What are you looking for? The mental and social health impacts of gay dating and hook-up apps

by

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Dedication and Inspiration:

To my teachers, mentors and friends.

To who I once was, and to who I am constantly becoming

I am larger, better than I thought; I did not know I held so much goodness. All seems beautiful to me; I can repeat over to men and women, You have done good to me, I would do the same for you.

- Walt Whitman

Note: "What are you looking for?" is a question often employed by users to determine intent in Gay dating and hook-up app conversations. It was also the runner-up when Grindr solicited the community of users for suggestions of a new a slogan.

Abstract

The aim of this thesis is to investigate and identify some of the potential social, and mental health impacts of gay dating and hook-up apps. These applications are new, GPS and smartphone based, forms of social media for gay men and other men who have sex with men. The main purpose of this qualitative analysis (grounded theory approach) is to determine what, if any, impacts there are, and to what degree they emerge or are demonstrated in publically available blog postings. The secondary purpose is to examine the findings and host a discussion towards advanced understanding for counsellors and other health practitioners. A final section will include considerations for counsellors based on the findings, and informed by other research. Purdie: What are you looking for: The mental and social health impacts of gay dating and hook-up apps

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Chapter One: Introduction

Introduction

The following is an introduction to a thesis on the subject of the mental and social health impacts of gay dating and hook-up apps (GDHAs). This introductory chapter has been divided into six sections. Section one will orient the reader to the topic; draw links between general social media and GDHAs; and address some gaps in the research that are guiding this paper. Section two will explore the nature of the study including an introduction of the research methodology, questions, hypothesis, goals and variables. Section three will explore the purpose and design of the study, the scholarly context, and introduce a particular conceptual framework. Section four will provide definitions of particular jargon and language to be employed in this study. Section five will explore why the study is significant, and introduce the literature review.

Section one: Orientation

Social media technology has expanded the capacity of the individual to engage in relationships that transcend the common understanding of relationships. With a few keystrokes, users of social media technology can gain insight into a topic of interest, maintain friendships over great geographical distance, and make connections with groups of others with whom they share similar interests (Campbell 2010). These networks form invisible webs of relationships between millions of people who might not

have previously connected. There is an expanding body of research and discourse about social media and how it helps and/or hinders the people who use it. Interpretation of this information is complex because of the vast diversity of the people engaged in social media. A teenaged North American user, and an elderly eastern European grandparent can be similarly engaged in social media and carry completely different health implications related to their use of the technology. This fact alone substantiates the importance of specific and targeted investigation into the many social and relational factors related to engagement in social media.

If the primary use of social media is to expand the capacity of each individual to maintain or obtain a larger network of relationships, socially repressed group may reap a unique benefit. In using social media technology, many of these groups are offered the possibility of anonymity and distance to generate new relationships (Turkle 1995, p.16). Among these socially repressed groups are gender and sexual minorities (GSM). GSM groups have often found unique opportunities to connect online and create a sense of safety in numbers (Campbell 2004). Dasgupta (2012) describes this phenomenon well in saying; "The need for safe space is probably the single most important factor that underlies the formation of digital queer spaces..." (p 116)

While other GSM groups use social media technologies to build and maintain relationships, the focus of this paper is to explore specific technologies designed for populations of gay men and other men who have sex with men (OMSM). Due to their minority status, there are situations when many gay men may not be safe to be out of

the closet, or to travel to a gay-safe space where connection can be made. This experience is one shared by many gender and sexual minority groups. Campbell suggests that online gay safe spaces provide a safer place for identity formation and experimentation (Campbell 2010, p.105). This kind of identity formation is particularly relevant for gay men in rural or remote locations where they might have little access to social groups, or the safe location of sexual partners.

In a Canada-wide sexual health and behavior survey conducted by the Community Based Research Centre for gay men (CBRC), researchers found that approximately 88% of men living in metropolitan areas use the Internet to find sexual partners; this occurred at a higher rate for those living in rural areas (Dulai, Ferlatte, Marchand & Trussier 2014). In the case of the Sex Now Survey, the "internet" was a generalized term to describe web-based, smart-phone based and other Internet reliant sexual-relational social media. Online dating and location of sexual partners also influences the "identity formation" mentioned by Campbell in that these men are able to use the Internet to find partners for sexual and social exploration.

In an expansion of the use of Internet to find sexual partners, there is a sub-set of applications that have been gaining popularity since approximately 2009. These gay dating and hookup applications (GDHAs) use smartphone geolocation technology to make locating sexual/romantic partners easier. Geolocation technology allows men to find other men close to their current location, making finding a date or sexual partner nearby simpler. GDHAs are male exclusive, which creates possibilities for relationships

without the need to 'come out' or to be reliant on a community based gay space (e.g.: gay bar). While some users may be isolated due to geography or other societal barriers, people living in metropolitan areas with gay-spaces also use these apps.

While GDHAs replicate the experiences of online chartrooms, and other social media, there is a more pronounced emphasis on forming novel connections. The goal seems to be: to start chatting on the app, and transition to an in-person relationship (sexual, social, etc.). This is similarly correlated in another study that states that while relationships may form on social media, the general intention of the individuals seems to be to transition to a local offline (in-person) relationship (Ellison, Hancock & Toma 2012). This is a key difference between general social media and GDHAs in that most relationships on general social media occurred between individuals who have a previously formed face-to-face relationship (Baym, 2010).

The creators of the most frequently used GHDA (Grindr) advertise the capacity for community building as a benefit to the app, demonstrating that GDHAs are not exclusively for the purpose of finding sexual partners (Grindr, 2013). Although these apps are officially advertised as offering social networking and dating services, men who use these apps frequently report using them to find sexual partners (Gudelunas 2012). Because these apps can provide semi-constant access to potentially available sexual partners, the majority of research that makes reference to GDHAs focuses on sexual health implications. One of the driving forces behind this research is detailed in studies that found that individuals who use the Internet to find sexual partners have, on

average, more sexual partners (per annum) and that those who have more sexual partners are therefore at a higher risk of contracting a sexually transmitted infection (STI) (Dulai et al, 2014 and Lehmiller & Loerger, 2014). Some of the sexual health implications of GDHAs will be explored in greater depth in chapter two.

The exploration of behaviour and health outcomes related to general social media is one that has been explored by many researchers. Conversely to the noted sexual health implications found in research related to GDHAs, general social media research tends to focus on psychological and social factors. For example, there have been studies that have examined addiction as it relates to Facebook and that many people would describe their relationship with Facebook as an addiction (e.g. Begum et al. 2014). Other studies describe experiences of increased positive self-image due to selective self-presentation on media such as Facebook (Gonzales & Hancock, 2011). There are studies that suggest that the use of social media to generate relational and social confidence among students living with disabilities is one of the most positive factors noted (Hill, 2014). Conversely, Kim, LaRose, & Peng found that certain groups of people experienced increased loneliness and isolation due to reliance on social media for social connection (2009).

What is most interesting to note about research about general social media is simply the fact that these types of factors have been studied, scrutinized and discussed. While some research has examined the behavioural, psychological and social factors of general social media, the structural differences between GDHAs and general social media are so significant that this research may not apply to this thesis. However, the

importance of investigating the social and mental health impacts of popular emergent social media technologies is reasonable because social media can, and has been proven to, have effects that differ from population to population.

There are also structural factors related to GDHAs that make them interesting, and worth examination. The internal mechanisms of the applications are different than other social media, and remain unexplored. One unique factor is that GDHAs tend to collapse contextual information that people use to discern the types of connections they want to make. For example, the profiles on GDHAs are usually limited in size, which limits positive self-presentation referenced in other social media. Users are typically allowed to post one photo, and encouraged to post their body type, body weight, ethnicity, specific sexual preferences/attractions and other details. While these unique aspects differentiate GDHAs from general social media, the same factors might contribute to vastly different associated health outcomes.

What is clear is that GDHAs aggregate diverse individuals into singular virtual spaces that have been examined for many sexual health implications, but lack depth of exploration into the aspects related to mental and social health.

Section two: Nature of the Study

The working hypothesis for this paper is: If other social media have been found to have an impact on the mental and/or social health of the users, it stands to reason that using a GDHA may have a similar or different impact. This hypothesis allows for both positive and negative experiences and does not rely on a pre-conceived notion of the value or quality of the app or the people who use them. To add more specificity,

the main questions of this thesis are: Can using GDHAs affect the mental and social health of the gay male user? And, what are some of the factors that are at play regarding the positive or negative impacts of using apps.

The method proposed in chapter three is to examine the self-reported experiences of GDHA users as they are reported on publicly accessible blogs or journal sites. The goal is to examine postings that contain experiences or references to the mental and social wellness of the user as they relate to their GDHA experience. Because blog and journal articles (postings) may not present a well-rounded picture, a tool will be developed to ensure some structure to the analysis. A more neutral position might have been established by developing a survey, or conducting interviews but, the goal here is to examine the candid expressions of a frequently oppressed (silenced) population. Another motivation for using this method is to artfully replicate the experience of anonymity found in the GDHAs themselves.

The primary variable with this method is the potential variation in the selfreported experiences of using GDHAs. There may be a range of experiences reported by users, spanning very positive to very negative. A positive psychology lens will be superimposed in discussion and to balance the analysis. The second variable is the individual diversity of individuals reporting their experiences. The diversity of the blog posters is addressed by considering only the content of the posting, rather than considering the diversity of the individual poster. A third variable might be the manifestation of unpredicted data or trends. An obvious variable is found in the men

themselves, and their internal relationship with factors like: ethnicity, culture, selfesteem, and pre-existing mental health disorder. Other variables may be related to the social acceptability of the apps themselves. There may be regional, political, physical, social, economic factors that may directly impact the use of GDHAs. A combinative research strategy will be employed to address as many variables as possible (chapter three: Methods).

The most noticeable weakness in this study was the lack of other scholarly resources related to the topic. While there is some research about GDHAs, this study will rely heavily on studies about general social media, and gay men's sexual, mental, social health as well as how these topics intersect with the questions and hypothesis of this paper. The methodology chosen to address the questions will also address some of the weaknesses here because the theoretical framework leaves space for emergent themes and unpredicted data (see chapter three: methods).

Section three: Purpose and scholarly context

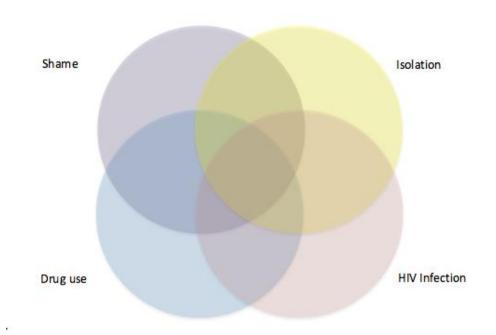
Due to the undeniable popularity of smart phones, social media and changes to the social acceptability of being gay (in some regions), more information is required to assist individual users and helping-professionals to understand the nuances of these technologies. This is important because it is possible that: 1. Men may not know the impact of their interaction with these apps, and 2. Health care professionals may not know in what ways these apps may help or harm the people they serve.

The design of this study will be qualitative in nature, with an emphasis on

examining the narratives of the men who report their experiences. Factors will be extracted and examined based on their commonalities with research; their internal similarities to other postings; and the presence of clear references to benefit or detriment to mental or social health. These parameters should allow for the factors to arise from the experiences of the individuals while screening out experiences that do not relate.

In order to establish a framework upon which to construct this thesis, two concepts have been chosen to guide and direct the study. The first conceptual framework of this paper is a formed around syndemics. A syndemic is: a co-occurrence of epidemics that additively increases negative health outcomes (Mustanski, Garofalo, Herrick & Donenberg 2007, p.38). A syndemics based understanding is particularly important for this thesis because it allows for the recognition of environmental factors that impact health and wellness (Chown 2013). A syndemics based understanding of a problem overlaps social, physical, mental, and sexual health factors and considers how the different factors may mutually reinforce the other factors (figure 1.1). Purdie: What are you looking for: The mental and social health impacts of gay dating and hook-up apps





Because a syndemic is, in essence, a way of understanding a problem, a more positively centered framework is required to provide balance to the analysis. The second contextual framework is on that can be easily superimposed over a syndemics, that model is: positive psychology. Positive psychology is the study of strengths that allow communities to thrive. Positive psychology recognizes the resilience of the individual and community to locate and enact positive change. In this case, a positive psychology lens provides and entirely different way of interpreting data, while remaining within a framework that fully acknowledges the intersectional interplay of the social determinants of health. Simply put, if a syndemic demonstrates how certain negative problems create co-morbidity, it also makes sense that a positive psychology informed model could assist in addressing and shifting some of what may or may not be negatively impactful. This ensures that any findings can be interpreted from a

standpoint of logic (bad things can happen), and solution based positivity (but there is probably something to help). An example of a positive psychology interpretation of the syndemics model can be found in Figure 1.2. In this model, the impact of HIV is hypothetically decreased by the super-imposition of positive activities designed to reduce impact.

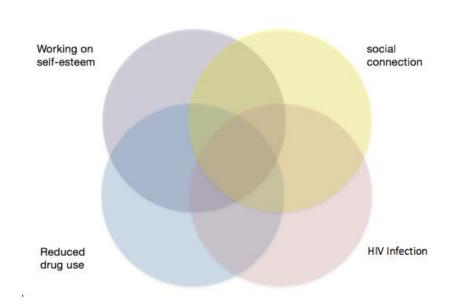


Figure 1.2

These frameworks are incredibly important because together, they create space for interpretive understanding of some of the unique risks and gratifications of using GDHAs without necessitating binary conclusions of "right and wrong". Rather, the researcher can examine any potentially negative evidence with a focus on solutions and supportive recommendations/considerations.

Because this thesis will explore the behaviours, reactions, health outcomes and associated social factors of a specific population (gay men), it is important to include

frameworks based on both social epidemiology (syndemics) and psychology (Positive Psychology). The focus on social-epidemiology is included partly because a focus on epidemiology allows an exploration of incidence (of behaviours, traits and experiences), and leads the researcher to examine the other factors related to health. And while the use of GDHAs is not an epidemic, there is a social epidemiological link in that they are a social-sexual tool that is uniquely used by a specific socially devalued group; one with a history intrinsically married to and HIV epidemic. Using GDHAs carries implications of health that have not yet been fully examined. Examining GDHAs under a syndemics sensitive and epidemiology-influenced lens is needed in order to fully understand the unique risks and gratifications, and potential outlying social contributors to the health and wellness of gay men. The addition of the positive psychology framework adds balance, and the potential for solutions to any potential problems, and leaves the researcher open to examine evidence from a balanced perspective. This addition also adds context for counsellors and mental health practitioners because it allows for interpretations of data that can lead to beneficial understanding and potential interventions.

Section four: Definitions

Gay: In this paper, gay will be used to describe men who may identify as: gay, bisexual, queer, two-spirit, pansexual, asexual, pan-romantic, and bi-romantic. The sex of the man is not important to this study, but for purposes of clarity, gay may also mean: Cisgender, transgender, trans, intersex, and other gender variances.

Other men who have sex with men (OMSM): OMSM will be used to refer to men who have sex with men but who do not identify as gay as defined above. These men might identify as straight (heterosexual) or asexual, but by their own choice or other motivation (e.g. sex work), have sex with men. This term is included only in cases when there is a need to ambiguate a difference between gay men (as identified above) and OMSM (as identified here).

Apps: In this paper, app will be used to describe applications that are installed on a smart phone and rely on the use of data-streaming or wireless fidelity. These may include applications GDHAs. This does not include more traditional website based dating sites (e.g. Plenty of Fish).

Gay Dating and Hookup App (GDHA): In this case, a GDHA is an application designed for gay men and OMSM populations. While the usage of the apps varies, the purpose seems to be dating (social or romantic) and hooking up (sex of any kind). Unless otherwise specified, GDHA might refer to: Grindr, Scruff, Growlr, Squirt, Adam4Adam, and Manhunt.

Section five: Biases, Assumptions and Limits

In any research, there is the probability of bias within the author. For the sake of transparency, I can admit to having a vague sensation that these apps may be doing some harm to some of the communities of people who use them. In my professional line of work, I take part in a campaign that examines that influence of online stigma and discrimination; much of which has been noted to transpire on GDHAs. In saying that, I

can also position myself as a periodic user of the apps. These experiences have motivated me to research this subject in more depth. The goal of stating my bias is to demonstrate my dedication to counter-balancing the bias I may have, with an intention to view all sides of the phenomenon in a neutral manner.

Because of the spoken and read languages of the author, blog postings will be collected from English writing users. Therefore, postings by users from non-English speaking regions may not be included. In addition to this, unless users describe their race/ethnicity and it is connected to the purpose or hypothesis, the diversity of the sampling may be slightly reduced. This study will not offer solutions to any of the problems that may or may not arise from the analysis of the associated factors. The purpose of this paper is exploration, rather than locating a solution.

Section six: Significance:

As mentioned before, research about this topic is sparse and tends to focus on sexual health. However, many gay men and OMSM interact with various medical or psychological professionals. These professionals may not know anything about GDHAs beyond their sexual health implications. This research might help helping professionals to have a more informed and balanced perspective on how to help their clients who may use them. The compilation and analysis of the experiences of others may also create an opportunity for men to consider the impacts of their app usage to their mental and social health. In addition to this, certain commonalities may be determined and open doors for further research into those specified topics.

The findings of this work may also assist in developing a greater sense of how to focus health promotion or social marketing endeavors, which might arise in areas outside of sexual health.

Conclusion

In conclusion, the hypothesis, rationale, aim, questions and context have been explored in order to create a strong framework for the continuation of the present study. The literature review to follow will add more information about context, history, other related trends.

Chapter Two: Literature Review

Introduction

This literature review will examine literature related to Gay Dating and Hookup apps (GDHAs) as well as other literature related to the goal of this thesis, which is: to examine the social and mental health impacts of GDHAs. Relevant articles, publications, research and other media will be referenced, linked and compared in order to form a cohesive picture of the current state of understanding of GDHAs and associated health outcomes. To achieve that end, the literature has been divided into five sections and some studies will be referenced in more than one section. Section one will focus on the uses, gratifications, and challenges of the apps to foster connection. Some reference to the quality of those connections will also be included. Section two will focus on subcultural observations and behaviours that are commonly described in literature related to GDHAs. Section three will examine some of the unique linguistic devices, behaviours, and social nuances encountered online. In assuming a syndemics based understanding GDHAs, section four will focus on sexual health and risk related to GDHA usage. Section five will center syndemics as they relate to gay men's health (sexual, physical, social and mental) and examine some research that makes reference to other potential threats/benefits to overall health.

Section one: Connection

In his anthropological and socio-geographical article, Dominique Pierre Batiste coded and analyzed a series of interviews regarding the use of gay dating and hookup

apps (GDHAs) amongst gay men in Toulouse, France. His question was, "why do gay men utilize geo-social media applications such as Grindr and Scruff" (Batiste, 2013, p. 111). Batiste identifies some positive rewards from being involved in gay specific social media, some of those are: safer construction of social/sexual network with other gay men; finding relationships of any kind despite physical distance; and the location of online social spaces to assist in identity formation (p. 116). This is correlated by other research, which qualifies that this identity formation is particularly important for queer people living in areas where there are no physical gay spaces, or situations where they are not safe to express their sexuality (Campbell 2004, p.105). Other researchers believe that it is of singular importance to have available online [queer] "safe spaces" online, in order to combat isolation in queer youth coming to an age where they may be inquisitive of the experiences of others (Dasgupta 2012, p.116). Batiste, Dasgupta and Campbell agree with the idea of GDHAs serving as a unique way of forming connections.

In a specifically gay male context, Batiste suggests that for many, life as a gay man can mean invisibility. He highlights the story of an individual who would be alone without the assistance of GDHAs (Batiste 2013, p. 122). Following this assertion, Batiste suggests a degree of privilege experienced by the individuals who are extroverted enough to attend social situations; in stark contrast of those who (for many reasons) may not ever feel safe, comfortable or socially able to go to social settings to meet men. Batiste also posits that GDHAs foster more than only sexual and romantic relationships, but also friendships and acquaintances (p. 123). He suggests that many men feel more confident online, and the barrier of the non-face to face communication facilitates

meaningful contact between users across communities and great distances (p. 129). He also suggests that the ability to see other gay men online combats the idea of heteronormative dominance simply by being able to see others nearby (p. 130). Gudelunas (2012) also examines the uses and gratifications of using GDHAs and posits that the "sliding scale of anonymity provided" is a unique gratification. On this scale of anonymity is also a level of intentional invisibility; a space where one can test the waters of their being publically seen (p. 359).

Regarding visibility and safety, authors Bolding, Davis, Hart, Sherr & Elford also extend this benefit to the HIV-positive community in their noting that HIV-positive men were more likely to find sero-concordant (same status) partners online or using apps. This may be related to the relatively safe environment where they can disclose their status (Bolding et al. 2005, p. 967).

While Gudelunas, and Bolding et al. describe the relative anonymity as a positive factor, Lapidot-Leftler and Barak (2012) suggest that some facets of the sliding scale of anonymity (lack of visbility, lack of eye contact and lack of personal information) are a strong predicator of instances of toxic online dis-inhibition (e.g. linguistic violence and micro-aggressions). This is corroborated by anecdotal articles describing the experiences of men who have experienced stigmatization of their HIV status on GDHAs (E.g. King, 2016).

Author Tom Roach also challenges the content and quality of the connections formed online. Roach asserts that the interactions on these applications are highly

abnormal when compared to other forms of inter-personal communication or interaction. Roach suggests that the interactions are so impersonal that they have transformed into interactions more indicative of business transactions; transactions guided by individualized desire (2015, p. 67). He posits that the self (user) and the other (potential partner) become aestheticized and begin to interact with each other on increasingly impersonal levels (p.67). By extension, these interactions seem to more closely represent shopping for commodities, rather than connecting with individuals. The individuals become replaceable or inter-changeable, Roach suggests is partly supported by their presentation on the "grid" of the GDHA home page, which changes as the user travels (see figure.2.1). The title of the Roach's paper uses the word fungible to reflect the kinds of interactions on GDHAs. Here, the term fungible is used to describe a situation wherein all character and content are hollowed out, leaving little other than a formal semblance of connection (Roach, 2015. p.70).

Similar to the aforementioned researchers, Evangelos Tziallas acknowledges the unique power of GDHAs to transform any "straight space" into a digital "gay space"; and that finding a long-term romantic or friendly relationship happens frequently (2015, p. 761). However, Tziallas's primary interest in his research is to discuss the motivation gay men have to use these applications. His assertion is that these applications replicate the experience of a game where the goal is, in part, a platform for the creation of do-ityourself pornography (p. 761). Tziallas refers to the applications as "gamified amateur porn platforms" wherein users can send and exchange private, personalized images of their naked bodies, or images of others whose photos the user received and kept (p.

761). Jane McGonigal argues that all games have four primary trails: a goal, rules, a feedback system and voluntary participation (McGonigal 2011, p. 21). Through the lens of McGonigal's theory, Tziallas observes that GDHAs are not games, but are gamified in that they are intentionally crafted to replicate certain game-like experiences (Tziallas 2015, p. 760). Most GDHAs, and the micro-cultures contained within, have all four aspects referenced by McGonigal, for example: the immersive experience of dropping oneself at any time into a pool of gay men at any time; and the potential for modifiable personal self-representation (adjust picture, weight, height, location etc.) which is very similar to a video game (P. 763). Tziallas makes further connection to McGonigal's assertion and argues that one's ability to give and receive ratings, count messages received, hear feedback about pictures sent, and record how many people have viewed your profile represents a feedback system (Tziallas, 2015. p.763). As an added facet, some people collect and redistribute images received much like a trading card (p. 767), which is evidenced by other research (e.g. Topping 2012). Regarding rules, Tziallas argues that these are defined not only by the application programmers and retailers, but also by the individuals who craft their profiles with language such as "No fats, no femmes, no Asians, no strings attached, no one older than 30". This represents a significantly more complex game than is advertised and creates competition between app developers and the users themselves (p.768). Overall, Tziallas posits that this gamification is a driving force behind the use of the apps, and the types of communication on GDHAs.

Section two: Unique sub-cultural observations and behaviours

In research that makes reference to subjects describing their experiences on GDHAs, it is interesting to note some similarities and differences of opinion. For example, Batiste spent extensive time with a primary subject who describes his experiences online. Batiste's primary subject (younger white Cisgender male) describes an overarching sense of sameness, a particular aesthetic, found on these applications. He says: "there is an aesthetic, a quality to gay culture. Gay people have a refined aesthetic... [they] look the same. They are all thin, they have particular clothes, or they are not wearing their shirt, and they have perfect bodies and muscles. No facial hair, no beard. They all look identical to each other" (2013, p. 123). This focus on aesthetics is noted in other literature that describes a culture of a "perceived fixation on image and connotations of superficiality, perfectionism and falseness" (Gough &Flanders 2009, p.244)

Author Tom Roach suggests that the development of same-ness is reinforced by the presentation of men on the visual interface he calls, the "grid" (figure 2.1) wherein most men look the same, and difference evaporates in similitude (Roach, 2015. p. 71). Roach posits that this similitude has many effects. One of these is the creation of a community that has everything and nothing in common in that the vast majority present as visually similar in order to attract mates, but other factors that are proven to foster good relationships [mates] are omitted intentionally (E.g. I have a steady job). Secondly, he describes a discourse of transparency, which is supported by the similitude of the profiles themselves (p.71). Essentially, meaning that if one is using the app, they are

assimilated into the assumption that they are using it for the same reason and therefore present themselves similarly. Batiste makes reference to another application for the people who do not fit the "gay aesthetic". That application is Scruff. Batiste suggests that this separate app might create a sense of group membership, and group inclusion where people with similar interests and characteristics can congregate on social media technologies tailored to their tastes (and body shape). He suggests that this inspires group membership and norms among gay men who use specific apps to foster inclusion (p.124). Batiste suggests that Scruff is more representative of "real life" situations (bars, clubs etc...), while Grindr seems to be more representative of a stereotype (p. 124). It is interesting to note the difference in community level engagement with GDHAs.

Section three: Linguistics, and unique social nuances

Some researchers have extended their research beyond connection, and continue to examine the internal linguistics and social nuances to achieve a different understanding. One study by French researchers Licoppe, Riviere and Morel, examines the socio-linguistic aspects of Grindr (2015). These researchers were interested in examining the social, or sexual-social values of the app with specific interest in the way that men converse in the chat feature of the app. These researchers posit that the purpose of Grindr is brief, anonymous, and non-repetitive sexual encounters (P. 1). Their examinations of actual opening conversations on Grindr lead them to describe a "linguistic ideology" which accomplishes two goals: first, to ensure a sexual encounter; and second to, "stifle the relational potentialities that are inherent to the conversational

medium" (P. 10). This analysis echoes the sentiments of Roach in his assertion that GDHAs are dichotomous in their attempt to create connection, while fostering unsustainable connections (Roach 2015, p. 71). Licoppe Rivier, and Morel describe a kind of conversational checklist wherein the users embark on a conversation designed to determine interest, attraction and other details pertinent to a sexual encounter; all the while avoiding conversation likely to create a sense of attachment or commitment (2015, p. 10). Indeed many of the subjects in this study described their interactions as "formulaic" and or "stereotyped" (p.11) and admit that they recognized these as such (p. 16).

Batiste concurs with the notion of stereotyped interactions (2013, p.124) and also asserts that they seem to represent something closer to rules, or customs. For example, if a user does not respond (in any way) to another user's advances it seems to mean that they are not interested. In these contexts there is no social consequence to not replying to a message. He suggests that in offline interactions, this would represent social ostracization, but online it is acceptable and is: "[a] distinct form of know-how in which men must become socialized" (p. 129). Licoppe, Riviere and Morel observed other examples of these customs by noting that complex preferences or desires are reduced to dichotomies (this or that), which are highly fastidious in their nature (E.g. This or nothing). The emphasis of this research is simply to note the difference in the way these conversations occur, and while a typical conversation is dialogic, open-ended and leads to elaboration, conversations on Grindr are on "opposite side of the dialogic spectrum" (P. 13). The researchers elaborate their claims by exploring the ways in

which conversations of a sexual nature, revert into more "typical conversation". This tends to occur once the probing of interest has failed to be successful and is usually found immediately after a sexual advance is declined or ignored twice (P. 16). The researchers muse as to whether the construction of the conversations is, in fact, designed to leave the users feeling as unaffected by the interaction as possible. This point links well with Roach's assertion that interactions on GDHAs can be more indicative for a dance or commerce, or barter system, rather than one to seek intimacy; the commodification of human intimacy (Roach 2015, p. 78).

Licoppe et al also suggest that that construction of the app itself invites the kind of interactions described above. Their observations are that there are only 3 possible features to the chat feature: Send a picture, send text, and send a geo-location based map to your location (Licoppe et al. 2015 P.1)(Figure. 2.2). In addition to this, user profiles are highly limited (e.g. 150 max character count). Essentially, Licoppe et al. suggest that the design of the app itself leads to semi-conscious completion of "tasks" because of the limited scope of the devices within the app (p.17). They also suggest the limited scope, and the geo-location technology is essential to their description of the app as a ground for interactional affordance (p.9). This suggests that some unique cultural behaviours, linguistics and rules exist, and set the stage for individual engagement.

Section four: Sexual health and risk

Epidemiological observations of the difference in disease rates in different

countries, rapid changes in rates of disease, social inequalities, and factors like immigration and social environment all factor into modern research about sexually transmitted diseases (Marmot & Wilkinson, 2005). This is relevant because, most research about health and GDHAs relates specifically to sexual health. Some researchers take an epidemiological approach to examining GDHAs and seek information about the people who use the apps and in what ways they use them to extract meaningful information that might inform an understanding of health related topics. For example, an extensive quantitative Canadian study found that approximately 88% of men in Canadian cities were using the Internet to find sexual partners (higher averages in rural regions) (Dulai, Ferlatte, Marchand & Trussier 2014, p.12). This population information is relevant because of the position shared by Lehmiller & Loerger (2014) and Dulai et al. (2014) which states that men who have more sexual partners are at higher risk for sexually transmitted infections, and that those who use the internet to find partners, have more sexual partners.

This higher risk threshold has been noted by many, including a survey in 2005 which involved over 4000 men. The results suggest that at that time, between 40 and 50% of men had used the Internet to find sexual partners (Bolding, Davis, Hart, Sherr & Elford. 2005, p. 962). Their results concluded that there is a clear association between seeking sex on the Internet and high-risk sexual behaviour (p. 966). However, the authors acknowledge that this is not only a problem located within men seeking sex on the Internet. They found that men who used the Internet to find sex reported high-risk sex (non-concordant condomless anal sex), but were no more likely to use the Internet

to find partners, than they were to find their partners in social environments (p.967). This was motivated by findings that suggested that many HIV-positive men used the Internet to find sero-concordant sexual partners for unprotected anal intercourse (UAI). This is only significant because while in sero-concordant sex, it is not possible to transmit HIV again, it is possible to contract and spread other STIs (p. 966). One of the core recommendations of this study was to use the Internet (and similar media) as a platform for delivering safer sex and harm reduction information (Bolding et al. 2005. p. 962). These advertisements are now present on all GDHAs, and are fueled by community-based organizations dedicated to delivering health promotion information (e.g. Joule 2015) (Figure 2.3). Researchers Grosskopt, Levasseur and Glaser conducted a thorough evaluation of men's sexual risk taking in association with their use of GDHAs (2014). The results suggest that while many men use the applications to find sex, there was only a slight tendency demonstrating that men using the apps were engaged in riskier sex (p. 515).

Grosskopf, Levasseur & Glazer and Dulai et al. concur that more extensive examination of specifically delineated GDHAs in the next incarnation of their respective studies would be beneficial. With more delineation of the various GDHAs, future results may be better positioned to shed light on the most popular apps in different region as well as the ages and ethnicities of the men using those apps (Dulai, et al. 2014). Grosskopf, Levasseur & Glazer recommend examining factors like the perceived differences between the various apps and the individuals who use them (2014, p. 518). They also made recommendations about examining how exactly men use the text in

their profiles to negotiate preferences and behaviours (e.g. friends, sex partners, serostatus etc.)(p. 518).

Section five: Syndemics and other health topics

Prior to the launch of the first fully realized GDHA, researchers worked to validate the existence of syndemics (co-occurring epidemics). Researchers in Chicago studied the intersectionality of "health problems" among young gay men and OMSM. They were seeking co-occurrence of multiple health problems such as: alcohol and drug abuse, experience of domestic violence, psychological distress, sexual risk taking, and HIV-positive status (Mutanski, Garofalo, Herrick & Donenberg. 2007, p. 5). In essence, researchers were examining whether the co-occurrence of certain psychosocial behaviours/habits could be significantly correlated with other problems such as HIV infection. While their sample was relatively small (n=310), researchers found that certain psychosocial problems were found in co-occurence with other health problems. For example, past experience of violence significantly increased the odds of having an HIV positive status, and people of colour were more likely to report an HIV positive status (Mutanski et al. p.6). Men who admitted to using street drugs and marijuana were more likely to report high-risk sexual decision-making (2007, p. 7). With specific reference to mental health, the young men (HIV + status) in this study reported higher rates of psychological distress. Specifically, these young men were likely to have experienced intimate partner violence (physical/sexual) (Mutanski et al. 2007, p.7). The researchers were able to find evidence of a syndemics based health problems among young gay men and OMSM.

Later research by Grosskopf, Levasseur, & Glaser was similar to others in that they evaluate the intersection between sexual risk and usage of GDHAs. These researchers took a syndemics based position in their research and inserted questions about gay-identity and self-homophobia. Grosskopf et al. reported that, on average, participants reported high levels of gay identity importance and a medium to low level of self-homophobia (2014, p. 515). They posit that this means that the majority in the sample possessed a generally positive sexual self-identity, which is "an indicator of good mental health" (p. 517). It was also noted that some groups were over represented in the sample (e.g. individuals with high income).

Because addiction can be considered both a mental health condition and important predictor of good sexual health outcomes, Evangelos Tziallas offers an explanation of addiction to GDHAs. This form of addiction is also mentioned repeatedly in other media (eg: Michaels, 2015). Tziallas suggests that when one "masters" the game (app); perhaps by finding hookups that match his desires, or some other selfdefined measure of success. The application is still active, offering a slightly different version of the original challenge; and the player shifts from playing, to surveying. Tziallas anecdotally links this constant surveying to casual addiction to the process (2015, p. 765). He concludes that the addictive allure apps is found in the appeal of the manicured online avatar being a representation of the user's best self and that this digital-self seems to have been merged inextricably from the offline self (p.767).

Justin Miller makes the conclusion that there may also be a connection between the apparent body image focused presentation on GDHAs, and eating disorders. Miller

noted a high degree of correlation between men describing their own interest in fitness, their desire for partners to be the same, and the user's own use of shirtless photographs (p. 653). Miller posits that this could be linked to other literature that explores body image and eating disorder in gay male populations (Miller 2015, p. 653).

It is observable in both formal and informal publications that one of the most significant social threats related to participation in GDHA culture, is the presence of racism and stigma (e.g. Raj, 2011 & Cooper, 2012). Author Shaka McGlotten suggests that these online media might be a chance to transcend racial, gendered, or sexual difference (promised by early cybertheorists)(2013, p. 62). However, online spaces can reproduce and heighten forms of racial injury, including ordinary micro-aggressions as well as overt or structural forms of racism. He elaborates using his personal experience and interviews with other users, and suggests that ethnic minorities are subject to gender normativity, surveillance, assumption, pathologization and hyper-sexualization (p. 67). Some systemic forms of oppression are demonstrated in the construction of the apps themselves in that if one chooses to indicate one's race on his profile, another person can filter out individuals based on the same criteria (p. 72). He states that microaggressions can be as simple as a profile that states a preference such as "Only into whites..." or "no blacks and asians, no offence" (p. 72). This kind of interpersonal and structural racism, normativity, and stigma could easily be connected to an experience of minority stress, which can be linked suicide and other psychologically significant problems (Michaels, Parent & Torrey, 2015).

In a further examination of the notion of race-based violence on GDHAs, Justin Miller examined user profiles and was careful to include fairly equal sampling with a mean age of 31.59 and fairly equally divided ethnic groups (2015, p.647). Miller cites a study that found that gay men were more likely to exhibit a higher drive for muscularity than heterosexual men, or women and another set of studies that examined the use of racialized language or race based assumptions in online gay spaces (P. 642). These types of publications guided the formation of Miller's questions. It is interesting to note, that Miller did not locate any statistically significant rates of racialized language in any specific cultural group (p. 653). However, miller and his team found an overarching presence of anti-effeminacy that he linked to other a large body of research that suggests that the pervasiveness of a heterosexist and homophobic culture, has lead gay men to overcompensate with rigid masculine norms; clearly demonstrated by his findings in his examination of the GDHA in question (Jack'd) (Miller, p.652).

Conclusion

The sections above were selected to capture and highlight some of the general and specific findings of research that is, by design, broad and encompassing of many important facets of an emergent technology. The location of research and literature from various distinct disciplines (e.g. philosophy, linguistics, psychology, virology, epidemiology, behaviour, medicine, media, and technology) seems to support the presumed paucity of research related to mental and social health, and counselling. This sectioned analysis has highlighted many important facts and opposing conclusions from the extant literature providing a complex and diverse theoretical framework for the

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continuation of this thesis.

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Chapter two figures

Figure 2.1: (Grindr. 2013)



Figure 2.2: (Grindr, 2013)



Figure 2.3: (Joule, 2013)



Chapter Three: Methods

Introduction

In chapters one and two, it has become evident that the specific question(s) posed in this thesis are not easily answerable by an existing body of research. Those questions are: Can using GDHAs affect the mental and social health of the gay male user? And, what might some of the factors that are at play regarding the positive or negative impacts of using apps. These questions are posed in a way that is open because it is yet unclear whether, and in what ways the mental and social health of gay men may be affected by using the apps. The open nature of the questions also positions this researcher to be open to receive and document both the risks and gratifications of using GDHAs: leading to a more positive contribution to the community. The following methodology outlines the way in which these questions will be investigated in the context of this thesis. The first section will highlight the overall methodologies to be applied in researching the topic. Section two will detail the design and approaches to be applied to the research. Section three will introduce an assessment tool designed to reduce latent variables. Section four will detail the sample population and eligibility criteria.

Section one: Methodology

One unique challenge is that there are few studies that directly address the questions posed in this thesis. Many different tactics have been used to examine GDHAS, but no consistent research framework has been proven to be better than

others. In addition to this, there are no tested, well-substantiated, unifying explanations for the factors and relationships in question. In the discussion section, theories of mental health will be used to guide the discussion; however, the overall research methodology most applicable to the subject material presented in this thesis is grounded theory. Grounded theory offers the capacity to generate a new theory, one grounded in the subject matter and data. One of the primary attractors to the use of grounded theory is the internal recognition of the complexity of any given social factor to be examined. Strauss and Corbin define it well in saying:

"... to understand experience, that experience must be located within and can't be divorced from the larger events in a social, political, cultural, racial, gender-related, informational, and technological framework and therefore these are essential aspects of our analyses" (Strauss & Corbin 2008, pg. 8).

The recognition of culture, racial, gender-related, and technological aspects are particularly important in this case because they are the same factors that create the variance in experiences reported on gay dating and hookup apps (GDHAs). Grounded theory also operates on some constructivist principles, which allow the space to evoke additional data as the subject matter data is analyzed. Emergent themes, ones not predicted, are permissible and promoted. This might be very important given the method to be described below.

In chapter two, some articles were referenced to add non-scientific, but lively experiences of men using GDHAs. These articles mentioned racism, anti-effeminism and

other deeply personal experiences, which in other scholarly contexts may go un-noticed or un-counted. In grounded theory, researchers are given unique capacity to honor the experiential side of the data. Corbin and Strauss posit that this promotes the ability to recognize and give meaning to a phenomenon where it was previously un-identifiable (2008, p. 45). They also assert that this intentional seeking of understanding/lived experience makes the finding of the properties of an object easier, and opens the capacity to notice the dimensions (variations) along the way.

However, because the goal of this thesis is to examine risks and gratifications to specific areas of health, it may also be prudent to intentionally reduce the number of variables to fewer latent variables, all of which share common variance (Bartholomew, Knott & Moustaki 2011). Reducing variables will better guide the discussion of the findings by reducing dimensionality and clarifying the main questions of this thesis. This reduction of variables is best examined in research guided by factor analysis and may be more viable in later research after factors have been identified in this thesis. Therefore, this thesis represents a combination of theoretical methodologies; grounded theory and factor analysis.

Section two: Design and Approach

In lieu of interviews, literature review or surveys, I have chosen to investigate publically available blog postings where users describe their experience on GDHAs. The attraction to using publically available blog postings is driven by the same research that suggests that queer people are likely to express themselves differently and with more freedom in online environments (eg: Dasgupta 2012). Garafalo, Herrick, Mustanski &

Donenberg confirm this in their report that in populations of queer youth, online anonymity helps appease fear of stigmatization and increases comfort in communicating with peers and non-peers (2007 p.422). One study went so far as to assert that queer youth might be far more likely to express themselves honestly (true-self) in online settings (Bargh, McKenna & Fitzsimmons, 2002. p. 45). Accordingly, using online blog postings may reveal a more candid expression of online experiences. However, it is notable that while this form of anonymity can support online disclosure, it is also possible that the postings will not present a well-rounded picture. Similarly to the concept of toxic online dis-inhibition presented by Lapidot-Lefler & Barak, individuals may extend this dis-inhibition to their blog postings, leaving a less than well rounded (2012). To address this, a tool has been implemented to guide and direct data collection (see: Chapter three: section three).

The unknown content of blog postings adapts well to grounded theory frameworks that suggest that the theory should emerge from the data, which is in this case, highly unpredictable. The goal of examining these blog postings is fueled by another tenet of grounded theory that is to seek new explanations for identified and unidentified problems.

Section three: Introduction of the chart/assessment tool

In an effort to mitigate some of the unpredictability of the content of the blog postings, a chart has been created based on the literature presented in the literature review (figure 3.1). Each line in the chart suggests a theme extracted from the

literature review, and there is a mix of positive, negative and neutral themes. This chart will be superimposed over each of the blog postings to determine firstly, whether any of the conjectured problems or gratifications are referenced; and second, to provide a "starting point" for discussion of the postings with reduced variables. Another study used a similar method in an explorative examination of blog postings on smoking cessation blogs. Their goal was to examine how blog posting can provide social and emotional support to people attempting to quit smoking (Brandt, Dalum, Skov-Ettrup & Schurmann Tolstrup 2013, p.655). They described several themes and came to the conclusion that the blog environment was one that was very supportive of smoking personal stories, wish to quit smoking) were noted in a significant amount of postings; validating their hypothesis that blogs facilitate social support (Brandt et al. 2013, p.660). The research to follow will benefit from these studies because a similar approach is employed. However, the aim and purpose of the studies are largely different.

The second function of the chart is to assist in categorizing and coding the content of the blog posts. There are two primary codes designed to subdivide the categories. The first is: original postings (OP), created by an author/user describing any experiences from their own perspective. The second code is reply postings (RP), where other users reply to an original posting by another author. This delineation supports the format of most blog website which almost always include an ability to reply equally [selectively] anonymously. Because it is beyond the scope of this thesis to investigate the posters themselves, only significant different between OP and RP will be discussed.

The chart should be considered a lens, rather than a test or assessment. Each blog posting will be scored according to the chart, and the goal will be seek additional themes, exceptions, and patterns. The lines of the chart will represent headings to divide the findings. This method is explorative and remains open to new, emergent themes not referenced in the literature review.

This method is justifiable because it uses extant literature to provide an informed framework; identifying potential mental health related topics. In conventional grounded theory research, the analysis and data gathering occur at the same time (Strauss & Corbin 2008). In this case, however, the main question relates to experiences that might have an impact on mental and/or social health, therefore a more specific criterion was important. This reduces the latent variables possible in the blog postings. For example, a blog posting detailing fantastic sexual experiences, or experiences of contracting a sexually transmitted infection should be screened out using an educated screening method rather than arbitrarily removing it from consideration.

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Figure 3.1

	All messages	Original postings	Reply postings
Connection:			
Reduced sexual isolation			
Reduced social isolation			
Increased community			
Lasting connections formed (partners, friends etc)			
Unique connective opportunities			
Unique sub-cultural interactions and behaviours			
Reference to a specified aesthetic (similitude, superficiality etc)			
Assumptions of sexual/social intention (assumed transparency)			
Linguistics and unique social nuances:			
Positive or negative descriptions of complex linguistic nuances			
Reports of interactional affordance			
Sexual health and risk:			
Sexually transmitted infections			
Sero-concordant safety and relationship building			
Syndemics and health topics:			
Reference to mental health impacts			
Experience of harmful stigmatization			
Racism or race based aggression			
Toxic online dis-inhibition			
Positive sexual-self identity (empowerment)			
Negative sexual-self identity (disempowerment)			
Addiction or compulsion			
Anti-effeminate messaging			
Reference to disordered eating (body image)			
Other emergent trends or themes			

Section four: Sample Population and Eligibility Criteria

The population to be sampled will be self-identified men who have sex with

men. This might mean, and is not limited to: trans men, gay men, bisexual men, gender-

fluid or non-conforming, two-spirit men, straight men who have sex with men, and men with unspecified sexualities. This population is of interest because of design and marketing of the apps to those populations. This population is also selected because of the unique health needs of the populations, and some of the other unique considerations detailed in chapters one and two. Because not all blog websites require a completed profile (detailing age, ethnicity etc.) this information will not be required for inclusion in the sample.

The first and primary criteria for inclusion will involve the author making reference to one of the following GDHAs: Grindr, Scruff, Jack'd, and Hornet. These applications were selected because they are the most frequently downloaded applications in North America (AppAnnie, 2016). Secondly, the blog posting must make reference to at least one theme identified in the chart. Postings that make multiple references to the themes will be placed in more than one category of consideration. 30 blog postings will be evaluated in this thesis. Blog postings will be selected based on keyword searches using a web-based resource (powered by the google search engine) called Twingly. Twingly is a dedicated blog search engine that has additional technology that allows advanced keyword searches.

Section five: Scoring, coding and categorizing

Each blog posting will be examined and coded independently; both reply postings, and original postings will be notated using the chart and totals will be calculated at the end of the examination. The process for scoring and coding the blog

postings is as follows:

Primary scoring: If a blog post makes reference to one of the themes, a score of +1 will be given noted in the appropriate line/theme. If a posting makes multiple references to the same theme, the score will remain at +1 in that same line/theme.

Multiple scoring: If a blog post makes reference to more than one theme, a score of +1 will be added to multiple lines. No line will exceed +1 per blog posting.

Coded scoring: Reply postings and original postings will be presented both separately and combined. Each will be coded independently, and categorized according to content. This might shed light on whether authors are more or less likely to share their experiences if in response to another author, or in an original posting.

Final totals: All blog scores will be compared at the end in order to, potentially, illuminate the key trends, patterns, themes and areas of inquiry. For example, if eight blogs reference "body image issues", a score of eight will be given to that theme, and the results will share those findings making reference to some of the experiences and how they were described similarly or differently; and what trends were observed. These totals will also guide the measurements of the concepts and more importance will be given to the themes that score the highest.

The goal of this method is to divide each posting into separate parts in order to glean information about whether any of the themes in the literature review hold any bearing on the real experiences of the user; and how often similar experiences are

described. Each line of the chart will be the heading of a paragraph in the results section of this thesis. Raw data will be kept in hard copy format and is available by request.

Chapter four: Results

Introduction

The following chapter is a presentation of the results of an examination of publically available blog postings with the goal of exploring the potential mental and social health impacts of gay dating and hook-up apps (GDHA). The data was collected according to the methods described in chapter three. This chapter has been divided into three sections. Section one will explain the process of overall data collection. Section two will review the systems used to track and understand the data. Section three, will present and briefly explain the results within the categories that yielded the highest rates of reference. There are 12 sub-sections organized according to the categories that were part of the assessment tool, including new categories that emerged from the research. The remaining categories were not referenced as much, and therefore did not warrant discussion (see fig 4.1 for full results). The largest category will be presented with explanations of: why blog excerpts were included in that category; what the prevalence of data within that category; and how the original postings (OPs) and reply postings (RPs) differed in terms of prevalence. Quotes from the blogs may be used to clarify or illustrate the types of postings that were included (coded) in that category.

Section one: Process of overall data collection

The process of collecting data evolved as the research took place; in alignment with grounded theory principles. The first step was to gather original postings (OP). To

do this, it was important to rely on search engines able to extrapolate results based on singular, and separate search terms. This lead to employment of Google search engines, because they retains the ability to filter and recognize separate search terms. The term "gay AND dating AND hook up AND app AND blog AND experience" was applied on three major search platforms that use the Google search engine (Google, Tumblr, and Blog Search Engine). In order to find blog postings containing a more positive tone, the additional search parameters were: "gay AND dating AND app AND hook up AND blog AND Positive AND experience". Reply postings (RP) were only used if they were in direct reply to one of the original postings (OP).

Postings were scrutinized to ensure that they contained narratives or reports of experiences on a gay dating and hook-up app (GDHA). An "experience" is here defined as: an individual reporting thoughts, feelings, experiences, trends, conjectures, observations, and other aspects related to their own experience while on a GDHA or a relationship (of any kind) made through a GDHA. Blog postings were omitted if: they focused too heavily on the technology itself; they were evidently false or designed to be satirical; they were too short (less than 100 words); they did not make specific reference to one or more of GDHAs in question. Similarly, RPs were used because they give additional context to the experience of blogging and blog reading. RPs were used if they were of sufficient length, and met the same criteria as above. The collection took place over approximately two weeks (May 14-30, 2016), and the posting dates were between 2011 and 2016. 16 original postings, and 11 reply postings were selected for examination.

Section two: Systems used for tracking data and emerging understandings

As stated in chapter three, an assessment tool was created to examine the postings. The goal of this was to reduce latent variables by extrapolating some of the current, conjectured, or researched observations about the potential mental and social health impacts of GDHAs from literature about GDHAs. Within each blog posting, a reference to one or more of the categories was scored with +1 regardless of how frequently the category was referenced within the same blog post. There were times when a single sentence or reference met the criteria for two or more categories. An example of a single quote containing multiple categories is: "It's the easiest way to meet new people for dates, sex, friends etc..." (Lemon, 2011). This sentence included a direct reference to the category labeled "Sexual connection opportunity", and another direct reference to "reduced social isolation". In this case, each category received a +1 score despite the close proximity of the references.

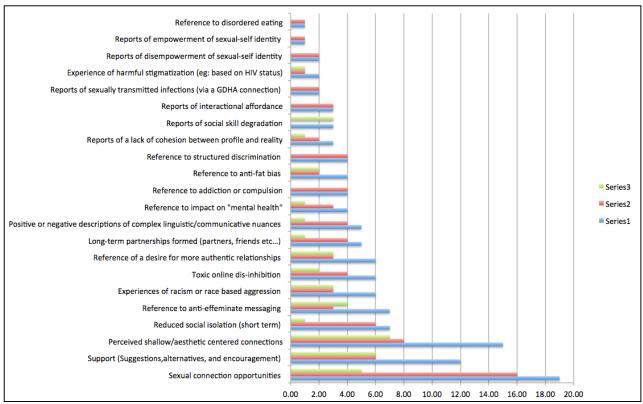
In alignment with grounded theory research, new categories were permissible as the research was being conducted. 8 new categories emerged from the blogs that were not noted in the assessment tool/literature review. These emergent categories were added when a particular theme was mentioned in more than one posting. For example, reference was made to "shallow and aesthetics based connections" in 8 OP, and 7 RP and so it was added to the assessment tool. Following the completion of the first "wave" of blog assessment, all blogs (RP & OP) were reviewed again to ensure than the new (emergent) categories applied to the blogs already scrutinized. The categories that emerged from the exploration were: Support (suggestions, alternatives, and

encouragement); Perceived shallow/aesthetic centered connections; Reference of a desire for more authentic relationships; Reference to structured discrimination; Reports of a lack of cohesion between profile and reality; and reports of social degradation.

Section three: Findings

The complete graph of the findings demonstrates the prevalence references made to the aforementioned categories (Figure 4.1). Each category will be discussed separately in the sub-sections to follow.

Figure 4.1: Results (in ascending order)



(Series 1: Total postings; Series 2: Original postings; Series 3: reply postings)

Sexual connection opportunities

'Sexual connection opportunities' was the most commonly noted and most populated category. This category was based on the findings of the literature review that suggested that GDHAs are a unique method to connect sexually. 'Sexual connection opportunities' is an organizing category that captures references to many parts of sex and sexuality on GDHAs. This might mean: a unique opportunity to find sexual partners; chances to experiment in a gay specific context; and a reduced sense of sexual isolation. Overall, 19 separate blog postings made reference to this category. It was far more likely to occur in original postings (OP=16, RP=5). Unsurprisingly, GDHA users report success in making sexual connections using the apps.

Some of the responses were made with specific reference to having sex. One user said: "I'd probably never get laid without Grindr…" (Hetero-Challenged, 2011). This quote seems to indicate that without the use of GDHAs, the user would not be able to have sex, thereby making his use of GDHA a unique method of having sex. Other posters made reference to the experiences of others, and made no direct reference to their own experiences:

"But for most of my friends and 99% of the gay guys I contact / date/ etc including online forums... This simply does not happen. Grindr is getting closer to 10 years old, and many I know, feel chewed up and spit out by the experience. They have had some hot sex but that's about it." (Notahitandrun, 2015) While the tone of this RP might seem negative, what is important is that the poster is making reference to the fact that people are using GDHAs to have sex.

Certain posters made reference to the fact that in certain areas and situations, having access to an out-gay community would be impossible, so the unique chance to have sex via GDHA is worth valuing. For example:

"... because guys haven't come out and just aren't comfortable yet.You can do it because your identity is hidden by the app. Being in the deep south, where you have one environment that is extremely conservative and the other being hurtful and full of criticism..." (RTR, 2013)

In this case, the poster was making a specific reference to people who were in the closet, however, other posters made reference to barriers such as: shyness, living in rural and remote locations, and simply choosing GDHAs in lieu of more literally social contexts.

Overall, the high prevalence of this category in blog postings suggests that GDHAs are used for their intended purpose. While the research questions were designed to determine potential impact on mental and social health, it stands to reason that these applications may contribute to positive improvement in self-esteem, and reduced sexual isolation that could easily contribute to positive change in mental health. More extrapolation of the cause and effect relationship between sexual intimacy and improved mental status will take place in chapter five.

Support (Suggestions, alternatives, and encouragement)

This category emerged from the blog postings and represented the second most populated category. Also interesting to note is that this category was referenced equally in both reply, and original postings (OP=6, RP=6). In order to meet the criteria

for inclusion in this category, a poster made direct reference to a solution or alternative to a problem presented in common online discourse, or directly posed in an OP. Some problems included: loneliness, anxiety about sex, distaste of the apps and other problems. A quote like the one below offers very positive support and alternatives to an individual seeking support from the online community about his first experience using a GDHA:

"Fill your life with friends and family, and do things before you regret it, the rest will happen in due time, and if it doesn't you will have loved many times trying to get there." (Notahitandrun, 2015)

Other inclusions in this category were closer to direct advice provided to improve the experience of a fellow GDHA user. For example, the following poster suggests modifications to the OPs approach to using GDHAs, while also making reference to another category (reference to lack of cohesion between profile and reality):

"I always tend to not let a conversation go longer than finding out what I want to know because I know Grindr almost never reflects people's looks or personality very well- you waste so much less time just treating it as a tool to meet up rather than a source of conversation." (Deleted, 2013)

The above reply (RP) was in direct response to an individual who was struggling to understand some of the unique social nuances that he had encountered while using a GDHA. The poster suggests using the GDHA to make face-to-face connections, instead of attempting to develop the relationship over the device.

Another version of suggestions or support offered came following a discussion on the topic of GDHAs, posters made reference to upstream change needed to improve the state of overall "gay media" and "gay society".

Overall, this section was unpredicted and different from the other categories. However, due to the frequency of occurrence it was important to include and consider. It was also worth considering because the support and suggestions offered were offered from a place of positivity despite the tone of the post in general. It is also of vital important to note that this support was found almost exclusively in the blog setting, and not captured on GDHAs. More discussion of this will take place in chapter five.

Perceived shallow/aesthetic centered connections

Many references to "Perceived shallow/aesthetic centered connections" were made in the blog postings (OP=8, RP=7). The term shallow was lifted from the literature and here means: connections that are fleeting, and based primarily on physical attraction/aesthetic. This category was developed from the literature review from many sources that suggested a certain focus on aesthetic, similitude and celebration of particular body types (eg. Miller, 2015). One quote commented on online behaviour (shallowness about aesthetic, race etc...) following discussion of race-based alienation on GDHAs:

"I understand that grindr is mostly about hooking up but the hypocrisy and the shallowness is downright disgusting" (HeteroChallenged, 2011) Others made more critical commentaries:

"Our expectations are so unrealistic, considering gay men only make up 2% of the population, yet the Internet has blurred that line of fantasy (the images we see nonstop of non-gay men posing in gay magazines) versus reality (real life gay men who are 20 years older and 100 pounds fatter than those models) has created a monster..." (Jonathan L 12',

2013)

Whether fuelled by distaste with GDHAs, or other motivations, it is clear that there is a perception of shallow, aesthetic based connections. This perception could be better understood given some cross sectional analysis of the individual poster, but this is unavailable.

Reduced social isolation

Reduced social isolation was noted in many blogs and was far more likely to be referenced in original postings (OP=6, RP=1). To be included in this category, posters made vague or specific reference to using a GDHA for making connections of a social nature (not exclusively sex or dating), for example:

"It's the easiest way to meet new people for dates, sex, friends etc ... "

(Lemon, 2011).

Others offered combinative suggestions, saying that the nature of the meeting does not need to fall into interactional affordance (mandatory sex and dating only) and that each individual has the choice to shift the meeting into a social one at any time: "Once you're there, you can always change your mind and go for a quick

hookup (if they're into it, too), or stick with a quick social meeting,

depending on how you feel." (Wistfuljali, 2013)

In most cases the tone of the messages here were positive and were often connected to offering solutions to fellow users to broaden their use of their GDHA of choice.

It is well validated that mental health outcomes improve with reduced isolation, therefore it stands to reason that using a GDHA as a tool to make friends and connections could have direct impact on improved mental health status.

Reference to anti-effeminate messaging

It was noted in the literature review that anti-effeminate sentiments were rampant in online profiles, messages and interactions and so this category was added in the original incarnation of the assessment tool. While three OP made reference to antieffeminate messaging, it was slightly more likely to be noted in reply postings (OP=3, RP=4).

The predominant way that blogs were included in this category was posters making reference to dates or connections made while using a GDHA. The following quote is describing a planned hook-up that was diverted due to the effeminacy of the other:

"Got to his place and met him. He was kind of attractive but I noticed that he was a bit effeminate in the way he spoke and he was wearing a dressing gown and slippers. Went inside, but totally had no desire to do anything and no idea how I would even start. I mean with chics it easy cause you can flirt and then

progress to making out but I totally felt like I couldn't do this with this guy." (bicuriousaussie, 2013)

It is worthwhile to note, that most of the reply comments were crafted to explain this sentiment, and why the OP might have felt the way he did while still validating the experience and recognition of some form of anti-effeminacy:

"If it was a guy you'd met in real life, and hung out with for some time, something like being a little effeminate might be something you'd be willing to overlook, since you knew it was a small part of who he was. When you come into a situation largely blind, that small details is a *huge* part of who he is in your mind, and it's harder to get past. What could otherwise be a small turnoff is magnified." (atsuckscox 2013)

Other individuals made reference to this category to illustrate a larger point about assumptions, for example: "[e.g.] black women are ugly, loud and aggressive hence not feminine and Asian men are effeminate you have a recipe where people are going to exclude a whole group of people. That's racist." (Torle Grant, 2012). Again, this posting indirectly validates the presence of some discourse about anti-effeminate sentiments on GDHAs without taking ownership of the sentiments.

One blog posting was designed to offer some linguistic translation of how this is conveyed on GDHAs: "**Femme / Fems** = Guys with feminine characteristics, 'a queen'."(Scott, 2013) Therefore, the use of the term femme, fems, feminine and effeminate were used as justification for inclusion in this category.

Experiences of violence and dis-inhibition are likely to have a negative effect on positive self-esteem and self-worth. Due to the clear presentation of online violence in the categories presented in this chapter there may also be significant risks to certain individuals using GDHAs. More discussion will follow in chapter five.

Experiences of race based discrimination/violence

Experiences of race based discrimination or violence was noted in the literature review and formed one of the original categories on the assessment tool. Instances of race-based discrimination were noted equally in both RP and OP (OP=3, RP=3). The majority of references made to this category were statements made in reaction to seeing the language people use in their messages or profiles. The majority of these were making reference to discrimination, or perceived discrimination (see Fig 4.1) For example:

"It hurts to read on someone's profile "no Asians" because it doesn't even allow a chance for anything, at all. Does a friend have to be White or Black or Latino? Does a chat have to be with someone of the same race?" (HeteroChallenged, 2011)

Experiences of discrimination and verbal violence were both included in this category. Postings demonstrating clear violence or directly threatening messaging were less likely to be discussed in blogs (OP=1). The example in figure 4.2 is used by a blogger hoping to share his experience: (Gremore, 2015)

Postings in this category, while frequent and unpleasant, seem to serve to identify the risks to certain groups (eg: People of colour). In this case, a risk might be

represented by an increased sense of minority stress due to direct, or indirect violence on GDHAs.

Toxic online dis-inhibition

In the literature review it was noted that toxic online dis-inhibition might be a factor in GDHA settings where anonymity or relative anonymity was assured. In order to be included in this category, blog postings needed to contain some example or experience of a transaction wherein one/or both users displayed toxic language, which might in other circumstances be prosecutable by law or represent grounds for complaint thereby making the anonymity one of the drivers of the dis-inhibition. Toxic online dis-inhibition was referenced similarly in both OP and RP (OP=4, RP=3). Instances like the Figure 4.2 illustrate a fairly clear example of this category. It is worth noting that many instances of toxic online dis-inhibition could (and were) were also counted as experiences of race based discrimination or violence. It is also worth noting that in almost all settings, the posters were sharing their experiences of toxicity rather than demonstrating their own dis-inhibition it in their posting.

Reference of a desire for more authentic relationships

Many of the blog postings made reference to a desire for more authentic relationships, ones that were not simply hook-ups. The fact that this was referenced 6 times lead to the creation of an emergent category (OP=3, RP=3). Blogs were included in this category if they made reference to either the degradation of past social customs, or a clear notation of a desire for connection of a more profound nature. The following

blogger praises the power of GDHAs to foster larger connection, and describes his thoughts on the lack of authentic relationships:

"While we can connect with more queer men than ever across the globe, we tend to connect in a more superficial manner. Instead of going out on dates, we invite people over for "netflix and chill." Instead of attempting to foster one (or a few) meaningful relationships, we have multiple meaningless ones. We spread ourselves too thin." (Zane, 2016)

Long-term relationships formed (partners, friends etc.)

In the literature review it was well documented that many forms of relationship are likely to occur on GDHAs. Postings were included in this category if there was reference to having found longer-term relationships or friendships using GDHAs. Many noted that they found boyfriends or even husbands using GDHAs, while others made reference to friendships:

"[...] I've been having this same conversation with a few of my buddies and with a guy I went to dinner with tonight, that I actually met on Grindr." (RTR, 2013). References to forging long-term relationships online were more likely to occur in original postings (OP=4, RP=2).

Similarly to "reduced social isolation", these results suggest a unique gift attached to the use of GDHAs in their ability to promote gay male connection in many different forms.

Positive or negative description of complex linguistic/communicative nuances

The use of complex linguistic communicative strategies on GDHAs was noted in the literature review. The general theory was that GDHAs have their own uniquely nuanced form of communication (Licoppe Rivier, and Morel, 2015). Some postings took the approach of actually defining terms, trends and common language; for example, one blogger did his own research and generated a set of definitions as a part of his blog:

"So how does one interpret the gay app vocabulary? Well, it's clear from a recent review of the most popular apps that "sup?" is a deal breaker, even though it is simply a more efficient way of asking "what's up?" Many guys post on their profiles that they won't respond to that query, although our reviewer suspects that most of them will forgive a "sup?" text if it comes from a guy whose pic shows a well-defined set of abs and a muscular chest" (Scott, 2013)

Other postings were included because they described a form of communication that is common on GDHAs and uncommon in inter-personal settings. For example, one individual made reference to one of the "rules of engagement" in saying: "If you don't think a guy is attractive? Block" (RTR, 2013).

Reference to impact on mental health

It was unlikely for any blog poster to make reference to his own mental health, though it was still present (OP=3, RP=1). Postings were included in this category if they made reference to the improvement or exacerbation of their mental health as a result of use of GDHAs. In this case, reference to impact on mental health means: A poster making reference to some form of mental disturbance related to their use of a GDHA.

The next section extracts data about addiction specifically, but addiction was also considered in this category because of the common consideration of addiction as a combinative health problem that is most commonly addressed using mental health models of care. For example, individuals who made reference to their process of trying to reduce the negative impacts of their habits using GDHA were notable because they relate to a user-described addiction, for example:

"A few years ago, I wrote a blog to record all of my thoughts and mental/emotional ramblings when I was trying to get over this addiction to online dating." (Lemon, 2011)

Others were more overt in their opinion that the use of GDHAs is directly detrimental to community mental health:

"More insidious is that these apps can reinforce feelings of low self esteem and body image problems" (Forgan-Smith, 2013).

While references to this category were found, the representation in the categories was less likely than anticipated. In addition to this, the references made were largely conjecture and rarely motivated by clear underpinning statements (eg: Grindr made me seriously depressed).

Reference to addiction or compulsion (using a GDHA)

Similarly to the above, many posters made reference to specific addiction to GDHAs. In order to delineate "sex addiction", the poster needed to make clear reference to an addiction of compulsion to checking the apps, using the apps or feeling that they cannot resist using the apps. This category was derived from the literature

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review based on multiple references to the intersection between addiction to GDHAs and "sex addiction". Interestingly, addiction and compulsion were only noted in original postings (OP=4).

In some cases, the poster makes reference to his addiction, or to the addiction of another, for example:

"The problem I only have is my partner's addiction to gay app called grindr. Whenever he has idle time, he opens the app and chats with guys. I have confronted him many times regarding this and his always defense is that it's just to pass time and he never actually has interest in meeting them." (Qatareddit, 2014)

In other cases, individuals made reference to an attempt to use GDHAs less, one example of this is: "So I've just deleted Grindr from my tablet for what feels like the 1000th time" (Lemon, 2011). However, in general, individuals were unlikely to report an addiction that was serious, pervasive and dangerous. Rather, they seemed to describe a feeling closer to an unfavourable habit.

Anti-fat bias

Reference to body shaming was a category, which emerged from the literature review. This category was equally demonstrated in both OP & RP (OP=2, RP=2). Postings were included here needed to match one of the following two criteria. In general, postings reported incidents of body specific insults and unsolicited feedback about weight:

"I can tell you that one person I tried to date helpfully offered, "You could be really attractive if you lost some weight." And I can tell you that I deleted Grindr after one night when a stranger messaged me to let me know that if I shed a few pounds I "might actually be cute." (Peitzman, 2013)

Studies by Foster-Gimbel & Engein have validated the presence of anti-fat bias in gay male communities, which seems to be corroborated here (2016). These postings seem to validate that it happens, but the connection to mental and social health impacts is unclear. However, what is clear is that certain groups are more likely to experience violence on GDHAs.

Reference to structured discrimination

This category emerged from the research and was added midway though the initial examination. Four OPs made reference to the concept of discriminatory tendencies built into the structure of the GDHA. Bloggers made periodic reference to the fact that many of the apps contain technology that allows the user to filter what (who) they do not want to see. For example, users are able to filter out (remove) the presence of people who exceed a certain body weight, height, or are a member of an identified ethnic group. Other features contain "suggested filters" that some bloggers felt was an insidious extension of structuralized discrimination (see Figure 4.3). In response to this, posters described these features as a breeding ground for continued discrimination:

"Speaking of a waste of time, should SCRUFF have a racial filtering feature? No. No one should. Because it's 2016 and not 1956. And SCRUFF, Grindr and all the

others should take responsibility for how their apps affect the community they're serving and representing." (Braithwaite, 2016)

The evidence of structured discrimination is clear in so far as there are technologies that permit the omission or removal of certain groups. However, it is less clear what the impact of this form of discrimination might be.

Conclusion

Based on these findings it is clear that no direct, diagnosable mental disorders are likely to arise from using a GDHA. It is also clear that use of GDHAs is not directly negatively impactful on mental and social health. There is also no evidence that using GDHAs can have a positively impactful experience on mental health. What is clear is that for many, social health can be improved by using GDHAs to form friendships and long term relationships. Secondary impacts of these types of connections are easily predictable. It is also worth discussion that increased rates of finding sexual connection could improve general mental health and self-esteem (though this was not directly found in the evidence).

It is also interesting to note that while many reported negative experiences, they did not mention any injury, or any intention to stop using GDHAs. Their comments were largely framed from a position of self-advocacy and drawing attention to a need for upstream change. The blog websites did provide an opportunity for dialogue and discussion of something experienced by one group, and not another. This could be a driving force behind the unveiling of racism, and online toxicity.

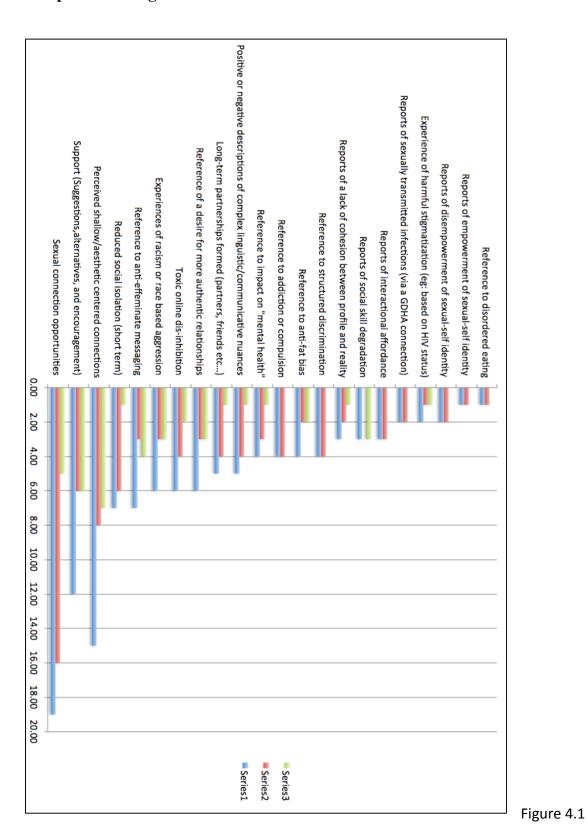
Certain sexual and social risks and gratifications seem to be validated in these results. For individuals and groups, these risks and gratifications vary depending on other variable factors. Some of those factors seem to include ethnicity, body shape and skin colour. For these individuals, both the gratifications and risks are co-occurring. While there may be high rates of toxic online dis-inhibition, race based violence and anti-fat bias, it seems that people are still using GDHAs for their intended purpose with great success. Based on the co-occurrence of the risks and gratifications, it still stands to reason that users should evaluate their own risk threshold prior to use, due to the fact that there is no guarantee that the gratifications will occur. The rate of injury or negative experience may be more easily related to the person's baseline self-esteem.

Due to many factors, many users feel that GDHAs are their only inlet to gay connection. This is partly due to the singularity of discourse and prevalence of GDHAs in gay communities. The fact that certain groups are at higher risk represents a challenge to counsellors and mental health practitioners because it validates the existence of a popular space where racism, toxicity and anti-fat bias are, not only present, but structurally supported. For some, low-risk connections can be made easily and for others, the risk is significantly higher.

It is also clear that varied forms of relationship are formed by using GDHAs; including friendships, long- and short-term relationships of substance. These were more prominent than references made to weak, inauthentic or paltry relationships. Here, the evidence shows that the applications are being used for their intended purpose: sexual and social connection. It is well validated that social and intimate relationships can be a

powerful gift toward the improvement and maintenance of mental health and wellbeing. Therefore it stands to reason, that for many, interaction with these applications can reduce social and sexual isolation, as well as being a source of rewarding and fulfilling activities and relationships.

Chapter five will contain in further discussion about the most commonly referenced categories and a distillation of trends noted in the less noted categories. The discussion will also include recommendations and considerations for practitioners based on the results.



Chapter Four Figures

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Figure 4.2

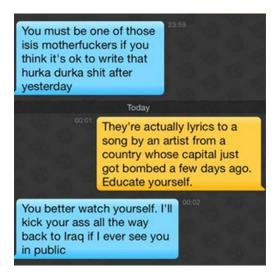
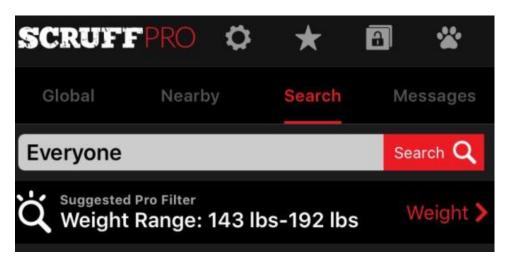


Figure 4.3



Chapter five: Discussion

Introduction

The hypothesis for this thesis was: If other social media have been found to have an impact on the mental and/or social health of the users, it stands to reason that using a GDHA may have a similar or different impact. In consideration of the methods employed, the resolution of this hypothesis is:

Regarding mental health: Gay dating and hook-up apps are unlikely to have a direct impact on mental health. There are some secondary benefits and risks, which will be discussed in, sections one, two and three.

Regarding social health: The evidence suggests that using GDHAs for purposes beyond sexual connection can grow social circles. Additionally, these social connections are made within a technology designed for and populated by gay men, which contributes to additional benefits of being connected with those with similar group memberships.

An additional question was added to add more capacity to the research, which was: What are some of the factors at play regarding the positive or negative impacts of using GDHAs. The answer to this question is detailed in the sections below. Section one will discuss the evidence that suggests that men are able to find and have sex using GDHAs, and how that might factor into a counselling context. Section two will explore the social benefits of using GDHAs and how those social benefits are uniquely important in gay male communities. Section three will explore findings that suggest that certain groups might be at a higher risk of social

injury, and increased stress than others (while using GDHAs). Section three will also contain discussion and conjecture about the factors that are likely involved in a user's positive or negative experiences, and the degree to which this might affect them. Section four will discuss some of the positive social support located on the blog sites and reply comments. Section four is a deviation from the questions and hypothesis, but is still an essential part of what was discovered in research process. Section five will include a brief discussion of some areas of future research. Finally, a series of considerations will be created for counsellors based on the findings of this study, and the evidence found in the literature review.

Section one: Finding and having sex

In general, blog postings show clear evidence that gay men are using GDHAs to connect with sexual partners with high degrees of success. It is important to note it validates a significant amount of discourse and discussion that gay men are highly sexually active. This has been additionally validated by studies like the Sex Now Survey who also confirm that those who use the Internet are more likely to find sexual partners (Dulai, Ferlatte, Marchand & Trussier 2014). A gay man is highly likely to witness, encounter, or hear that gay men are highly sexually active, whether or not the client is sexually active himself. Because of what was shown in the results of this thesis, it stands to reason that if a client is seeking sexual relationships, a GDHA might be a valid tool. While the counsellor's work is not directly related to helping the client increase his sexual activity, it is important that the counsellor recognize the power of dominant discourse and evidence-based prevalence of a highly sexually active community.

It is impossible to deny a connection between sexuality, and mental health. It is well known that: certain mental health challenges effect libido and sexual desire certain drugs can support/enhance as well as derail/detract from sex; there is a connection between sex and self-esteem (Kline, 2015). In addition to this, many gay men are reticent to talk about their sex with health practitioners due to histories of stigmatization, and criminalization of sex in queer contexts (Dulai et al. 2015). Where this might become a problem is that a client may feel the impacts of stigma that dictate that his sex is "bad sex". In actual fact, the greatest risk to the client is this perception; that his sex is wrong. A counsellor's recognition of sex as a part of gay life, and the counsellor taking a sex positive stance could be a very important relationship-building tool. Additionally, it seems clear that talking about sex-life with gay men, including their use of apps would be a valid topic of conversation in therapy.

Section two: Social and other relationships

Recent research has made massive strides in proving that social connection is essential to human health. Being disconnected from others, and experiencing loneliness can effect physiological, and mental health (Cacioppo & Patrick, 2008). In mixed populations (not specifically gay or queer), there has been specific work to prove that loneliness can directly impact and exacerbate depression; which is also positively correlated with increased rates of suicide (Westefeld, Maples, Buford & Taylor, 2016. p.79). Other researchers have found that social support is specifically important for queer people for several reasons. Oksana Yakushko posits that social support is essential for addressing conflict about sexual identity and improving self-esteem. Yakushko also

proved that stronger self-esteem is predicted by having a greater sense of social support (Yakushko 2006, p. 132). In populations of queer youth, positive psychological health is also connected to having social connection and group membership (Detrie & Lease, 2007). It is clear that social connection with peers and those with similar group membership is essential to humans, and additionally important for queer people.

This thesis presents clear evidence that many forms of relationships are formed on GDHAs. Many report finding friends, boyfriends, husbands and even group membership through their use of GDHAs. This is a very unique gift associated with the use of GDHAs because for many who live in high-stigma areas, or are unable to be publically gay, these applications offer a way in; a secret club with open doors. Opening the application can show you that there are gay men near you who are also seeking connection. Intent aside, this is a powerful technology because it combats assertions such as: I am alone; I am the only gay person I know; and I can't find a relationship because I'm in the closet. This gay space does have risks that will be discussed in another section but it seems that in many cases, the gratifications can outweigh the risks.

Section three: Risks for certain groups

It was clear from the results, that certain groups were more likely to encounter specific problems on GDHAs. An example of this was demonstrated by blogs that made reference to one of the following categories: racism or race based aggression; reference to anti-fat bias; shallow/aesthetic-based connections; and reference to structured discrimination. These categories were referenced in many different blogs, and by many

different posters; they represented a moderately high prevalence of individuals describing these experiences. The highest over-all being, "perceived shallow/aesthetic-based connections" (OP=8, RP=7).

It seems that there are some core messages to be extracted from these findings: 1. There is a perception of a hierarchy that seems to prefer people who embody a particular aesthetic (interpreted as: white-centric, and anti-fat). This is corroborated by Batiste, who suggested that there are many apps for many people and that aesthetics were particularly important on the most popular GDHA (Grindr) (Batiste, 2013).

2. It seems that for many people of colour, racism and race based aggression has happened, and continues to occur on GDHAs.

To be clear, there is no division between the individuals who have experienced this kind of aggression, bias or discrimination and the people who are using GDHAs to find sex and other connections. Indeed, often they are the same (experiencing negative things, and also having sex and making connections). In many cases, individuals describe outliers who demonstrated these negative traits and toxic behaviours. The posters were unlikely to connect this to their dis-enfranchisement from GDHAs completely; in fact, many were likely to report that they simply found someone else to connect with. For many, the blog platform was a chance to share their experiences with the larger community and to send a message that this behaviour in unacceptable and worth discussion. For this reason, there is no way to suggest that one particular group should cease using GDHAs to prevent any harm, however, certain users may be at a

higher risk of witnessing, or encountering violence and racism. For certain (more vulnerable) people, there may be a risk of adding complexity to an ongoing experience of minority stress or other mental disorder.

A fascinating study by Burns, Kamen, Lehman and Beach makes some interesting assertions that illustrate how these results might impact gay men. Burns et al. suggest that gay men experienced increased anxiety and stress if they experienced discrimination. The stress was noted to be more severe if the individuals added certain attributes to the discriminatory event. Some of the attributions were: the discrimination was costly (made a deep impact) and that the discrimination had widespread implications (i.e.: the whole world must be like this) (Burns et al. 2012. P.33). This increased stress reaction seemed to be the same regardless of how many incidents of discrimination there were (Burns et al. 2012. P. 28). This research suggests that the assignment of these attributes to the transaction was the main driver behind it being a harmful situation. Others who did not make the same attributions did not experience the same reaction (Burns et al. 2012. P. 33). The researchers here also made assertions that having negative feelings about other gay men, and a less developed gay identity contributed to higher risk of heightened anxiety as a result of any discrimination (Burns et al. 2012. p. 33).

The implication for mental health practitioners whose clients are using GDHAs is that there may be a greater connection between the individual's self-esteem and their safety online, than there is between the individual's race, body shape, and other factors. A highly confident gay man of any ethnicity might demonstrate higher resilience against

attacks, than a white gay man who is coping with internalized homophobia and shame about his body. Therefore, the risk to certain groups splits, and becomes two distinct risk definitions:

- 1. People of colour are likely to witness discrimination and racism online, but in general are no less likely to find connection (sexual, and social); and
- 2. regardless of skin colour, men who may have low self-esteem and a tendency to assign certain attributes to discriminatory transactions are more likely to experience adverse mental health outcomes (increased anxiety and stress) through their interaction with GDHAs.

The negative mental health outcomes of low self-esteem are noted in many studies, and many of them make reference to the co-representation of low self-esteem as a symptom, predictor or sign of other diagnosable disorders. Some of those include: Depressive disorders, dysthymic disorders, anorexia, and other personality disorders (Mann, 2004). It should, therefore, be considered that there are some men who may, by virtue of many experiences, have lower self-esteem and this does influence physical and mental health (Mann, 2004. P. 358).

Section four: Support on blogs

Because the goal of this thesis was to explore the potential mental and social health impacts of using and interacting with GDHAs, the following section does not directly apply. However, it is extremely relevant to note that during the course of research and data collection, a lot of positive support was located on both blogs and the corresponding reply postings. The messages of support and kindness were located

equally in both reply, and original postings. Here is an example of a fulsome and supportive message by a reply poster providing advice to an OP who was nervous about the success (or lack of success) of his first GDHA hook-up:

"What you may find helpful is to try setting up one non-sexual meeting. Find someone through whatever website or service you like who just seems like they'd be an okay guy to grab a pint with. Or a few guys. Just say you're getting over a breakup and want to kill an idle evening. Go into it not looking for to get laid, but just as a thing to do, and set that expectation for the other guy." (Wistfuljali, 2013)

This quotation represents direct, freely given, and anonymous support. The assumption can also be made that this RP has had experience with GDHAs, and gay sex/relationships, making this advice appear to come from a peer. In their 2013 study, Brandt et al concluded that a blog platform was a viable way of seeking social support for smoking cessation, and that blogs provided a space for: congratulations, advice, emotional support and sharing of personal experiences (Brandt, Dalum, Skov-Ettrup & Schurmann Tolstrup 2013. P.655). A dissertation by M. Chen examined blog postings on the topic of acculturation and spousal support among foreign wives living in their husband's country. She found that active users shared empathy and patience regarding homesickness; expressions of love, care and acceptance; as well as child-rearing and financial support (Chen 2012, P.7). In addition to this, Miriam Locher found that many people are likely to turn to web-based advice columns for their health information, and that one of the categories most likely to elucidate cries for support was the domain of

relationships (Locher, 2006. P.126). Locher's research also suggests that a significant amount of people tend to use the Internet to seek health and wellness advice and information and that these platforms can be effective.

These three pieces of research suggest that blog environments are a valid, effective and unique form of support seeking. When combined with Campbell's assertions that online spaces are important spaces for identity formation for queer youth, and Dasgupta's assertions that online safe spaces combat isolation, it seems that this could be similarly suggested for individuals seeking support for their use of GDHAs (Dasgupta 2012, p.116 & Campbell 2004, p.105). Blogs and their associated replies could be a space for: giving and receiving advice; seeing that the user is probably not alone in his experiences; and having advice from (mostly) anonymous queer voices.

Suggestions for further research and upstream change

Further research on the subject of self-esteem as a predictor for success or enjoyment of GDHAs would be a very interesting subject to investigate. The discussion above has elucidated some interesting connections, but validation of those assertions. For example, a question worth investigation might be: Can self-esteem predict enjoyment or engagement with GDHAs. Another question might be: Do people with low self-esteem engage more or less with others while using GDHAs. And finally: Does self-reported self-esteem change after using a GDHA. Addressing these questions would be interesting because it would give a clearer picture of the complex and nuanced side of gay men's mental and social health as well as social dynamics.

Mann et al. recommends that self-esteem be an important focus on health promotion (Mann, 2014. P.158). It is interesting to note that health promotion does exist on GDHAs in the form of sexual health promotion (Joule 2015). It seems that similar health promotion does not exist for mental health on GDHAs. If GDHAs are attracting as many gay men as they appear to be, and posing increased risks for adverse mental health outcomes for some, it makes sense to examine the efficacy of mental health promotion on GDHAs. These health promotion campaigns range in subject, but some of them might include: suicide prevention, self-care, self-esteem raising, seeking treatment and support etc... The options are endless, and it seems that GDHAs would be an excellent method for delivering mental health promotion.

Conclusion

In conclusion, this research has explored and expanded the small body of research on the holistic health impacts of GDHAs. The results seems to suggest that for most gay men, GDHAs are a powerful tool of connection; a new wave of interaction and connection. By nature, GDHAs are not perfect, but further research about social media, GDHAs and gay men's health will continue to challenge systems of power, heteronormative assumptions, gay related stigma, and community based mislabelling of a technology as innately harmful. With increased social connection, friendships, and decreased social isolation; communities of gay men might start noticing a decline in low self-esteem that was originally driven by isolation and lack of experiences. The power housed within the technology could be a driver behind major positive social and mental health related change for all gay men.

Purdie: What are you looking for: The mental and social health impacts of gay dating and hook-up apps

Considerations for counsellors

Gay men are sexually active: It is true that gay men are, generally more sexually active. It is also true that whether an individual client is sexually active or not, he is witness to a high concentration of discourse which suggests that he should be. **Gay men are using apps to hook-up**: Thousands of Gay men are using dating and hookup apps to find sexual partners and are more likely to have more sex by using them! These applications can fight a sense of isolation while providing an opportunity for sexual and social connections regardless of geographical location. There are also opportunities for sexual chatting, group encounters and experimentation. The risk of sexually transmitted infection is higher when having more sex, so it is advisable to ensure that the client has a safe and supportive place for health information and testing: talktohim.ca

Gay men are making connections beyond the sexual: Maybe they hooked up once and became friends, maybe they met on Grindr and were married a year later. Many gay men are making connections on apps are that reach far beyond brief sexual encounters. For men who may prefer anonymity, a gay app can provide them with a chance to explore their gay identity while remaining safe. For others, apps provide an exclusive space to make connections with other gay men of all kinds.

Gay men are using the Internet to find information and support: It is highly likely, that your client uses the Internet to seek information/advice that he is uncomfortable seeking in person. Consider recommending the client to examine some blog postings and their replies. This can be an opportunity to give and receive advice, reduce a feeling of alone-ness in the problem, and to hear from many who have similar and different lived experiences. In most cases, the counsellor disclosing their personal experiences on GDHAs would not be appropriate and so, suggesting certain blogs might be a good way to engage the client in finding answers to his own questions.

Gay sex is not bad sex but let's recognize the stigma: As is the case for many queer and gender non-conforming people, gay sex is often stigmatized as bad, sinful or dangerous. It is also somewhat likely that gay men may have internalized this stigma and may, on some level, believe that their sex is wrong. In order to demonstrate unconditional positive regard, it is essential that a counsellor invest time in deconstructing the history of this stigma in order to avoid enacting or reinforcing negative stigma in the counselling relationship. Consider researching programs and resources that are resisting stigma in gay male contexts. (www.resiststigma.com)

Discrimination is happening: It is true that gay dating and hook-up apps can be an anonymous environment with periodic incidents of toxic online dis-inhibition. It is likely that many men will witness incidents of: racism and race based discrimination, anti-fat bias, and anti-effeminate sentiment. Consider exploring a resource that can educate the counsellor and demonstrate what work is being done to combat discrimination. (www.thinkbeforeyoutype.ca)

Gay apps are not free of discrimination: Gay dating and hook-up apps are spaces for any self-identified gay man. People of colour, and people who might be viewed as "over-weight" are more likely to witness toxic online behaviour and/or discrimination.

Gay identity and self-esteem: It seems more likely that an individual's self-esteem, internalized homo-negativity, and resilience is more likely to be the drivers behind their positive or negative internalization of incidents of discrimination online. If a client reports having only negative experiences online, it is possible that his self-esteem and resilience are low, creating a potential avenue for work in a counselling context.

Different apps to span the gaps: Group membership is important, and based on current research, additionally important for queer and gender non-conforming people. There are many different forms of gay dating and hook-up apps that are designed to capture the diversity of gay men (body shape, hairiness, skin colour etc...). Only using one app can create a false sense of community diversity; leading many to feel excluded. Consider recommending "switching it up" and trying out other apps!

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