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Dragged into the future : how interent communications and media legitimacy facilitate lagging gender norms

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DRAGGED INTO THE FUTURE: HOW INTERENT COMMUNICATIONS AND MEDIA
LEGITIMACY FACILITATE LAGGING GENDER NORMS

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Abstract

Social interaction is the driving force of human society. Social interaction extends far beyond one-on-one conversations – it is how we learn about the behavioral expectations, beliefs and symbols of our culture. Sometimes these beliefs and expectations are related to celebrations and events that bring cultures together. Through interaction we learn that we are expected to bring a gift to a birthday party and why we even choose to celebrate birthdays at all. Yet that same framework – which is tied to the way humans categorize each other to make interaction easier – also allows cultures to share biases about different social groups that may lead to discrimination. Ridgeway (2009, 2011) argues that the fundamental processes of interaction are one of the structural elements that have kept women from achieving parity with men in society, both in terms of wages and in terms of cultural perception. In her argument, Ridgeway claims that the social norms surrounding gender have not evolved to reflect women's modern role in social life. Ridgeway and other social psychologists consider gender a major element of social structure that is relevant in every social interaction, making gender one of the major classifications used to frame interaction. That gender frame is used in every social interaction and, as such, lags behind because old norms are reinforced in every interaction. So, while women have greatly increased their human capital outcomes, their place in society is still lower than men's because it is based in gender norms that were introduced in earlier times and kept in place through interaction. In this dissertation, I begin with Ridgeway's work on the gender frame and expand it to examine how the online presentation of sexist information may influence people's gender beliefs. I test this theory with a social psychological experiment that exposes participants to sexist message board conversations and opinion columns and compares their scores on a measure of ambivalent sexism with participants exposed to non-sexist articles and message board conversations. Results show that the media format does have some influence on perception, but the medium's legitimacy and the sex and race of the participant also influenced their gender attitudes.

Chapter 1: Introduction

Human society is built on a cyclical relationship between shared symbolic meanings and social interaction – we give meaning to gestures, objects and words which are then shared with others through social interaction and become cultural symbols (Goffman 1959, Stryker 1980). Those cultural symbols are continuously transferred back into society through socialization and reactivated through social interaction (Beede et al. 2011, Ridgeway 2009, Ridgeway 2011, Risman 1998, Steinberg 1992, Stryker 1980). These shared meanings are fundamental to social life, allowing cultures to celebrate holidays together and enjoy bonding experiences with friends and family (Goffman 1967, Griswold 2008). Yet to social psychologists, there is far more going on in the background than it seems at first, because social interaction must be coordinated to happen at all – we have to know how to start the interaction and what to say (Cooley 1964, Goffman 1959, Mead 2009, Stryker 1980). To coordinate interaction effectively, interlocutors must first categorize others into fundamental categorization schemes associated with specific characteristics, which then become part of the overall cultural knowledge that is continually reinforced through processes of socialization and interaction.

The same processes that allow cultures to share in holidays, rituals and beliefs also have potential to instill biases that can be held against entire groups of people, leading to discrimination (Lorber 1994, Ridgeway and Correll 2004, Ridgeway 2009, Ridgeway 2011). Gender discrimination, in particular, is tied to one of these fundamental categorization schemes, or "frames," that are based in cultural knowledge about gender that is inscribed through social interaction (Lorber 1994, Ridgeway and Correll 2004, Ridgeway 2009, Ridgeway 2011, Risman 2004b). The results of these interactional processes are unequal societal prestige and lessened earnings in the workplace for women (Lorber 1994, Ridgeway and Correll 2004, Ridgeway 2009, Ridgeway 2011, Risman 2004b, Smith-Doerr 2004, Udry 2000). These culturally-held biases can remain ingrained long after the views they represent have been disproved – women have increased

their workforce participation and educational attainment, but progress in earnings has stalled since the mid-20th century. The stagnation of women's income equality is particularly interesting when you take into account the social change and technological innovation that has occurred since the women's liberation movement of the early 20th century (Ridgeway 2009, Ridgeway 2011).

Women's wages have been frozen at around 77% of men's wages since the early 1990s. Social scientists give credit to number of social movements such as women's liberation for changing women's outcomes, as these movements challenged social structure and public discourse leading to women's increased role in the workforce and the lessening of some gender-specific social norms. However those movements are not the only thing that has improved women's outcomes. During the same time period that women's workforce participation was increasing, the U.S. also saw a shift to a service-based economy rather than a manufacturing one. This shift means that many high paying jobs that once depended on men's superior size and physical strength declined and high-skill jobs that relied on technology and education increased. These social shifts make women's wage stagnation even more confounding as it persisted through the explosion of the most recent technological change to profoundly shift human social interaction – the Internet.

In many ways, social science research and the popular press have struggled with understanding the Internet and have chosen to focus on the elements of online life that are trendy, such as social media sites like Facebook, Twitter, and Instagram (Zickuhr 2013). While we hear most frequently about these elements of the Internet, they are not its most used features, as research shows that these online networks are used by less than 10% of the overall world population (Smith and Brenner 2012). That being said, the Internet itself is *very* popular - the Pew Research Center (2012) estimates that 85% of Americans go online on a daily basis. What are those people doing online? They communicate and interact with other humans, sharing information in a variety of ways including email, message boards, instant messaging and online chats. Yet there has

been little research into how these online communications, which often bear a strong resemblance to offline communications, have influenced fundamental social processes – such as social interaction and the creation and activation of cultural knowledge.

Instead of focusing on the manifest elements like Twitter, this dissertation will examine an underlying element of online social life – how the format for delivering information online influences an individual's attitudes. Specifically, I will explore how the format of sexist information may influence gender attitudes. My argument begins with what social scientists refer to as a "gender frame" in the context of online social interaction (Ridgeway 2009, Ridgeway 2011, Risman 1998, Risman 2004b). The gender frame is a fundamental element of the social process I mentioned in the first paragraph – essentially, gender is one of the major schemas that people use to categorize others in order to interact with them. In her 2009 article, "Framed before we know it" and 2011 book, *Framed by Gender: How Gender Inequality Persists in the Modern World,* Ridgeway argues that women's subordinate position in many social hierarchies has persisted throughout human history despite social and technological upheaval and change because of the gender frame and its constant reproduction within society (Acker 1990, Mead 1950, Ridgeway 1997, Ridgeway 2009).

Gender norms are reinstilled because humans must often make quick decisions in social interactions. Decisions are simplified by splitting the world up into obvious binary categories (such as male vs. female) that have attached sets of cultural norms that inform behavior. So when we are interacting with other humans, we use gender to determine which actions are important within that given situation. This gender frame is active in all human social interactions – even when it may not seem obvious. Two men talking are still using the gender frame to coordinate social interaction because there are still norms about how two men should behave together.

Ridgeway argues that the gender norms that make up the gender frame do not change at the same pace in all areas of a society because older norms are constantly reinstilled through social interaction – causing gender norms to lag behind the other norms that are not as fundamental. Thus the same mechanism that allows the gender frame to exist allows older gender norms to be carried into and reproduced in new social spaces. To support this claim, Ridgeway draws upon a large body of social psychological research relating to social interaction and the foundations of cultural knowledge as well as institutional studies of high-tech firms. As will be explained in the subsequent sections, gender is in the background of everything that happens in society (England and Browne 1992, Lorber 1994, Ridgeway 2009, Risman 2004a).

Ridgeway ties the gender frame and lagging social norms directly to women's outcomes in the real world. I borrow the concept of the gender frame in order to test how symbols (in this case written words) and meanings transfer online. How do the words of other people affect our personal beliefs when read online rather than heard in person? A majority of the academic research into the Internet similarly focuses on how offline processes work online, but few directly test how using the Internet influences social processes that help convey culturally held information. Ridgeway's and other scholars' analyses of the gender frame is a great benefit to many areas of social science research, and in particular I think it has merit for studying the Internet.

 In this dissertation I test and explore some elements of how communications made possible by the Internet may interact with essential social processes involving the gender frame and how people decide which sources of media are "right" (Ridgeway 2009, Ridgeway 2011, Tyler 2003). To understand how the written format of online communications can activate the gender frame and thus influence individuals, I use a social psychological experiment in which I expose participants to sexist message board conversations and sexist articles. I exposed control groups to message board conversations and articles which did not reference gender. By making comparisons

across groups, I examine how these two formats activate the gender frame in participants and offer

explanations as to which social processes may be in place.

Chapter 2: Theoretical Orientation

2.1   Ridgeway's Theory of Persistent Gender Inequality

The basic argument for my study is couched in Ridgeway's theory of persistent gender inequality. The sections below will detail her theory and how my own research project blends Ridgeway's work with research on Internet communications and legitimacy to expand the existing body of social research on the influence and transmission of social norms.

Sociologists have long argued that gender is an important element of all societies; with many choosing to focus analysis towards why gender inequality exists. This had led many to focus on a concept of masculinity as hegemon which dominates all things feminine, even feminine masculinities (Connell and Messerschmidt 2005, Donaldson 1993). In *Framed by Gender* (2011), Ridgeway agrees with the general academic consensus that gender inequality has always existed and that male dominance is the norm, but instead of looking for its genesis and identifying the concept itself, Ridgeway choose to analyze its persistence. From that angle, gender inequality seems to be a fundamental concept of society that has survived numerous social, political and technological shifts. Ridgeway argues that it has persisted for two reasons: gender is a major organizing frame for social life and that the processes of social interaction are keeping gender inequality alive despite significant social change.

2.2   Gender as a Major Organizing Frame of Society

Scholars have debated where to place gender in examining social structure; with many choosing to focus on theories arguing that gender differences arise at the individual level through either social or biological conditions (Bem 1993, Risman 1998, Udry 2000). Others have favored more structural approaches (Epstein 1988). Today, we find social scientists arguing that there is likely some significant interplay between the structural and individual levels wherein social

scientists must acknowledge that there is a larger gender structure that we all exist in while also acknowledging that there are individual and cognitive elements that are developed individually (England and Browne 1992). The end result of this debate is that most gender scholars see gender as a socially constructed system of stratification that cuts across multiple levels of society (Connell 2002, Ferree, Lorber and Hess 1999, Lorber 1994, Risman 1998). There is solid agreement that gender is a major element of social life, with Risman (2004) arguing that gender should be seen in the same analytic plane as economics and politics, meaning that we need study gender as a full part of social structure. That thesis directly assumes Ridgeway's first point – gender is a primary organization frame for society and is used to justify gender inequality (Ferree, Lorber and Hess 1999, Lorber 1994, Risman 1998, Risman 2004a).

To say that gender is a central frame of social organization requires a brief explanation of the processes involved in social interaction. In short, social interaction must be coordinated for it to function, for use to coordinate how and who we interact with we must first categorize the world so that we can understand our social position. Ridgeway and other gender scholars argue that gender is a fundamental frame that we use to organize interactions in all social interactions and not just those where it may be salient (Ferree and Smith 1979). Ridgeway is not the first to make the argument that gender is an element of social structure, but she is unique in directly tying her analysis to symbolic interactionism and direct processes of social interaction (Reskin and McBrier 2000, Ridgeway 2011, Smith 2002).

2.3   Women's Disadvantaged Position in Society

Gender's status as a primary frame of social organization needs to be seen in the context of women's social position in order to expose its true influence. Women have historically been in a disadvantaged position in social hierarchies around the world, yet for the purpose of this paper it is important to situate this disadvantage in modern terms. Women have been underrepresented in

positions of power and in high-paying jobs for most of the modern era, regardless of advances in legal rights and in changes in the job market (Fernández 2013, Ridgeway 2011). This underrepresentation means that women are not earning wages on parity with their male counterparts. In the US, Census data show that women's wages, on average, increased until around the 1990s, at which point the rate of increase has slowed significantly compared to the previous decades (Blau and Kahn 2007). On average, full time working women earn 77 cents for every one dollar earned by a man. In some states, such as Louisiana, Wyoming and Utah, women earn less than 60 cents for every one dollar earned by a man (Bureau 2010). Sociologists no longer see the de facto discrimination of the 1950's, but it remains true that women working identical jobs are on average paid less. The gap is much smaller today, but it still remains. Most important in this discussion is that the shifting and resilient nature of gender inequality highlights the idea that gender differences are an element of social structure that has individual level implications in terms of both socialization and women's empirical outcomes (England and Browne 1992).

2.4   The Gender Frame's Role in Women's Disadvantaged Position

There is sufficient support for the idea that gender is an element of social structure and that the gender frame is used in all social interactions. The norms that support the gender frame often stigmatize femininity overall, leading to discrimination against women in both the job market where they are often discouraged from applying for administrative jobs, and in education where women are often tracked away from paths traditionally associated with higher wages (Beede et al. 2011, Eagly and Johnson 1990, Oakes 1990, Smeding 2012). Lorber (1994) argues that gender differences are used exclusively to justify gender inequality and keep women in a subordinated position. The mechanism that produces this outcome has its origins in the coordinated nature of human social interaction.

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Human interactions are carefully coordinated affairs; we are not animals that run purely on instinct. Human social interaction is a highly coordinated affair that involves the internalization of cultural norms or rules to which humans interpret on the fly (Goffman 1967, Mead 2009). Norms relating to the gender frame, take advantage of cognitive processes that have seemingly arisen to make social interaction in densely populated areas quicker and easier by associating essential characteristics such as intelligence with a broad social category such as gender (Ferree and Smith 1979). We use this process daily to make decisions about individuals, which itself leads to the formation of cultural rules associated with status (Goffman 1967).

This is where Ridgeway's argument becomes clear. The cultural bias against women is kept alive through social interaction because nearly every social interaction is based in norms about gender (Ridgeway 2009). Thus we remind ourselves of these gender norms each time we engage in interaction with another person and they are solidified within us. Both men and women behave according to what they think most people believe about female inequality and it becomes a more entrenched part of the culture, where the status inequality is activated in the background of many social interactions and thus works its way into the structure of work and home. It is cyclic, so the gender inequality is consistently reproduced through interaction processes.

2.5   Ridgeway and Technology

To further make her case for how important gender is in social classification, Ridgeway notes that women's disadvantaged position in society has not occurred in a vacuum – women have made very significant strides in education and other areas of life that should have them more equal with men (Bailey and Dynarski 2011, Sicilian and Grossberg 2001). The period following the women's rights movement in the 1960s and 1970s, for example, saw a steady increase in women's wages, some of which came from the 1973 congressional act which pushed more women into the

workforce out of necessity (Census-Bureau 2010). These gains persisted, but seem to have

stagnated around the 1990s (Blau and Kahn 2007).

The law was not the only mechanism working in women's favor. Throughout the 20th and

21st century, the invention of machines that can lift heavy objects, computers that can perform tasks

that might take days by hand, and telecommunications technologies that allow people to work from

home have undercut the argument that men have a set of specific biology-based skills that justify

their advantaged position within society. These technological shifts should help to level the playing

field of gender because high-paying and highly prestigious jobs are no longer based entirely on

one's physical strength. The shift in workplace organization and needs would theoretically spur a

major social change in the way we conceptualize gender, but these innovations occur within

society's complex system of interactions based on status, and as such the evolution is not linear –

high-paying jobs being less physical does not mean that women will automatically get them and

move to parity. The dot-com boom of the 1990s saw millions of investment dollars poured into

startup companies that represented a vision of what the future could be. These were new business

models that were offering completely new services to the public. Theoretically these new models,

based in technological changes, also represent the opportunity to reintroduce new gender norms

within new environments, yet that did not happen and women are still highly underrepresented in

science and technology positions (Ahuja and Correspondence 2002). Ridgeway (2009) sees

technology as an important element of gender inequality, but not in alleviating it – Ridgeway argues

that sites of technological innovation can function to reinforce cultural beliefs that disadvantage

women in status.

2.6 Gender in Innovative High-Tech Firms

Ridgeway's empirical support for gender as an organizing frame comes from a comparison between women's status in start-up firms in the fields of biotechnology and information technology (IT) that have diffuse working structures and traditional models that are hierarchal in nature in those fields (Ridgeway 2009). In their studies of the two industries, Smith-Doerr (2004) and Whittington and Smith-Doerr (2008)note that new innovative firms operate in a more informal, flexible organization of teams that are nested within a larger network structure. Scientists and programmers move between work teams. The biotech firms were formed in a less gender-typed environment, with women making up around a third of the Ph.Ds. in the field but with a different organizational structure, while the IT fields were more traditionally gender typed (Smith-Doerr 2004). The comparison of the two firm organizational types is a good test case for Ridgeway's theory of gender as a primary social frame and lagging norms. The gender frame operates in the background regardless of the organizational structure of the industry – it's outcomes just change depending on the specifics of said organizational structure (Ridgeway 2009).

The results show women scientists in the innovative biotech firms do better than women scientists in hierarchical research organizations (Whittington and Smith-Doerr 2008). Women in flexible firms, overall received more promotions and were more likely to be in supervisory positions (Smith-Doerr 2004). The comparisons show the gender frame in the background to be highly influential, though the structure of the organization itself was as well.

2.7 Cultural Lag

Cultural lag is the second part of Ridgeway's overall theory about the persistence of gender inequality. It is a social process that occurs when changes in nonmaterial culture(ideology and cultural knowledge) lag behind changes in material culture (women's increased educational credentials) because older gender norms are constantly refreshed within us as we interact in a

society where gender is the primary organizing frame (Richard L. Brinkman 1979, Ridgeway 2009, Whittington and Smith-Doerr 2008). So, in the case of gender, while women are graduating with more skills and credentials due to increased college graduation rates and becoming a larger part of the workforce, gender stereotypes and perceptions of women's capabilities lag behind women's achievements and social norms disadvantage women (Ridgeway 2011).

Earlier I discussed these sites of technological innovation in relation to the presence of the gender frame. However, the same example also illustrates the concept of cultural lag. In both firms, the social interactions would function as a mechanism to reactivate the dominant gender norms of the organization -- if the organization was more gender egalitarian then the interactions would reactivate that, if it was more favorable toward men it should reactivate those norms. (Ridgeway 2011). Because of the mixed gender environment of the biotech firms, the gender frame provided a more modest advantage to men when compared to the IT fields. Social interactions replicated the more gender equitable gender frame. The interactions that were outlined earlier help older gender norms stay in place, therefore the culturally held beliefs on gender suffer from lag.

2.8   Online Social Interaction, Legitimacy and Gender

In the above sections, I outline Ridgeway's argument on the relationship between the gender frame, technology and women's disadvantaged social position. Using this as a base, I would like to examine an idea that springs from this argument: how do online settings communicate gender norms? This research question takes elements of Ridgeway's theory of persistent gender inequality – gender is a central frame of social organization which causes norms to lag – and import the basic model into another area of social life, online communications. To do so I contrast a new form of online communication that closely resembles social interaction with an old form of communication that has transitioned online.

My experiment focuses on whether and how the format of online communication influences gender beliefs. This dissertation is not a direct extension of Ridgeway's work; it borrows elements and uses the gender frame to examine if and how fundamental processes may work in the online environment. I expand the body of sociological knowledge about how gender processes occur to the user of Internet technology. In both cases I am assuming that gender is a fundamental part of the cultural frame that has significant impact on individual attitudes. Cultural sociologists view culture as either a reflection of human society (Dupré 1980) or a more complex interplay between the society itself, cultural objects, and those who produce and receive culture (Griswold 2008). In this research project, I will highlight the interaction between the macro view of culture and cultural knowledge and examine the specific mechanisms through which cultural attitudes are shaped. Is the legitimacy lent by the media source enough to change individual attitudes?

Chapter 3: Outlining Internet Communications

Online communications represent a major change in social interaction and are an extension of existing technology at the same time, making Ridgeway's theory a good fit to examine some parts of the social processes that underlie Internet culture. Technology has a history of changing culture, with technological changes often bringing small revolutions in communication with them. Written language allowed people to communicate their thoughts and feelings in a shared manner. Telegrams and the postal service allowed individuals to exchange messages without traveling near each other. The telephone allowed people to communicate instantly across wide expanses. These new forms of technology changed everyday life by giving people more mediums and opportunities to communicate with each other. What's important about the relationship between technological change and social change is that these new forms of media did were more variations on an original type of communication rather than something completely new – the fundamentals of human interaction didn't change, but the conduit that moved them did. I have chosen to focus this analysis on online communications because they are the latest version of this trend, having elements that were both completely new and still familiar.

Secondly, and more importantly for this study, the newer forms of communication are often familiar enough that new users or early adopters were able to import the communication norms of other similar communications media and adapt them to work in this new setting, further likening them to the elements of social organization that Ridgeway based her analysis on. Emails, for example, list the name and email address they were sent from in the majority of cases, yet most people still sign them like letters. The norms of communication were used so frequently and interacted with so often that they were constantly reactivated and kept around long after their necessity(Ridgeway 2009, Ridgeway 2011). This is important to this project because it sets precedent for new forms of technological communication using existing norms as the template for the technologies' future norms.

Not all forms of online communication are the same and different methods offer different levels of similarity to older forms of communication. Instant messaging, for instance, requires the user to be present and responding actively with other individuals, so they are similar to phone calls. Emails and message board conversations represent forms of online communication that are asynchronous and so do not have the same time-sensitive elements of in-person communication or even instant messages. Message boards and email are semi-static, meaning they are not live communications, but the user can access them from a variety of locations and there is some capacity for further communication and updates. For example, web-based email can be accessed from most anywhere that has an Internet connection (assuming the user account is active). The same can be said for message boards– the user can access and read these communications as often as they wish, and usually in the original wording and format in which they were created.

The accessibility of online communications in general is similar to that of old letters or telegrams which are available for infinite re-readings, but what is different is that message boards and emails still allow for some active replies. It is generally not reasonable or worthwhile for me to respond to a letter written to me 10 years ago; the person who sent it may have moved, may not care anymore, or may not even be alive anymore. Email still has some of these same limitations because it involves private and direct communication, so you may reply to an old email but the address is no longer active. Message boards do not have these limitations. The communications are not in real-time, but are easily accessed and, depending on the speed of contributors, can flow quickly. Plus because they are semi-public, a conversation can be started with someone who a user never intended to respond to. Most conversations on these message boards are available as long as they are still on the web server. Individuals do not need to be in a specific location to access or respond to these messages; as long as there is an Internet enabled device present then those messages can be read and replied to.

Message boards represent a unique communication space that combines elements of in-person communications with other elements that can only exist online. Like offline communications people can exchange messages with each-other, but unlike offline communications people can reply to those messages at points long after the authors may have lost interest and the comments are usually public, therefore outsiders can witness the conversations. This new medium is not without drawbacks and seems to come at the expense of the non-verbal information often contained in voice or in-person communication. Because individuals can only read the conversations and cannot see the body language of or hear the vocal inflections of the people they are communicating with, there is a loss of context information.   However these online communications are recorded and semi-public, so it is possible that multiple individuals, each with a different concept of what is being discussed, can still access these messages and even respond to them, creating long chains of communications between individuals who don't know each other and do not have any of the in-person context clues that might be present. In this way message boards represent a unique communication space that has elements of traditional communication, but removes them from an in-person environment and preserves them only in the context of the message board itself. These online spaces become high-tech restroom graffiti full of messages between people who are mostly strangers and communicate only in terms of the message board itself and the thread's[1] topic.

Message boards are an interesting place for sociological analysis because they sit somewhere in-between previous technologically upgraded communications like letter and emails, and something that is totally new. The same characteristics that make message boards hard to classify is also what make them a fertile ground to examine the gender frame. Message boards offer semi-anonymous communication in a space unlike nearly anything in offline society society. Is the

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[1] A thread is a line of discussion on a message board. Most boards are organized around threads, which contain an original post (op) that sets the topic. All replies to that OP are considered "posts" on the message board.

gender frame still active in this new space that is similar to face-to-face human social interaction, but not really the same?

Most of the theory backing the idea that gender is a central frame of society indicates that yes, the gender frame would be active in a message board – but how? Would people interacting in this new way be influenced by the words of other people and have the existing gender norms reactivated? Or is the process less like social interaction and more like traditional media legitimacy, where people are influenced by the reputation and "rightness" of the source?   It's also possible that online communications don't activate the gender frame at all and are a type of interaction / communication in and of themselves – a new world where gender norms are recreated due to the significantly higher degree of anonymity.

Chapter 4: Review of Literature

4.1   Symbolic Interactionism

Symbolic interactionism is a school of sociological theory organized around 3 separate notions regarding human interaction. The first is that humans act toward things on the basis of the meanings they ascribe to those things; so we act towards things in accordance to what they mean to us. Second, the meaning of things is derived in the social interactions that we have with others and the society itself, so we learn what things mean by interacting with others in society. Finally, meanings are handled in, and modified through, an interpretive process used by the person in dealing with the things he/she encounters; meaning there is an element of art to this because meanings are not concrete and are subject to interpretation (Blumer 1969, Stryker 1980). Through interaction we share ideas and beliefs with others, passing on the individual meanings we create to those with whom we interact. Over time these shared ideas layer upon themselves and become shared knowledge within a local spatial context (community or environment).

4.2   Social Construction of Reality

Social constructionism is a school of sociological theory and critique organized around the idea that meaning is developed through human social interaction. The theory's insights extend far beyond just social interaction and into all areas of human social life (Blumer 1969, Cooley 1964, Mead 1950, Stryker 1980). Constuctionism posits that the social world is not organized around one objective truth that all humans accept, but rather reality itself is socially constructed, based on individuals' own understandings (Blumer 1969, Goffman 1959, P. Berger 1966). Berger and Luckmann (1966) emphasize that sociological analysis must focus on the social "processes" through which reality is constructed. We cannot separate the individual from society because they are developed together through social interaction (Cooley 1964, Mead 1950). Individuals are socialized through interaction, while society itself is made up of individuals interacting with each other and

reacting to the world through the filter of their own interpretations (Cooley 1964, Mead 1950, P. Berger 1966). Furthermore, one cannot understand the motives of the individual without knowing their cultural background and what kind of meanings they infer from various interactions and events (Stryker 1980).

This process of transferring cultural knowledge is the process through which cultures acquire distinct rituals, norms and ideals – social interactions aggregate until they form cultural knowledge. An illustration of this is the reaction many outsiders have when they encounter people from far different cultures such as primitive tribes. These peoples were often depicted as isolated from other forms of society and were thus framed as deviant and/or primitive because their norms and lifestyles were so different, but both the tribe and their critiques were operating from separate bases of shared knowledge that were developed through interaction within their respective environments.

Though some may feel inclined to think of social construction as just an explanation for large-scale differences in cultures, it also works on significantly smaller levels such as neighborhoods or even small groups. The concept of social construction is important because it illustrates the complex, cyclical nature of social interaction – while we may create meaning from our social interactions, those interactions in turn form the foundations for culture. From this perspective, our cultures are repositories for the collective beliefs, ideals and norms of many generations. These beliefs are not just abstractions; social scientists have connected them to the financial outcomes of individuals. Areas with environments that are less supportive of equal racial rights have been shown to exhibit significantly greater levels of gender inequality (Beggs 1995). Meaning that culture, derived from our previous interactions, thus influences our future interactions – regardless of the specific circumstances of those initial interactions.

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4.3   The Socialization Process

As a concept, the social construction of reality explains how the world of norms, beliefs and ideals are created, but those abstract ideals are in turn instilled in us through the socialization process (Blumer 1969, P. Berger 1966). Socialization is one larger part of how the beliefs of a culture can influence the behaviors of an individual. It is a constant and complex social process in which people learn the norms and beliefs of their socially constructed environment through social interaction. These norms and beliefs are transmitted by the individuals with whom we have frequent and/or significant interactions, thus our parents, teachers, and peers are all instrumental in this process (Cooley 1964, Kandel 1978, Mead 1950).

The process of socialization does not just occur in early childhood, it is continuous in life, though the processes are arguably most effective in the early stages of life. Many foundational sociologists focused on the way individuals must use social interaction to formulate their own knowledge of who they are (Cooley 1964, Mead 2009). Mead's *Looking Glass Self (1934)*, which postulates that individuals form their perception of themselves and of the world by gauging the reactions of others with whom they interact, for this study, though, my interest is not in the specifics of how the process transfers the norms – the interest is in the balance that is struck between the modern world as individuals experience it and what we are taught through interactions with others. Because socialization is often done by those who have experienced more than us, we are almost always learning norms and ideals from those who were themselves socialized in an older time, thus we experience and interact in the current world while still indirectly interacting with a belief system from an older time period (Ridgeway 2011). The balance mentioned earlier comes because we cannot separate the world into distinct categories of "old knowledge" and "new knowledge" easily because we largely do not have control over who we

interact with, especially as children. Adults do have more control over who they interact with, but we are still not in complete control of the ideas we are exposed to on a regular basis.

The structure of socialization is the first note of an echo that will reverberate through this study – society's beliefs are instilled into individuals by others who are likely to have been socialized in a different time period, thus creating the opportunity for an inherent lag in beliefs that is supported and often re-inscribed or reinforced through interactions with others (Ridgeway 2009).

4.4   Introduction to Gender as an Organizing Frame

Interactionists argue that all of our interactions with people and objects are filtered through the meanings we have attached to those people and objects, but all people and objects are not equal. To argue that gender is a central organizing concept of social life is to argue what seems obvious because humans deal with gender every day. Gender becomes an active part of life each time an individual thinks about going into a public bathroom, shops for clothing, hears about a pregnancy or childbirth, and numerous other situations. Social scientists who argue that gender is a primary organizing frame for social life do not deny that these daily events are gendered elements of life, on the contrary, they argue that those events are only the ones that we *consciously* associate with gender – many social psychologists argue that gender is one of the key elements at the heart of how humans structure social interactions, which themselves are key to human society (Brewer and Lui 1989, Fiske 1998, Ridgeway 2009, Ridgeway 2011).

Gender being a fundamental organizing element of social life occurs as a by-product of how people must sort and coordinate social interactions. In short, our brains often make simplified comparisons in order to help sort out the difficulties of social interaction – such as who speaks first (Goffman 1967). One of the easiest comparisons for our brains to make is "male or female." The

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following sections will detail some research findings that support this idea as well as connect those findings to my argument.

4.5   Coordinating Social Interaction

Human life is dependent upon social interaction. Humans need to interact with others for food, shelter, clothing, and emotional support or comfort, but interactions must begin somewhere. When two people meet on the street, someone has to talk or act first. The others involved in the interaction must then use the information gained from that opening to decide what their behavior will be. In this way, social interaction is largely a coordinated affair. Though it may seem spontaneous and natural, we are really exhibiting behaviors that have been finely tuned and rehearsed through thousands of other social interactions (Goffman 1967). This type of social coordination extends beyond just the opening parts of a conversation—all parts of a social interaction are coordinated. For example, within a conversation between two individuals, the participants must coordinate who will speak first, how to respond to those words, what body language to display, where to stand, and a number of other small decisions. Even long distance communications must coordinate in these same ways – someone has to decide to answer the phone or respond to an email for those things to be interactions. The behaviors people exhibit in social interactions are often determined by the behaviors of the other individuals we interact with. For interactions to work smoothly our actions must be coordinated, and so rapid that they are almost instinctive, otherwise the intent of the message may be lost (Cooley 1964, Mead 2009).

Coordination is a problem when it does not happen. If two people fail to decide who will communicate first or what the structure of their interaction will be, then that interaction will likely be unsuccessful for both individuals. As stated by Ridgeway (2011:36), "Engaging another in joint activity is something like a dance. If the other steps forward, you must step back, or you will stumble over each other." Unsuccessful social interactions happen frequently, so their consequence

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is often not severe in most cases. However, looking at it from a more abstracted view, uncoordinated social interaction can have very negative results. In particular, without social coordination of some sort, it is difficult for individuals to relate to each other and find common ground in social situations. In particular, this type of coordination has been linked to continued issues of racial difference because without some common form of social coordination it is difficult for groups with significant differences to begin communicating and changing their meaning of their relationship (Brewer 1997).

One way that we deal with problems of coordination is through the organization of society. Interactionists argue that we do this naturally through the process of socialization as we develop concepts of the self and other (Cooley 1964, Mead 2009). The self occurs on the individual level and internally, but for coordination to occur and work in a larger societal context where they must interact frequently, we develop shared social-category systems that are based in culturally-defined differences (Ridgeway 2009). Sociologists find that these systems are few in number, but have a strong impact on social life (Brewer and Lui 1989, Fiske 1998).

4.6   Knowledge Required for Social Interaction

The cultural categories of gender and race mentioned above are important because they often form the base of information that people in a society must know before they relate to another (Ridgeway 2009). Many theories of social interaction use the metaphor of brick building to explain the nature of social interaction and social life. Essentially, social interactions form the bricks that build into larger social elements throughout time as more and more interactions accumulate. On the individual level, these bricks are the experiences that make up our worldview and our perceptions(Cooley 1964, Mead 2009, Stryker 1980). On a more cultural level, these bricks often form the basis for social institutions but can also influence the way entire communities orient

themselves, partially explaining why inequality and issues of discrimination seem to have such regional effects (Beggs 1995).

4.7   Gender as Common Knowledge

For individuals who have never encountered each other before to coordinate their interactions, they must both rely on a bank of common knowledge. In the case of most social interactions,

> Common knowledge is not just knowledge that actors in a situation do share but knowledge that they each know or can reasonably presume that they share. Shared knowledge like this is in effect cultural knowledge. It is knowledge that is presumed to be consensually shared by a group of people—what "everybody knows"—and not just the private knowledge of individuals. (Ridgeway 2011: 35)

For example, a student entering a classroom for the first time knows to sit down and wait for the instructor to enter the room and begin class. They do this without commands or needing specific instructions – they rely on their past experiences and the shared collection of behaviors that are associated with a classroom. Even though college is a different type of learning institution, they use the common knowledge of classroom behavior and extend it to the college institution. Thus the coordination of daily social interactions is not calculated in real time, but is instead built from a body of common knowledge, which can come from socialization in the family, exposure to other humans in social interaction, education in school, and many other sources that detail expected behaviors (Goffman 1959, Hardin and Conley 2001, Hardin and Higgins 1996). Interactions are not guided by just any common knowledge. The common knowledge that allows participants to define each other within the context of the interaction is most important (Bettenhausen and Murnighan 1985).

Gender functions as cultural knowledge because it is a fundamental element of our social structure (Brewer and Lui 1989, Lorber 1994, Risman 1998, Risman 2004a). Risman (2004) argues

that gender can be seen as a social structure when we examine it on the same level as politics and economics – meaning that it becomes a fundamental structure of social organization. This differs from traditional assessments that have often placed gender as an individual level element that only exists as norms internalized by the individual, which fails to fully take into account how social structures such as gender can constrain an individual (Blau 1977, Rytina et al. 1988). Risman is right to place gender on the same analytic plane as politics and economics because it is encountered within society in similar ways. Though people may not specifically know the names of elected officials or all the basic tenets of capitalism, they do know fundamentally how to exchange money for goods and services and that America is a democracy. While people may not think about gender reflexively, they do share cultural concepts of what clothing and behavior is considered appropriate for people of different genders. Ridgeway takes this basic idea that gender is a part of social structure and extends it into the notion that gender is a fundamental frame for organizing social relationships because it so easily communicates differences between groups, which is what allows for the complete coordination of social interaction (Ridgeway 2009, Ridgeway 2011).

4.8   Gender as a Primary Frame, Coordination and Difference

In order to define each other within an interaction, a comparison between participants must take place. To do this, the participants must categorize each other. Categorizing is one of the simplest ways to organize social interactions as it creates a binary grouping focused on a simple "in this group" or "not in this group" idea. Most systems for categorization are based in differences. For example, when categorizing by race, the simplest way of categorizing is to determine that someone is black or is not black, Asian or not Asian. Studies of social cognition show that there are a small number of societal social-category systems (Brewer and Lui 1989, Fiske 1998). The function of categorization is to simplify the process of coordinating social interactions. When we categorize someone we are interacting with, we are also categorizing ourselves by comparing ourselves as

being similar or different (Ridgeway 2011). The categorization defines the options we have for interaction with that person because our interactions are based in our shared cultural knowledge that we apply within each social interaction (Stryker 1980).

Gender is a type of visible human difference that is quite easily applied as a frame for this type of categorization. Social psychologists have shown that, in addition to age and race, gender is virtually always one of society's primary frames of categorization (Glick and Fiske 1999, Schneider 2005). Studies show that humans almost automatically sex categorize any specific person with whom we try to interact (Ito and Urland 2003).

4.9   Legitimacy

This dissertation contains two possible perspectives on why gender norms may lag in online environments. The first, as stated above and supported in literature, is that the norms are instilled through initial socialization and constantly reactivated through social interaction. The second involves traditional processes of legitimacy.

The concept of legitimacy is an extension of the psychological concept of power, which essentially denotes the act of one individual or organization changing another's will. "Power is the ability to shape the gains and losses of others either by threatening or using coercion to deter undesired behavior or by promising rewards to promote desired behavior" (Tyler 2006:376). Power is a core part of social dynamics and something that has been fundamental in understanding human relationship and societal struggles.

Legitimacy is more than power and using pure might to achieve one's will. History is filled with political leaders who attempted to rule through pure power and whose careers were short lived as result – ruling through the guise of altruism is more successful than pure force (Liebe and Tutic 2010). In sociology, Weber's theory of charismatic authority is built on this very concept.

Charismatic leaders maintain power through coercion in the guise of altruism (Adair-Toteff 2005). While many of the famed examples of charismatic authority turn to the exercise of power in desperation; they were legitimized by a personality that convinced people they were earnest and righteous. Despots and dictators are not truly altruistic, but their people are willing to support them as long as they believe these leaders are altruistic and are doing what is right – this is the heart of legitimacy.

Legitimacy is a version of power that is more akin to influence than brute force. It relies on the notion that people are influenced by others not because they are scared of them, but because they believe the rules and decisions enacted by those people are in some way right or proper (Zelditch 2001). When people feel a leader has legitimacy they are seeing them as more than just an individual who is leading through a sense of self interest, they seem them as people who hold the moral high ground and stand for what is truly right in the world (Beetham 1991). So those who are in power must convince others that they deserve to rule rather than taking it, which is a fundamental element of every authority system in the world.

The connection between this broad definition of legitimacy focused on leadership and the more day-to-day version of legitimacy that is in effect in this experiment comes through processes in which humans internalize social norms. Legitimacy is social influence that is induced by feelings of what is "right" or what "should" be done in a given situation (French Jr and Raven 1959). This occurs through an internalized value or norm, meaning that we go from seeing it just as an element of an authority figure to a broader concept that is essentially a general assumption that the actions of an entity are appropriate (French Jr and Raven 1959, Suchman 1995). So we extend this concept beyond world leaders and into organizations and other people – it becomes the ability to create voluntary deference to the directives of an authority that has been legitimated. The influence grows as the authority becomes more legitimated and the social norms that they alter become

internalized by those who operate within that society(King and Lenox 2000, Tyler and Huo 2002).

This can eventually lead to legitimizing ideologies, which serve as myth that lead a social system

and its authorities and institutions to be viewed as morally right by those within their system. Once

legitimacy has been established for an organization or individual, people internalize their norms

and they become part of a cultural ideology (Sidanius and Pratto 2003). An example of this would

be belief that women were unable to work many of the same jobs that men did prior to WWII. The

idea was cemented in the public consciousness through social leaders, institutions and practices

that were influential and argued that women's place in the home was domestic. Many women

internalized the norms that they were less capable than men, thus legitimating the idea and

cementing it as a part of culture.

4.10   Legitimacy as a Social Process

As noted in the previous section, at legitimacy's center is the notion of power but it extends

beyond just forcing someone to do your will and into convincing others that the actions of an actor

or organization are just and right. Social psychologists have taken to referring to legitimacy as a

social process more than just an element of social life.

Social-psychological approaches to legitimacy focus directly on how social objects become

constructed as legitimate. In that way, they tend to look at how things such as social institutions

and status conditions such as inequality come to be seen as just and a natural part of the social

landscape. It begins with the idea and assumption that actors have referential beliefs about types of

people or social categories that tend to hold higher status positions in the interpersonal influence

hierarchies of social life. These referential beliefs are descriptive and are related to social reality, or

the "the way things are" that it is assumed that actors share (Berger et al. 1998, Ridgeway and

Berger 1986). Essentially, people consider others who have certain characteristics or who are in

certain social categories as being more capable of observing or understanding "reality" and thus defer to them on a variety of matters.

Ridgeway (1998) and Berger (1986) argue that when these referential beliefs are activated in situations, they create a set of expectations for the types of social actors that will become influential in a given situation. So we assume that the professor at the front of the class should know what they are talking about when they are in the front of the classroom. Actors in that situation assume that others hold the same beliefs. So we assume that others in the classroom hold the professor as influential. When that actor then fulfills the expectation and brings some insight, then it is likely that one of the actors will follow suit and give deference to the influential actor. So in the case of our example, the professor confirms her/his knowledge to the class in some way, expectations are met, and students defer (Johnson, Dowd and Ridgeway 2006). This could be by raising their hands to ask questions, or by being complicit in the act and merely sitting and listening to the lecture. In any case, the status of the professor in the classroom has been legitimated – it is assumed to be right and the way things should be. The process is not explicit. It is largely an implicit process in which widely held cultural beliefs from the society create expectations for behavior within a given setting. What is interesting about this social-psychological approach is that it emphasizes the local situation where the action and interactions are taking place (Johnson, Dowd and Ridgeway 2006).

Legitimacy functions within institutions and organizations as well as individuals. Scott (1995) argues that an organization or procedure first becomes legitimate through the authorization or endorsement of actors within the local environment. He also points to three types of legitimacy that can be conferred: regulative, which comes from actors who have sovereignty, normative, which stems from actors who define what is morally desirable, and cognitive, which comes from the

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prevalence of comparable organizational actors (Scott 2005). What makes Scott's argument strong

is that he points to both implicit and explicit processes that are at work.

4.11   Legitimation of New Social Objects and Media

Within this paper I am concerned with legitimacy as a general concept, but I am mostly

concerned with the process by which legitimacy is instilled into institutions and how it is

maintained. Some forms of media have more legitimacy than others, and as such are more

influential on people. Thus people are more likely to believe a fact if they see it published in a local

newspaper rather than if they read it on Facebook. New social objects gain legitimacy through a

four-stage process that often takes place over time. The first stage is innovation, wherein a social

innovation is created to address some need or purpose within a local level of actors (Johnson, Dowd

and Ridgeway 2006). For a social object to be accepted it must be consistent with the widely held

nonmaterial culture of its area (Walker 2004, Zelditch 2001, Zelditch and Walker 2003). Once a

social object is accepted at a local level, it is diffused into other local contexts, which usually

happens at a much faster rate as it has already been validated in some context (Mezias 1990). Once

the diffusion has occurred for long enough, the object reaches a critical mass and actors eventually

take on the belief that most other actors see this social object as influential and thus the object

achieves cultural legitimacy (Tyler 2006). In the case of media, we can see how things like

newspapers and television went through a variation of this process, though it was likely so long ago

that it is difficult to think of it in this way. It has happened in recent times though, and on the

Internet. People legitimated websites based on information they discerned from the URL and other

web elements. Sites with ".net" or ".edu" are considered more reliable. That is most likely due to

their affiliation with other institutions websites. For this study, what is fundamental and important

about legitimacy is the idea that people allow information sources that they feel are right and just to

influence their opinions.

Chapter 5: Summary of Theory and Hypotheses

5.1   Summary of Theoretical Justification

Within this dissertation I seek to examine how the format of online information influences its ability to influence personal attitudes. To do so I borrow liberally from the social psychological scholarship dealing with gender and how it aids and constrains social interaction. The first element of my theory is that gender is a major element of our social lives – one of the fundamental frames used to categorize society and organize social interaction. (Goffman 1967, P. Berger 1966, Ridgeway 1997, Stryker 1980). This frame exists as a means to facilitate social life; for humans to communicate and interact, we need to have signals that provide initial cues to participants about the social status of each participant (Brewer 1997, Goffman 1959, Stryker 1980). Knowing the status of the people we interact with allows for the coordination of interaction itself (Mead 1950, Stryker 1980). Gender norms are one such set of norms that are influential in all situations and are thus considered a master social status (Goffman 1959, Goffman 1967, Ridgeway 1997, Ridgeway and Correll 2004, Ridgeway 2009). These norms become powerful through repeated interactions over long periods of time as stereotypes and ideas become cemented in the societal consciousness and eventually become cultural information that is assumed to be known by all members of a society (Goffman 1959). Because norms are cultural information, they seep into everyday social interactions where they are reinforced through social interaction as we use the lagging information every time we use gender to coordinate interaction (Ridgeway 2011).

The second element of Ridgeway's theory that I borrow is the idea that gender norms lag because of the processes mentioned above. Online communications also have a strong precedent for the lagging of social norms in Internet communication spaces outside of gender. For example, many people who were new to email often wrote in the format of traditional, postal service mailed letters and included their names and email addresses in the text, even though emails already

electronically embed address and name information. Here the norms surrounding email are imported from traditional letters because they are the closest to that new form. But cultural lag is significantly more than just bringing the offline world online – norms surrounding general social interaction can also lag. When people use social networking sites, they are often using them to facilitate and maintain offline social relationships (Ellison, Steinfield and Lampe 2011). Further research shows that the people who use the Internet the most are often the least invested in the online community (Wellman et al. 2001). So, cultural lag extends beyond just importing norms about greetings and into lagging behavior with people using their online social networks to facilitate in person relationships. Internet culture lags beyond just the words we use; people have not abandoned face to face networks for the Internet as many predicted (Kraut et al. 1998). They have instead held on to their traditional cultural definitions of networks and friendships and used online sites to augment them. So if both logistical elements such as email greetings and fundamental elements like in person networks are lagging and not fully exploiting the new online environment, then it is logical that people would also import older norms when dealing with gender in an online form of communication that closely resembles the social interaction that we are familiar with in everyday life – listening to or reading the words of other people.

My primary research question is informed by Ridgeway's theory of lagging gender norms and assumes her argument that gender is a primary frame of social organization (Acker 1990, Brewer 1997, Brewer and Lui 1989, Lorber 1994, Ridgeway 2009, Ridgeway 2011, Risman 2004b). We know that gender norms lag at sites of technological innovation, but what happens when you change the type of technological innovation and move away from in person firms and onto the Internet? Ridgeway make a strong case for the lag itself and supports her argument with traditional theories of social interaction, but do the norms lag online in the same way? Does interacting with people online also change the way gender norms are translated or are processes of legitimacy at work? How do different communication platforms influence the way that gender attitudes are

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translated? I have chosen to test this through the form of Internet communications, which are largely new areas of technology that allow people to communicate in new ways that were not possible in previous generations.

It is possible that online communications do not influence gender beliefs by activating the gender frame, but they can still be influential through the legitimacy of the medium. The literature shows that people see institutions as legitimate when they feel the institution uses a fair criteria to apply its authority (Tyler 2003, Tyler 2006). This perspective transfers directly into decisions about media. It is assumed that established institutions such as newspapers are by their nature fair and impartial. So when faced with the choice of believing a local newspaper that has been around for years or a pamphlet handed out by someone on a street corner, most people assign more legitimacy to the source they have known for years and that has a proven record of assumed fair methods (Tyler 2006).

In summary, I argue that reading online communications about sexist information is likely to influence individual level attitudes about gender through either one of two mechanisms. This experiment will test 3 specific questions. The first, does reading online communications activate the gender frame, thus reinforcing culturally held beliefs about gender? The second, does reading online articles influence individual gender beliefs is through the legitimacy of the medium? Finally, which one is more effective at activating gender beliefs – an online article or a sexist conversation between miscellaneous people on the Internet?

5.2   Introduction of Hypotheses

This study examines one element of how gender norms spread into online social environments. I argue that reading social interactions online may activate the gender frame that always lingers in the background, thus exposure to messages that reinforce the gender frame online would keep gender norms lagging, even in this online environment. This section details the possible outcomes of the experiment itself and what those outcomes may mean for the overall validity of this study.

I have chosen one common online social interaction medium and one common form of one-way informational mediums to test my extension of Ridgeway's theory. Through a process of alternate random assignment, participants were exposed to four examples of a type of online information and communications media. Two were opinion columns formatted in the traditional style of print journalism, which represents the one-way informational medium (the "article" stimulus). The other two are formatted as a simulated message board conversation representing the online communications medium (the "message board" stimulus). Each represents a different communications paradigm as mentioned in the literature review. Both of these mediums can be presented either in digital or analogue formats. Each of these hypotheses, and the subsequent study, uses the Ambivalent Sexism Inventory (ASI) as the dependent variable and the exposure to different types of stimulus (message board or article) as the primary independent variables. The ASI is a scale designed to measure a propensity toward sexism (Glick and Fiske 1996, Glick et al. 1997, Glick and Fiske 2001). It is composed of two 11-item subscales that measure hostile (antagonistic toward women) and benevolent (patronizing toward women) sexism. A more detailed account of the methods used in the study follows this section.

5.2.1   H1 = Message Board Stimulus ASI score higher than Message Board Control ASI score[2]

If I show evidence for H1, it means reading a gender-primed message board conversation activates the underlying gender frame. In that case, exposure to an online social interaction in which interactants express sexist attitudes would result in a higher ASI score than reading an online message board conversation where no sexist attitudes were expressed. The literature indicates that human social interaction reactivates and reinforces culturally held ideas about gender, so while this is not social interaction, it is possible that people reading online message boards may be similarly affected by the words written by anonymous strangers. I predict a higher ASI score for this hypothesis but, exposure to sexist attitudes may not necessarily have a positive effect on ASI—activating the gender frame could potentially *decrease* the ASI for those participants who already hold strongly egalitarian gender beliefs.

5.2.2   H2 = Article Stimulus ASI score higher than Article Control ASI score

If I show evidence for H2, reading a gender-primed article activates the underlying gender frame. In this case, the ASI for the article stimulus condition would show a score that is higher than the ASI for the control conditions with a non-sexist article. This indicates that the online article activates the gender frame in the background but, because the article more clearly not a social interaction, it cannot influence people in the same way that the message board would. The literature on legitimacy indicates that a different score on the ASI would indicate that those reading the sexist article believe the source came to their conclusion though means that were right and just and, as such, it influences them.

5.2.3   H3 = Article Stimulus ASI score higher than Message Board Stimulus ASI score

If I show evidence for H3, that means articles have a different level of legitimacy (and therefore a greater level of influence over respondents) than message board conversations. Though

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[2] Hostile and Benevolent sexism are separate parts of the overall ASI score and will be discussed in the results for all hypotheses. However, there is insufficient support in the literature to predict a specific direction for these sub elements.

there is no literature making direct comparisons between these two groups, the literature on

legitimacy indicates that a large, though vaguely affiliated, newspaper should have more legitimacy

than miscellaneous people on the Internet and should have a higher ASI score.

Chapter 6: Methodology

6.1   Overview

The methodology used for this study is a social psychological experiment which was

conducted at Louisiana State University in Baton Rouge, Louisiana. The project evolved over a

series of iterations, but only two samples will be presented here. Initial pre-tests were short

surveys that gauged student's experiences with the Internet and the type of technology systems

they used to access the Internet. Results showed that over 85% of students used the Internet

regularly and the primary method of accessing the Internet was a computer, though a significant

number of individuals used various other devices to primarily access the Internet. These early tests

indicated that student groups would have sufficient Internet experience to participate in the study.

The experiment itself uses simplified experimental methods in which four groups are

compared. 2 groups were exposed to stimulus and 2 were control groups.[3] The experimental

method was chosen because the research question centers on human social processes that

influence an opinion rather than just the differences in opinions between different people.

Experimental methods also allow a high level of environmental control, which allows the

experimenter to more closely determine the influence that a particular stimulus has on

participants.

All data were collected by the experimenter through the Inquisit Online Experiment

interface. The sample was an availability sample of LSU students enrolled in introductory sociology

courses.   This sample is not representative of the American population as a whole, college students

are likely to hold more egalitarian gender beliefs and be more tech savvy than the average

American(Pew 2009-2012). As a result, any gender biases that are discovered here are likely to be

more muted than they would be in the general population. Also, young adults are less likely to make

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[3] A fifth group, which included "dirty" language was included originally, but means testing did not show it to be significant. This additional condition will be discussed in its own section later.

associations with traditional media sources that older adults would, so the legitimacy of the sexist articles are also likely to have a reduced effect. The convenience sample of this experiment allows me to make a conservative test of my hypotheses. The experiment was coordinated with each of the 3 instructors who administered it to their students so that participants would take it prior to the gender chapter of their course, to minimize bias that may be caused by the materials in the course.

6.2   Sampling Technique

The sample was drawn in two waves from university students who were enrolled in LSU introductory sociology courses from August 2010 through May 2011. All students completed the experiment in exchange for either course or bonus credit. The total sample size was 812, with participants assigned to conditions randomly.

6.3   Online Surveys and Experiments

This study uses software designed to deliver social psychological experiments through the Internet. The Inquisit software will be discussed in the following section, but first the issue of online surveys themselves must be addressed because there is some concern in academic circles about the validity and reliability of online research. Because this project involves both a survey and experimental elements I will address both online surveys and online psychological experiments.

Many social scientists imagined the Internet would provide a new way to acquire data from individuals (Kaye and Johnson 1999). Eventually it would do that, but initial results were not promising, as the first methods of online data collection were surveys that were completed and returned via email. Studies showed this method was susceptible to the same issues as traditional surveys; most notably declining response rates and insufficient completion rates (Bates 2001, Sheehan 2001). The early email surveys also had difficulty acquiring representative samples

because they lacked a sufficient mechanism to compel individuals to complete them (Bradley 1999). As with all new technology, it took some time to work out kinks in the system and find ways to ensure higher completion and response rates.

More recent studies have shown the response rate of online surveys to be dependent largely upon how the survey is constructed rather whether it is administered on the Internet or on paper (Cook, Heath and Thompson 2000). The response rate is also heavily influenced by how much computer experience the user has, with more experienced users being more likely to respond (Anderson and Gansneder 1995). Furthermore, the type of online software used to collect information has changed dramatically. Many online survey software packages today are able to ensure that participants complete surveys by requiring the completion of certain sections before recording any data. Many of the issues that plagued early surveys were due to inadequacies in early implementation rather than the fact that they were being done online.

Online experiments are similar to and different from online surveys. By their nature, online experiments require significantly more deliberation and planning than online surveys and thus have enjoyed a significantly shorter history. The tradeoffs for online experiments are also significantly higher than those for online surveys. Converting paper surveys to online surveys is straightforward outside of the programming aspects. Experiments demand control, but by making them online the experimenter must give up a large amount of control because the participant will not be in the same physical location in an online experiment. So for an experiment to work in an online environment it must be designed around the online interaction; it is not sufficient to merely convert a traditional experiment onto the Internet and only certain types of experiments are viable for online administration (Anderson and Gansneder 1995, Cook, Heath and Thompson 2000). The same advancements and online software packages that make surveys more functional also allow for online experiments that are designed for the Internet to work and produce consistent results. As

with surveys, the design and organization of the experiment is fundamentally important to how reliable the measurement will be (Birnbaum 2000).

This experiment is designed to be administered in an online environment. I am testing how people react to different presentations of information they would read on the Internet. Specifically, reading sexist statements in online-specific communications mediums activates lagging social norms about women and their role in society? To test this I am using several forms of popular online communication, including a message board segment which is a form of communication that only exists online. In a more traditional experimental setting, these exposures would happen in a lab with the participants being closely monitored. I argue that while that method is the best way to guarantee no intrusions or outside stimuli, it is also very different from the way that most people access the Internet. In particular, 18-21 year old undergraduates are unlikely to read message boards or online articles in silent rooms. On the contrary, they are likely to be listening or watching some other form of stimulus (such as a video or music) while surfing the Internet. Thus it seems only natural that if I am examining how the information people read on the Internet influences their beliefs, then I would like to test them in a way that is closest to their natural online habits.

Even though I would like the experience to be as close to their natural Internet surfing habits as possible, there are still some precautions that I am taking to ensure that my results are consistent and reliable. The first method is ensuring reliability is through the use of advanced online survey software. Responses to the survey portion of the experiment were taken via the Inquisit Online Experiment software which is published by Millisecond software. This software was first used and published in 1997 and is designed to allow experimenters to use visual data along with survey questions to administer social psychological experiments through a computer interface.

Inquisit was chosen due to its efficiency and ease of application, but also because it replicates the conditions in which most respondents would actually be using the Internet at home. This software package does include some measure of control over the user experience as it blocks the user's entire desktop while the experiment is running. So while participants could still play music or have their TV on in the background, they were not allowed to surf to additional web pages or actively use other programs on their computer – thereby ensuring that most participants would complete the experiment. By using this online experiment software, I allowed participants to experience the online articles and message board conversations in a way that replicated some traditional elements of Internet use while still maintaining some element of control over how they experienced the stimulus.

My experiment's design also takes into account issues with the sample and with survey completion. As noted earlier, one criticism of online surveys is that they are often unable to achieve samples that are representative of the national population. While this is normally an issue with any survey instrument, I have designed this experiment to focus on the population that is most available to me, which are young people between the ages of 18 and 21 with varying levels of computer experience. Because the students earn course credit for completion, there is an inherent incentive for them to complete the survey.

6.4   Descriptive Statistics

Table 1 displays the descriptive statistics for the first, second and combined samples.

Table 1 Descriptive Statistics

Variable	Sample 1	Sample 2	Full
Female	73.9%	63.6%	68.1%
Male	26.1%	36.4%	31.9%
White	76.3%	82.0%	78.2%
Nonwhite	23.5%	18.0%	17.8%
N	361	451	816

Sample 1

There were 361 participants in the first sample. All students were undergraduates with the majority being freshmen. Demographically, the sample is 74% female and nearly 76.3% white, 16% black, and 7% other races. All participants included in the study were 18 years or older, but the average age was around 20 years old with the oldest participant being 56 years old. There were 25 cases that were removed from the final sample due to incomplete survey responses. The questions used in this analysis were required, so those missing cases were due to errors or omissions on the user end, such as surveys that were not completed or for refusing to answer an essential question.

Sample 2

There were 455 participants in the second sample. It was drawn from a second round of undergraduate students one semester after the first sample. The second sample has more male representation than the first, with males making up 36.4% and females 63.6%. It has less minority representation than the first sample with 18% of participants categorized as nonwhite and 82% white. The oldest participant was 50 and the youngest 18, with the mean age 19. There were 10 cases dropped from this sample due to missing data.

Full Sample

The full sample contains 812 participants, including those sampled in the first and second

samples. The full sample was made of all undergraduate students, most of which were freshmen

and sophomores. Since the final sample has roughly 10% more males represented, the final sample

is a little more balanced than the first sample, with 68.1% being female. Racially, the sample is still

heavily skewed, with whites representing 78.2% of the sample. Overall the combined sample is still

skewed heavily female and white, but with a consistent age representation.

6.5   Dependent Variable

Ambivalent Sexism Inventory

To explore how people's views on women and their role in society can be shaped by the way

information is presented in online settings, I first employ an individual-level analysis of personal

beliefs. To measure people's attitudes toward sexism, this experiment uses the Ambivalent Sexism

Inventory (ASI), a measure designed to tap into the amount of sexism, or prejudicial attitudes

individuals hold about gender. The ASI examines two types of sexist attitudes; hostile and

benevolent sexism (Glick and Fiske 1996). Hostile sexism conceptualizes women as being hostile to

masculinity and patriarchy, while benevolent sexism conceptualizes women as lesser beings that

need protection. Both hostile and benevolent sexism encompass 3 elements of male ambivalence:

paternalism, gender differentiation, and heterosexuality. Paternalism is the idea that women are

undeveloped to some degree and thus must be protected by men. Gender differentiation is the

assumption that the biological differences between males and females justify different social

positions. Heterosexuality in this context is the belief that women use men's desire for intimacy

and sex with them as a weakness to be exploited (Glick and Fiske 1996, Glick et al. 1997, Glick and

Fiske 2001).   The creators of the measure argue that sexism is a form of prejudice, but that it differs

greatly from racial prejudice because it is a deep ambivalence rather than uniform antipathy (Glick

and Fiske 1996, Glick et al. 1997, Glick and Fiske 2001). Thus while racial prejudice is often driven by a dislike or hatred of those of a differing race, sexism functions on a more complex level – women have been revered throughout history just as they have been demonized and discriminated against (Eagly, Makhijani and Klonsky 1992, Fiske and Glick 1995, Guttentag and Secord 1983).

The scale itself reflects the complexity of examining sexism on two axes. The initial scale conceptualized by Glick and Fiske consisted of 140 statements of which respondents were asked if they agreed or disagreed with on a Likert scale of 0 (disagree strongly) to 5 (agree strongly) (Glick and Fiske 1996). The version of the scale used in this study is the short form, which is 22 questions long with 11 hostile sexism statements and 11 benevolent sexism statements. The hostile sexism measures tap into the categories of dominant paternalism, competitive gender differentiation, and heterosexual hostility. Benevolent sexism items tapped into categories such as protective paternalism, complementary gender differentiation, and heterosexual intimacy. The overall ASI score is taken from all 22 questions, while the hostile and benevolent scores are derived from their specific questions. I used Cronbach's Alpha as a measure of reliability for the scale (Bland and Altman 1997). All scores were suitably high enough to use the instrument, with the benevolent scale scoring a .630, hostile a .678 and the overall ASI having a score of .814.

The ASI allows researchers to measure an individual's propensity toward sexism in a way that reflects the complexity of modern social discourses on gender, which – as noted earlier – have never been completely focused on hostility towards women and have instead ebbed and flowed between paternalist benevolence and the more harsh antipathy. There are other measures of sexism and gender inequality that have been used frequently in social science research. Of these the most noted are Eagly and Mladinic (1989), Swim et al. (1995) modern sexism scale and Tougas et al. (1995) neosexism scale. While these scales are all valid and have been used consistently in social science research, they do not allow for the multi-pronged analysis possible with the ASI,

through the dimensions of hostile and benevolent sexism. In particular, the ASI is focused on the interpersonal elements of sexism that are activated through social interaction. This lines up well with the theoretical orientation of this project, as I am interested in the way that communication and interaction can reactivate personally held beliefs about sexism (Glick and Fiske 1996, Glick et al. 1997).

6.6   Independent Variables

My analysis also includes several additional variables that were used to control for other elements of the participants' life experiences and differences in skill level. Of primary concern was the amount and type of Internet experience the participants had. Other variables include the amount of time respondents spent participating in activities outside of their school work and using the Internet.

Internet Use

Studies have linked the length of time that one spends on the Internet with a number of economic, social and psychological outcomes (Jackson et al. 2006). In young people, Internet use is associated with increased academic achievement; children who used the Internet more had higher scores on standardized tests of reading achievement and higher grade point averages (Jackson et al. 2006). So there is strong empirical evidence supporting that the time someone spends online influences their behavior. However, for this study I am interested in separating a participant's familiarity with Internet culture from the social processes that underlie my hypotheses. Thus this measure and the subsequent measures will be used to illustrate how likely a participant is to know about Internet culture and what sites/areas of the web are reliable and which are not.

Demographic Characteristics

The remaining independent variables consist of a series of variables related to basic demographic information such as age, gender, college grade level, major, and race. College grade level, major and age were used mainly as diagnostics to assume a varied sample was attained and are not used in the analysis. Race is categorized into white/nonwhite binary because the nonwhites' ASI scores were not significantly different from each other. Gender is categorized into male /female.

6.7   Experimental Methodology

The experiment itself has 2 different manipulations in which participants are exposed to a form of media and then take a survey. The first manipulation is the *article* or *message board*, which determines if the participant sees the stimulus in either an opinion article or message board format. The second manipulation is *control* or *stimulus* which determines whether the content is designed to activate gender-based reactions (also referred to as 'gender primed'), or the content is expressly designed not to mention gender. There are four conditions overall, with two stimulus conditions and two control conditions.

Procedure

Participants were contacted via email from a research organization affiliated with the university and invited to participate in a research study about how people use the Internet. The survey is administered entirely online through the Inquisit software program. Inquisit is a software package designed to administer experiments via the Internet. This experiment was administered online because it would allow a student to view the stimulus materials in a location of their choosing, so as to replicate their real life conditions of Internet use. Figure 1 outlines the overall design of the experiment.
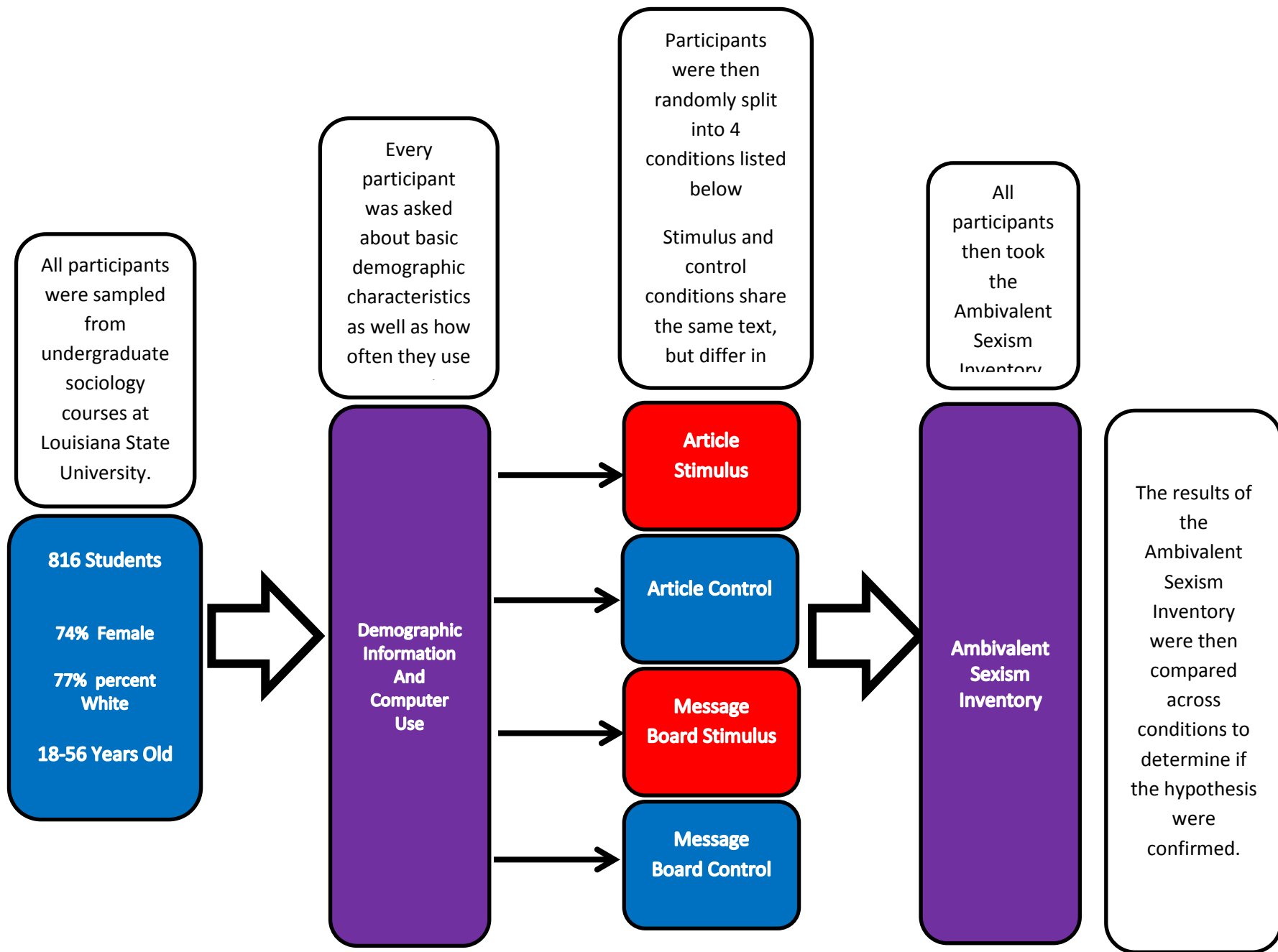
Figure 1 Outline of Experiment Procedure

The survey given to students consisted of 6 parts. Participants were first asked a series of questions about their use of the Internet. These questions focus specifically on the amount of time each participant accesses the Internet and through which devices they are most likely to use when going online. The survey also asks questions about their activities outside the Internet and how often they do these activities, as well as the duration of the activities.

Participants also took the Ambivalent Sexism Inventory (ASI) after their exposure to the manipulation (Glick and Fiske 1996). After the initial online survey, participants were exposed to the stimulus. Depending on the condition to which they were assigned, students were exposed to a sample message board conversation or a sample of an opinion-column style article snippet, all of which are detailed below.

Manipulation Conditions

Participants were assigned to one of four conditions. In each condition, participants were told they were part of a larger study focusing on how people conceptualize information on the Internet. They were informed the survey would take approximately 30 minutes. Participants were also presented with information detailing the questions that were going to be asked of them and given an option to opt out of the survey. Each condition gave a preview of the type of material the participants would be exposed to.

In the manipulation conditions, participants were exposed to one of two segments of a message board conversation, or one of two segments from online opinion columns. Each of the stimulus examples in the manipulation conditions was themed around sexism, with one example being hostile sexism and the other benevolent sexism (Glick and Fiske 1998). The hostile example expressed animus toward women in an opinion article entitled "Women Underrepresented in Higher Paying Jobs Because They are Not Good at Them." The content of the article focused on arguing that women are not getting paid as much as men because their work is not as valuable. The

benevolent article, titled "Women Need Social Safety Net; Not Men," argued that women are delicate

and need to be protected by the men of society through government-sponsored health care. All of

the manipulation conditions shared the same language, with some small modifications. To create

the message board stimulus, the article text was divided into segments that resembled a

conversation between individuals who supported the sexist theme of the segment. [4] The articles

were all written with this purpose in mind, so the dialogue was structured to be split between

paragraphs and to have each paragraph seen as a different speaker. See Figure 2 for an illustration.

All stimulus and control images are presented in the appendix.

Article Format		Message Board Format	
Paper Title			
	Text A	User A	Text A
	Text B	User B	Text B
	Text C	User C	Text C
	Text D	User D	Text D
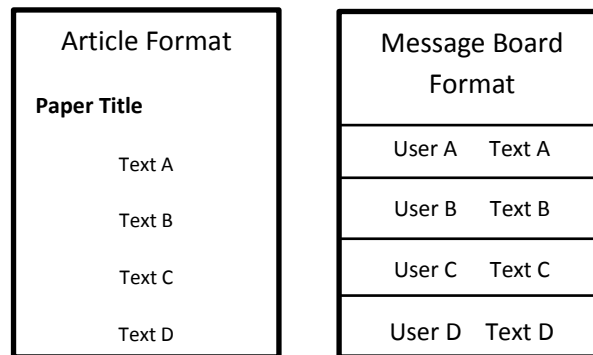
Figure 2 Examples of Media

Baseline Conditions

In order to test my hypotheses, the measures from manipulation conditions were compared

to baseline scores derived from two other conditions that did not contain manipulations. The

article baseline followed the same format as the manipulation condition except the subject matter

was focused on non-sexist and non-sexist material. The first control condition used an article titled

"Defeated by a Dog" which featured a man complaining about his neighbor's dog using the restroom

on his lawn. The second control article was entitled "Climate Change is Nature's Solution, Not the

_____

[4] Early testing indicated that the language used in online message board conversations was much more aggressive than what one might see in a published opinion column, so an additional language manipulated condition was added. In this condition the text was the same as in the first message board stimulus condition, except the female pronouns were changed to more sexist terms. This condition is not included in the data analyses presented here.

Problem," which focused on a columnist arguing that climate change is a natural phenomenon.

Both of these articles were written to sound like real opinion columns and to *not* prime the gender

beliefs of the individual in charge. As with the manipulation conditions, the message board baseline

condition used the exact same text as the article baseline, but the article was segmented so that it

resembled a message board conversation. The control columns and message board conversations

are present in the appendix.

Chapter 7: Analysis and Findings

This analysis will be presented in three parts. The first two parts will be the individually presented results of the first and second waves of my experiment. This analysis contains the five initial conditions and the Ambivalent Sexism Inventory. The "dirty" condition is a condition that used extreme language to better simulate the message board environment. It showed no significant differences in any area and was not fundamental to the experiment. As such, it is not included in the full comparison in order to streamline the analysis. The third analysis will contain the complete and final data set with a significantly larger sample size that comes from adding both samples together and then breaker the larger sample down by demographic groups.

7.1   Findings of Sample 1

This section presents the results of the first run of this experiment. The initial samples looked at 5 conditions instead of the 4 used in the full sample of the study. The dirty condition was meant to more accurately simulate the language used by people on most message boards, which tends to be very informal and often features extensive use of profanity. This extra condition was added in as result of a small number of respondents suggesting the text did not sufficiently represent real message board discussion in comments sections that were present in the early pre-tests. As demonstrated below, the additional condition did not produce results that were significantly different from the condition it was meant to replace and was not used in future analysis. Table 2 illustrates the results for sample 1.

Table 2 Overall Results for Sample 1

Condition	N	ASI	SD	Benevolent	SD	Hostile	SD
Article Control	63	2.42	0.53	2.20	0.77	2.66	0.67
Article Stimulus	97	2.53**	0.61	2.32	0.79	2.74	0.73
Message Board Control	78	2.39	0.58	2.14	0.77	2.64	0.73
Message Board Stimulus	65	2.32	0.60	2.18	0.71	2.46	0.86
Message Board Stimulus D	68	2.41	0.62	2.27	0.89	2.56	0.89
Levene's		0.139		0.145		1.608	

Ambivalent sexism is the overall sexism score for the respondent – referred to here as the overall ASI. A higher score of overall ambivalent sexism means the individual or group displayed a more sexist attitude taking both hostile and benevolent sexism into account, with the highest score possible being a 6. The variation in the overall ASI was tested with an ANOVA. Homogeneity of variance tests were not significant at the .05 and showed sufficient variation in the groups to assume unequal variances.

Benevolent sexism is the form of sexism most associated with treating women as special but lesser and is considered a patronizing form of sexism. A higher score means the individual displayed a higher amount of benevolent sexism or that the individual is more likely to believe that women need to be protected by men in society. Homogeneity of variance tests between conditions were not significant thus unequal variance between groups was assumed (Levine Statistic =.144, p=.189). The ANOVA shows an insignificant amount of variation within the entire group (F =.4, p=.753).

Hostile sexism is the form of sexism most associated with viewing women as a threat to male dominance and treating them with hostility. A higher score means the individual displayed a higher amount of hostile sexism. Comparison of means illustrates similar conclusions to those of the overall ambivalent sexism results. Homogeneity of variance tests once again indicate that

unequal variances should be assumed (Levene Statistic = 1.376, p. =25).   In this case the ANOVA

shows a significant amount of variation between groups in the model (F=2.976, P < .05).

Interaction Comparison

The message board conditions are designed to simulate social interaction and activate the

gender frame to some degree – meaning that exposure to the sexist information is designed to

activate culturally held gender information within the participant. I did observe some differences in

ASI score, but none of them were significant. The stimulus message board conditions showed a

lower overall ASI in the clean language condition, but a higher overall (but insignificant) ASI for the

dirty language condition. For benevolent sexism, exposure to the stimulus message board

conditions lead to a higher score, but the effect was larger in the dirty language condition and

neither was significant. For hostile sexism the effect is different as both message board stimulus

conditions had lower hostile sexism scores, indicating that the overt sexism may cause participants

to be more sensitive to the sexist message and thus influences their answers. The initial outcomes

indicate there is a possible effect brought about by the exposure to the gendered materials or

gender priming, but there is no statistical significance, so reading the message board conversations

does not prime the gender frame and does not lend support to H1.

Article Comparison

In the article conditions, which were presented as online opinion columns, the stimulus

conditions had higher scores on all elements of the Ambivalent Sexism Inventory over the control

conditions – though the effect is not statistically significant. In terms of benevolent sexism the

comparison of the two article conditions is also statistically insignificant. This means that the

stimulus article did not sufficiently influence the beliefs of participants. What is most interesting

about this finding is that the presentation of legitimacy in both conditions is consistent, so neither

of these formats looks more or less legitimate and in that case the sexist presentation is

meaningless. Like the prior condition there is a difference in the mean score, but that difference is not statistically significant, so the message itself is not priming benevolent sexism within the individual, even when the text used is more explicit. Comparing the two article conditions by the hostile sexism measure is also statistically insignificant. This means that the stimulus article did not sufficiently influence the beliefs of participants, which means this result does not lend support to H2.

Message Board Legitimacy V Article Legitimacy in Influencing the Gender Frame

In the case of overall ASI score, the article stimulus condition had a significantly higher score than the stimulus message board condition, with a T-test comparing the two showing a highly significant difference (p<.01) – meaning that the article stimulus condition activates the gender frame. All other T-test comparisons were not significant for the overall ASI. For benevolent sexism, neither the message itself nor the format is effective in changing or inciting beliefs that women are inferior to men and need to be protected. In the case of hostile sexism, neither the text itself nor the format is effective in changing or inciting beliefs that women are inferior to men. So while there is no significant difference between the isolated conditions and their control counterparts, comparing the two stimulus conditions show a statistically significant difference between the clean language message board condition and stimulus article condition. This directly supports H3.

The Dirty Condition

Overall the dirty condition has added little to the analysis and does not seem to be a necessary inclusion in the full data set. Initially the measure was created in response to participant suggestions that the language of the message board condition was not sufficiently similar to a real message board – where people tend to use aggressive language and significantly more profanity than one might encounter in most public settings. As noted, however, even though the condition

used harsh language and pejorative terms for women, it did not increase or significantly change any of the ambivalent sexism measures presented in the analysis.

7.2   Sample 1 Summary and Discussion

A cursory examination of the data shows that different formats of online communication do influence individual views of sex and gender. This influence, however, may have more to do with the legitimacy of the source. By the numbers, the gender-primed condition only showed a higher ASI score in the article condition and that was only when compared to the message board stimulus condition. Reading sexist message board conversations did not show a higher level of gender bias in individuals. In most cases, participants exposed to the message board stimulus showed lower, though insignificant, ASI scores in all measures. From a media legitimacy perspective this makes sense. The online message board has no marking that would confer any additional legitimacy to the words written below. As far as the participants knew, this was likely little different than eavesdropping on someone else's conversation in public.

The label on the online opinion column was enough to lend legitimacy to the comments because they were designed to represent a generic newspaper that could be in almost any major city. Advocates of the Internet often argue that it presents new spaces where people are free to create their own identity and interact with each other free of the norms of the offline world (Crang, Crang and May 2004). The legitimacy that newspapers lend to the information makes it significantly more influential than the information presented by miscellaneous individuals on the Internet (Tyler and Huo 2002, Tyler 2003, Tyler 2006).

There is also the issue of Internet experience. It is likely that there is an age effect buried within this process. The participants involved in this study were all students at a major university who were likely to have significant exposure to the Internet. That exposure might make them less likely to believe what they read in online message boards because they would be more familiar with

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the reputation of message boards online, though there are no empirical studies to back up this assumption.

Finally, this finding supports existing theories concerning legitimacy and the gender frame. Ridgeway argues that the complexities of our social world force people to categorize others into essential categories that we use to make decisions. These categories are based on existing cultural knowledge regarding gender. The norms that are exported through socialization and kept in place through interactions that rely on them and thus they constantly lag. The Internet represents an interesting opportunity to shake this cycle to some degree, as new social groups could form and communicate with lessened influence from the society at large meaning that norms around gender might be more free to shift due to the separation from traditional mechanisms that lead to gender sorting – i.e. we can no longer see someone's gendered clothing or hear their gendered name thus we no longer make the same assumptions about them. Reading sexist attitudes in an online opinion column lead to a significantly higher ASI score, when compared to the online sexist message board. This supports legitimacy because the only major difference between the two groups was the title of a fictitious newspaper and where the names were placed. It is unclear in these results if the gender frame is supported, but the article control condition was significantly lower than the article stimulus condition. Mere exposure to sexist beliefs legitimized through a newspaper source led to a higher hostile sexism score.

Within this experiment it appears that participants will look to the legitimacy of a media source when deciding whether or not to believe it. In the absence of more traditional agents of legitimacy such as respected societal figures, parents or elders, participants seem to find legitimacy in trappings of traditional forms of media.

7.3   Findings of Sample 2

Structurally, sample two looks very similar to sample one, though as noted in the descriptive statistics, there are more males and fewer nonwhites. The sample shows sufficient variation to continue analysis, though the benevolent category is more similar than the overall and hostile categories. Table 3 displays the results of sample 2.

Table 3 Sample 2 Results

Condition	N	ASI	SD	Benevolent	SD	Hostile	SD
Article Control	90	2.40	0.59	2.22	0.68	2.59†	0.89
Article Stimulus	101	2.38	0.56	2.30	0.72	2.45	0.76
Message Board Control	96	2.37	0.53	2.28	0.65	2.46†	0.72
Message Board Stimulus	86	2.47	0.63	2.28	0.71	2.65†	0.88
Message Board Stimulus D	78	2.48	0.64	2.40	0.76	2.56	0.93
Levene's		0.770		0.287		0.718	

Interaction Comparison

Unlike the first sample, sample 2 shows support for hypothesis 1. The message board stimulus condition is significantly higher than the message board control condition at p*<.1 but only in the hostile condition.

Article Comparison

Sample 2 shows no support for the second hypothesis. Exposure to the sexist article did not lead to higher ASI scores when compared to the control.

Message Board Legitimacy V Article Legitimacy in Influencing the Gender Frame

The second sample also shows support for hypothesis 3. The message board stimulus is significantly higher than the article stimulus. So while exposure to the sexist article did not lead to an increase second sample, it was significantly lower than the message board stimulus. The sexist message board was more effective at priming the gender frame than the sexist article.

7.4   Sample 2 Summary and Discussion

Samples 1 and 2 give very different results on the same experiment. The only major differences in the two samples are the higher male representation and lower nonwhite representation in the second sample with roughly 10% more males and 5.5% fewer nonwhites. While the first sample showed the sexist article leading to higher ASI scores than the sexist message board, this sample shows the opposite effect. Reading sexist message board discussions led to significantly higher ASI scores. In the second sample, there was also support for hypothesis 1, with the message board stimulus exposure leading to significantly higher ASI scores when compared to the message board stimulus.

7.5   Full Sample with Demographic Analysis

Table 4 shows the final results for the full sample, which sis both samples added together. The overall variation in the conditions was tested with an ANOVA. Homogeneity of variance tests were not significant at the .05 level and showed sufficient variation in the groups to assume unequal variances. The ANOVA did show significant variation between the conditions (F=1.732, p=.161).

Table 4 Overall Results for Full Sample

Condition	N	ASI	SD	Benevolent	SD	Hostile	SD
Article Control	153	2.41	0.56	2.21	0.71	2.61	0.62
Article Stimulus	197	2.45	0.49	2.31	0.75	2.59	0.54
Message Board Control	173	2.39	0.54	2.22	0.71	2.55	0.53
Message Board Stimulus	148	2.40	0.61	2.24	0.72	2.56	0.69
Levene's		0.506		0.299		1.222	

Interaction Comparison

Looking at the overall ASI, there are no significant differences between the message board stimulus and message board control conditions. So looking at the overall measure, there is no support for H1 in the final sample. This result is consistent for both hostile and benevolent sexism as well. The final sample seems to wash out all of the findings that were present in the first and second samples, likely due to the stark differences in their respective findings.

Article Comparison

As with the previous comparisons, the ASI score across all measures shows no significant differences between categories. So the gender primed article did not have any significant effect on the ASI scores of participants. This implies that reading sexist articles online may activate the gender frame in the same way as social interaction. It does not mean that reading sexist information online does not reinforce the culturally held sexist information in participants – reading the information could still reinforce the gender frame, but not in the same way that interaction might. Either way, this finding does not support H2. While this finding is disappointing, it is consistent with the first two samples.

Message Board Legitimacy V Article Legitimacy in Influencing the Gender Frame

When comparing the two stimulus conditions the results are similar to the first sample but insignificant at any level, which is consistent across all measures of sexist attitudes. The

contradictory findings of the first two samples again wash out here and there is no support for the

third hypothesis in the combined sample. With this analysis, I do not have sufficient evidence to

confirm H3.

7.6   Comparison by Race

Table 5 shows the results of the full sample. Looking at the effect by race is difficult due to

the nature of the student sample that was taken. A strong majority of the participants were white,

which led to very small categories of nonwhite students. This led me to pursue this analysis as two

categories of white and nonwhite rather than breaking it out by individual racial group, though the

nonwhite group was small; all groups contained at least 30 participants, so they were viable for

statistical comparison. Of the nonwhite group, over 60% are black.

Table 5 Full Sample Comparison by Race

White				
	N	ASI	Benevolent	Hostile
Article Control	118	2.40	2.17	2.62
Article Stimulus	160	2.48	2.34	2.60
Message Board Control	132	2.38	2.19	2.56
Message Board Stimulus	109	2.43	2.25	2.59
Levene's		0.380	0.232	0.467
NonWhite				
	N	ASI	Benevolent	Hostile
Article Control	35	2.45	2.31	2.59
Article Stimulus	36	2.39	2.20	2.57
Message Board Control	41	2.43	2.31	2.54
Message Board Stimulus	39	2.33	2.19	2.47
Levene's		0.476	0.253	1.873

Interaction Comparison

Again, the overall ASI shows some numerical differences but there are no statistically significant differences between conditions at this overall level. Looking at the other elements of the ASI produces one significant result. For nonwhites, the hostile sexism category is significantly lower than the control category ($p < .015$). This finding is interesting as by dividing the group up by race shows that the message board condition does have an effect on individual beliefs, but in the opposite direction of what the literature suggests; raising the question if exposure to sexist message boards lowering the ASI means that it is activating the gender frame. The sample of minority students was more female than male, so that could explain some elements of this finding as the women could have been more sensitive to the sexist statements. This result does not support H1.

Article Comparison

While dividing up the sample by race did produce findings for the message board category, it did not produce a significant finding for the article conditions. Even the hostile and benevolent sub-categories showed no results. This finding does not support H2.

Message Board Legitimacy V Article Legitimacy in Influencing the Gender Frame

As with the above category, there is no significant difference between racial groups and there was no significant difference between elements of the ASI. Dividing the sample by race produces no support for H3.

7.7   Comparisons by Gender

Overall

Splitting the sample by gender examines the elements of this social process that may be influenced by gender. Since I am talking about sexism that is aimed specifically at women, then it is possible that men and women will have different reactions to the stimulus. Table 5 shows the results of the comparison by gender.

Table 6 Full Sample Comparison by Gender

Male				
	N	ASI	Benevolent	Hostile
Article Control	104	2.35	2.15	2.56
Article Stimulus	133	2.48	2.35	2.60
Message Board Control	116	2.48	2.24	2.71
Message Board Stimulus	97	2.44	2.47	2.63
Levene's		0.504	0.349	0.699
Female				
	N	ASI	Benevolent	Hostile
Article Control	104	2.44	2.23	2.65
Article Stimulus	133	2.44	2.30	2.59
Message Board Control	116	2.34	2.22	2.47
Message Board Stimulus	97	2.38	2.24	2.52
Levene's		2.095	0.741	1.346

Interaction Comparison

Comparisons between the stimulus message board and control message board categories showed no significant differences.

Article Comparison

A comparison of male and female ASI scores in the article stimulus and article control conditions produces no significant differences. Reading the sexist articles does not appear to have a

direct influence on an individual's gender attitudes. This finding is consistent throughout all measures of the ASI for these two conditions and does not support H2.

Message Board Legitimacy V Article Legitimacy in Influencing the Gender Frame

As with the previous comparison, gender seems to make no difference in the overall scores though there is some variation. The hostile sexism score for women would be significant for a one-tailed T-test ($p<.10$) rather than a two tailed. I have selected to use a two tailed test for this analysis as I did not predict a direction for the hostile and benevolent elements of the ASI. In this case the score was lower for women in the hostile sexism category, which is again intuitive as reading the words of people who say discriminatory things about a group a person belongs to will likely make them display more egalitarian gender beliefs. Regardless, there is no support for H3 when dividing the group by gender.

7.8   Comparisons by Internet Experience

Overall

The Internet experience measure was designed to ensure that I could control for the amount of Internet experience each user had. It seems logical that the amount of time that someone spends using the Internet would have some sort of an influence on how they perceive the legitimacy of these messages. Again all measures had sufficient variation to make comparisons and again there are differences between groups but none are of statistical significance. Table 7 lists the full results of the analysis by Internet Experience.

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Table 7 Full Sample Comparison by Internet Experience

More than 51% of Day Spent Online				
	N	ASI	Benevolent	Hostile
Article Control	59	2.39	2.21	2.58
Article Stimulus	73	2.46	2.46	2.64
Message Board Control	79	2.38	2.38	2.52
Message Board Stimulus	65	2.36	2.36	2.49
Levene's		0.587	1.988	0.524
Less than 50% of Day Spent Online				
	N	ASI	Benevolent	Hostile
Article Control	90	2.42	2.20	2.64
Article Stimulus	122	2.45	2.34	2.56
Message Board Control	92	2.38	2.19	2.57
Message Board Stimulus	83	2.43	2.25	2.61
Levene's		0.691	0.426	1.393

Interaction Comparison

Splitting the sample by Internet experience does show a significant difference, but only in the hostile sexism category and again it shows a lower ASI score. People who use the Internet more often and who were exposed to sexist message board conversations have a lower ASI score than those in the control condition. In this case it likely means people who use the Internet more often already know that message boards may be less than trustworthy. They are still influenced by them, but not in the main ASI category and in the opposite direction than I hypothesized. There is no support for H1 here.

Article Comparison

Once again there is no support at all for H2 – reading sexist articles online does not lead to a different ASI score.

Message Board Legitimacy V Article Legitimacy in Influencing the Gender Frame

There is no support for H3 either when dividing the group by Internet experience.   The legitimacy of the article stimulus is not enough to shift opinions when compared to its control condition or the other stimulus.

Table 8 Hypotheses Tested

#	Hypothesis Description		Sample 1	Sample 2	Full Sample Overall	Race W	Race NW	Gender M	Gender F	Internet Exp High	Internet Exp Low
H1	**Message Board Stimulus ASI score higher than Message Board Control ASI score**	Overall	N	N	N	N	N	N	N	N	N
		Hostile	N	N	N	N	Y**	N	N	N	N
		Benevolent	N	Y†	N	N	N	N	N	N	N
H2	**Article Stimulus ASI score higher than Article Control ASI score**	Overall	N	N	N	N	N	N	N	N	N
		Hostile	N	N	N	N	N	N	N	N	N
		Benevolent	N	N	N	N	N	N	N	N	N
H3	**Article Stimulus ASI score higher than Message Board Stimulus ASI score**	Overall	Y**	N	N	N	N	N	N	N	N
		Hostile	N	Y†	N	N	N	N	N	N	N
		Benevolent	N	N	N	N	N	N	N	N	N

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Chapter 8: Discussion and Conclusion

8.1   Hypotheses Results

Table 8 shows the results of each comparison and if it supported or did not support the

hypotheses. Conditions that supported a hypothesis were have a 'Y' in them and are highlighted.

The significance level of their comparison is also listed. Conditions with 'N' did not support any

hypothesis.

Hypothesis 1

In the first sample, there was no support for H1 at all. Conditions that were exposed to the

sexist message board conversations did not have significantly higher ASI scores than the control

message board conditions.   In the second sample, there was support for H1 in the hostile sexism

categories. The sexist message board condition had a significantly higher ASI score than its control

message board control counterpart. This support unfortunately disappears in the combined final

sample. So in total, the first and final samples do not support H1 and the second sample did

support it.

Hypothesis 2

There is no support in any condition for hypothesis two in any versions of this experiment.

Though there are some differences in ASI score, they are not significant under any circumstances,

even when dividing the sample up by demographic characteristics. This means that reading sexist

online articles in this experiment did not lead to higher ASI scores at all and H2 is rejected.

Hypothesis 3

Hypothesis 3 was supported by the first sample, but is not supported in the second sample.

In fact, the second sample has contradictory finding showing the stimulus message board category

with an ASI score that is significantly higher than the sexist article. In the final sample, there is no

support for this hypothesis at all, even when split up by demographics. This means that even the

legitimacy of a newspaper did not make the sexist messages it supported seem more legitimate and "right." H3 is supported by the first sample, not supported in the second and final samples.

8.2 Discussion

Social Interaction

My initial theory set out to prove that, in some way, reading online communications such as message boards were like social interactions in that they activated the gender frame, reinforcing traditional gender norms and playing a role in lagging cultural gender norms (Acker 1990, Ridgeway and Correll 2004, Ridgeway 2009, Ridgeway 2011, Risman 2004b). There are obvious comparisons to be made between message boards and in-person social interactions; therefore it is likely there was going to be some similarity. Given the design of this experiment, it is not possible for me to prove that viewing online message board conversations works exactly like offline social interaction, but I can show that reading sexist material does lead to a difference in ASI score, indicating that the exposure to sexist material, in some way, activates the gender frame.

In the first sample, the online message board did not lend any evidence to the idea that reading online sexist message board conversations activates the gender frame. In the second sample, there is support – reading sexist articles did lead to a significantly higher ASI score. In the final sample, the overall ASI is not significantly different in stimulus categories, but is significantly different when subdivided by race. In only one sub-set of a condition does exposure to sexist message board conversations actually show any difference in the ASI score and that was only for nonwhites in the benevolent sexism condition and it showed a lower ASI score, which is the opposite direction of what I hypothesized. This finding lends some support to the argument that mere exposure to sexist attitudes being displayed in a conversation-like format is enough to activate the gender frame which keeps sexist information relevant in the bank of cultural knowledge. It seems there is something more complex going on and that people are affected by

reading sexist message board conversations, but the contradictory findings indicate that the process could be significantly more complex than just emulating social interaction.

The Gender Frame

While the interaction finding is muddy, overall in this study there is some evidence that the gender frame can be activated by interacting with sexist material in online settings. In the first sample people exposed to gendered materials legitimized by a fake newspaper from an intentionally ambiguous city had higher ASI scores than people exposed to sexist message board conversations. Because an article is more like a media source rather than a conversation, it is likely that any influence lent by the article is due to the legitimacy of the medium. In the second sample, there is an opposite finding. The sexist condition that simulated social interaction had a significantly higher ASI scores when compared to both the stimulus single author and the control multi-author formats. These findings combined point to some evidence that the gender frame can be activated in these online communications that simulate interaction. That finding goes away in the final sample, likely washed out by second sample. However, the hostile sexism score for nonwhites does show a significantly lower score than its control counterpart. The score being lower does not mean that the gender frame was not activated, but it does mean that my finding is not consistent with the literature, which points to interactions reactivating sexist beliefs and increasing them.

Legitimacy

As mentioned in the review of literature, legitimacy is lent to an organization or institution when people believe that its findings or decisions are derived through processes that are right and just (Tyler 2003, Tyler 2006). So in this case the legitimacy of the online article or online message board could help confirm beliefs that participants hold. The results show that the message board stimulus condition is not significantly different then either the online article stimulus or the

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message board control in that they do not really shift attitudes. The first sample showed a significantly higher ASI score in people who read the sexist article when compared to the sexist message board. Since the messages were exactly the same across stimuli, the article's legitimacy gives influence to the sexist ideas. This finding is present in neither the second sample nor the final combined sample. The second sample also showed the sexist message board condition with a significantly higher ASI score than the sexist article, which is in stark contrast to hypothesis 3.

The obvious conclusion from all of this is that online newspapers may not have the same legitimacy as offline newspaper, or that the design of my fake newspaper did not inspire the same type of response that a trusted newspaper source would.   I figured splitting the sample up by various demographic characteristics would lead to some interesting findings, or at least explain some of the differences, but only the race split showed any significantly different ASI scores and only in the hostile sexism message board category.

Change in Finding between Samples

The story of this study overall is that of shifting findings. The finding in the first sample is significantly different from the second sample and most of the findings overall washed out by combining the two. Looking at it demographically, the new sample had 10% fewer female participants which indicate a more male-favored group. A significant gender difference seems like a possible explanation for a difference in findings. Another possibility is the source of the sample. A different set of instructors were used to acquire the second sample. While all of the samples were taken prior to the gender lecture in the classes, each lecturer has a starkly different gender presentation that may themselves prime some gender attitudes within the participants. Some preliminary analysis from a different study in which the grade outcomes and ASI scores were compared between classes indicates that the instructor choice may have some effect on student beliefs (Gremillion and Chancey 2013). In this other study, all elements of the course were the

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same in both groups, including the lecture materials and scripts used during the lecture, the only differences between the courses was at the instructor level.

8.3 Study Limitations

The support found in my first and second samples show that this experiment had merit, but its design had some significant flaws. I would very much like to continue in this line of research and improve upon this design. This experiment began as a wide net meant to catch some elements of what message boards were and how influential they are. A future study would do more to test how interacting with a message board influenced a person's opinion on gender and sexist attitudes. It's possible that I could use computer simulations and simple artificial intelligence routines to "fake" message board conversations randomly and give the user a more interactive role in the process – further blurring the line between social interaction online and offline. There is a precedent for this type of study. In a forthcoming publication, Justine Tinkler, myself and Kira Arthurs used the Inquisit program to make participants believe they were communicating with someone of the opposite sex in order to test the efficacy of sexual harassment videos and programs. The study's results suggest that the effect of a law on social change may depend on characteristics of the messengers (Tinkler, Gremillion and Arthurs 2013).

That's an optimistic view of what can be achieved with this design and fundamental idea. The more likely scenario for improvement is that I would replace the current set of demographic and independent variables with a more intuitive set of measures to control for the user's experiences both online and offline. With the scholarship giving significant evidence that online life often supplements offline life, better measures could allow for more sophisticated controls that could show which characteristics and social group involvement may make one more susceptible to this type of influence (Wellman et al. 2001). For example students who play games on Facebook may be less likely to see significant differences in ASI scores when compared with those who

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regularly chat online as they would be more familiar with the types of communications that happen online and whether or not they are trustworthy. I would have liked to have included these measures in the first runs of this experiment, but did not have sufficient time to implement them. The participants themselves need to be more varied as well. Because the sample was taken from a large university, there was a significant age and gender skew. Further studies need more gender and age variation to outline any larger effects.

There is also the issue of the "dirty" condition. Though there was no real statistical difference in ASI scores – there might be something to criticism that the message board felt *fake* to the participants. What the lack of significance may show is that just sprinkling dirty words through the article doesn't really make it any more real or convincing. Though changing the text too significantly decreases my ability to make direct comparisons, so it may just be better to design another type of experiment to deal with this issue and keep the dirty condition out.

Policy and Criminal Justice Implications

The findings of this study might be relevant to public policy and criminal justice as well. My research shows that merely reading content that primes one of the master frames of social interaction, gender in this case, can influence the attitudes of individuals and that its efficacy depends on the format it uses and who is looking at it. On its own, the gender frame being activated through the reading of sexist information has important implications for criminal cases of sexual assault, spousal abuse and other more significant gender-based hate crimes. Expanding this study to examine the other frequently discussed frames like race and age may lead to some interesting findings. If my finding is consistent across the frames that organize social interaction, then my finding could indicate that reading information about racist ideas could also incite people who commit hate crimes, which could open the window for this type of evidence to be used in future court proceedings.

This finding may also be particularly germane given current events regarding privacy and the government's actions regarding personal information and national security. Within the last year data mining by large corporations and government institutions has become an important social issue. In particular the NSA has come under fire for reading emails and logging cell phone records in the name of national security and the protection of the American people. Many are concerned that the information collected by the FBI will someday be used against them in court or hope the FBI will use the information to fight terrorism. The results of my study have no implications for the willingness of the government or private corporations to read private information nor upon its constitutional legality, but it lends support to the idea that reading legitimated messages online shapes beliefs.

In many ways this question speaks to the some of the broader issues of the Internet and online life. One major change that the Internet has brought to life is a new, if unrealistic, sense of anonymity. You can be anyone online. It's an active form of Internet anonymity and the most common, but it's not what this study is looking at. This study is relevant to a more passive form of anonymity – the idea that you can freely look at anything online without anyone knowing and without it having an effect. The NSA scandal exposed the hollowness of the former and this study sheds light on the latter. What someone reads online does change who they are – as shown by the findings in my first and second samples sample and by some elements of the final full sample. In some cases the exposure to sexist information shifted ASI scores lower, while in others it activated the gender frame and raised them. With a broader sample of the population and a set of more refined control measures, a more advanced version of this experiment could have significant implications.

8.4   Conclusion

This study began as an attempt to extend and borrow some elements of Ridgeway's theory

of lagging gender norms to examine how exactly culturally held information transfers through

online environments. Per Ridgway and numerous other social psychologists, social norms that

disadvantage women are kept in place because they are reactivated through social interaction

(Ridgeway 1997, Ridgeway 2009, Ridgeway 2011). Because the same culturally held norms are

constantly being reactivated and not changing to acknowledge shifts in the material structure of

work – culturally held beliefs about gender lag and women suffer the consequences since those

norms are fundamental to society and are used to coordinate social interaction which keeps women

in a subordinate position (Ridgeway 2011, Risman 2004b).

I did not intend to test any elements of Ridgeway's theory but to borrow some elements of it

and reassemble them to test elements of how online communications work. From her work on the

gender frame itself I borrowed the idea that gender is a fundamental element of social organization

and works in the background of all other social processes, even functioning heavily in new areas of

technology (supported through research on high tech firms) with new organizations are still

heavily subject to the gender frame (Smith-Doerr 2004, Whittington and Smith-Doerr 2008).

Secondly I borrow the notion that gender norms lag due to the nature of human social interaction.

We use culturally held information about important individual elements divide people into groups

so that we can coordinate social interaction with them.

I took these basic assumptions of Ridgeway's theory and appropriated them in order to

examine how information conveyed in popular online mediums influences the people who are

exposed to it. Using stimulus that is designed to be sexist, I use sexist materials to activate the

culturally held gender biases that are already present within individuals via the gender frame that

Ridgeway sets up. I thought that it might be reasonable to infer that reading other people online

talking about gender might be enough to prime gender with it having effects similar to the gender

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priming done through social interaction. The experiment's design allowed me to see which format of online information is more successful at reactivating those beliefs – online message boards or online opinion columns. The question itself was simple – does sexist rhetoric from a group of random strangers online activate the gender frame at all and if it does, what is doing it? Do online message boards work like social interaction and activate the gender frame or is the legitimacy of the online article enough to influence people's individual attitudes?

The data in one sample doe support the idea that online message boards prime gender by mere exposure to them, but there is some variation that shows something else is happening there. My first sample did not show this same finding, but did show that people who read online opinion columns that expressed sexist ideas had significantly higher ambivalent sexism scores. When combining these samples, the only case where sexist message board exposure led to a significantly different ASI score was for nonwhites in the hostile sexism measure. This indicates that merely reading sexist messages may lead to more sexist attitudes as may reading sexist online opinion columns. The effectiveness of these mediums likely depends on some variable that is not tapped by the design of my experiment. Future studies should incorporate a much stronger set of control measures that would lead to a better picture of which individual level elements might play a part in this social process.

Works Cited

Acker, Joan 1990. "Hierarchies, Jobs, Bodies:: A Theory of Gendered Organizations." *Gender & Society* 4(2):139-58. doi: 10.1177/089124390004002002.

Adair-Toteff, Christopher. 2005. "Max Weber's Charisma." *Journal of Classical Sociology* 5(2):189-204.

Ahuja, M. K. and Correspondence. 2002. "Women in the Information Technology Profession: A Literature Review, Synthesis and Research Agenda." *European Journal of Information Systems* 11(1):20-34.

Anderson, Susan E. and Bruce M. Gansneder. 1995. "Using Electronic Mail Surveys and Computer-Monitored Data for Studying Computer-Mediated Communication Systems." *Social Science Computer Review* 13(1):33-46. doi: 10.1177/089443939501300103.

Bailey, Martha J and Susan M Dynarski. 2011. "Gains and Gaps: Changing Inequality in Us College Entry and Completion." Vol.: National Bureau of Economic Research.

Bates, Nancy. 2001. "Internet Versus Snail Mail as a Data Collection Methodology from a High Coverage Population." in *Annual Meeting of the American Statistical Association*

Beede, David, Tiffany Julian, David Langdon, George McKittrick, Beethika Khan and Mark Doms. 2011. "Women in Stem: A Gender Gap to Innovation." *Economics and Statistics Administration Issue Brief* (04-11).

Beetham, D. 1991. *The Legitimation of Power* NJ: Atlantic Highlands.

Beggs, John J. 1995. "The Institutional Environment: Implications for Race and Gender Inequality in the U.S. Labor Market." *American Sociological Review* 60(4):612-33. doi: 10.2307/2096297.

Bem, Sandra L. 1993. *"The" Lenses of Gender: Transforming the Debate on Sexual Inequality*: Yale University Press.

Berger, Joseph, Cecilia L Ridgeway, M Hamit Fisek and Robert Z Norman. 1998. "The Legitimation and Delegitimation of Power and Prestige Orders." *American Sociological Review*:379-405.

Bettenhausen, Kenneth and J. Keith Murnighan. 1985. "The Emergence of Norms in Competitive Decision-Making Groups." *Administrative Science Quarterly* 30(3):350-72. doi: 10.2307/2392667.

Birnbaum, M.H. 2000. *Psychological Experiments on the Internet*: ACADEMIC PressINC.

Bland, J Martin and Douglas G Altman. 1997. "Statistics Notes: Cronbach's Alpha." *Bmj* 314(7080):572.

Blau, Francine D and Lawrence M Kahn. 2007. "The Gender Pay Gap Have Women Gone as Far as They Can?". *The Academy of Management Perspectives* 21(1):7-23.

Blau, Peter Michael. 1977. *Inequality and Heterogeneity: A Primitive Theory of Social Structure*: Free Press New York.

Blumer, Herbert. 1969. *Symbolic Interactionism: A Perspective and Method*. Englewood Cliffs: Prentice hall

Bradley, Nigel. 1999. "Sampling for Internet Surveys. An Examination of Respondent Selection for Internet Research. ." *Journal of Market Research Society* 41(4):387-95.

Brewer, M. B. 1997. *The Social Psychology of Intergroup Relations: Can Research Inform Practice?*

Brewer, Marilynn B. and Layton N. Lui. 1989. "The Primacy of Age and Sex in the Structure of Person Categories." *Social Cognition* 7(3):262-74. doi: 10.1521/soco.1989.7.3.262.

Bureau, U.S. Cenus. 2010. "Employment by Gender [Data]." *Census 2010 Summary File 1*.

Census-Bureau. 2010. ""Demographic Trends"." Washington: GP0: United Status

Connell, R. W. and James W. Messerschmidt. 2005. "Hegemonic Masculinity: Rethinking the Concept." *Gender & Society* 19(6):829-59. doi: 10.1177/0891243205278639.

Connell, RW. 2002. "Gender: Short Introductions." Polity Press in association with Blackwell Publishing Ltd, Cambridge.

Cook, Colleen, Fred Heath and Russel L. Thompson. 2000. "A Meta-Analysis of Response Rates in Web- or Internet-Based Surveys." *Educational and Psychological Measurement* 60(6):821-36. doi: 10.1177/00131640021970934.

Cooley, C.H. 1964. *Human Nature and the Social Order*: Transaction Publishers.

Crang, Mike, Phil Crang and Jon May. 2004. *Virtual Geographies: Bodies, Space and Relations*: Routledge.

Donaldson, Mike. 1993. "What Is Hegemonic Masculinity?". *Theory and Society* 22(5):643-57. doi: 10.1007/BF00993540.

Dupré, Louis. 1980. "Marx's Critique of Culture and Its Interpretations." *The Review of Metaphysics* 34(1):91-121. doi: 10.2307/20127461.

Eagly, Alice H and Blair T Johnson. 1990. "Gender and Leadership Style: A Meta-Analysis." *Psychological bulletin* 108(2):233.

Eagly, Alice H, Mona G Makhijani and Bruce G Klonsky. 1992. "Gender and the Evaluation of Leaders: A Meta-Analysis." *Psychological bulletin* 111(1):3.

Eagly, Alice H and Antonio Mladinic. 1989. "Gender Stereotypes and Attitudes toward Women and Men." *Personality and Social Psychology Bulletin* 15(4):543-58.

Ellison, Nicole B., Charles Steinfield and Cliff Lampe. 2011. "Connection Strategies: Social Capital Implications of Facebook-Enabled Communication Practices." *New Media & Society* 13(6):873-92. doi: 10.1177/1461444810385389.

England, Paula and Irene Browne. 1992. "Internalization and Constraint in Women's Subordination." *Current perspectives in social theory* 12:97-123.

Epstein, Cynthia Fuchs. 1988. *Deceptive Distinctions: Sex, Gender, and the Social Order*: Yale University Press.

Fernández, Raquel. 2013. "Cultural Change as Learning: The Evolution of Female Labor Force Participation over a Century." *The American Economic Review* 103(1):472-500. doi: 10.1257/aer.103.1.472.

Ferree, Myra Marx, Judith Lorber and Beth B Hess. 1999. *Revisioning Gender*, Vol. 5: Rowman Altamira.

Ferree, Myra Marx and Eliot R. Smith. 1979. "A Cognitive Approach to Social and Individual Stigma." *The Journal of Social Psychology* 109(1):87-97. doi: 10.1080/00224545.1979.9933642.

Fiske, Susan T. 1998. "Stereotyping, Prejudice and Discrimination." in *The Handbook of Social Psychology*. Boston: McGraw-Hill.

Fiske, Susan T. and Peter Glick. 1995. "Ambivalence and Stereotypes Cause Sexual Harassment: A Theory with Implications for Organizational Change." *Journal of Social Issues* 51(1):97-115. doi: 10.1111/j.1540-4560.1995.tb01311.x.

French Jr, John RP and Bertram Raven. 1959. "The Bases of Social Power."

Glick, Peter, Jeffrey Diebold, Barbara Bailey-Werner and Lin Zhu. 1997. "The Two Faces of Adam: Ambivalent Sexism and Polarized Attitudes toward Women." *Personality and Social Psychology Bulletin* 23(12):1323-34. doi: 10.1177/01461672972312009.

Glick, Peter and Susan T. Fiske. 1996. "The Ambivalent Sexism Inventory: Differentiating Hostile and Benevolent Sexism." *Journal of Personality and Social Psychology* 70(3):491-512. doi: 10.1037/0022-3514.70.3.491.

Glick, Peter and Susan T Fiske. 1999. "Gender, Power Dynamics, and Social Interaction." *Revisioning gender*:365-98.

Glick, Peter and Susan T Fiske. 2001. "An Ambivalent Alliance: Hostile and Benevolent Sexism as Complementary Justifications for Gender Inequality." *American Psychologist* 56(2):109.

Goffman, Erving. 1959. *The Presentation of Self in Everday Life*: Anchor Books.

Goffman, Erving. 1967. *Interaction Ritual: Essays on Face to Face Behavior*: Anchor Books.

Gremillion, Skylar C. and Laurie Chancey. 2013. "Influence of Instructor Sex on Student Gender Beliefs ". Unpublished Manuscript.

Griswold, Wendy. 2008. "Culture and the Cultural Diamond." *chapter* 1:1-17.

Guttentag, Marcia and P Secord. 1983. "Too Many Women? Beverly Hills." Ca: Sage.

Hardin, CD and TD Conley. 2001. "A Relational Approach to Cognition: Shared Experience and Relationship Affirmation in Social Cognition." Pp. 3-17 in *Cognative social psychology: The Princeton symposium on the legacy and future of social cognition*. Mahwah, NJ: Erlbaum.

Hardin, Curtis D and E Tory Higgins. 1996. "Shared Reality: How Social Verification Makes the Subjective Objective."

Ito, Tiffany A and Geoffrey R Urland. 2003. "Race and Gender on the Brain: Electrocortical Measures of Attention to the Race and Gender of Multiply Categorizable Individuals." *Journal of Personality and Social Psychology* 85(4):616.

Jackson, Linda A., Alexander von Eye, Frank A. Biocca, Gretchen Barbatsis, Yong Zhao and Hiram E. Fitzgerald. 2006. "Does Home Internet Use Influence the Academic Performance of Low-Income Children?". *Developmental Psychology* 42(3):429-35. doi: 10.1037/0012-1649.42.3.429.

Johnson, Cathryn, Timothy J Dowd and Cecilia L Ridgeway. 2006. "Legitimacy as a Social Process." *Annual Review of Sociology*:53-78.

Kandel, Denise B. 1978. "Homophily, Selection, and Socialization in Adolescent Friendships." *American Journal of Sociology* 84(2):427-36. doi: 10.2307/2777857.

Kaye, Barbara K. and Thomas J. Johnson. 1999. "Research Methodology: Taming the Cyber Frontier: Techniques for Improving Online Surveys." *Social Science Computer Review* 17(3):323-37. doi: 10.1177/089443939901700307.

King, Andrew A and Michael J Lenox. 2000. "Industry Self-Regulation without Sanctions: The Chemical Industry's Responsible Care Program." *Academy of management journal* 43(4):698-716.

Kraut, Robert, Michael Patterson, Vicki Lundmark, Sara Kiesler, Tridas Mukophadhyay and William Scherlis. 1998. "Internet Paradox: A Social Technology That Reduces Social Involvement and Psychological Well-Being?" Pp. 1017-31, Vol. 53. US: American Psychological Association.

Liebe, Ulf and Andreas Tutic. 2010. "Status Groups and Altruistic Behaviour in Dictator Games." *Rationality and Society* 22(3):353-80.

Lorber, Judith. 1994. *Paradoxes of Gender*: Yale University Press.

Mead, George Herbert. 2009. *Mind, Self, and Society: From the Standpoint of a Social Behaviorist*: University of Chicago press.

Mead, George Hurbert. 1950. *Mind, Self and Society from the Standpoint of a Social Behaviorist... D*: University of Chicago Press.

Mezias, Stephen J. 1990. "An Institutional Model of Organizational Practice: Financial Reporting at the Fortune 200." *Administrative Science Quarterly*:431-57.

Oakes, Jeannie. 1990. "Multiplying Inequalities: The Effects of Race, Social Class, and Tracking on Opportunities to Learn Mathematics and Science."

P. Berger, T. Luckmann. 1966. "The Social Construction of Reality ": Londres, Inglaterra : Penguin.

Pew. 2009-2012. "Pew Research Center's Internet and American Life Project."

Reskin, Barbara F. and Debra Branch McBrier. 2000. "Why Not Ascription? Organizations' Employment of Male and Female Managers." *American Sociological Review* 65(2):210-33. doi: 10.2307/2657438.

Richard L. Brinkman, June E. Brinkman. 1979. "Cultural Lag: Conception and Theory ". *International Journal of Social Economics* 24(6):609-27.

Ridgeway, Cecilia L and Joseph Berger. 1986. "Expectations, Legitimation, and Dominance Behavior in Task Groups." *American Sociological Review*:603-17.

Ridgeway, Cecilia L. and Shelley J. Correll. 2004. "Unpacking the Gender System." *Gender & Society* 18(4):510-31. doi: 10.1177/0891243204265269.

Ridgeway, Cecilia L. 1997. "Interaction and the Conservation of Gender Inequality: Considering Employment." *American Sociological Review* 62(2):218-35.

Ridgeway, Cecilia L. 2009. "Framed before We Know It." *Gender & Society* 23(2):145-60. doi: 10.1177/0891243208330313.

Ridgeway, Cecilia L. 2011. *Framed by Gender: How Gender Inequality Persists in the Modern World*: Oxford University Press.

Risman, Barbara J. 1998. *Gender Vertigo: American Families in Transition*: Yale University Press.

Risman, Barbara J. 2004a. "Gender as a Social Structure Theory Wrestling with Activism." *Gender & Society* 18(4):429-50.

Rytina, Steven, Peter M Blau, Terry Blum and Joseph Schwartz. 1988. "Inequality and Intermarriage: A Paradox of Motive and Constraint." *Social Forces* 66(3):645-75.

Schneider, David J. 2005. *The Psychology of Stereotyping*: Guilford Press.

Scott, W Richard. 2005. "Institutional Theory: Contributing to a Theoretical Research Program." *Great minds in management: The process of theory development*:460-84.

Sheehan, Kim Bartel. 2001. "E-Mail Survey Response Rates: A Review." *Journal of Computer-Mediated Communication* 6(2):0-0. doi: 10.1111/j.1083-6101.2001.tb00117.x.

Sicilian, Paul and Adam J Grossberg. 2001. "Investment in Human Capital and Gender Wage Differences: Evidence from the Nlsy." *Applied Economics* 33(4):463-71.

Sidanius, Jim and Felicia Pratto. 2003. "Social Dominance Theory and the Dynamics of Inequality: A Reply to Schmitt, Branscombe, & Kappen and Wilson & Liu." *British Journal of Social Psychology* 42(2):207-13.

Smeding, Annique. 2012. "Women in Science, Technology, Engineering, and Mathematics (Stem): An Investigation of Their Implicit Gender Stereotypes and Stereotypes' Connectedness to Math Performance." *Sex Roles* 67(11-12):617-29.

Smith-Doerr, Laurel. 2004. *Women's Work: Gender Equality Versus Hierarchy in the Life Sciences*: Lynne Rienner Publishers.

Smith, Aaron and Joanna Brenner. 2012. "Internet and American Life Project Winter 2012 Tracking Survey."

Smith, Ryan A. 2002. "Race, Gender, and Authority in the Workplace: Theory and Research." *Annual Review of Sociology* 28:509-42. doi: 10.2307/3069251.

Steinberg, Ronnie J. 1992. "Gendered Instructions Cultural Lag and Gender Bias in the Hay System of Job Evaluation." *Work and Occupations* 19(4):387-423.

Stryker, Sheldon. 1980. *Symbolic Interactionism*. Menlo Park, California: The Benjamin / Cummings Publishing Company.

Suchman, Mark C. 1995. "Managing Legitimacy: Strategic and Institutional Approaches." *Academy of management review* 20(3):571-610.

Swim, Janet K, Kathryn J Aikin, Wayne S Hall and Barbara A Hunter. 1995. "Sexism and Racism: Old-Fashioned and Modern Prejudices." *Journal of Personality and Social Psychology* 68(2):199.

Tinkler, Justine, Skylar Gremillion and Kira Arthurs. 2013 "Perceptions of Legitimacy: The Sex of the Legal Messenger and Reactions to Sexual Harassment Training." in *Journal of Law and Social Inquiry (Forthcoming)*.

Tougas, Francine, Rupert Brown, Ann M Beaton and Stéphane Joly. 1995. "Neosexism: Plus Ca Change, Plus C'est Pareil." *Personality and Social Psychology Bulletin* 21(8):842-49.

Tyler, Tom R and Yuen J Huo. 2002. *Trust in the Law: Encouraging Public Cooperation with the Police and Courts*, Vol. 5: Russell Sage Foundation.

Tyler, Tom R. 2003. "Procedural Justice, Legitimacy, and the Effective Rule of Law." *Crime and Justice* 30:283-357. doi: 10.2307/1147701.

Tyler, Tom R. 2006. "Psychological Perspectives on Legitimacy and Legitimation." *Annual Review of Psychology* 57:25.

Udry, J Richard. 2000. "Biological Limits of Gender Construction." *American Sociological Review*:443-57.

Walker, Henry A. 2004. "Beyond Power and Domination: Legitimacy and Formal Organizations." *Research in the Sociology of Organizations* 22:239-71.

Wellman, Barry, Anabel Quan Haase, James Witte and Keith Hampton. 2001. "Does the Internet Increase, Decrease, or Supplement Social Capital?: Social Networks, Participation, and Community Commitment." *American Behavioral Scientist* 45(3):436-55. doi: 10.1177/00027640121957286.

Whittington, Kjersten Bunker and Laurel Smith-Doerr. 2008. "Women Inventors in Context: Disparities in Patenting across Academia and Industry." *Gender and Society* 22(2):194-218. doi: 10.2307/27821633.

Zelditch, Morris. 2001. "Processes of Legitimation: Recent Developments and New Directions." *Social Psychology Quarterly* 64(1):4-17.

Zelditch, Morris and Henry A Walker. 2003. "The Legitimacy of Regimes." *Advances in group processes* 20:217-49.

Zickuhr, Kathryn. 2013. "Who's Not Online and Why." Vol. Pew Internet and American Life Project: Pew Research Center.

Appendix A: Experiment Stimulus and Control Sources

A-1 Article Control 1

Springfield Post Chronicle – Opinion Briefs.

By ███████████████

Defeated by a Dog

I see it every single morning when I come outside to get the paper – a lovely brown ornament sitting in the middle of my yard. It's not just any ornament; it's a special ornament left there by Martha, my neighbor's 13 year old toy poodle.

It's been going on for years now, but as a homeowner, I honestly don't know what to do. I don't think I'm alone though, this is a situation many homeowners find themselves in.

It's an incredibly frustrating predicament and there really isn't that much that someone who owns property can do about their neighbor. The best option would be a calm discussion with your neighbor – but that may not be feasible and may not even do any good.

I had a neighbor tell me this one day last week "There's nothing you do can do about it, just get on with your day. It's just poo."

He's right, it's just poo, but I can't shake the feeling I've been defeated by a dog.

A-2 Message Board Control 1

Anonymous User 1	I see it every single morning when I come outside to get the paper – a lovely brown ornament sitting in the front of my flowerbeds. It's not just any ornament; it's a special ornament left there by Martha, my neighbor's 13 year old toy poodle.
	It's been going on for years now, but as a homeowner, I honestly don't know what to do. I don't think I'm alone though, this is a situation many homeowners find themselves in.
Anonymous User 2	It's an incredibly frustrating predicament and there really isn't that much that someone who owns property can do about their neighbor. The best option would be a calm discussion with your neighbor – but that may not be feasible and may not even do any good.
Anonymous User 3	I had a neighbor tell me this one day last week "There's nothing you do can do about it, just get on with your day. It's just poo."
Anonymous User 1	He's right, it's just poo, but I can't shake the feeling I've been defeated by a dog.

Springfield Journal – Opinion Briefs.

Climate Change is Nature's Solution, Not the Problem

By █████████████

It's really frustrating to read the newspaper or watch the news and see people discussing Climate Change. Regardless of whether you call it Climate Change or Global Warming, the issue is being poorly discussed on TV and the Internet.

All these newscasters, politicians and Internet celebrities keep talking about Climate Change as though it were a problem, when Climate Change actually seems to be how nature fixes itself.

It's true if you think about it. Climate change is essentially the earth changing in response to the way that people live.

I'm not one to believe the world has been changed completely by humans. We have clearly had an impact on the planet. Hell, humans divert rivers and change the lay of the land – of course there has been some sort of effect on the earth!

The earth is just adjusting to what we are doing and eventually it will all balance out. Climate change isn't the problem, its nature's own solution.

A-4 Message Board Control 2

Anonymous 1	It's really frustrating to read the newspaper or watch the news and see people discussing Climate Change. Regardless of whether you call it Climate Change or Global Warming, the issue is being poorly discussed on TV and the Internet. All these newscasters, politicians and Internet celebrities keep talking about Climate Change as though it were a problem, when Climate Change actually seems to be how nature fixes itself.
Anonymous 2	It's true if you think about it. Climate change is essentially the earth changing in response to the way that people live.
Anonymous 3	I'm not one to believe the world has been changed completely by humans. We have clearly had an impact on the planet. Hell, humans divert rivers and change the lay of the land – of course there has been some sort of effect on the earth!
Anonymous 1	The earth is just adjusting to what we are doing and eventually it will all balance out. Climate change isn't the problem, its nature's own solution!

A-5 Article Stimulus Hostile Sexism

Springfield Post Chronicle – Opinion Briefs.

Women Underrepresented in Higher Paying Jobs because they are not good at them.

By █████████████████

A recent study published by the National Census Bureau says that women in are under-represented in higher paying jobs. Most notably there are less women managers and executives than there are male managers and executives.

For many years many intelligent men have asked one question; why is this?

The answer is simply that women do not naturally have the skill set that is required for managers work.

Managers are strong individuals who can make solid decisions without thinking about it too much – they go with their gut. Women are soft and nurturing, so they are more inclined to be employed in other roles that can really use their genetic skill set.

That's why we see so many women nurses and so few women doctors – men are better at making those kinds of decisions.

A-6 Message Board Stimulus Clean Hostile Sexism

Anonymous User 1	A recent study published by the National Census Bureau says that women in are under-represented in higher paying jobs. Most notably there are less women managers and executives than there are male managers and executives. For many years many intelligent men have asked one question; why is this?
Anonymous User 2	The answer is simply that women do not naturally have the skill set that is required for manager's work.
Anonymous User 1	Managers are strong individuals who can make solid decisions without thinking about it too much – they go with their gut. Women are soft and nurturing, so they are more inclined to be employed in other roles that can really use their genetic skill set.
Anonymous User 3	That's why we see so many women nurses and so few women doctors – men are better at making those kinds of decisions.

A-7 Message Board Stimulus Dirty Language Hostile Sexism

Anonymous User 1	A recent study published by the National Census Bureau says that are not enough chicks in higher paying jobs. They say there are less lady managers and executives than there are men managers and executives. For many years many intelligent men have asked one question; why is this?
Anonymous User 2	The answer is simply that chicks do not naturally have the skills required for manager's work.
Anonymous User 1	Managers are strong men who can make solid decisions without thinking about it too much – they go with their gut. Hoes are soft and nurturing, so they are more inclined to be employed in other roles that can really use their genetic skill set.
Anonymous User 3	That's why we see so many women as nurses and so few as doctors – men are better at making those kinds of decisions. Back

Springfield Post Chronicle – Opinion Briefs.

Women Need Social Safety Net; Not Men.

By ██████████

Recently politicians have been very concerned with the costs of Social Security, Medicare and Medicaid. In all their debates however, very few elected representatives have mentioned one important fact – men don't need them.

Men are tough and should be working hard to support their families. Women, on the other hand, are delicate and are the only sex capable of giving birth – so they must be protected.

The facts are clear in this situation. Men are bigger than women on average, have more muscle mass on average and do not need to take long periods of time away from their work due to pregnancy. Because these are facts, public policy should be made around them. Men should have to work through their problems and we should focus on protecting women with preventative services.

Women are delicate things and need to be placed on a pedestal.

A-9 Message Board Stimulus Clean Benevolent Sexism

Anonymous 1:	Recently politicians have been very concerned with the costs of Social Security, Medicare and Medicaid. In all their debates however, very few elected representatives have mentioned one important fact – men don't need them.
Anonymous 2:	Men are tough and should be working hard to support their families. Women, on the other hand, are delicate and are the only sex capable of giving birth – so they must be protected.
Anonymous 3:	The facts are clear in this situation. Men are bigger than women on average, have more muscle mass on average and do not need to take long periods of time away from their work due to pregnancy. Because these are facts, public policy should be made around them. Men should have to work through their problems and we should focus on protecting women with preventative services.
Anonymous 2:	Women are delicate things and need to be placed on a pedestal.

A-10 Message Board Stimulus Dirty Benevolent Sexism

Anonymous 1:	Recently politicians have been very concerned with the costs of Social Security, Medicare and Medicaid. In all their debates however, very few elected representatives have mentioned one important fact – dudes don't need them.
Anonymous 2:	Men are tough and should be working hard to support their families. Girls, on the other hand, are delicate and are the only sex capable of giving birth – so they must be protected.
Anonymous 3:	The facts are clear in this situation. Men are bigger than chicks on average, have more muscle mass on average and do not need to take long periods of time away from their work due to female issues. Because these are facts, public policy should be made around them. Men should have to work through their problems and we should focus on protecting girls with preventative services.
Anonymous 2:	Women are delicate creatures and need to be placed on a pedestal.

Appendix B – IRB Approval Form

ACTION ON PROTOCOL APPROVAL REQUEST

LSU
Institutional Review Board
Dr. Robert Mathews, Chair
131 David Boyd Hall
Baton Rouge, LA 70803
P: 225.578.8692
F: 225.578.8792
irb@lsu.edu | lsu.edu/irb

TO: Justine Tinkler
    Sociology

FROM: Robert C. Mathews
      Chair, Institutional Review Board

DATE: February 24, 2011
RE: **IRB# 3164**

TITLE: The Spread of Discriminatory and Prejudicial Information in Online Environments

New Protocol/Modification/Continuation: New Protocol

Review type: Full ____ Expedited _X_   Review date: 2/25/2011

Risk Factor: Minimal __X__ Uncertain _____ Greater Than Minimal_____

Approved_____X_____ Disapproved_____

Approval Date: 2/26/2011_ Approval Expiration Date: 2/25/2012

Re-review frequency: (annual unless otherwise stated)

Number of subjects approved: _200_

Protocol Matches Scope of Work in Grant proposal: (if applicable)_____

By: Robert C. Mathews, Chairman _____

PRINCIPAL INVESTIGATOR: PLEASE READ THE FOLLOWING –
Continuing approval is CONDITIONAL on:

1. Adherence to the approved protocol, familiarity with, and adherence to the ethical standards of the Belmont Report, and LSU's Assurance of Compliance with DHHS regulations for the protection of human subjects[1]
2. Prior approval of a change in protocol, including revision of the consent documents or an increase in the number of subjects over that approved.
3. Obtaining renewed approval (or submittal of a termination report), prior to the approved expiration date, upon request by the IRB office (irrespective of when the project actually begins); notification of project termination.
4. Retention of documentation of informed consent and study records for at least 3 years after the study ends.
5. Continuing attention to the physical and psychological well-being and informed consent of the individual participants including notification of new information that might affect consent.
6. A prompt report to the IRB of any adverse event affecting a participant potentially arising from the study.
7. Notification of the IRB of a serious compliance failure.
8. SPECIAL NOTE:
All investigators and support staff have access to copies of the Belmont Report, LSU's Assurance with DHHS, DHHS (45 CFR 46) and FDA regulations governing use of human subjects, and other relevant documents in print in this office or on our World Wide Web site at http://www.lsu.edu/irb

Application for Approval of Projects Which Use Human Subjects

This application is used for projects/studies that cannot be reviewed through the exemption process.

— Applicant: Please fill out the application in its entirety and include two copies of the completed application as well as parts A-E, listed below. Once the application is completed, please submit to the IRB Office for review and please allow ample time for the application to be reviewed. Expected reviews usually takes 2 weeks. Carefully completed applications should be submitted 3 weeks before a meeting to ensure a prompt decision.

- A Complete Application Includes All of the Following:
  (A) Two copies of this completed form and two copies of part B thru E.
  (B) A brief project description (adequate to evaluate risks to subjects and to explain your responses to Parts 1A2)
  (C) Codes or all instruments to be used.
     *If this proposal is part of a grant proposal, include a copy of the proposal and all recruitment material.
  (D) The consent form that you will use in the study (see part 3 for more information)
  (E) Certificate of Completion of Human Subjects Protection Training for all personnel involved in the project, including students who are involved with testing or handling data, unless already on file with the IRB. Training link (http://phrp.nihtraining.com/users/login.php.)
  (F) IRB Security of Data Agreement; (http://www.lsu.edu/irb/IRB%20Security%20of%20Data.pdf)

1) Principal Investigator*: Justine Tinkler   Rank: Assistant Professor
*P. must be an LSU Faculty Member

Dept: Sociology   Ph: 225-578-0108   E-mail: jtinkler@lsu.edu

2) Co-Investigator(s) please include department, rank, phone, and number for each
Skylar Gremillion, Sociology, Graduate Student, 225-802-3736, sgrem3@lsu.edu

IRB# 3184   LSU Proposal #

○ Full

⊗ Expedited

Ⓧ Human Subjects Training

Ⓧ Complete Application

3) Project Title: The speed of discriminatory and prejudical information in online environments.

4) Proposal Start Date: 3-15-2011   5) Proposed Duration Months: 12

6) Number of Subjects Requested: 200   7) LSU Proposal #:

8) Funding Sought From:

ASSURANCE OF PRINCIPAL INVESTIGATOR named above
I accept personal responsibility for the conduct of this study (including ensuring compliance of co-investigators/co-workers) in accordance with the documents submitted herewith and the following guidelines for human subject protection: The Belmont Report, LSU's Assurance (FWA00003692) with OHRP and 45 CFR 46 (available from http://www.lsu.edu/irb). I also understand that copies of all consent forms **must be maintained at LSU for three years after the completion of the project**. If I leave LSU before that time, the consent forms should be preserved in the Departmental Office.

Signature of PI _____   Date 2/18/11

ASSURANCE OF STUDENT/PROJECT COORDINATOR named above. If multiple Co-Investigators, please create a "signature page" for all Co-Investigators to sign. Attach the "signature page" to the application

I agree to adhere to the terms of this document and am familiar with the documents referenced above.

Signature of Co-PI(s) _____   Date 2/18/11

Study Approved By:
Dr. Robert C. Mathews, Chairman
Institutional Review Board
Louisiana State University
203 B-1 David Boyd Hall
225 578-8692 | www.lsu.edu/irb
Approval Expires: _____

Informed Consent Form

1. Study Title: The Perception of Ideas in Online Environments

2. Performance Site: Louisiana State University and Agricultural and Mechanical College

3. Contacts: The following investigators are available for questions about this study,

> T-F, 9:00 a.m. - 4:30
> Skylar Cromillion
> ███████████

4. Purpose of the Study: The purpose of this research is to explore the way information is spread in different environments.

5. Subject Inclusion: Individuals enrolled in classes at LSU

6. Number of Subjects: 200

7. Study Procedures: Participants will answer survey questions about their online habits and attitudes and then participate in a social psychology experiment, using an Implicit association test which will last approximately 30 minutes.

8. Benefits: Subjects will receive class credit for participation in this research project.

9. Risks: The only risk is the inadvertent release of sensitive demographic information. All possible precautions will be taken to ensure the confidentiality of the participant is maintained. Files containing identification information will be destroyed once data collection is complete.

10. Right to Refuse: Subjects may choose not to participate or to withdraw from the study at any time without penalty.

11. Privacy   Results of the study may be published but no names or identifying information will be included in the publication. Subject identity will remain confidential unless disclosure is required by law.

12. Signatures :
The study has been discussed with me and all my questions have been answered. I may direct additional questions regarding study specifics to the investigators. If I have questions about subjects' rights or other concerns, I can contact Robert C. Mathew, Institutional Review Board, (225) 587-8692, irb@lsu.edu, www.lsu.edu/irb . I agree to participate in the study described above and acknowledge the investigator's obligation to provide me with a signed copy of this consent form.

> Subject Signature:_____ Date:

The Vita

Skylar Craig Gremillion was born in Plaucheville, Louisiana. In 2004, he graduated from Louisiana State University with a Bachelor of Arts degree in Political Science. He received his Master of Arts degree in Sociology from LSU in 2008. He will receive his Doctor of Philosophy degree in Sociology from LSU during the fall 2013 commencement ceremony.