

Use of Online Dating Websites and Dating Apps: Findings and Implications for LGB Populations

Kristine Johnson
Rowan University

M. Olguta Vilceanu
Rowan University

Manuel C. Pontes
Rowan University

Data and findings from the Pew Foundation's "Internet and American Life Project Tracking Survey" (2013) were adjusted through the use of sampling weights to estimate for general US population parameters. Univariate and multivariate analysis indicate that lesbian, gay, and bisexual adults are significantly more likely to flirt online and to use online dating websites and dating apps than heterosexual adults. Findings enhance understanding of LGB consumer decision-making processes, promote creation of LGB lifestyle-focused technologies and promotional messages for non-heterosexual niche audiences, and contribute to a better understanding of LGB online dating habits and usage.

INTRODUCTION

The popularity of online dating has increased substantially since its inception. What was once viewed as a social stigma is now widely accepted to be a “good way to meet people” (Smith and Anderson, 2014, para. 3). In fact, research indicates 87 percent of single American males and 83 percent of single American females view online dating as socially acceptable (Statistics and Facts, 2015).

The growth in online dating is due in part on the advancement and adoption of new technologies, as well as the number of available options. For instance, the mobile-only application, Tinder—an app that provides search results based on location—continues to be immensely popular (Bilton, 2014), while longer-standing, more traditional online dating sites such as Match.com and eHarmony are still very well utilized (Match Group, 2015; Harwell, 2015). Today, more than ever, there are a plethora of specialized digital dating resources: *Grinder for Her*, designed specifically for the lesbian population; *Gluten-free Singles*, a dating site for health-conscience people, and *Ashley Madison*, an outlet for those seeking extramarital affairs. The growing emphasis on specialization is clearly evident, as over 500 dating-related applications can be found on *iTunes* (Wells, 2015).

Given the availability of digital dating outlets, this research is designed specifically to further investigate the relationship between sexual orientation and the use of digital dating services, dating applications, or online dating websites (the terms used interchangeably for the purposes of this study).

Although scholars have researched digital dating among the LGBT (lesbian, gay, bisexual, and transsexual) populations, there remains a lack in the literature regarding LGBT adult use of these technologies in comparison to use of these technologies among heterosexual adults. Therefore, the results of this research may serve as a powerful springboard for further exploration of LGBT digital dating use and its associated implications, also from the perspective of individuals, groups, and various industries serving them, as well as the relationship between race/ethnicity and use of digital dating services.

LITERATURE REVIEW

Previous research on online dating included both in-depth qualitative and extensive quantitative investigations for differences in attitudes, goals, and preferences of adults who engage in online dating (Alterovitz & Mendelsohn, 2009; Cali et al., 2013); the process of selecting and pursuing potential partners for romantic relationships (Blackhart et al., 2014; Finkel et al., 2012; Heino, Ellison & Gibbs, 2010); and the conceptualizing and analyzing self and others' presentation strategies (Couch & Liamputtong, 2008; Geser, 2007; Guadagno & Sagarin, 2010; Hall et al., 2010; Lo, Hsieh & Chu, 2013). These studies focused on comparing concepts and strategies associated with online vs. offline dating. Participants tended to be Caucasian, white, heterosexual, and younger females.

These studies relied on respondents' self-reported ages and results often emphasized heteronormative concepts such as online dating women's preference for older male partners, and online dating men's preference for younger female partners. Even after accounting for deceptive self-presentation (declaring younger ages) and strategies to identify deceptive presentation in others' profile (looking for clues about 'true' age), such generalizations raised the issue of applicability within non-heterosexual populations. After all, for a male-male match to work, at least half of the dating population must be interested in exploring potential relationships with partners same age or younger.

The cited research also compared online dating to 'traditional' or 'conventional' heterosexual dating, therefore falling on stereotypical gender roles in their exploration of participant values and attitudes. Unsurprisingly, female online daters appeared to be looking for male partners with 'status' (healthy and financially stable) and who could accommodate an 'active lifestyle,' while male online daters appeared to favor thin (rather than large-size), younger (by up to 15 years), sexually attractive and 'well maintained' female partners who could help shoulder household chores—a situation resembling the equity trade-off in the 'marriage mart' metaphor (Heino, Ellison & Gibbs, 2010). It remained to be seen what degree would these preferences be influenced by study participants' education and income level, and, furthermore, would such findings be reflected in the overall older adult population.

LGBT Dating Literature

The literature connecting LGBT populations and digital dating examined a variety of issues, such as the reasons male online daters start or stop using the smartphone app Grindr (Brubaker, Ananny, & Crawford, 2014). Identified as an app for gay men, Grindr enables users to find nearby men to chat, seek potential dates, or to pursue intimate encounters. The research suggests the app was viewed as time consuming and took time away from other activities, including work. It was viewed as a means for objectifying men—something some study participants found to be disconcerting. Along with this, respondents claimed to stop using the app because it was believed it would not lead to finding the type of mate users were interested in meeting. In other research, the same dating app was explored in terms of impression formation and self-presentation. Blackwell, Birnholtz, and Abbott (2014) found that co-situation—a combination of physical and virtual presence—impacts how we behave and feel. For example, one study respondent suggested the app can make "every space a potentially gay space" (p. 10), even as users form impressions and judge potential partners from every piece of information provided (such as pictures, key words, personal interests and preferences). Profiles without photos, on the one hand, indicate lack of self-confidence, whereas full-body photos are perceived to be genuine and honest. By posting flattering photos, therefore, individuals can manage self-presentation in order to appear "hot" and appealing to potential dating partners.

This idea of using body image use as a tool to manage and judge self-presentation is also present in heterosexual male's perception of gay males' online dating profiles (Penney, 2014). Reinforcement of gender ideals or clichés may result in dating ads where “straight men” are searching for other “straight men” (Reynolds 2015), as well as the culture of creating and sharing of naked or semi-naked pictures for sexting and sexualizing in LGBT populations (Albury & Byron, 2014).

Interest in LGBT and online dating research dates back to the early 2000s, if not earlier, when a variety of services and websites began to target niche populations (Ridinger, 2005). In an investigation of how gay and bisexual men meet their partners, Prestage and colleagues (2015) gathered data from over 4,000 Australian males who met their partners online and preferred online dating to other methods of seeking dates and romantic partners. In their study, older men also used the Internet to meet significant others, thus indicating online dating is not always primarily used by younger men, as many had assumed. Overall, digital outlets were found to be used for pursuing both long-term romantic partnerships and casual sexual encounters.

HYPOTHESES

While previous researchers have examined LGBT use of online dating, there is not much information comparing the extent of use of online dating services among heterosexual vs. LGBT adults. One of the advantages of using online dating services is self-identification of sexual orientation, interests, and availability—something not easy to ask or identify when seeking casual or long-term sexual encounters. Studies selecting participants from the databases of online dating service users tend to include early adopters of online dating options who are confident and comfortable communicating with an individual without facing judgmental implications. Given the proliferation of LGBT dating websites and apps, it is arguably imperative to further examine the use of these sites in order to gain an understanding of LGBT consumer groups, from both a personal and marketing perspective. Given the limitation of the original dataset collected by the *Pew Foundation's "Internet and American Life Project Tracking Survey,"* this study will focus primarily on lesbian, gay, and bisexual populations (LGB).

This study proposed the following hypotheses:

H1: Online flirtation is significantly more likely among LGB adults than among heterosexual adults.

H2: The use of online dating services is significantly more likely among LGB adults than among heterosexual adults.

METHODS

Data Source and Subjects

For this research, we used data collected by the Pew Foundation's "Internet and American Life Project Tracking Survey" conducted in Spring 2013 (Smith & Duggan, 2013). The data were obtained from telephone interviews with a nationally representative sample of adults (ages 18 or older) living in the continental US (n=2,252). Interviews were conducted by landline (n=1,125) and cellphone (n=1,127). Sampling weights were provided in the dataset (Smith & Duggan, 2013), and were used for the estimation of population parameters (Lumley, 2014).

Variables

The two dependent variables that are the focus of this study are whether the respondent 1) Ever flirted online and 2) Ever used an online dating site or mobile dating app. The use of an online dating site or mobile dating app was measured by two questions, a) Ever used an online dating site, and, b) Ever used a mobile dating app. Respondents, who answered – yes - to either question, were coded as having ever used a dating website or app.

The two independent variables of primary interest for this study are 1) Sexual Orientation (Lesbian/Gay/Bisexual or Straight), 2) Race/Ethnicity (Non-Hispanic White, Non-Hispanic Black, Hispanic, Non-Hispanic Other). The other covariates used for multivariate logistic regression are, 1)

Relationship Status, 2) Sex (Men, Women), 3) Education (At least some college education, No college education), and 4) Household Income (0-29K, 30-74K, and 75K or more). Respondents' relationship status was coded into 4 levels based upon a) the length in years of their current relationship (0-5 years, 6 years or more) and b) whether they were currently looking for a relationship (No, Yes) (Table 1).

Statistical Analyses

Since the Pew survey data have sampling weights, specialized software are needed to incorporate the sampling weights for estimation of population parameters. The estimates in this paper were produced using R (R Core Team, 2014) and the survey package for R (Lumley, 2004, 2014). For this research we used both univariate and multivariate logistic regression.

Results

Relationship Status. Results displayed in Table 1 showed that respondents who were not in a current relationship but were actively looking for a relationship were most likely to have flirted online (46.5%) or to have used a dating website or app (37.6%). Relative to this group, the likelihood of online flirtation was significantly lower among persons who were not in a relationship and not currently looking for a relationship (18.1%, $t=-6.07$, $p<0.01$) and among persons who were in a relationship for six or more years (8.7%, $t=-9.43$, $p<0.01$) and non-significantly lower among persons who were in a relationship for five years or less (42.5%, $t=-0.72$, $p>0.40$). Relative to respondents who were not in a current relationship but were actively looking for a relationship, the likelihood of using a dating website or app was significantly lower among persons who were in a relationship for five years or less (20.9%, $t=-3.36$, $p<0.01$), among persons who were not in a relationship and not currently looking for a relationship (10.4%, $t=-6.72$, $p<0.01$) and among persons who were in a relationship for six or more years (2.9%, $t=-10.21$, $p<0.01$). See Table 1.

Table 1: Percentage of Adults Who Have Ever Flirted Online or Ever Used a Dating Website or App by Relationship Status

Current Relationship Status			Ever		Ever	
In a	Looking For	Length of	Flirted Online		Used Dating Website or App	
Relationship	A Relationship	Current Relationship	% (SE)	t	% (SE)	t
Yes	Not Asked	6 or more years	8.7 (1.07)**	-9.43**	2.9 (0.62)	-10.21**
No	No	Not Asked	18.1 (1.76)**	-6.07**	10.4 (1.36)**	-6.72
Yes	Not Asked	0 – 5 years	42.5 (2.87)	-0.72	20.9 (2.40)**	-3.36**
No	Yes	Not Asked	46.5 (4.77)**	Ref	37.6 (4.62)**	Ref

% = percentage of US adults within group who have ever flirted online or ever used a dating website or app, SE=Standard error of estimate, t=t statistic, Ref=Reference group, significance levels: *= $p<0.05$, **= $p<0.01$.

Sexual Orientation and Race/Ethnicity (Multivariate Analyses). Results showed that lesbian, gay, or bisexual adults were significantly more likely than heterosexual adults to have flirted online (56.2% versus 19.9%, $t(U)=5.86$, $t(M)=4.24$, $p<0.01$), and to have used a dating website or app (29.8% versus 10.5%, $t(U)=3.33$, $t(M)=2.61$, $p<0.01$) (See Table 2). Univariate analyses showed that online flirtation was significantly more likely among non-Hispanic blacks (27.2%) than among non-Hispanic whites (18.8%, $t=2.43$, $p<0.05$); multivariate analysis showed that this difference was marginally significant ($t=1.90$, $p<0.10$). All other effects of race/ethnicity were non-significant.

Table 2: Percentage of US Adults Who Have Ever Flirted Online or Ever Used a Dating Website or App

Group		Univariate		Multivariate	
		% (SE)	t (U)	β (SE)	t(M)
Ever Flirted Online					
Sexual Orientation	LGB	56.2 (6.10)	5.86**	1.31 (0.31)	4.24**
	Heterosexual (Ref)	19.9 (1.05)			
Race/Ethnicity	Non-Hispanic Other	20.6 (4.01)	0.43	0.19 (0.32)	0.59
	Hispanic	21.9 (2.76)	1.03	0.33 (0.21)	1.53
	Non-Hispanic Black	27.2 (3.25)	2.43*	0.43 (0.23)	1.90†
	Non-Hispanic White (Ref)	18.8 (1.19)			
Ever Used Dating Website or App					
Sexual Orientation	LGB	29.8 (5.74)**	3.33**	0.99 (0.38)	2.61**
	Heterosexual (Ref)	10.5 (0.80)			
Race/Ethnicity	Non-Hispanic Other	8.1 (2.65)	-1.17	-0.37 (0.47)	-0.80
	Hispanic	8.0 (1.83)	-1.64	-0.47 (0.31)	-1.53
	Non-Hispanic Black	12.3 (2.42)	0.35	0.09 (0.28)	0.33
	Non-Hispanic White (Ref)	11.4 (0.97)			

% = percentage of US adults within group who have flirted online or used a dating website or app, SE=Standard error of estimate, t(U) = univariate t statistic, β = logistic regression coefficient, SE=standard error, t(M)=multivariate t statistic, significance: †=p<0.10, *=p<0.05, **=p<0.01.

Note: The other variables included in the multivariate logistic regression model were relationship status (see Table 1), sex, income level, and education level.

Discussion

The results confirm the two hypotheses: 1.) online flirtation is significantly more likely among LGB adults than among heterosexual adults, and 2.) the use of online dating services is significantly more likely among LGB adults than among heterosexual adults. While marketing and advertising efforts focus on more commonly known dating websites such as Match.com and eHarmony, the findings suggest there is an untapped market among LGBT persons who use online dating websites and apps. Knowledge of this may enable advertisers to focus on digital marketing tactics designed to attract specific non-heterosexual niche audiences. This is especially powerful given the availability of lifestyle digital dating resources (such as Bumble, Her, and Hinge for lesbians and Grindr and Manhunt for gay men). Although sometimes debated, aspects of this market are known to be affluent. This can further appeal to researchers given the noted spending power of these individuals. The study findings can also serve as a stepping stone for exploring new ways to study LGBT consumer habits. In fact, one may argue there are a multitude of digital dating outlets inquiries that could be examined more in-depth. These could include but are certainly not limited to an examination of the benefits of LGBT dating sites; attitudes toward available resources; gratifications and purpose of use, and time spent using these technologies. Researchers may also want to examine LGBT user perceptions of dating websites versus dating applications. Studies concerning LGBT flirting habits (i.e., texting, social media, email, other) may also be beneficial.

Aside from this, research suggests Non-Hispanic blacks (race only, not identified as LGBT) are slightly more likely to flirt online than Non-Hispanic whites. This too, arguably, warrants deeper exploration. For instance, which online resources are most used by this particularly segment and why? Again, a variety of questions could be asked in order to dig deeper and learn more about this finding. The same can also be said for those looking for a relationship (not identified as LGBT), as the research suggests these individuals are more likely to flirt online and use online dating websites.

From a LGBT consumer perspective, a greater understanding of how and why people use these digital dating resources can create a marketing environment where the messages are meaningful and useful. This in turn can be advantageous for users in order to assist with decision-making processes help fuel the creation of other LGBT lifestyle-focused technologies.

LIMITATIONS

The data from this study does not include responses from transgender individuals. It may be possible there were not enough self-reported respondents from this particular group. If this was the case, it may be an indicator that other methodologies may be more suitable to further understand individual segments of the LGBT population.

CONCLUSION

Study findings indicate lesbian, gay, and bisexual adults are significantly more likely to flirt online and to use online dating websites and dating apps than heterosexual adults. Implications include opportunities to assist with LGBT consumer decision-making processes, the creation of meaningful and useful promotional messages, and an indication for further development of LGBT lifestyle-focused technologies.

ENDNOTES

1. The Pew data from which this study is based includes data provided by only lesbian, gay and bisexuals adult participants.
2. Although study findings are based solely on LBG data, is is arguably advantageous to apply the implications to the LGBT population.

REFERENCES

- Albury, K., & Byron, P. (2014). Queering sexting and sexualisation. *Media International Australia* (153), 138–147.
- Alterovitz, S. S.-R. & Mendelsohn, G.A. (2009). Partner preferences across the life span: Online dating by older adults. *Psychology and Aging*, 24(2), 513-517.
- Blackhart, G.C., Fitzpatrick, J., & Wiliamson, J. (2014). Dispositional factors predicting use of online dating sites and behaviors related to online dating. *Computers in Human Behavior* 33, 113-118.
- Blackwell, C., Birnholtz, J., & Abbott, C. (2015). Seeing and being seen: Co-situation and impression formation using Grindr, a location-aware gay dating app. *New Media & Society*, 17(7), 1117–1136. Retrieved from <http://doi.org/10.1177/1461444814521595>
- Brubaker, J. R., Ananny, M., & Crawford, K. (2016). Departing glances: A sociotechnical account of “leaving” Grindr. *New Media & Society*, 18(3), 373–390. Retrieved from <http://doi.org/10.1177/1461444814542311>
- Cali, B.E., Coleman, J.M., & Campbell, C. (2013). Stranger danger? Women’s self-protection intent and the continuing stigma of online dating. *Psychology, Behavior, and Social Networking*, 16(12), 853-857.
- Couch, D. & Liamputtong, P. (2008). Online dating and mating: The use of the Internet to meet sexual partners. *Qualitative Health Research*, 8(2), 268-279.
- Finkel, E.J., Eastwick, P.W., Karney, B.R., Reis, Harry.T., & Sprecher, S. (2012). Online dating: A critical analysis from the perspective of psychological science. *Psychological Science in the Public Interest*, 12(1), 3-66

- Geser, H. (2007). Online search for offline partners: Matching platforms as tools of empowerment and retraditionalization. *Sociology in Switzerland: Towards Cybersociety and Vireal Social Relations*. Retrieved from http://socio.ch/intcom/t_hgeser19.pdf
- Guadagno, R.E. & Sagarin, B. J. (2010). Sex differences in jealousy: An evolutionary perspective on online infidelity. *Journal of Applied Social Psychology* 40(10), 2636-2656.
- Hall, J. A., Park, N., Song., & Cody, M.J. (2010). Strategic misrepresentation in online dating: The effects of gender, self-monitoring, and personality traits. *Journal of Social and Personal Relationships* 27(1), 117-135.
- Heino, R.D., Ellison, N.B., & Gibbs, J.L. (2010). Relationshopping: Investigating the market metaphor in online dating. *Journal of Social and Personal Relationships*, 27(4), 427-447.
- Lenhart, A., & Duggan, M. (2014). Couples, the Internet, and Social Media. Retrieved from <http://www.pewresearch.org/fact-tank/2016/02/29/5-facts-about-online-dating/>
- Lo, S.-H., Hsieh, A.Y., & Chiu, Y.P. (2013). Contradictory deceptive behavior in online dating. *Computers in Human Behavior*, 29, 1755-1762.
- Lumley, T. (2004). Analysis of complex survey samples. *Journal of Statistical Software*, 9(1), 1–19.
- Lumley, T. (2014). Survey: analysis of complex survey samples. R package version 3.30.
- Penney, T. (2014). Bodies under glass: Gay Dating apps and the affect-image. *Media International Australia* (153), 107–117.
- Prestage, G., Bavinton, B., Grierson, J., Down, I., Keen, P., Bradley, J., & Duncan, D.(2015). Online dating among australian gay and bisexual men: Romance or hooking up? *AIDS and Behavior*, 19(10), 1905–1913. Retrieved from <http://doi.org/http://dx.doi.org/10.1007/s10461-015-1032-z>
- R Core Team. (2015). R: A language and environment for statistical computing. Vienna, Austria: R Foundation for Statistical Computing. Retrieved from <http://www.R-project.org>
- Reynolds, C. (2015). I am super straight and I prefer you be too: Constructions of heterosexual masculinity in online personal ads for “atstraight” men seeking sex with men. *Journal of Communication Inquiry*, 39(3), 213–231.
- Ridinger, R. B. (2005). Gay, lesbian, bisexual, and transgender resources on the Web. *Choice*, 42(8), 1343–1354.
- Smith, A., & Duggan, M. (2013). Online dating & relationships. Retrieved from <http://www.pewinternet.org/2013/10/21/online-dating-relationships/>
- Smith, A., & Anderson, M. (2016). 5 Facts about Online Dating. Retrieved from <http://www.pewresearch.org/fact-tank/2016/02/29/5-facts-about-online-dating/>