Sexuality & Culture (2023) 27:326–342
https://doi.org/10.1007/s12119-022-10015-5

ORIGINAL ARTICLE

Differences in Social Networking Behaviors Between Italian Gay and Heterosexual Men

Gianmarco Biancalani[1] · **Lucia Ronconi**[2] · **Ines Testoni**[1]

Accepted: 20 August 2022 / Published online: 9 September 2022

Abstract

The present study investigates differences between gay and heterosexual Italian men regarding both social networking behaviors and addiction. Furthermore, it explores the possible mediation effects of grandiose and vulnerable narcissism, fear of missing out, and physical appearance on social networking behaviors and addiction. A total of 586 Italian men (334 gay and 252 heterosexual) were recruited with snowball sampling, and they completed an online questionnaire. Results showed a significant difference between the two groups, with men who identify themselves as gay having higher levels of social networking addiction, narcissism, fear of missing out, and the importance of one's appearance. A direct effect of sexual orientation on social networking behaviors and addiction can be seen, which is only partially mediated by the variables posed as mediators.

Keywords Gay and heterosexual men · Social networking behaviors · Narcissism · Fear of missing out · Physical appearance

Introduction

Social networks are virtual communities where users can create public profiles, interact with real-life people, and meet other people with the same interests (Kuss & Griffiths, 2011). People addicted to social networks experience symptoms similar to those experienced by individuals suffering from substance addiction or other addictive behaviors (Griffiths, 2005, 2013). Social networking addiction is a growing phe-

✉ Gianmarco Biancalani
gianmarco.biancalani@unipd.it

[1] Department of Philosophy, Sociology, Education and Applied Psychology (FISPPA), University of Padova, Padova, Italy

[2] IT and Statistical Services, Multifunctional Pole of Psychology, University of Padova, Padova, Italy

nomenon all around the world: prevalence of social networking addiction is currently believed to range from 8 to 25% of the population, depending on the methodology taken into consideration and the culture it is being examined (Cheng et al., 2021).

Social networks have played an essential role in people's lives, including members of the LGBTQ+community who therefore use social networks for various reasons, including sex, friendship, romantic relationships, communication, and defining their identity (Ceglarek & Ward, 2016; Miller, 2015).

Research studies explored social network use and several other variables, both within the LGBTQ+community and in the general population. The use of social networks appears to be influenced not only by belonging to the LGBTQ+community but also by other factors such as narcissism (Andreassen et al., 2017). Individuals with narcissistic personality traits may be more at risk of developing an addiction to social networks (Andreassen et al., 2017). There are two subtypes of narcissism: grandiose narcissism and vulnerable narcissism. The grandiose type is characterized by continuous admiration-seeking, high self-esteem, exhibitionism, and arrogance (Miller & Campbell, 2008). On the other hand, the vulnerable type entails a defensive and insecure sense of grandiosity associated with low self-esteem, a penchant for shame, shyness, and hypersensitivity in evaluating others (Pincus & Roche, 2011). Addiction and compulsive use of social networks positively correlate with the construct of narcissism (Andreassen et al., 2017), other studies already demonstrated how Facebook, Instagram, and other social networks could serve as ideal social arenas for people who appreciate and are attracted to ego-strengthening activities (Ryan & Xenos, 2011; Wang et al., 2012), as they allow people to strengthen their ego on immediate feedback from a potentially large amount of other individuals (Andreassen, 2015).

As for gay men, some studies find higher levels of narcissism for men who identify as gay than for those who identify as heterosexual (Drescher, 2021; Rubinstein 2010). This could be attributed to various factors, such as a response to the oppressive homophobic power of heterosexual society or due to the high visual standards within the gay community that force gay men to take great care of their appearance (Drescher, 2010). Gay men find masculine men more attractive and therefore want to overcome effeminate gay images by exhibiting hegemonic masculinity (Connell & Messerschmidt, 2005; Moskowitz et al., 2009). Men with above-average bodies who adhere to and perform the canons of hegemonic masculinity may receive more attention and consequently develop a greater sense of narcissism (Eguchi, 2009). The fact that this "straight acting" makes them more attractive in the eyes of potential partners may promote gay men's continued performance of hegemonic masculinity, in addition to the fact that adhering to the canons of hegemonic masculinity makes gay men more accepted by both other gay men and heterosexual men (Connell & Messerschmidt, 2005; Eguchi, 2009; Moskowitz et al., 2009). The representation of hegemonic masculinity may also subject gay men to the stress of acting in a way that represses their own identity (Lu et al., 2018). However, the literature has shown on the other hand that the investment in the care of one's physical appearance is an element associated with higher levels of narcissism, not finding differences regarding sexual orientation (Brown & Graham, 2008).

An additional predictor of social networking addiction is Fear of Missing Out (FOMO) (Blackwell et al., 2017), a form of social anxiety that results in a desire to stay perpetually connected to others, even on a virtual level (Przybylski et al., 2013). This concept consists of a pervasive apprehension that includes the fear that when one is absent from an event, other people will have rewarding experiences and is thus characterized by the tension of wanting to keep up with what others are doing (Przybylski et al., 2013). The development of new technologies and platforms, such as social networks, is linked to the emergence of new pathological conditions, such as the need of personal gratification coming from receiving attention online (Oberst et al., 2017; Alt, 2015).

Passive use of social networks focused primarily on appearance, such as scrolling through profiles of particularly attractive people, has been shown to be detrimental to one's well-being: individuals who continuously see attractive images of other users are more likely to be dissatisfied by their body image and to experience more negative feelings (Haferkamp & Krämer, 2011; Ridolfi et al., 2011; Ryding & Kuss, 2020). Moreover, there were clear parallels between body image dissatisfaction and sexual orientation, particularly caused by the comparison of one's image to those found via social networks. Common elements between individuals who identify themselves as gay and people addicted to social networks are the high psychological investment in their physical appearance and the constant comparison between their own body image and others' (Wood, 2004).

The purpose of the following study is to assess the differences between gay and heterosexual men regarding social networking addiction and social network use, grandiose and vulnerable narcissism, FOMO, and investment in one's physical appearance. Moreover, we want to assess how sexual orientation affects social networking addiction and social network use and how many variables, such as narcissism, FOMO and investment in one's physical appearance, may mediate this relationship.

As for the researchers' positionality, they actively support the LGBTQIA+community in their daily work and wanted to study a phenomenon that is still little explored in the sexist and patriarchal Italian society (Callahan & Loscocco, 2021), using a quantitative research approach. The quantitative approach allowed the researchers to achieve greater knowledge and understanding of the social world in the most detached and objective way possible, so as to limit any form of bias against the research participants. In the present study, researchers wanted to explore differences in social network use behavior among men of different sexual orientations in order to provide new information on the topic. Exploring this issue is important to understand what aspects may contribute to a disadvantageous use of social networks between individuals who tend to suffer more discrimination because of their sexual orientation and others who do not, and in this way to encourage the development of actions to support people who may be experiencing difficulties.

Method

Participants

A total of 829 Italian males had filled out the questionnaire. Inclusion criteria to participate in this study were: being male, identifying himself as exclusively gay or heterosexual, being between the ages of 18 and 45, and having a Facebook and Instagram account for at least six months. The social networks considered in this research were Facebook and Instagram that are the two most used social networks in Italy ("Italy: Main social networks users 2021", 2021).

The participants are 586 Italian men, 334 exclusively gay men (GM) and 252 exclusively heterosexual men (HM). However, we excluded 175 of them because their sexual orientation was not exclusively heterosexual or gay. We excluded the other 68 because they had not had a Facebook and Instagram account for six months. In the GM group, the mean age is 26.84 (SD = 6.07) and as regards the HM group, the mean age is 24.22 (SD = 5.52). There is a significant age difference between the two groups ($t = 5.37$, $df = 584$, $p < .001$), with the GM group being older. Furthermore, the two groups are similar in physical activity, practiced by 66% of gay men and 68% of heterosexual men ($\chi^2 = 0.28$, $df = 1$, $p = .595$), although the former group goes to the gym for physical activity more than the latter, 47% contra 30% ($\chi^2 = 18.46$, $df = 1$, $p < .001$). Moreover, gay men are engaged in a relationship less often, 38% contra 55% ($\chi^2 = 16.41$, $df = 1$, $p < .001$). Age, physical activity at a gym (herein abbreviated as Gym) and having a relationship have been included as control variables in the path model.

Snowball sampling was used to recruit participants, since this method is often preferred with subjects who tend to hide their identity (e.g., LGBTQ+community members) (Browne, 2005). The authors began offering to participate in the study by filling out the questionnaire: they started involving men who were close to them and asking each one of them if he wanted to participate, explaining the research aims and instructing them to complete a 30-minute-long questionnaire. If someone accepted, the authors gave him the link to the online questionnaire and asked him whether he knew other men who might want to join the research and whether he could give the authors the other men's contact. The questionnaire was completely anonymous.

Measures

The instruments of the questionnaire were as follows:

Heterosexual-Homosexual Rating Scale (HATH; Kinsey et al., 1948). The HATH is a the 7-point scale (from 1 = exclusively heterosexual to 7 = exclusively homosexual) that measures sexual orientation.

Narcissistic Personality Inventory – 16 (NPI-16; Ames et al., 2006). The NPI-16 is a scale composed of 16 items and each item consisting of a pair of statements, one narcissistic and the other non-narcissistic. This is the primary measure of grandiose narcissism. It is a shortened form of the NPI-40 for measuring subclinical narcissism. Subjects are required to check one of the two statements. The Italian validation of this

scale was used (Fossati et al., 2008). In the present study, Cronbach's alpha value for NPI-16 was 0.68 with adequate internal consistency.

Hypersensitive Narcissism Scale (HSNS; Hendin & Cheek, 1997). The HSNS is a 10-item 5-point Likert-type scale that measures vulnerable narcissism. All the items had significantly positive correlations with the composite measure of vulnerable narcissism. The Italian validation of this scale has been used (Fossati et al., 2009). In the present study, Cronbach's alpha value for HSNS was 0.66 with adequate internal consistency.

Bergen Social Media Addiction Scale (BSMAS; Andreassen et al., 2012). The BSMS is a 6-item 5-point Likert-type scale that is a brief and effective psychometric instrument for assessing at-risk social media addiction on the Internet and this instrument has a single-factor structure. The Italian validation of this scale has been used (Monacis et al., 2017) adapted for social networking. In the present study, Cronbach's alpha value for BSMAS was 0.81 with good internal consistency.

Fear of Missing out Scale (FOMOS; Przybylski et al., 2013). The FOMOS is a 10-item 5-point Likert-type scale that measures the fear of missing out, that is the desire to be continuously connected with what others are doing. The scale utilized in this case was the Italian adaptation. (Casale et al., 2018). FOMOS refers to the sensation that others are having a rewarding experience in one's absence and, therefore, it is associated with the drive to remain socially connected. In the present study, Cronbach's alpha value for FOMOS was 0.84 with good internal consistency.

Appearance Schemas Inventory-Revised (ASI-R; Cash, 1996). The ASI-R is a 20-item 5-point Likert-type scale, which assesses how people believe that their appearance is essential to their sense of self-worth and the extent to which people attend to their appearance and engage in appearance management behaviors. A higher score shows a greater physical appearance investment, overall leading to a more significant dysfunctional investment in appearance and a greater engagement in appearance management behaviors (Rusticus et al., 2008). Since there is no official Italian version of this scale, a preliminary Italian adaptation was obtained through the back-translation method. In the present study, Cronbach's alpha value for ASI-R was 0.89 with good internal consistency.

Social networking behaviors indices (SNB indices). Four indices were obtained through questioning about SNB. *Photo* consists of 3 questions about the appeal to being photographed, even in sensual and provocative poses, and publishing them to increase followers ("I really like to pose in front of a camera"; "I often publish provocative, personal photos on my social profiles"; "Publishing photos where I am portrayed naked or half-naked helps me increase my followers"). *Like* is made up of two questions regarding the feeling related to receiving approvals on social networks ("Receiving likes causes a feeling of pleasure in me"; "I would like to have more and more likes and followers"). *Post* consists of two questions on a 5-point Likert scale (1 - less than once a month; 2- once-twice a month; 3- once-twice a week; 4 - once a day; 5 - more than once a day) concerning the posting frequency on a social network. In the present study, Cronbach's alpha values for these three SNB indices are: for *Photo* is 0.79, for *Like* is 0.81, for *Post* is 0.61, with a good internal consistency level. Finally, *Delta Followers and Followees on Instagram (Delta FFI)* relates to the difference between their followers and the people they follow.

Data Analysis

Sexual orientation differences on all construct scores were analyzed using t-test and Cohen's d to measure effect size. According to Cohen (1988), we considered a small difference between groups up to 0.20, a medium difference up to 0.50 and a large difference up to 0.80. We calculated the Pearson correlation coefficient to assess the relationships between all study variables. We have set the alpha level at 0.001 for correlation examinations to keep the high number of correlations in check. Benchmarks, used to define when the correlational strength is small, moderate, or large, are 0.10, 0.30 and 0.50, respectively (Cohen, 1988). (This statistical convention also applies for β (beta, i.e., standardized coefficients in path model).

Path analysis (i.e., structural equation model with observed variables) with lavaan package in R was performed to evaluate the direct effect of sexual orientation on social networking addiction and social network use and its indirect effect mediated by narcissism, FOMOS and investment in one's physical appearance, with age, Gym and engagement in a relationship as control variables. The suitability of the tested model was evaluated considering the χ^2, the root-mean-square error of approximation (RMSEA), the standardized root mean square residual (SRMR) and the comparative fit index (CFI). χ^2 needs to be non-significant ($p > .05$) for models with an adequate fit.

The χ^2 index is susceptible to the sample size, becoming significant with larger samples and, because of this, we have mainly considered the values of the other fit indices. In particular, values equal to or lower than 0.08 for RMSEA and SRMR and values equal to or above 0.90 for CFI were considered as an acceptable fit of the tested model to the data (Bollen, 1989). Moreover, coefficients of determination (R^2) for social networking addiction and all SNB indices were considered, and values of 0.02, 0.13 and 0.26 were considered as small, medium and large effect sizes, respectively (i.e., Cohen's f^2 [$R^2/1\text{-}R^2$] of 0.02, 0.15 and 0.35) (Cohen, 1988). We have set the alpha level at 0.001 for parameters examinations to keep the high number of parameters in check.

Results

Significant effects of sexual orientation differences were observable on all construct scores (see Table 1). Scores on narcissism, FOMOS, appearance scale, addictive use of social networking, and all SNB indices (*Photo, Like, Post, and Delta FFI*) were higher among GM than HM. The effect size of this difference is small for narcissism (d = 0.23 for NPI and d = 0.24 for NHS) and FOMOS (d = 0.32) and is large for appearance scale (d = 1.03) and two SNB indices, *Photo* and *Post* (d = 1.37 and d = 1.22, respectively).

Positive and significant correlations were found between addictive use of social networking and sexual orientation (r = .32, medium effect) as shown by comparing groups of sexual orientation presented above. These correlations also extend Gym (r = .15, small effect), higher vulnerable narcissism (r = .27, medium effect), higher FOMOS (r = .35, medium effect) and higher scores on the appearance scale (r = .48, large effect) (see Table 2). Similar results were found for SNB indices. In particular,

Table 1 Comparison between sexual orientation groups (N = 586)

Variables	GM group (N = 334)	HM group (N = 252)	Test t		Cohen's d
	M (SD)	M (SD)	t (584)	p	
Grandiose narcissism (NPI)	0.32 (0.19)	0.28 (0.17)	2.80	0.005	0.23
Vulnerable narcissism (NHS)	30.55 (5.81)	29.16 (5.62)	2.91	0.004	0.24
Fear of missing out (FOMOS)	2.62 (0.82)	2.37 (0.69)	3.86	< 0.001	0.32
Appearance scale (ASI-R)	3.65 (0.60)	3.01 (0.64)	12.32	< 0.001	1.03
Social networking addiction (BSMAS)	15.00 (5.29)	11.53 (4.66)	8.28	< 0.001	0.69
SNB - Photo	2.89 (1.15)	1.56 (0.66)	16.38	< 0.001	1.37
SNB - Like	3.60(1.11)	2.76 (1.02)	9.38	< 0.001	0.78
SNB - Post	3.18 (1.27)	1.68 (1.15)	14.66	< 0.001	1.22
SNB - Delta FFI	1.02 (2.13)	0.09 (0.80)	6.62	< 0.001	0.55

GM = Gay men; HM = heterosexual men; SNB = Social network behaviour; Delta FFI = Delta Followers and Followees on Instagram

for *Photo* we can observe positive and significant correlations with sexual orientation (r = .56, large effect), with Gym (r = .30, medium effect), with higher grandiose narcissism (r = .28, medium effect) and with higher scores on the appearance scale (r = .48, large effect). As for *Like*, we can observe positive and significant correlations with sexual orientation (r = .36, medium effect), with Gym (r = .16, small effect), with higher narcissism (r = .30 for NPI e r = .24 for NHS, medium to small effect), with higher FOMOS (r = .32, medium effect) and with higher scores on appearance scale (r = .48, large effect). *Post* shows positive and significant correlations with sexual orientation (r = .52, large effect), with higher FOMOS (r = .14, small effect) and with higher scores on the appearance scale (r = .30, medium effect). Finally, *Delta FFI* show positive and significant correlations with sexual orientation (r = .26, medium effect), with higher grandiose narcissism (r = .24, small effect) and with higher scores on the appearance scale (r = .21, small effect).

The appearance scale showed positive and significant correlations with sexual orientation (r = .45, large effect), with Gym (r = .23, small effect), with higher narcissism (r = .21 for NPI e r = .29 for NHS, medium to small effect), with higher FOMOS (r = .34, medium effect) and also a negative and significant correlation with engagement in a relationship (r = − .22, small effect).

FOMOS showed positive and significant correlations with sexual orientation (r = .16, small effect), with higher vulnerable narcissism (r = .36, medium effect) and also a negative and significant correlation with engagement in a relationship (r = − .16, small effect).

No significant correlations were found between narcissism and sexual orientation (r = .12 for both NPI and NHS); only a negative correlation between vulnerable narcissism and engagement in a relationship was found (r = − .16, small effect).

Table 2 Correlations between variables included in path model (N=586)

Variables		1	2	3	4	5	6	7	8	9	10	11	12	13
1	Homosexual orientation (Yes=1, No=0)	-												
2	Age	0.22*	-											
3	Engaged in a relationship (Yes=1, No=0)	−0.17*	0.12	-										
4	Physical activity in Gym (Yes=1, No=0)	0.18*	0.12	−0.02	-									
5	Grandiose narcissism (NPI)	0.12	−0.09	−0.06	0.09	-								
6	Vulnerable narcissism (NHS)	0.12	−0.12	−0.16*	0.05	0.13	-							
7	Fear of missing out (FOMOS)	0.16*	−0.12	−0.16*	−0.03	0.09	0.36*	-						
8	Appearance scale (ASI-R)	0.45*	−0.07	−0.22*	0.23*	0.21*	0.29*	0.34*	-					
9	Social networking addiction (BSMAS)	0.32*	−0.05	−0.12	0.15*	0.10	0.27*	0.35*	0.48*	-				
10	SNB - Photo	0.56*	0.08	−0.13	0.30*	0.28*	0.13	0.13	0.48*	0.42*	-			
11	SNB - Like	0.36*	0.03	−0.12	0.16*	0.30*	0.24*	0.32*	0.48*	0.52*	0.52*	-		
12	SNB - Post	0.52*	0.10	−0.12	0.08	0.13	0.07	0.14*	0.30*	0.37*	0.48*	0.32*	-	
13	SNB - Delta FFI	0.26*	−0.06	−0.06	0.13	0.24*	0.09	0.03	0.21*	0.21*	0.37*	0.23*	0.27*	-

SNB=Social network behaviour; FFI=Delta Followers and Followees on Instagram

*p<.001

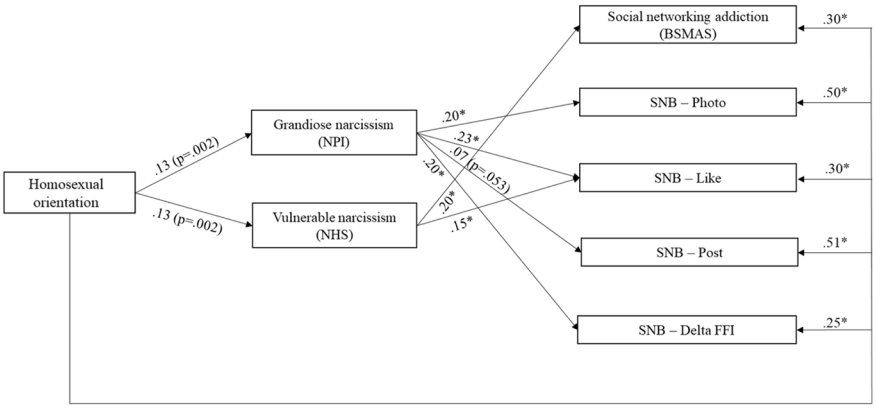

Fig. 1 Path model 1 with narcissism as mediator (standardized parameters; * p < .001)

Path analysis was used to evaluate the contributions of sexual orientation, narcissism, FOMOS and ASI-R to SNB and social networking addiction. Age, Gym and engagement in a relationship were inserted in the model as covariates on social networking behavior, social networking addiction, narcissism, FOMOS and ASI-R. We tested direct and indirect effects of sexual orientation in three different models, one for each mediator variable: narcissism, FOMOS and ASI-R. To get to the most parsimonious model, we preliminary tested all path coefficients of sexual orientation, mediator variable and the control variables in a complete model. As a result, the non-significant path coefficients were removed from the model to get a final model with only significant path coefficients. This final model showed acceptable fit indices for all mediator variables: χ^2=11.18 df=16 p=.798, RMSEA=0.000, SRMR=0.020 and CFI=1.000 for narcissism, χ^2=10.94 df=13 p=.616, RMSEA=0.000, SRMR=0.018 and CFI=1.000 for FOMOS and χ^2=10.51 df=13 p=.652, RMSEA=0.000, SRMR=0.015 and CFI=1.000 for ASI-R. The whole models accounted for 9–42% of the variance for social network behavior and social networking addiction, with an f^2 of 0.10 to 0.72, indicating a medium-large effect size.

In Figs. 1, 2 and 3 we have reported only significant relationships resulted in the final models (standardized path coefficients near continued lines) and we have omitted the effect of the control variables to simplify the figures, their effects are reported below: age on grandiose narcissism (beta=-0.13 p=.003), age on vulnerable narcissism (beta=-0.14 p=.001), age on FOMOS (beta=-0.14 p=.001), age on ASI-R (beta=-0.18 p<.001), age on BSMAS (beta=-0.10 p=.003 in path model 1 and beta=-0.08 p=.016 in path model 2), age on the social network behavior index *Delta FFI* (beta=-0.10 p=.010 in path model 1; beta=-0.12 p=.003 in path model 2 and beta=-0.13 p=.001 in path model 3), engagement in a relationship on vulnerable narcissism (beta=-0.12 p=.004), being in a relationship on FOMOS (beta=-0.11 p=.007), being in a relationship on ASI-R (beta=-0.12 p=.001), Gym on grandiose narcissism (beta=0.08 p=.049), Gym on ASI-R (beta=0.17 p<.001), Gym on BSMAS (beta=0.10 p=.009 in path model 1 and beta=0.12 p=.001 in path model 2), Gym on the social network behavior index *Photo* (beta=0.20 p<.001 in path

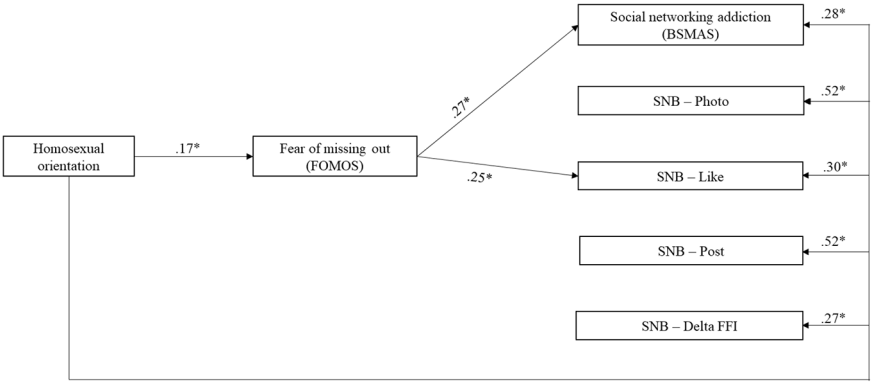

Fig. 2 Path model 1 with FOMOS as mediator (standardized parameters; * p < .001)

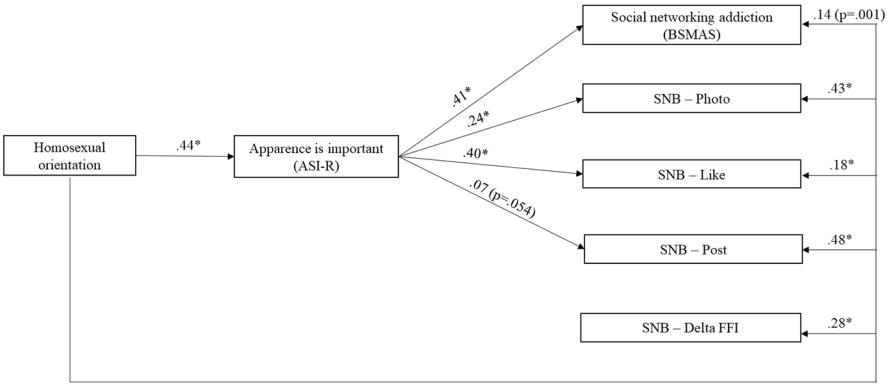

Fig. 3 Path model 1 with ASI-R as mediator (standardized parameters; * p < .001)

model 1; beta = 0.21 p < 001 in path model 2 and beta = 0.17 p < .001 in path model 3), Gym on the social network behavior index *Like* (beta = 0.08 p = .026 in path model 1 and beta = 0.12 p = 002 in path model 2), Gym on the social network behavior index *Delta FFI* (beta = 0.08 p = .038 in path model 1; beta = 0.10 p = 016 in path model 2 and beta = 0.09 p = .017 in path model 3).

In all final models, except the path model 3, the direct effect of sexual orientation on SNB and social networking addiction is always significant and higher than indirect effect, indicating that only a little part of the variability is shared with mediators (Table 3). In the path model 3, instead, we can observe a relevant role as a mediator of the investment in one's physical appearance for social networking addiction and the social network behavior index *Like.* In fact, in both these cases the direct and indirect effects of sexual orientation are very similar.

Table 3 Direct and indirect effects of sexual orientation on social networking addiction and social network use (N = 586)

Effect of sexual orientation		Social networking addiction (BSMAS)	Social network behaviour indices			
			Photo	Like	Post	Delta FFI
Path model 1 - Narcissism as Mediator						
Direct effect		0.30*	0.50*	0.30*	0.51*	0.25*
Indirect effect (global)		0.03 (p = .007)	0.02 (p = .006)	0.05*	0.01	0.02 (p = .009)
	by Overt narcissism (NPI)	nc	0.02 (p = .006)	0.03 (p = .005)	0.01	0.02 (p = .009)
	by Covert narcissism (NHS)	0.03 (p = .007)	nc	0.02 (p = .011)	nc	nc
	R-square	*17%*	*40%*	*22%*	*27%*	*13%*
Path model 2 - Fear of missing out as Mediator						
Direct effect		0.28*	0.52*	0.30*	0.52*	0.27*
Indirect effect		0.05*	nc	0.04*	nc	nc
	R-square	*20%*	*36%*	*21%*	*27%*	*9%*
Path model 3 - Appearance scale as Mediator						
Direct effect		0.14 (p = .001)	0.43*	0.18*	0.48*	0.28*
Indirect effect		0.18*	0.10*	0.17*	0.03 (p = .057)	nc
	R-square	*24%*	*42%*	*29%*	*27%*	*12%*

Delta FFI = Delta Followers and Followees on Instagram

nc = not computed, since no-significant path coefficients

*p < .05; **p < .01; ***p < .001

Discussion

The aim of the present study was to assess the differences between gay and heterosexual men regarding social networking addiction and social network use, grandiose and vulnerable narcissism, FOMO, and investment in one's physical appearance. Moreover, we want to assess how sexual orientation affects social networking addiction and social networks use and how many variables, such as narcissism, FOMO and investment in one's physical appearance, may mediate this relationship.

The social network considered in this study were Facebook and Instagram as, in addition to being the most used social networks in Italy ("Italy: Main social networks users 2021", 2021), they have similar characteristics. They allow you to post content on your profile, both photographic and textual, for a limited (the stories are visible for 24 h from publication) or unlimited period of time and are accessible to all, not being specific for certain populations.

The results of this study show that men who identify as gay may be more at risk for social media addiction and specific behaviors adopted on social networks, spending more time on social media, posting more content, and seeking personal gratification by posting photos that may also be sexually provocative, receiving likes, and growing

their following, with the possibility of getting more followers than followees. These findings may be applicable in Italy, where levels of homophobia have historically been particularly high (Lingiardi et al., 2005; Prati et al., 2011) due to widespread religious ideology, political conservatism, and traditional beliefs about gender roles. (Ioverno et al., 2018). In Italy, the family and the Catholic Church are the institutions that underpin society (Callahan & Loscocco, 2021). It is difficult in Italy for a person belonging to the LGBTQIA+community to be accepted by their family without difficulty (Donà, 2021). This happens because the patriarchal and sexist Italian society cannot accept that men who define themselves as gay can have effeminate traits, as this is contrary to the dominant model of masculinity (Callahan & Loscocco, 2021; Donà, 2021). In addition, the strong Christian values rooted in Italian families lead them to perceive homosexuality as an unnatural phenomenon, contrary to the divine design of a family composed of a man and a woman, hindering the acceptance of homosexuals and all other people who belong to the LGBTQIA+community (Donà, 2021). The climate of patriarchal and sexist societies leads men who define themselves as gay to try to adhere as closely as possible to the typical norms of hegemonic masculinity, performing "straight acting" so that they can be more easily accepted socially (Callahan & Loscocco, 2021; Connell & Messerschmidt, 2005).

The results show that there are other significant differences between the two groups too. The GM group tends to have a high grandiose representation of themselves but a greater sensitivity to criticism. This is in line with other studies that had found that people who identified themselves as gay reported higher levels of self-importance, compared to people who identified themselves as heterosexuals, and this might happen in response to the homophobic both oppressive power and norms of society (Drescher, 2010; Rubinstein, 2010).

The FOMO variable also shows significant differences between the two groups, with higher values for gay men, who appear to be more afraid of feeling excluded, wanting to get in touch with others also on a virtual level. Furthermore, according to the previous ones, the positive correlation between FOMO and social networking addiction was also highlighted in the present study (Riordan et al., 2018; Oberst et al., 2017). The GM and HM groups also present significant differences regarding their body image: men who identify as gay tend to invest a lot in their own image, go to the gym, and make comparisons with others, much more than heterosexuals do. These results are consistent with previous studies, showing that men who identify themselves as gay tend to have a high psychological investment in their physical appearance and to constantly compare their body image to the others' (Wood, 2004). Moreover, from the correlations, we note how both dimensions of narcissism correlate with the variables related to the attention given to one's own body image and the comparison with others. This could be due to the very high beauty standards within the gay community, which lead the gay man to take care of his appearance to the extent that increases self-importance (Drescher, 2010). The demands and visual standards within the gay community may force men who identify themselves as gay to take care of their appearance to such an extent that they increase, nourish, and even induce self-importance, considering it an adaptive rather than a pathological behavior, since it helps them survive in that community and find a sexual life partner (Drescher, 2010). Moreover, the fear of not being socially accepted in a patri-

archal and sexist society if not considered sufficiently masculine men might lead men who define themselves as heterosexual and men who define themselves as gay and respond to the standards of hegemonic masculinity. If performing a hegemonic masculinity helps both men who define themselves as heterosexual and those who define themselves as gay to both find a partner and to be socially accepted (Connell & Messerschmidt, 2005; Moskowitz et al., 2009), this may also be true in the virtual world of social networks. In particular, Italy's patriarchal and sexist society (Callahan & Loscocco, 2021; Donà, 2021) may lead men who define themselves as gay to perform hegemonic masculinity in order to avoid being discriminated against by both men who define themselves as heterosexual and those who define themselves as gay as they prefer more masculine partners (Connell & Messerschmidt, 2005; Eguchi, 2009; Moskowitz et al., 2009), despite the fact that "straight acting" leads to high levels of stress in those who perform it (Lu et al., 2018). Men who define themselves as homosexual perceive more as safe those social networks specifically created for and used by people from the LGBTQIA+community, within which they can feel free to express themselves openly (Hanckel et al., 2019; Miller, 2015).

Social networking addiction is significantly more prevalent in the GM group, which shows higher levels of dependence on social networks. Furthermore, the results show a significant difference between the two groups regarding the four SNB indices: GM group presents a stronger desire to be photographed, also in sensual and provocative attitudes, a stronger need to receive approvals on social media, a higher frequency of posting content on social media and a higher difference between followers and followees on Instagram than the HM group. This finding is in line with other studies that have shown that social networking addiction is a phenomenon more present in LGBTQ+community (Han et al., 2019). This connection between sexual orientation and social networking addiction was also evident in the present study. However, the results show that the mediating variables considered just partially moderate the direct effect that sexual orientation has on social networking addiction along with social networking behaviors. The literature highlights that there is a link between narcissistic personality traits and social networking addiction (Brailovskaia & Margraf, 2017; Casale & Fioravanti, 2018; Susanto et al., 2021) but the present study reveals how this link may be moderated by sexual orientation. The same happens with the FOMO that is strongly tied to social networking addiction (Blackwell et al., 2017; Przybylski et al., 2013), but in this study it proves to be a weak mediator in the relationship between sexual orientation and social networking addiction. Investment in one's physical appearance is the only moderator whose direct effect outweighs (albeit slightly) the indirect effect of sexual orientation, consistent with the literature indicating it as a variable forcibly linked to social network addiction (Castaneda, 2020). Regarding SNB indices, for them the direct effect of sexual orientation is always greater than the indirect effect of narcissism, FOMO, or investment in one's physical appearance. Also in agreement with the comparison between the two groups, the desire to be photographed in provocative acts and to post these provocative pictures to receive approval from other people, adding content to social network profiles more frequently and having more followers than followees is significantly more frequent in the GM group. From these results some hypotheses may be made: the desire to post provocative pictures to receive approval from other people may also be due to the

desire of people who identifies themselves as gay to reach the beauty ideal to which they compare themselves in order to compensate for their body image dissatisfaction (Wood, 2004). Then, the need for other's approval by receiving likes on posts is consistent with the literature stating that heightened investment in physical appearance and the constant comparing between their own body image and other people's are shared traits between people who identifies themselves as gay and people addicted to social networks (Wood, 2004). It can also be assumed that having more followers than followees symbolizes a status of importance in social communities, typical of celebrities, which is something looked for to have approval. This may be related to the use of social networks to achieve self-identification which may be found difficult to reach in a society that often causes the members of LGBTQ+community feelings of inadequacy and inferiority (Han et al., 2019).

Limitations and Future Directions

The limitations of this research arise mainly from the nationality of the sample since only Italian men were taken into consideration. Furthermore, a type of randomized sampling would be preferable instead of the snowball sampling used for this study. Another limiting factor includes the sexual orientation of the participants. We considered only those who were exclusively heterosexual or homosexual, not being able to consider other remaining types of sexual orientation (not exclusively heterosexual or homosexual and bisexuals) since we could not find a big enough sample, and this would not have allowed an adequate statistical comparison. Future suggestions for the potential development of this research may be to observe whether there are differences for these other sexual orientations. It might be also appropriate to investigate how living in a society permeated by discriminatory beliefs about gay people may cause them to take refuge in social networks use to attain other people's approval rather than searching for it in real life. Finally, research could delve into the performance of hegemonic masculinity by examining how it affects self-importance and self-representation for both men who define themselves as gay and those who define themselves as heterosexual.

Funding The research group did not receive funds for this study.

Open access funding provided by Università degli Studi di Padova within the CRUI-CARE Agreement.

Data Availability The data that support the findings of this study are openly available in Research Data Unipd at https://doi.org/10.25430/researchdata.cab.unipd.it.00000602.

Declarations

Conflict of Interest The authors declared no potential conflicts of interest concerning the research, authorship, and/or publication of this article.

Ethics Statement Participants agreed to take part in the research after reading the informed consent and accepting its conditions. The research obtained the approval of the Ethics Commission of the Psychological Department of the University of Padova (No. A866BCE42AF24ABFEA930E5AA853A917).

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