (<i>n</i> = 403)	Group 3: LGB + same-gender CW (<i>n</i> = 143)	Group 4: LGB + opposite-gender CW (<i>n</i> = 116)	Effect size (Phi, Cohen's <i>d</i>)
HABS Normative Behavior						
<i>Mean</i> (SD)	2.90 (1.18)	3.17 (1.16) _a	2.62 (1.09) _b	2.33 (1.09) _c	2.06 (0.78) _c	1–2: 0.48 1–3: 0.73 1–4: 0.98 2–3: 0.27 2–4: 0.54

****p* < 0.001; ***p* < 0.01; **p* < 0.05

CW = celebrity worship; CAS = Celebrity Attitude Scale; HABS = Heteronormative Attitudes and Behaviors Scale

χ^2 -test results and Phi are reported for gender, while results of one-way ANOVAs with Cohen's *d* are reported for all other variables

According to the test of homogeneity for the one-way ANOVAs, *F*-value is reported with Tukey post hoc test results for the Entertainment–Social subscale of the CAS, while Welch with Games-Howell post hoc test results are reported for all other variables

Different subscript letters in a row represent significant group differences, while same subscript letters in a row indicate non-significant difference between the respective groups according to the post hoc tests of the one-way ANOVA

The first two numbers in the “Effect size” column represent the groups that are compared. Effect size is reported only for significant group differences

Heteronormativity Predicting Celebrity Worship in Different Groups Based on Sexual Orientation and Opposite/Same-Gender Celebrity Worship

Pearson-correlations indicated weak, positive associations between two subscales of the CAS (i.e., Intense–Personal and Borderline–Pathological) and the two dimensions of heteronormativity (r s were 0.05 and 0.06, respectively) (see “Appendix”).

To test H4, regression analyses were conducted. As a result, scores on the Essential Sex and Gender subscale of the HABS did not predict celebrity worship in either group, while scores on the Normative Behavior subscale consistently predicted all dimensions of celebrity worship among individuals who selected a favorite celebrity of their own gender, irrespective of sexual orientation (see Table 2). Since H4 postulated that heteronormative attitudes will predict celebrity worship only in heterosexual individuals, this hypothesis was not supported. The result indicated that individuals with a favorite celebrity of their own gender and heteronormative attitudes in terms of gender roles and behavior exhibited higher levels of celebrity worship.

The association between heteronormative attitudes in terms of behavior and celebrity worship was generally stronger among LGB+ individuals (β s ranged from 0.31 to 0.40) than among heterosexual individuals (β s ranged from 0.08 to 0.10), although significant difference in the strength of associations could only be observed in relation to the Borderline–Pathological subscale. In more detail, there was no overlap between the confidence intervals relating to the Normative Behavior subscale in the group of heterosexual individuals ($\beta=0.08$, 95% CI=0.02; 0.14) and LGB+ individuals ($\beta=0.40$, 95% CI=0.15; 0.64), which indicated a significant difference between the effect of heteronormative attitudes on the Borderline–Pathological dimension of celebrity worship in the two groups. In line with this result, heteronormativity explained only 1.1% of the total variance of celebrity worship among heterosexuals, while the proportion of explained variance was slightly higher among LGB+ individuals (5.8%).

With regard to the different dimensions of celebrity worship, the proportion of explained variances were generally negligible among heterosexual individuals (0.4–1.3%), while the proportion of explained variance showed a larger variability among LGB+ individuals across the CAS subscales (2.7% for the Entertainment–Social, 7.0% the Intense–Personal and 7.7% for the Borderline–Pathological subscale).

H5 postulated that heteronormative attitudes will predict stronger romantic and erotic feelings for a celebrity of the opposite gender. It was found that LGB+ individuals who selected a favorite celebrity of the opposite gender and expressed stronger heteronormative attitudes in terms of gender roles and behaviors had stronger romantic and erotic feelings for their favorite celebrity, while this association was not demonstrated among heterosexual individuals. Therefore, H5 was only partially supported. The effect of heteronormative attitudes was relatively weak ($\beta=0.28$) and this variable explained only a small proportion of the total variance of romantic and erotic feelings towards a favorite celebrity (3.9%).

Discussion

According to the Absorption–Addiction model, consistency is an important need for celebrity worshippers that stems from the lack of integration of the self at extremely high worship levels (McCutcheon et al. 2002). Moreover, similarities with a celebrity's attitudes have been found to increase individuals' fascination with that person (Klimmt et al. 2006). Based on theoretical and empirical findings, it was assumed that heteronormative attitudes alter the strength of celebrity admiration across heterosexual and LGB+ individuals with different gender-based preferences for a favorite celebrity. It was found that heterosexual individuals with a favorite celebrity of their own gender exhibited stronger heteronormative attitudes in terms of gender roles and behavior than LGB+ individuals. Additionally, these heteronormative attitudes predicted higher celebrity worship levels among those who admired a celebrity of their own gender, irrespective of sexual orientation. However, these associations were generally weak, and the explained variance of celebrity worship was small (1–6%), suggesting that the contribution of heteronormative attitudes to celebrity admiration is negligible for both heterosexual and LGB+ individuals. These findings suggest that individuals' dedication for a celebrity is largely independent of heteronormativity.

In this study, five hypotheses were proposed. Consistent with previous findings (Bond 2018; Hoffner 2011; Lin and Lin 2007), females, younger and LGB+ individuals were more likely to become fascinated by a celebrity of the opposite gender. Therefore, the first hypothesis received support. However, it was not confirmed that LGB+ individuals and those with a favorite celebrity of the opposite gender have a greater tendency to become obsessed with celebrities. Contrary to the second hypothesis, no substantial difference was found between individuals with an opposite- and same-gender celebrity selection among either heterosexual or LGB+ individuals. In addition, although LGB+ individuals with a favorite celebrity of the opposite gender reported higher levels of celebrity worship than heterosexual individuals, there was no difference between LGB+ individuals with a favorite celebrity of their own gender and heterosexual individuals in celebrity worship. Provided that LGB+ individuals with an opposite-gender favorite celebrity expressed stronger romantic and erotic feelings towards this celebrity than those who admired a celebrity of their own gender, it is possible that sexual attraction also contributed to higher celebrity worship levels in LGB+ individuals as was proposed by Lin and Lin (2007), while LGB+ individuals who selected a favorite celebrity of their own gender may be more heterogeneous in their motives to admire a celebrity (e.g., considering them as role models, deriving inspiration from their work). It is also plausible that motives vary within the subgroups of individuals with an opposite- or same-gender celebrity selection, and the identification with an influential role model for those with a favorite celebrity of their own gender has no less impact on their admiration levels than romantic feelings and sexual attraction for those with an opposite-gender favorite celebrity.

Partial support was found for the third hypothesis postulating that heterosexual individuals hold stronger heteronormative attitudes and beliefs than

Table 2 Regression models predicting celebrity worship in different groups based on sexual orientation and opposite/same-gender celebrity worship

Outcome variables	Explanatory variables: Dimensions of heteronormativity <i>Beta</i> (<i>SE</i>)							
	Group 1: Heterosexual + same-gender CW (<i>n</i> = 1101)		Group 2: Heterosexual + opposite-gender CW (<i>n</i> = 403)		Group 3: LGB+ same-gender CW (<i>n</i> = 143)		Group 4: LGB+ opposite-gender CW (<i>n</i> = 116)	
	HABS ESGS	HABS NBS	HABS ESGS	HABS NBS	HABS ESGS	HABS NBS	HABS ESGS	HABS NBS
Model I								
CAS Entertainment–Social	−0.02(0.04)	0.09(0.04) ^a	−0.05(0.07)	0.04(0.07)	−0.11(0.10)	0.31(0.13) ^a	0.03(0.11)	−0.04(0.13)
CAS Intense–Personal	0.02(0.04)	0.10(0.04) ^a	0.02(0.07)	0.03(0.06)	−0.06(0.09)	0.35(0.13) ^{a**}	0.02(0.10)	0.10(0.12)
CAS Borderline–Pathological	−0.03(0.04)	0.08(0.04) ^a	0.01(0.08)	0.06(0.07)	−0.10(0.09)	0.40(0.15) ^{a**}	−0.02(0.11)	0.06(0.12)
Romantic–Erotic	0.04(0.04)	−0.03(0.04)	−0.01(0.07)	0.003(0.07)	−0.09(0.09)	0.14(0.12)	−0.09(0.11)	0.28(0.12) ^a
Model II								
CAS Total	−0.008(0.04)	0.10(0.04) ^a	−0.01(0.07)	0.04(0.07)	−0.10(0.10)	0.37(0.14) ^{a**}	0.02(0.11)	0.03(0.12)

****p* < 0.001; ***p* < 0.01; **p* < 0.05^a*Beta* (*SE*) = standardized coefficient and its standard error^bCW = celebrity worship; CAS = Celebrity Attitude Scale; HABS = Heteronormative Attitudes and Behaviors Scale; ESGS = Essential Sex and Gender Subscale; NBS = Normative Behavior Subscale^cIn Model I, a multiple indicators multiple causes (MIMIC) model was applied in which the three subscales of the CAS alongside with the variable of romantic and erotic feelings towards a favorite celebrity were outcome variables while controlling for gender and age. In Model II, a linear regression model was conducted in which the total score of the CAS was an outcome variable while controlling for gender and age. For the sake of clarity, control variables are not presented

LGB+ individuals. Although heterosexual individuals expressed stronger heteronormativity in terms of gender roles and behaviors than LGB+ individuals, only LGB+ individuals with opposite-gender celebrity worship scored lower than heterosexual individuals on the Essential Sex and Gender subscale comprising items stating that there are only two sexes (i.e., male and female). One possible explanation for this result is that this aspect of heteronormativity had no special relevance for the present sample due to the low proportion of individuals describing their sexuality using the category of “other” (0.68% of the total sample) that was applicable for sexual orientations such as intersexuality and transsexuality.

Contrary to the fourth hypothesis proposing that heteronormative attitudes predict higher celebrity worship levels in heterosexual individuals, results indicated that heteronormative attitudes in terms of gender roles and behaviors predict higher levels of celebrity worship among individuals with a same-gender favorite celebrity, irrespective of sexual orientation. Besides, the association of heteronormative attitudes with celebrity worship was slightly stronger for LGB+ individuals, particularly in the borderline–pathological dimension. The contribution of various effects can provide a possible explanation for this unexpected result. According to previous studies, individuals express stronger emotional attachment for celebrities of the same gender (Giuliano et al. 2007) and those who share attitudes and beliefs that are convergent with the fans’ attitudes (Klimmt et al. 2006). Therefore, these celebrities can possibly serve as role models for individuals with existing beliefs about heteronormativity. This function may have no relevance in opposite-gender celebrity worship. According to the Absorption–Addiction model, individuals with a poorly integrated identity structure are more likely to admire celebrities in an attempt to establish a stronger self-integrity by the process of identification (McCutcheon et al. 2002). Based on this theoretical approach, it is possible that individuals with stronger heteronormativity increase their identification with their favorite celebrity to maintain the integrity of their attitudes, and this consistency can strengthen their identity structure. Identity crisis is a common experience among young LGB+ individuals (Bilodeau and Renn 2005); therefore, they may have a stronger need for integrity. Moreover, Bond (2018) found that LGB+ individuals are more likely to develop strong emotional attachment towards celebrities than heterosexual individuals. Hence, the effect of similarity with a celebrity in terms of gender and attitudes can possibly contribute to an increased psychological absorption with a celebrity in LGB+ individuals who were found to be generally more vulnerable to celebrity influence (Bond 2018; Gomillion and Giuliano 2011).

Finally, partial support was found for the fifth hypothesis postulating that heteronormative attitudes predict stronger romantic and erotic feelings for an opposite-gender celebrity. This association was only demonstrated among LGB+ individuals. One possible explanation for this result is that LGB+ individuals with existing heteronormative attitudes and beliefs about gender roles and behavior consider their favorite celebrity as an ideal partner instead of a role model. Indeed, Lin and Lin (2007) suggested that sexual attraction is associated with stronger emotional attachment to a celebrity. Further confirming this assumption, LGB+ individuals with a favorite celebrity of the opposite gender expressed the highest levels of romantic and erotic attraction towards their favorite star in the present study. However, further

research is needed to gain a nuanced understanding of motives underlying celebrity admiration.

One limitation of this study is that no information was gathered on the sexual orientation and heteronormativity of the celebrities selected by the participants. Therefore, overlaps in the sample could not be investigated. Another limitation is that the low proportion of LGB+ individuals in the present sample could not allow for further investigations in heteronormativity and celebrity worship in specific subgroups (e.g., bisexual, transgender individuals). Furthermore, the convenience sampling method used in this study challenges the generalizability of the present findings. Broader investigations and even more diverse samples are needed to confirm the associations found in this study. Finally, predictor and outcome variables were defined to serve the aim of the present study (i.e., investigating the role of existing heteronormative attitudes and beliefs in celebrity admiration); however, the direction of associations can be reversed.

Overall, this study endeavored to address the question of whether heteronormativity can alter the intensity of celebrity admiration in heterosexual or LGB+ individuals. The main findings suggest that heteronormative attitudes in terms of gender roles and behavior can predict higher celebrity worship levels in individuals with a favorite celebrity of their own gender, irrespective of sexual orientation. This result is consistent with previous findings demonstrating a positive association between perceived similarity and celebrity admiration (Klimmt et al. 2006; Sciappa et al. 2007). However, associations found in the present study were generally weak, and the explanatory power of heteronormative attitudes was particularly small (1–6%), indicating that heteronormativity plays no influential role in celebrity admiration. These results can possibly increase general knowledge on the dynamics of celebrity admiration in heterosexual and LGB+ audiences.

Appendix

Zero-order correlations among the dimensions of celebrity worship and heteronormative attitudes and behaviors ($N = 1,763$).

	(1)	(2)	(3)	(4)	(5)	(6)
(1) CAS Entertainment–Social	–					
(2) CAS Intense–Personal	0.73***	–				
(3) CAS Borderline–Pathological	0.65***	0.63***	–			
(4) CAS Total	0.94***	0.91***	0.78***	–		
(5) Romantic–Erotic	0.23***	0.28***	0.23***	0.28***	–	
(6) HABS Essential Sex and Gender	0.03	0.05*	0.05*	0.05*	–0.12***	–
(7) HABS Normative Behavior	0.04	0.06*	0.06*	0.06*	–0.16***	0.63***

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$.

^aCAS = Celebrity Attitude Scale; HABS = Heteronormative Attitudes and Behaviors Scale.

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Availability of Data and Material The data is available upon request from the first author.

Compliance with Ethical Standards

Conflict of interest The authors declare no conflicts of interest.

Ethical Approval Ethical approval was obtained from the Institutional Review Board of the research team's university, and the research was carried out in accordance with the Declaration of Helsinki.

Consent to Participate The participation was voluntary and anonymous. Participants were informed about the aims of the research (i.e., investigating the psychological characteristics associated with the interest in celebrities) and were requested to provide informed consent if they agreed to the terms. All participants provided informed consent.

Consent for Publication Participants were informed about the future publication of the results from the research. All participants approved that by providing an informed consent.

Code Availability Not Applicable.

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