

Instructions for authors, subscriptions and further details:

<http://mcs.hipatiapress.com>

Mobile Masculinities: An Investigation of Networked Masculinities in Gay Dating Apps

Nathian Shae Rodriguez¹

Jennifer Huemmer²

Lindsey E. Blumell³

1) San Diego State University, United States

2) Texas Tech University, United States

3) Oxford Brookes University, England

Date of publication: October 21st, 2016

Edition period: February 2017 - June 2017

To cite this article: Rodriguez, N. S., Huemmer, J., & Blumell, L. E. (2016). Mobile Masculinities: An Investigation of Networked Masculinities in Gay Dating Apps. *Masculinities and Social Change*, 5(3), 241-267. doi: 10.17583/MCS.2016.2047

To link this article: <http://doi.org/10.17583/MCS.2016.2047>

PLEASE SCROLL DOWN FOR ARTICLE

The terms and conditions of use are related to the Open Journal System and to [Creative Commons Attribution License \(CC-BY\)](#).

Mobile Masculinities: An Investigation of Networked Masculinities in Gay Dating Apps

Nathian Shae Rodriguez
San Diego State University

Jennifer Huemmer
Texas Tech University

Lindsey Blumell
Oxford Brookes University

Abstract

This study argues that hegemonic masculinity is still prevalent as well as conciliatory to inclusive masculinity when applied to networked masculinities in homosexual spaces. The authors contend hegemonic masculinity is a macro-level process that informs micro-level processes of inclusive masculinity. Employing a textual analysis of 500 individual profiles in gay dating apps (Scruff, GROWLr, GuySpy and Hornet), findings indicate networked masculinities are informed by the two concepts. A resulting process of “mascing” is created and introduced in this study. Mascing in gay males to reinforces their own masculinity, while also maintaining masculine norms by seeking out masculine partners. The process is a form of policing that reinforces a masculine elite within the gay dating app community.

Keywords: mascing, gay dating apps, networked masculinities, hegemonic masculinity, inclusive masculinity, digital spaces, mobile, textual analysis

Masculinidades Móviles: Una Investigación de Masculinidades en Red en las *Gay Dating Apps*

Nathian Shae Rodriguez
San Diego State University

Jennifer Huemmer
Texas Tech University

Lindsey Blumell
Oxford Brookes University

Resumen

Este estudio sostiene que la masculinidad hegemónica está todavía muy extendida, también cuando hablamos de la masculinidad inclusiva en relación a las masculinidades en red concretadas en espacios homosexuales. Los autores sostienen que la masculinidad hegemónica es un proceso a nivel macro que incorpora los procesos micro de la masculinidad inclusiva. A través de un análisis de contenido de 500 perfiles individuales en diferentes *app* de citas gay (Scruff, GROWLr, GuySpy y Hornet), hemos hallado resultados que indican que las masculinidades en red son definidas a partir de dos conceptos. Un proceso al que hemos llamado "mascing". Mascing se refiere a los hombres homosexuales que refuerzan su propia masculinidad, manteniendo al mismo tiempo las normas masculinas con el objetivo de encontrar parejas también muy masculinas. De forma que este proceso es una forma de vigilancia que refuerza una élite masculina dentro de las *app* de la comunidad gay.

Palabras clave: mascing, gay dating apps, masculinidades en red, masculinidad hegemónica, masculinidad inclusiva, espacios digitales, móviles, análisis de textos

There has been an increase in the representations of gay males in mainstream media as well as an upsurge in gay-specific media. These portrayals, however, have depicted gay males as young, white, smooth bodied, muscled, good looking, educated, and holding professional jobs with high incomes (Fejes, 2000; Poole, 2014); not too different from the typical depictions of heterosexual males in mainstream media. This constant media representation of an idealized masculinity influences social norms and gender identity expectations.

Similarly, due to the ubiquity of the Internet, people can perpetually connect through the use of mobile apps. There are numerous apps at the disposal of gay males who are searching for companionship, meaningful relationships or casual sex. Because gay men primarily utilize these apps for hooking up (either sexual or not) there is a paradox of convenience crafted amongst the users. According to Freeman (2014) these apps benefit users by saving time searching for other compatible males; potential partners are instantly and constantly available online. However, the apps also “create a society of oversharing, superficiality, and instant gratification. You are on the grid 24/7 and you must advertise yourself” (p.5).

Through an advertisement of sorts, men construct and display their masculinity on these digital spaces, specifically their user profiles (Payne, 2007). Masculinities are socially constructed and vary in degrees, with hegemonic masculinity being the most extreme (Connell, 1992; Demetriou, 2001). Hegemonic masculinity has typically been considered heterosexually constructed (Connell, 1995), but there are scholars who have identified a “homomascularity” that mirrors that of hegemonic masculinity in gay males (Clarkson, 2006; Eguchi, 2009; Suresha, 2002; Ward, 2008). There is also a contention amongst other scholars that hegemonic masculinity is no longer a viable theoretical framework from which to examine masculinities due to a shift in hegemonic dominance (Anderson, 2015). The theoretical lens of inclusive masculinity reasons that a decrease in homophobia has directly impacted masculinities, specifically among heterosexual males, and has stripped homophobia of its power to regulate masculinities (Anderson, 2015).

We argue that these seemingly opposing theoretical foundations are actually conciliatory when applied to networked masculinities, specifically in homosexual spaces. Hegemonic masculinity involves a “pattern of practice” for performing a type of masculinity that naturalizes men’s dominance over women (Connell & Messerschmidt, 2005). Hegemonic masculinity is conceptualized as the normative patterns of performing masculinity as a gender rather than as an idealized identity or set of role expectations. These normative patterns are then held as the “most honored way of being a man” and all other male gender performances are examined within the framework of that standard (Connell & Messerschmidt, 2005). Inclusive masculinity focuses on the amount of homophobia present (temporally and spatially) in order to regulate masculinities. Both theoretical frameworks were conceptualized based on heterosexual masculinities, however, what happens when these conceptualizations are applied to gay masculinities? We argue that both inform each other.

The current study examines how networked masculinities manifest in the user profiles of gay males using gay dating apps. Particularly, we seek to uncover what masculine indicators are demonstrated to both reify masculinity in the users of the apps and also in their desired partners. We first review previous scholarship of hegemonic masculinity, inclusive masculinity, gay masculinities, and gay app culture, followed by a textual analysis of profile content found on *Scruff*, *Hornet*, *GROWLr*, and *GuySpy*. The goal of this study is to not only contribute to networked masculinities and digital media research, but to also introduce a new process we have termed “mascing,” which incorporates both hegemonic and inclusive masculinity.

Literature Review

Hegemonic Masculinity

Hegemonic masculinity has been criticized for relying on an essentialist underlying construction of masculinity that reduces masculinity to a homogenous set of traits or roles (MacInnes, 1998). This criticism is, perhaps, a more accurate examination of the reductionistic application of hegemonic masculinity in some scholarly research rather than an accurate

criticism of the theory. Connell (2005) does, in fact, address this criticism stating, “Masculinity is not a fixed entity embedded in the body or personality traits of individuals. Masculinities are configurations of practice that are accomplished in social action and, therefore, can differ according to the gender relations in a particular social setting” (p. 122). The social norms associated with hegemonic masculinity provide meaning about the appropriate patterns of masculine performance, which are then internalized and negotiated in each person’s construction of their gender identity (Connell, 1996). The appropriate patterns of performance are not predetermined and the “cultural template” of desirable masculinity is consistently reconfigured in a way that can appear to convolute notions of gender difference without discrediting the structure of patriarchy (Connell, 1996).

Scholars commonly tie hegemonic masculinity and the social power associated with hierarchical structures of gender to the realm of heterosexual men. Homosexual men are conceptualized as a “subordinate” category of men and are therefore excluded in scholarly considerations from the social benefits that occur as a result of compliant gender performance. Indeed, Demetriou (2001) argues for an examination of “internal hegemony” whereby homophobia manifests as a tool through which men police other men. A socially and historically contextual examination of masculine power does, of course, reveal the structural and social inequalities that have oppressed homosexual men. However, an argument can be made that the years of scholarship distinguishing sexuality from gender provide grounds for considering the way gay men are positioned to negotiate their gender identity and sexual identity through discursive practices that are constructed within the patterns of normative masculine performance that dictate social power. If, in fact, a collective understanding of normative symbols of masculinity exists and are tied to social power, it is beneficial to understand how homosexual men both resist and comply with these normative symbols.

Hegemonic masculinity, in the context of this paper, is not used as a base of comparison to analyze the degree to which gay men adhere to a set of homogenous masculine traits. Instead, this study examines the practical relationships between gay men and collective images of ideal masculine patterns of performance to better understand the way gay men resist,

comply, and make sense of these patterns. This is particularly relevant in a networked environment that already assumes a relationship between masculinity and technology (Light, 2013). Presentations of self in a networked environment are restricted to the boundaries of the technological structure and, as such, this structure provides an interesting framework for the analysis gay men's practices of compliance and resistance.

Inclusive Masculinity

Policing of male groups can manifest as homophobia – “the fear that other men will unmask us, emasculate us, reveal to us and the world that we do not measure up, that we are not real men” (Kimmel, 2004, p. 88). It is homophobia that Anderson (2015) contends makes Connell's (1995) notion of hegemonic masculinity appropriate for understanding the “social organization of stratified masculinities” (p. 364). It is also levels of homophobia that provide the center of inclusive masculinity. The theory maintains that when cultural homophobia is high, and is coupled with the knowledge that homosexuality is present in one's culture, heterosexual males will vehemently establish that they are not gay. As homophobia declines, so does the stigma attached to homosexuality, permitting heterosexual males to engage in a wider range of behavior without the derision of being labeled gay.

While there may indeed be a decline in homophobia in some regions of the world (Anderson, 2009; McCormack & Anderson, 2010), the empiricism of inclusive masculinity studies have been restricted to Western countries like the U.S. and the U.K. and may not be applicable to other global regions (Rodriguez, 2016). In fact, we argue that even within the United States itself, there are areas where the levels of homophobia may fluctuate, but cultural norms and gender roles shape masculine behavior. The utility of inclusive masculinity lies in its attention to investigate localized lived experiences, dependent on temporal and spatial factors (Anderson, 2015). These localized experiences, however, do not operate in a vacuum and are still affected by hegemony.

Gay Masculinity

The regulation of “other” males by the elite masculine group is perhaps most prominently observed between heterosexual and homosexual, or effeminate male populations. However, we argue that it is also visible within gay populations. Aggressive masculinity is often exaggerated in an attempt to perform a type of masculinity that protects against threats of emasculation. Sexuality is “always grounded in wider material and social forces” and cannot be disconnected from “economic, religious, political, familial, and social conditions” (Plummer, 2005, p. 16). Masculine norms among gay men (and heterosexual men) are often formed during childhood and adolescence, long before they come out of the closet, alongside the aforementioned factors. Therefore, it is only reasonable that hegemony influences both heterosexual and homosexual men in their early, formative years. The policing of this masculinity then continues into adulthood.

The policing among male groups demonstrates Connell’s (2005) claim that hegemonic masculinity is not restricted to power relations between genders but also explores power relations within genders (Demetriou, 2001, Ward, 2008). Within the hegemonic masculine lens, gay men are not excluded for their sexuality alone, but for the fact that their sexuality does not contribute to the patriarchal order (Demetriou, 2001). Labeled as internal hegemony, this maintains that hegemonic masculinity may actually be a “hybrid bloc that unites practices from diverse masculinities in order to ensure the reproduction of patriarchy” (p. 337). Although both Connell and Demetriou classify this internal hegemony as typically referring to heterosexual men’s ascendancy over gay men, we argue that this social domination is also evident amongst gay men. Gay men are considered less masculine because they subsist outside the boundaries of heterosexuality and take other males as sexual partners. Consequently, gay men may feel societal pressure to shape and maintain their masculinity in recompense for their sexuality (Chesebro, 2001) and absence of power and status (Scott, 2011). There is an evident separation between gay men who display high levels of masculinity and those who display low levels of masculinity (Clarkson, 2006; Eguchi, 2009).

Gay men who identify as a “very straight acting male” use the label of “straight acting” as a means of gender identification (Connell, 1992). The

labels “fem” and “sissy” are ascribed to effeminate gay men by more masculine males (Christian, 2005). These labels serve as semantic examples of how gay males both assert their masculinity and emasculate others to reify the power structure of hegemonic masculinity, thus creating a hierarchy of masculinities. Furthermore, gay males may enact hyper masculine manners and behaviors according to the current standards of hegemonic masculinity in order to reject the stereotypical archetypes of a gay man (Kimmel & Mahalik, 2005; Messner, 1997).

Hegemonic masculinity can be looked at as a cultural ideal that is frequently encouraged by society through media portrayals of model masculinities (Demetriou, 2001). Huemmer’s (2016) analysis of the film *Superbad* illustrates that even when the media place less emphasis on the heterosexuality of the masculine ideal, the patriarchal order remains intact. Examples of these exemplar masculinities in gay males have been found in print, television, online, and mobile media (Benzie, 2000; Payne, 2007, Avila-Saavedra, 2009; Chi, 2015). Researching masculinities within the institutions in which they are embedded positions scholarship to consider power structures on a global scale (Connell, 2012), something that inclusive masculinity neglects. We contend that hegemonic masculinity is a macro-level process that informs micro-level processes of inclusive masculinity.

Because gay males are not bounded by the requirements found in the sexual system of masculinities, there is a possibility for the construction of many different homosexual manifestations of masculinities (Fejes, 2000). Particularly of interest is the use of digital media as a site of construction and maintenance. The current study examines how networked masculinities manifest in the digital spaces of gay dating apps. Networked masculinities are “those masculinities (co)produced and reproduced in conjunction with digitally mediated networked publics and their associated properties (Light, 2013).

Gay Apps

Social networking sites (SNS) provide a way to deconstruct and understand masculinities within heteronormative digital media (Harvey, 2015; Siibak, 2010). Light (2013) argues that SNS also provide a space to interrogate “non-normative, queer masculinities and relations” (p. 254). One such

subgroup of SNS, geosocial networking apps (GSNs), enables users to find others in close proximity with one another. *GROWLr*, *Scruff*, *Hornet*, and *GuySpy* are GSNs that target males who might identify as gay, bisexual, or curious. Previous studies have investigated how these apps are used to find potential partners and are motivated by the user's desire to communicate, form relationships, or simply hook-up sexually (Gudelunas, 2012; Roth, 2015); or to investigate HIV and STI prevention health campaigns (Holloway, et al., 2010; Wilkerson, Smolenski, Morgan, & Simon Rosser, 2012). We will refer to these apps as "gay dating apps."

Gay dating apps are fitting spaces to investigate the nuances of communication between gay males. Users are able to create profiles that convey their identity, intentions, and requirements of potential partners, and because of their interconnectedness, these apps are spaces for various sexualities and masculinities. Furthermore, the geographic focus of these apps transcends the boundaries of virtual spaces and real-world (Bumgarner, 2013). Gay dating apps can only be accessed via mobile phone, expanding the social opportunities of users by visibly revealing other users nearby (Blackwell & Birnholtz, 2014). Of scholarly importance is the way in which gay males utilize these apps to negotiate their masculinities amongst each other.

Recent studies have examined how hegemonic masculinity influences the creation of identity on gay dating apps (Reynolds, 2015; Roth, 2015). Within these studies pejorative terms served as discourse to create a power dichotomy, ultimately reinforcing hegemonic masculinity (Reynolds, 2015). Also, gay dating apps serve as a virtual space that intersects with offline geographic locations, which raise questions of influence and replacement for real-life social interaction (Roth, 2015). A majority of these studies primarily focus on one app and do not compare masculinity between gay dating apps. This study seeks to fill the gap in literature by comparing manifested networked masculinities in *GROWLr*, *Scruff*, *Hornet*, and *GuySpy*. We pose the following research questions:

RQ1: Do gay dating apps construct technological boundaries for the presentation of networked masculinities?

RQ2: How are networked masculinities constructed within the bounded spaces of gay dating apps in regards to user's personal description?

RQ3: How are networked masculinities constructed within the bounded spaces of gay dating apps in regards to user's desired partners?

Method

This study employed a textual analysis of gay dating app user profile content. A textual analysis provides us with the more in-depth and nuanced observations of a qualitative approach (Leech, Dellinger, Brannagan, & Tanaka, 2010). Our unit of measurement was individual user profiles in gay dating apps, specifically *Scruff*, *GROWLr*, *GuySpy* and *Hornet*.

Sampling

Our sampling frame follows Riffe, Lacy, and Fico's (2014) online sampling guidelines. Since apps, like online content, are interactive, immediate, multimodal, and include hyperlinks, the first stage is to perform multiple, detailed searches to accumulate a list of possible samples. Once searches were conducted through the app store and in search engines, we compiled our list of the top apps that met the necessary criteria of displaying users' profiles and extensive geographic location searches. We then took a rank list of top gay dating apps (Rukkle, 2014) and selected the first four apps that met the study's inclusive criteria: being able to search specific zip codes from a remote location. *Grindr* is listed as the most used app amongst gay males, however it does not allow a user to enter exact zip codes, nor does it allow for a global subgroup of users. Users are limited to search profiles of men that are in close proximity to the user. Therefore, we did not include *Grindr* in our analysis and utilized the other apps that rounded out the top five: *Scruff*, *Hornet*, *GROWLr*, and *GuySpy*.

Hornet and *GuySpy* position themselves to target a broader, more general audience. There is no definite delineation for the typical user and

both apps boast access to “the hottest guys” for not only gay males, but also males who consider themselves bi or curious. Conversely, *Scruff* and *GROWLr* both tend to attract “bears” and “jocks” (Rukkle, 2014). The users of these apps are typically hairy, muscular men and are, therefore, more indicative of a presentation of self that aligns with the current cultural template of hegemonic masculinity. *Scruff* and *GROWLr* also attract those who desire bears and jocks.

A random list of 20 zip codes was then generated, each app being assigned five unique zip codes. The first 25 profiles with a picture included in the profile were then coded per assigned zip code for a total of 500 user profiles in the sample ($N=500$). This sample was used for both the qualitative and the quantitative analysis of our study. Inductive thematic coding was performed on the personal narratives found in each user’s profile.

Results

Technological Structures and Networked Masculinities

In regards to RQ1, Do gay dating apps construct technological boundaries for the presentation of networked masculinities, we found that each app required certain identifying information and that this information was usually restricted to a set of options provided by the app (see [Table 1](#)). The apps also provided optional identity information categories that included written descriptions and restricted category selections, and options to ignore or exclude other users based on various identity descriptions.

Previous scholars have identified the various ways that technology is gendered in particularly masculine ways (Light, 2013). It is necessary then to define the ways technology itself imposes a structured framework for presenting identity to better understand how gay men negotiate presentations of self within these structures. The four apps all required the user to agree to the terms of service, agree or disagree to enable location access, and agree or disagree to allow the app to send the user notifications. Once the user completes these initial steps, he is allowed to create a user profile. Each app shared similar baseline profile requirements including an email, password, and username. *Guyspy* differed the most markedly from

the other apps in that it required the user to upload a picture in order to complete the profile creation process.

Table 1
Percentages of Preset Descriptive Options in Gay Dating Apps

Characteristic	Self	Potential Partners
<i>Personal</i>		
Bear, Polar Bear	14.8	21.0
College, Geeks	10.4	12.2
Muscle, Big Muscle, Jock	9.2	27.2
Cub, Boy	6.8	11.8
Daddy, Silver Daddy, Sugar Daddy	6.6	15.2
Chaser, Daddy Chaser, Bear Chaser	6.6	10.0
Discreet	6.0	5.0
Twink	3.0	5.6
Chub, Super Chub	3.6	6.2
Leather	3.4	6.2
Transgender, Transsexual	0.2	1.2
Bi-curious, Bisexual	0	0
Other	10	.4
<i>Positon</i>		
Versatile	18.0	14.0
Bottom	7.2	5.0
Top	6.2	7.0

Note. (N = 500) Each app (Scruff, GROWLr, GuySpy, and Hornet) had preselected options to describe “user” and “looking for.” Categories were not mutually exclusive.

Aside from the required basic profile descriptors, each app allowed various optional identity and preference indicators. Optional identity descriptors generally included weight, height, age, and ethnicity. In all four categories, the user was forced to select a descriptor from the option choices listed. Restricting identity choices to a set of specified options in

categories like age, weight, height, and even ethnicity may not seem unusual or particularly restrictive. However, the apps similarly restricted the more nuanced and complex categories of sexual preference, sexual identity, and relationship status to a limited set of options. For example, each app allowed the user to describe their sex role identity by selecting descriptive terms like bear, twink, geek, leather, etc. Some apps also allowed users to construct their sexual identity through more overt sex role identity descriptions like top, bottom, and versatile. The apps also allowed users to indicate the sex role identities that they desired in a partner along with the type of relationship they were seeking (i.e. friendship, husband, love, etc.). These descriptions were also limited to the selections presented on the app. While each app allowed the users to write a description of themselves in their own words, typically in an ‘about me’ section, these descriptions were often limited by the specific number of text characters the app allowed.

The overt restrictions placed on self-presentation by the technological framework of the app are most obviously experienced through the process of creating a user profile. A more subversive element of presenting and controlling identity presentation was, however, found in the account settings where users were given the option to limit who was allowed to view their profile or filter the types of profiles they were shown on the app. These filters and control options were frequently based on identity indicators like weight, age, and ethnicity so that users who identified as a certain ethnicity or age were immediately filtered out of the user’s experience with the app.

These technological structures are not neutral, nor are they unique to the gay dating community. The emphasis placed on sex roles, age, and ethnicity, the utility and function of the profiles and descriptive categories, and the boundaries placed on the options used to describe complex gender and sex identities are created in and informed by overarching ideologies. Thus, the description of the app structure itself informs our analysis of the way gay men create profiles that resist and comply with more macro ideologies about gender, specifically hegemonic masculinity.

Instances of Networked Masculinities in Self

In regards to RQ2, how are networked masculinities constructed within the bounded spaces of gay dating apps in regards to user's personal description, we found themes that primarily centered on masculinity and body. Perhaps the most prevalent example of compliance with hegemonic masculinity manifested in these networked masculinities was the blatant, unrestrained use of the word masculinity itself. Statements such as "I'm a chill masc bottom boi looking for fwb ..." (NJBottomBoi), "vers here/mostly top and masculine" (Khen_9), and "LatinoM4M / Masc Chicano Top Looking for Bottom/Vers Latino Uncut Mix Race..." (Rafa) demonstrate how the users view themselves as masculine. Furthermore, the self-imposed label of "masculine" was consistently used as a discursive symbol of gender identity that held, on some level, a meaning that was collectively understood and therefore did not require further explanation. This pattern of presentation is then interpreted as a performance of masculinity that is complicit with the definition of masculinity that has been constructed through hegemonic masculinity. Again, if sexual identity is understood as separate from gender identity, it becomes easier to see how discursive patterns of masculine identity construction among men using gay dating apps are informed by similar patterns in both the heterosexual and homosexual dating communities.

Connell (1996) argues that the body is the most literal tool for "doing" gender as a pattern of actions. The users' profiles supported this argument through the repeated emphasis placed on the body and its sexual and athletic functions. The specific focus on the sexual and athletic actions of the body provided interesting points of analysis in that critical scholarship has identified these two themes as imperative in the negotiations of heterosexual masculine hierarchies (Connell, 2005; Kimmel, 2004). The role of the body as a tool for negotiating masculine hierarchies appeared to inform a similar hierarchical structure within the users' profiles and was presented through references to gym use and athletic prowess. This assertion of an embodied masculinity is consistent with Connell's (2005) claim that sports and competition are used to establish a man's "right to rule" within the masculine hierarchy. One user stated, "I'm an athletic guy soccer, wrestling, lifting & running. Love going on adventures with my

dog, kayaking, paddle boarding” (Coach). Studies have demonstrated that the most typical masculine archetypes are jocks (Scott, 2011). Thus, the entire concept of a “jock” embodies an athletic ethos of physique, attire, and sportsmanship.

The users’ profiles also constructed the penis as a discursive symbol of male power, again situating the body as an important site of meaning in the construction of masculinity in these networked environments. The penis is not only a visually obvious reference to manhood and masculinity, but also a value-laden reference to masculine power and dominance in the most primal and historical sense (Kimmel, 2004). One user described himself as, “good looking well-endowed” (smokeethree). Similarly, a recent online survey indicated that 83% of gay men have sent a “dick pic” on a gay dating app (Alvear, 2015). The body, and specifically the penis, is still identified as a site where the symbolic meanings of masculinity are ‘done’ regardless of homosexual or heterosexual orientations of the sex act.

Instances of Networked Masculinities in Desired Partners

In regards to RQ3, how are networked masculinities constructed within the bounded spaces of gay dating apps in regards to user’s desired partners, the pattern of using the word ‘masculine’ as a heuristic for indicating a shared understanding of the traits associated with an ideal gender presentation was again visible in the users’ profile descriptions of ideal traits in desired partners. Within the profile sections that restricted sections of ‘what I’m looking for’ to a list of option choices presented by the app, there was a greater variance in the users’ selection of various descriptive traits of a desired partner (i.e. leather, twink, masculine, geek, etc.). However, when profile users were presented with the option to write “what I’m looking for” in their own words, the word ‘masculine’ was reiterated as the most salient and ideal trait in a desired partner. “NSA fun. Top looking for masculine” (Tony) and “Looking for a masculine man” (smoothtwink) demonstrate the straightforward request from users for their prospective partner to embody traits of masculinity that represent the commonly held ideas of appropriate gender performance. This interpretation is particularly supported when users apply other stereotypically “masculine” adjectives in conjunction with their use of the word “masculine.” For example, “Looking for Muscular,

Masculine guy!!” (dopekid234), “I’m into masculine, beefy, fury, funny, accepting and understanding guys” (DougMat32), and “I prefer my guys masculine like myself, preferably athletic.” Here the users clearly associate masculinity with specific traits. Again, the users never define what masculine is which supports the idea that the meanings associated with the use of the word ‘masculine’ as a descriptor of oneself and one’s desired partner, do not differ from the collective meanings of masculinity that exist outside of the homosexual dating community and, therefore, require no further elaboration.

While the users’ profiles negotiated meanings of the male body as a subject that ‘does’ masculinity in the sections of the app that allowed for self-description, the profiles also negotiated the male body as an object that receives desire and evaluation. One fundamental attribute of masculinity, as discussed above, is the idyllic image of a muscular, fit body. This was also conveyed in the discourse about desired partners. Statements such as “looking for a good looking, muscular/fit guy” (Bahamut) and “occasional NSA fun with sexy, confident guys who take care of their bodies” (stu) are testaments to the request of fit bodies. A leaner, muscular, more athletic physique is equivalent to masculinity in gay males (Tiggemann, Martins, & Kirkbride, 2007). It could also be interpreted as a more salient signal of health in the gay community against the backdrop of HIV (Levesque & Vichesky, 2006)

Equally, any male body which is not fit is considered less than desirable. Users who had masculine substandard bodies acknowledged their deficiency through statements such as, “I don’t have a gym bod but I’m working on it” (howdy+) and “looking around for someone...that is nice and doesn’t mind chubby guys like myself” (justme_ky). Straightforward self-descriptions like these weed out those users who are simply looking for an ideal body type. Furthermore, some users emphasized personal and sexual characteristics in lieu of their subpar bodies: “very oral here...get to know me, real nice guy here, bf material. I may not have 6pk abs like most stuck ups on here but I have lots to offer (dates?)” and “I’m not idealistic, so not lookin for love, just fun” (Joe). These users offered personality and sexual favors in recompense for their less than masculine body types.

Sustaining hegemonic masculinity embraces the rejection and degradation of subordinate masculinities (Kimmel, 2003). There was a clear

theme of dominate top versus submissive bottom. Statements such as “Looking for a sub bottom that stimulates both my heads” (Osofeeder) and “Sub BTM for DOM aggressive tops. Total sub man here!!! Zero gag reflex...can go all night” (hitsithard) illustrate this dichotomy. Traditionally, males who are the penetrating partner during sex are viewed as more masculine, whereas the male who is penetrated is seen as less masculine (Potoczniak, 2007). By identifying as a dominate top in search of a submissive bottom, the user not only reifies his masculinity, but also reinforces a dichotomy of power (Connell & Messerschmidt, 2005; Demetriou, 2001). By identifying as a submissive bottom, the user indicates that a more dominate, masculine male is more desirable.

There was also the expression of wanting facial and body hair in desired partners. Statements such as “*Beards and hairy chests*” (blknthecity), “Beards, assertiveness, hairy chests and fun loving attitude” (JB), and “Love beards, furry chests, and ass worshippers” (Spectrum Ranger) serve as examples. Beards have long been important factors in perceived heterosexual masculinity, however it wasn’t until the last 20 years that body hair became a symbol of homosexual masculinity (Hennen, 2005). Body hair is indicative of a “bear subculture” that seeks to assert a homosexual masculinity that rejects body fascism and embraces a more natural look (Lucie-Smith, 1991). Body hair has since been both accepted and expected as part of a raw masculinity (Suresha, 2002).

Within the negotiations of traditional masculine hierarchies in the U.S., racial categories are used to establish white masculinity as illustrative of the cultural template of ideal manhood thus subordinating all other racial identities (Connell, 1992). The importance of race as an indicator of desirability and exclusivity was, indeed, assumed in the very structure of the apps which allowed users to block members of other racial categories. A parallel manifestation of racial preference was also uncovered in sections of the user’s profiles that allowed the user to describe preferences in their own words. Statements such as “typically prefer white guys” (Tanner) and “Safe fun with young fit guys prefer white guys but not opposed to others” (Benno) coincide with those of other scholars who found that gay culture is not only gendered, but also can be particularly racialized (Ocampo, 2012; Ward, 2008).

Gay Divergence from the Cultural Masculine Template

The gay dating community is, however, distinct in many important aspects from other male community groups. Connell and Messerschmidt's (2005) argument that research should begin to localize manifestations of masculinity within specific communities sheds light on the specific contributions of Anderson's inclusive masculinity theory in the context of the networked gay dating community. Anderson argues that as homophobia declines, stereotypical performances of masculinity become unnecessary. This idea is particularly applicable in the context of a gay dating community where, presumably, instances of homophobia are limited. It becomes important then to understand how the relevant issues and identity presentations that are specific to the gay community manifest in a way that negotiates resistance to the normative patterns of masculine performance. The abovementioned findings along with the more traditional research about normative masculinity point to sexual orientation as the most readily identifiable point of divergence from the cultural template of ideal masculinity. Not everyone who uses gay dating apps identifies as gay and, as such, the negotiations for managing the potentially stigmatizing identity of 'gay' were particularly relevant to this specific technological space.

The users' profiles revealed that words like 'discreet' and 'down-low' were used as both descriptions of the self and descriptions of desirable traits in potential partners. Py writes on his profile "Masculine, fit, discreet...Looking for similar," while devmichael95 writes "Looking for some DL fun. Discreet, laid back." Both users demonstrate the reluctance to disclose their identity, possibly for fear of being labeled as gay (King & Hunter, 2004). Anonymity has been found to be a specific gratification amongst gay app users (Gudelunas, 2012). Partners are chosen based on how well they will help conceal one's sexual identity from the rest of society (McCune, 2014). This discourse illustrates the significance of networked spaces as sites that allow for a presentation of the self that may conflict with 'everyday' presentations. It further illustrates that, within these spaces, app users can participate in sexual behaviors that may deviate from what they feel is a culturally acceptable 'masculine' behavior while still maintaining a gendered identity that mirrors the cultural standard of 'masculine' in other significant ways.

Another issue that appears more salient among the gay dating community is the health risk associated with using gay dating apps for anonymous sex (Holloway et al., 2013). The option to disclose HIV status was therefore an element built into the structure of some of these gay dating apps and was frequently considered a relevant identity description among users. For some men, communicating details about HIV status upfront may eliminate the need to discuss such issues in person (Sheon & Crosby, 2004). “Bottom here. I’m HIV neg and disease free and I play safe only” (sam) and “Into barebacking, negative but on PREP” (JLo69) indicate that not only are these users aware of their status, but they also want to prevent any health risk associated with hooking up. While other users do not disclose their HIV status, they still communicate their intentions of having safe sex in upfront manners, “If you want bareback sex, I’m not your man” (mark). This quote serves as an example of the social stigma and judgment against those with HIV in the gay community. In a recent online study, two thirds of respondents who identified as HIV-negative say they are not likely to initiate contact with or respond to an attractive guy who states he is HIV-positive in his profile (Alvear, 2015).

Unlike the above statements where users were forthright with their status, this type of discourse can lead to increased silence and hesitancy of disclosing one’s status (Haig, 2006). As previously stated, the body is an important tool for constructing meanings of masculinity, as such, the open and forthcoming discourse about the HIV status of one’s body resists many of the socially constructed notions of deviance that have historically been assigned to men who do not adhere to ideas that heterosexuality is a necessary component of masculinity. The gay dating app users’ processes of constructing patterns of masculinity within a networked environment include instances of compliance with cultural norms, but also instances of resistance that are unique to the community but no less valid in informing the complex facets of masculine identity.

Conclusion

Throughout history there have been overarching systems of regulations and boundaries for heterosexual masculinity, however there is none for homosexuals. There is “no normal way to be gay that is enforced through

law, medical, and psychological knowledge, and custom and socialization” (Fejes, 2000). Thus, how do gay males come to define their masculinity, and ultimately themselves? While the latter is beyond the scope of this study, we do find evidence in our results to offer enlightenment on how gay males define masculinity on digital spaces, specifically in user profiles on gay dating apps. Masculinities range on a continuum from extreme to moderate to deficient. These masculinities are socially inspired and guided by the temporal and spatial limitations of geography, culture, and communication platform.

To understand this range of networked masculinities we employed a textual analysis of gay dating app profiles. Users communicated their desired qualities in potential partners and to showcase their own masculinities. These masculinities are influenced by technological restrictions within the app: the pre-conceived categories produced by the app creators. However, the users were permitted to freely write within the “about me” section. Both the pre-conceived categories and the open-ended “about me” sections were utilized to investigate networked masculinities. The manifestations of networked masculinities found primarily centered on companionship, sex, sexuality, and the dichotomy of power to reinforce masculine hierarchies. This process, that we have termed “mascing,” is a way for gay males to reinforce their own masculinity, while also maintaining masculine norms by seeking out masculine partners. Mascing is a form of policing that reinforces a masculine elite within the gay dating app community, an elite that is predominately white, young, fit, and healthy.

The networked masculinities found among gay males using these apps were similar to those outlined in Connell’s (1995) conception of hegemonic masculinity. We argue that hegemony in a larger social structure influences masculine norms, norms that are found in both heterosexual and homosexual men. Anderson’s (2009) concept of inclusive masculinity is also questioned. The theory maintains that as homophobia declines, so does the stigma attached to homosexuality, permitting heterosexual males to engage in a wider range of behavior without the derision of being labeled gay. The digital space of gay dating apps is free of homophobia and is exclusive to users who engage in sex with other men, yet we still see the policing of masculinity. The digital space provides for a more broad display

of behaviors and the users still predominately prefer to engage in hegemonic tendencies. The networked masculinities reified in gay dating apps are more influenced by hegemony than they are by levels of homophobia.

This study, like others, is not without limitations. First, because we wanted to conduct a random sample of various geographic locations within the U.S., we were limited to apps that allowed for wider geographic searches. Due to this technological restraint, none of the apps selected rank as the number one popular user app, instead we reconciled on the next highest ranked apps, all of which are still very popular and provide a diverse selection of gay males. Secondly, due to qualitative approach we were limited in sample size, because too large of a sample would make qualitative study impractical. We did not want to sacrifice the complex and in-depth richness that qualitative research provides. We feel our approach combines the benefits of qualitative inquiry and nation-wide sampling which helps balance out respective weaknesses.

Future directions in research on gay masculinities in gay dating apps might also address the profiles of those users who do not identify within the archetypes of the straight-acting gay male. There is important consideration to be taken of those individuals who fall outside the boundaries of heteronormative criteria and the reasons why, and how, they utilize mobile platforms. We understand that gay males are not one monolithic, hegemonic group, but instead diverse and idiosyncratic. The multiplicity of sexualities, masculinities, and ideologies warrant a more nuanced and in-depth understanding of how this faction of society interacts and communicates amongst each other.

Secondly, by conceptualizing our findings as a process, masxing, we leave open the opportunity to situate the process itself into a greater theoretical orientation. Future research should employ qualitative initiatives to better understand the framework of networked masculinities in the realm of gay digital media and social networking sites. Connell (2012) challenges scholars to apply hegemonic masculinity to the examination of social structures and institutions. This application allows for a more holistic examination of the various interconnected social systems that construct hegemonic masculinity both locally and collectively, while considering structural, liminal, and localized masculine norms

Compared to the past when the coming out process for gay males included recognizing and accepting repressed sexual desires, today's process is more about the consumption and creation of acceptable gay masculinities (Fejes, 2000). We have moved beyond the between-group comparisons among hetero- and homosexual men, and moved into a more within-group comparisons of males. Gay males have created niche subdivisions and are hastily moving in different directions.

While a majority of our findings point toward the hypermasculine user searching for other masculine males for anonymous hookups, there is utility in apps as constructive relationship tools. To make a normative statement that all gay dating apps are hook up apps takes away from the nuanced and diverse function of the apps. These assorted functions, when combined with the variety of users, helps create a social environment that is constantly changing and evolving based on social interaction and external factors; thus, influencing the negotiation of various networked masculinities by gay males.

References

- Anderson, E. (2009). *Inclusive masculinity: The changing nature of masculinities*. New York, NY: Routledge.
- Anderson, E. (2015). Assessing the sociology of sport: On changing masculinities and homophobia. *International Review for the Sociology of Sport*, 50(4-5), 363-367. doi:10.1177/1012690214538628
- Alvear, M. (2015, March 18). 83 percent of gay men have sent a dick pic on dating apps, says survey. *Huffington Post*. Retrieved from http://www.huffingtonpost.com/mike-alvear/83-percent-of-gay-men-send-dick-pics-on-dating-apps-says-survey_b_6893316.html
- Avila-Saavedra, G. (2009). Nothing queer about queer television: Televised construction of gay masculinities. *Media, Culture, and Society*, 31(1), 5-21. doi:10.1177/0163443708098243
- Benzie, T. (2000). Judy Garland at the gym—gay magazines and gay bodybuilding. *Continuum: Journal of Media & Cultural Studies*, 14(2), 159-170. doi: 10.1080/713657700

- Blackwell, C., Birnholtz, J., & Abbott, C. (2014). Seeing and being seen: Co-situation and impression formation using Grindr, a location-aware gay dating app. *New Media & Society*, 1-20.
[doi:10.1177/1461444814521595](https://doi.org/10.1177/1461444814521595)
- Bumgarner, B. (2013) Mobilizing the gay bar: Grindr and the layering of spatial context. In *Conference of the International Communication Association*, London, UK.
- Chesebro, J. W. (2001). Gender, masculinities, identities, and interpersonal relationship systems: Men in general and gay men in particular. In L. P. Arliss & D. J. Borisoff (Eds.), *Women and men communicating: Challenges and changes* (pp. 33-64). Long Grove, IL: Wavel and Press.
- Chi, K. R. (2015). Masculinity: Men's makeover. *Nature*, 526(7572), S12-S13. [doi:10.1038/526S12a](https://doi.org/10.1038/526S12a)
- Christian, T. Y. (2005). "Good cake" An ethnographic trilogy of life satisfaction among gay black men. *Men and Masculinities*, 8(2), 164-174. [doi:10.1177/1097184X04271358](https://doi.org/10.1177/1097184X04271358)
- Clarkson, J. (2006). "Everyday joe" versus "pissy, bitchy, queens": Gay masculinity on straighttacting.com. *The Journal of Men's Studies*, 14(2), 191-207. [doi:10.3149/jms.1402.191](https://doi.org/10.3149/jms.1402.191)
- Connell, R. W. (1992). A very straight gay: Masculinity, homosexual experience, and the dynamics of gender. *American Sociological Review*, 57(6), 735-751. Retrieved from <http://www.jstor.org/stable/2096120>
- Connell, R. W. (1995). *Masculinities: Knowledge, power and social change*. Berkeley, CA: University of California Press.
- Connell, R. W. (1996). Teaching the boys: New research on masculinity, and gender strategies for schools. *The Teachers College Record*, 98(2), 206-235. Retrieved from <http://www.tcrecord.org/content.asp?contentid=9614>
- Connell, R. (2012). Masculinity research and global change. *Masculinities & Social Change*, 1(1), 4-18. [doi:10.4471/MCS.2012.01](https://doi.org/10.4471/MCS.2012.01)
- Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic masculinity rethinking the concept. *Gender & Society*, 19(6), 829-859.
[doi:10.1177/0891243205278639](https://doi.org/10.1177/0891243205278639)

- Demetriou, D. Z. (2001). Connell's concept of hegemonic masculinity: A critique. *Theory and Society*, 30(3), 337-361.
doi:10.1023/A:1017596718715
- Eguchi, S. (2009). Negotiating hegemonic masculinity: The rhetorical strategy of "straight-acting" among gay men. *Journal of Intercultural Communication Research*, 38(3), 193-209.
doi:10.1080/17475759.2009.508892
- Fejes, F. (2000). "Making a gay masculinity". *Critical Studies in Media Communication*, 17(1), 113-116. doi:10.1080/15295030009388382
- Freeman, C. (2014, October 16). Hook-up apps are destroying gay youth culture. *Time*. Retrieved from <http://time.com/3510261/hook-up-apps-destroying-gay-relationships/>
- Gudelunas, D. (2012). There's an app for that: The uses and gratifications of online social networks for gay men. *Sexuality & Culture*, 16(4), 347-365. doi:10.1007/s12119-012-9127-4
- Harvey, L., & Ringrose, J. (2015). Sexting, ratings and (Mis) Recognition: Teen boys performing classed and racialized masculinities in digitally networked publics. In E. Renold, J. Ringrose, & R. D. Egan (Eds), *Children, Sexuality and Sexualization* (pp. 352-367). New York, NY: Palgrave Macmillan.
- Hennen, P. (2005). Bear bodies, bear masculinity recuperation, resistance, or retreat? *Gender & Society*, 19(1), 25-43.
doi:10.1177/0891243204269408
- Huemmer, J. (2016). Beyond boobs and beer: Analysis of masculine rites of passage in the film *Superbad*. *Southwest Mass Communication Journal*, 31(2). Retrieved from <http://swecjmc.wp.txstate.edu/files/2016/05/huemmer.pdf>
- Kimmel, M. (2003). Masculinity as homophobia. In M. S. Kimmel & A. L. Ferber (Eds.), *Privilege: A reader* (pp. 51-74). Boulder, CO: Westview Press.
- Kimmel, M. (2004). Masculinity as homophobia. In Rothenberg, P. S. (Ed.), *Race, class, and gender in the United States: An integrated study*. (81-92). New York, NY: Macmillan.
- Kimmel, S. B., & Mahalik, J. R. (2005). Body image concerns of gay men: The roles of minority stress and conformity to masculine norms.

Journal of Consulting and Clinical Psychology, 73(6), 1185-1190.
[doi:10.1037/0022-006X.73.6.1185](https://doi.org/10.1037/0022-006X.73.6.1185)

King, J. L., & Hunter, K. (2004). *On the down low: A journey into the lives of "straight" Black men who sleep with men*. New York, NY: Harlem Moon.

Leech, N. L., Dellinger, A. B., Brannagan, K. B., & Tanaka, H. (2010). Evaluating mixed research studies: A mixed methods approach. *Journal of Mixed Methods Research*, 4(1), 17-31.
[doi:10.1177/1558689809345262](https://doi.org/10.1177/1558689809345262)

Levesque, M. J., & Vichesky, D. R. (2006). Raising the bar on the body beautiful: An analysis of the body image concerns of homosexual men. *Body image*, 3(1), 45-55. [doi:10.1016/j.bodyim.2005.10.007](https://doi.org/10.1016/j.bodyim.2005.10.007)

Light, B. (2013). Networked masculinities and social networking sites: A call for the analysis of men and contemporary digital media. *Masculinities & Social Change*, 2(3), 245-265.
[doi:10.4471/mcs.2013.34](https://doi.org/10.4471/mcs.2013.34)

Lucie-Smith, E. (1991). The cult of the bear. In C. Nelson (Ed.), *The bear cult* (pp. 6-8). London, UK: Gay Men's Press.

MacInnes, J. (1998). *End of masculinity: The confusion of sexual genesis and sexual difference in modern society*. Buckingham, UK: McGraw-Hill Education.

McCormack, M., & Anderson, E. (2010). 'It's just not acceptable any more': The erosion of homophobia and the softening of masculinity at an English sixth form. *Sociology*, 44(5), 843-859.
[doi:10.1177/0038038510375734](https://doi.org/10.1177/0038038510375734)

McCune Jr, J. Q. (2014). *Sexual discretion: Black masculinity and the politics of passing*. Chicago, IL: University of Chicago Press.

Messner, M. A. (1997). *Politics of masculinities: Men in movements*. Thousand Oaks, CA: Sage.

Ocampo, A. C. (2012). Making masculinity: Negotiations of gender presentation among Latino gay men. *Latino Studies*, 10(4), 448-472.
[doi:10.1057/1st.2012.37](https://doi.org/10.1057/1st.2012.37)

Payne, R. (2007). Str8acting. *Social Semiotics*, 17(4), 525-538.
[doi:10.1080/10350330701637106](https://doi.org/10.1080/10350330701637106)

Plummer, K. (2007). Queers, bodies, and postmodern sexualities: A note on revisiting the "sexual" in symbolic interactionism. In M. Kimmel

- (Ed.), *The sexual self: The construction of sexual scripts* (16-30). Nashville, TN: Vanderbilt University Press.
- Poole, J. (2014). Queer representations of gay males and masculinities in the media. *Sexuality & Culture*, 18(2), 279-290. doi:10.1007/s12119-013-9197-y
- Potoczniak, D. J. (2007). Development of bisexual men's identities and relationships. In K. J. Bieschke, R. M. Perez, K. A. DeBord, K. J. Bieschke, R. M. Perez, K. A. DeBord (Eds.), *Handbook of counseling and psychotherapy with lesbian, gay, bisexual, and transgender clients (2nd ed.)* (pp. 119-145). Washington, DC: American Psychological Association. doi:10.1037/11482-005
- Reynolds, C. (2015). "I am super straight and I prefer you be too": Constructions of heterosexual masculinity in online personal ads for "straight" men seeking sex with men. *Journal of Communication Inquiry*, 39(3), 213-231. doi:10.1177/0196859915575736
- Riffe, D., Lacy, S., & Fico, F. (2014). *Analyzing media messages: Using quantitative content analysis in research (3rd ed.)*. New York, New York: Routledge.
- Rodriguez, N. S. (2016). #FIFApuntos: A Twitter textual analysis over "puto" at the 2014 World Cup. *Communication & Sport* [ahead of print]. doi:10.1177/2167479516655429
- Roth, Y. (2015). "No overly suggestive photos of any kind": Content management and the policing of self in gay digital communities. *Communication, Culture & Critique*, 8(3), 414-432. doi:10.1111/cccr.12096
- Rukkle. (2014). Best dating apps of 2014. *Rukkle.com*. Retrieved from <http://rukkle.com/features/best-gay-dating-apps-2014/>
- Scott, D. T. (2011). Contested kicks: Sneakers and gay masculinity, 1964–2008. *Communication and Critical/Cultural Studies*, 8(2), 146-164. doi:10.1080/14791420.2011.566275
- Sheon, N., & Crosby, G. M. (2004). Ambivalent tales of HIV disclosure in San Francisco. *Social Science & Medicine*, 58(11), 2105-2118. doi:10.1016/j.socscimed.2003.08.026
- Siibak, A. (2010). Constructing masculinity on a social networking site: The case-study of visual self-presentations of young men on the

profile images of SNS Rate. *Young*, 18(4), 403-425.

[doi:10.1177/110330881001800403](https://doi.org/10.1177/110330881001800403)

- Suresha, R. J. (2002). *Bears on bears: Interviews and discussions*. Los Angeles, CA: Alyson Books.
- Tiggemann, M., Martins, Y., & Kirkbride, A. (2007). Oh to be lean and muscular: Body image ideals in gay and heterosexual men. *Psychology of Men & Masculinity*, 8(1), 15-24. [doi:10.1037/1524-9220.8.1.15](https://doi.org/10.1037/1524-9220.8.1.15)
- Ward, J. (2008). Dude-sex: White masculinities and 'authentic' heterosexuality among dudes who have sex with dudes. *Sexualities*, 11(4), 414-434. [doi:10.1177/1363460708091742](https://doi.org/10.1177/1363460708091742)
- Wilkerson, J.M., Smolenski, D.J., Morgan, R., Simon Rosser, B.R. (2012). Sexual agreement classifications for gay and bisexual men and implications for harm reduction HIV prevention. *Health Education & Behavior* 39(3) 303-314. [doi: 10.1177/1090198111413917](https://doi.org/10.1177/1090198111413917)

Jennifer Huemmer is Graduate Part-Time Instructor at Texas-Tech University, United States.

Lindsey E. Blumell is visting research fellow at Oxford Brookes University, United Kingdom.

Nathian Shae Rodriguez is lecturer at San Diego State University, United States.

Contact Address: Direct correspondence to Nathian Shae Rodriguez, School of Journalism and Media Studies, College of Professional Studies and Fine Arts, San Diego State University, 5500 Campanile Drive, San Diego, CA 92182-4561, email: nsrodriguez@sdsu.edu