Reproductive Health Seeking Behaviors Among Female University Students: An Action Oriented Exploratory Study

Robin Emily Mowson

University of South Florida, rmowson@mail.usf.edu

Follow this and additional works at: https://digitalcommons.usf.edu/etd

Part of the Anthropology Commons, and the Women's Health Commons

Scholar Commons Citation

Mowson, Robin Emily, "Reproductive Health Seeking Behaviors Among Female University Students: An Action Oriented Exploratory Study" (2015). USF Tampa Graduate Theses and Dissertations. https://digitalcommons.usf.edu/etd/5539

This Thesis is brought to you for free and open access by the USF Graduate Theses and Dissertations at Digital Commons @ University of South Florida. It has been accepted for inclusion in USF Tampa Graduate Theses and Dissertations by an authorized administrator of Digital Commons @ University of South Florida. For more information, please contact digitalcommons@usf.edu.
Reproductive Health Seeking Behaviors Among Female University Students:

An Action Oriented Exploratory Study

by

Robin Emily Mowson

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Arts
Department of Anthropology
with a Concentration in Bio Cultural Medical Anthropology
College of Arts and Sciences

and

Master of Public Health
Department of Community and Family Health
College of Public Health
University of South Florida

Major Professor: Linda Whiteford, Ph.D., M.P.H.
Co-Major Professor: Cheryl Vamos, Ph.D.
Elizabeth Miller, Ph.D.

Date of Approval:
February 26, 2015

Keywords: Medical Anthropology, Student Health, Access to Care, Health Literacy, Applied

Copyright © 2015, Robin Emily Mowson
Acknowledgments

I would like to thank my faculty advisor within the Anthropology Department, Dr. Linda Whiteford for all her guidance, support, and encouragement during my Masters program. Additionally, my faculty advisor in the College of Public Health, Dr. Cheryl Vamos, and my committee member, Dr. Elizabeth Miller, who were essential in designing this research to assure it was effective in creating applied outcomes. I would also like to thank Dr. Joseph Puccio, Medical Director at USF Student Health Services, for inviting me to do this research at his facility, and providing me access to his staff. Finally, this research would not have been possible without the students who agreed to participate in my study and provided the data that informed my recommendations for improving the services at USF.
# Table of Contents

List of Tables ........................................................................................................................................... iii

List of Figures .............................................................................................................................................. iv

Abstract ......................................................................................................................................................... v

Chapter 1: Introduction ................................................................................................................................. 1
  Overview and Research Aims ....................................................................................................................... 1
  Ethical Considerations and Positionality ..................................................................................................... 4
  Chapter Summaries ................................................................................................................................... 5

Chapter 2: Background and Literature Review ............................................................................................ 7
  Literature Review ....................................................................................................................................... 7
    Student Health Services ............................................................................................................................ 7
    Patient-Provider communication ............................................................................................................... 10
    Perceived barriers to reproductive health care ....................................................................................... 12
  Theoretical Framework .............................................................................................................................. 16
    Critical Medical Anthropology ............................................................................................................... 16
    Reproductive Ecology and Feminist Theory .............................................................................................. 17
  Research Setting ....................................................................................................................................... 19
    Clinic Demographics ............................................................................................................................... 20

Chapter 3: Methodology ................................................................................................................................. 22
  Mixed Methods Approach ............................................................................................................................ 22
    Ethnographic Observations ....................................................................................................................... 23
    Sampling and Recruitment ....................................................................................................................... 25
    Surveys ..................................................................................................................................................... 27
    Interviews ................................................................................................................................................. 30
  Data Analysis .............................................................................................................................................. 31
  Limitations ............................................................................................................................................... 33

Chapter 4: Results ........................................................................................................................................ 35
  Results from Surveys and Interviews ......................................................................................................... 35
    Recruitment Survey ................................................................................................................................ 35
    Online Survey ........................................................................................................................................ 36
    Provider Interviews ................................................................................................................................. 49
    Student Interviews ................................................................................................................................. 55
Chapter 5: Discussion ........................................................................................................................................68
Discussion..................................................................................................................................................68
Student Health Services, Barriers to Care, Patient-Provider
Communication ........................................................................................................................................68

Chapter 6: Conclusions ..................................................................................................................................75
Recommendations for the USF Student Health Clinic ..............................................................................75
Recommendations for Future Research .....................................................................................................77
Closing Remarks .........................................................................................................................................78

References .....................................................................................................................................................81

Appendices ...................................................................................................................................................86
Appendix I: Recruitment Survey ..................................................................................................................86
Appendix II: Online Research Survey .........................................................................................................87
Appendix III: Interview Guide ......................................................................................................................90
Appendix IV: Email Solicitation of Online Survey ......................................................................................94
Appendix V: Informed Consent for Surveys ..................................................................................................95
Appendix VI: Informed Consent for Interviews ............................................................................................99
Appendix VII: Results from Pearson Chi Square Tests ..............................................................................103
Appendix VIII: IRB Approval ......................................................................................................................106
List of Tables

Table 1: Ethnicity of Respondents .......................................................................................................................... 37
Table 2: Respondent’s Year in School ..................................................................................................................... 37
Table 3: Respondent’s Type of Insurance .............................................................................................................. 37
Table 4: Where Respondents Report Seeking Care ............................................................................................... 38
Table 5: Interview Participants .............................................................................................................................. 56
Table 6: Continuum of Sources of Information ..................................................................................................... 63
List of Figures

Figure 1: Sex of Respondents........................................................................................................35
Figure 2: Top Sexual Health Concerns ..........................................................................................40
Figure 3: 1\textsuperscript{st} Choice for Contraceptive Method..........................................................41
Figure 4: 2\textsuperscript{nd} Choice for Contraceptive Method............................................................41
Figure 5: 3\textsuperscript{rd} Choice for Contraceptive Method ..............................................................42
Figure 6: Where Respondents Obtain Information .........................................................................43
Abstract

The focus of this research was to: 1) study the perceptions of female students attending the university Student Health Center, concerning available services, 2) learn how they describe their decisions to obtain care, and 3) identify perceived barriers to reproductive health care and contraception. This exploratory study used a mixed-methods approach that included clinic public-space observations, interviews with health care providers and staff at Student Health Services (SHS), surveys distributed to clients of the campus clinic, and in-depth interviews to contextualize emergent themes. Topics addressed included sexual health behaviors and perceptions, influence of peers and partners, the propagation of health myths, and past experiences with SHS. Gathering practitioner perspectives on student barriers to care, goals of the clinic, and perceived health needs of the student community, allowed for measurement of incongruence between student and staff, thereby adding greater context to results. SHS sought recommendations in order to improve student's use of the Sexual Health and Gynecology clinic, increase accuracy of student's sexual health knowledge, and guide future clinic operations. SHS is now working with the College of Public Health to create improvement projects based on my results, including a peer education program. Research such as this can result in greater student awareness of available services, and more productive communication between patients and provide. Implications on the larger issues of gender and the search for health care, acceptance and knowledge of STI testing, and client comfort are addressed, and provide opportunity for future work in this area.
Chapter 1: Introduction

Overview and Research Aims

As a student pursing a Master of Arts degree in Anthropology and a Masters degree in Public Health, I sought to use my interdisciplinary perspective to gather exploratory ethnographic data on the issue of student health and satisfaction at the University of South Florida (USF). This research has applied goals and aims to provide data useful to both the community of female students and the stakeholders at USF Student Health Services (SHS). I employed ethnographic observations, student surveys, and interviews, while using a grounded theory approach to incorporate student perceptions into instrument formation along the way. Engaging the stakeholders throughout the research process and analyzing inductively strengthened the applied outcomes of this research, which resulted in recommendations for the improvement of information and service delivery to students at the USF Sexual Health and Gynecology clinic (SHG).

The focus of this research was to: 1) study the perceptions female college students at the University of South Florida who attend the Student Health Center have about available services and contraception, 2) learn how they describe their decisions to obtain sexual health care, and 3) identify perceived barriers to sexual and reproductive health care. In order to gain a more complete understanding of these three research themes I focused on several research questions. Research questions intended to elucidate student perceptions about the USF Student Health Center include: 1) what is the female USF student perception of USF Sexual Health and
Gynecology, 2) how satisfied are female students with the services offered at USF Sexual Health and Gynecology, and 3) are other sexual and reproductive health care providers preferred by female students? Moving to the second theme, research questions that aimed to explore how students decide to obtain sexual health care include: 1) how large an influence are friends on female USF students when they are making sexual health care decisions, 2) are providers perceived as a major source of information and knowledge by female students at USF, and 3) do students consider sexual and reproductive health care to be important for themselves. Finally, the third theme, which sought to understand student’s perceived barriers was addressed by research questions including: 1) do students feel comfortable communicating concerns with medical professionals, 2) do financial concerns stop female USF students from pursuing health care, and 3) are health myths influencing student perceptions of sexual and reproductive health care, contraception, and USF Student Health Services.

The medical director of USF’s Student Health Services, Dr. Joseph Puccio, encouraged this project and expressed several issues of concern for the Sexual Health and Gynecology clinic, such as improving rates of use of the clinic’s services by at least 5% in the 2013-14 business year, continuing to reduce the number of ‘no-shows’ for appointments, and spreading the word about low-cost, convenient sexual health services and information available to the USF student population. Currently, Sexual Health and Gynecology houses three practitioners who see approximately 4,000 patients a year. This number is in comparison to the approximately 11,000 students seen by the USF Student Health Clinic’s general practitioners every year. Administrators would eventually like to see the Sexual Health and Gynecology clinic operating with attendance rates at 60% of the general Student Health clinic’s rates, which would mean sexual health practitioners would be seeing approximately 6,500 students a year. Student Health
Services sought recommendations based on my research with their student clients in order to improve rates of attendance, student’s sexual health knowledge, and their overall positive perceptions and comfort related to sexual health care delivery at USF.

Sampling was based on female students who were willing to be surveyed after an appointment at Student Health Services; they were asked about their experiences, perceptions and practices. I aimed to study their perceptions of what forces, such as insurance status, relationship status, or personal finances, act to form the preferences women have for specific methods of contraception, and whether those preferences are reinforced or challenged by health care providers. I wanted to better understand the factors, which play a role in the decision-making process of sexually active women enrolled in college who are trying to prevent pregnancy, and whether they had concerns or barriers that were not being addressed. In order to do this, I needed to identify what some of the shared experiences and perceptions are among young women in college, navigating reproductive health services and making contraceptive decisions. In addition to a review of the literature on the topic with students not attending USF, I gathered this information through the use of participant observation, surveys, and interviews at USF Student Health Services, this methodology permitted a grounded theory approach to understanding major factors that shape women’s sexual health perceptions and choices.

In order to understand the context for students’ perceptions and decisions I conducted observations at the clinic and interviewed the providers. By meeting with practitioners and gathering their perspectives on student barriers to care, goals of the clinic and their perceived needs of the student client community I could measure the symmetry between what students expressed about the same topics. Assessing the cohesiveness between practitioner goals and student needs helped me to make recommendations for improving content delivery and
communication. By incorporating the viewpoints of patients, providers, and administrators I was able to identify some of the underlying forces leading to barriers to care for students. This created the possibility of increased bridging social capital among these groups, which in turn has the potential to increase student use of services and perceived value of the USF Student Health clinic (Szerter and Woolcock 2004).

**Ethical Considerations and Positionality**

While I did not foresee any conflicts of interest during this research, it was important to explore my own positionality and any ethical dilemmas that could have arisen in the field. As a female university student, I was careful to not be biased and represent my own feelings in the data I collected from my fellow students. I carefully and accurately recorded responses, and asked for clarification when necessary to avoid imparting influence on the results. I overcame any biases by focusing on the community of female university students I was sampling, and presenting progress reports to USF Student Health Services on a regular basis. This allowed for discussion and collaboration on project trajectories. Finally, I always tried to keep the research questions and applied goals as the driving force behind my data collection, in order to prevent fieldwork from deviating course.

Privacy and confidentiality are important to this project due to the sensitive nature of the questions involving sexual practices, provider history, and contraceptive use. I obtained informed consent forms from all of the research subjects before data was collected. Consent was given in writing with a signature on a consent form for the recruitment and online surveys, and interviews. Students had to sign and agree to being contacted for follow-up survey and interview before they provided a contact email (Whiteford and Trotter 2008). In order to assure the rights,
safety, and welfare of all participants, this research followed the guidelines of the University of South Florida Institutional Review Board (IRB). The IRB research application lists Dr. Linda Whiteford, professor of anthropology at USF, as the Co-Investigator, and myself as the Principal Investigator and project coordinator. Informed consent documents for the surveys and student interviews can be found in Appendix V and VI. The IRB approval letter is in Appendix VIII.

**Chapter Summaries**

In the following chapters, I present my research and discuss how it fits within the current anthropological literature, as well as presenting my recommendations for researchers and Student Health Services, moving forward. Chapter 2 provides background and a literature review of the topics relevant to this project, including methods of information dissemination by university health clinics, the disconnect between knowledge of services available and using those services, young women’s perceived barriers to care, and literature regarding patient-provider communication. This chapter also explains my theoretical framework that shaped the research design, the research setting, and demographics.

Chapter 3 will explain the methodology used to carry out the research. Beginning with the research design, followed by data collection, which included overt observations, surveying in the clinic and online, interviewing students, and interviewing the clinic providers. This chapter also contains a note on ethical considerations and the limitations of the study.

Chapter 4 contains the presentation of the results from the quantitative and qualitative portions of the research. First, the quantitative analysis process and survey results are presented. Then the thematically coded results from the provider interviews are laid out, the main themes discussed in provider interviews that I elaborate on in this chapter were, lack of student
knowledge, concern over insurance and financial issues, scheduling and services provided, and patient communication and comfort. Finally, this chapter presents the themes that arose from student interviews, which were, knowledge of services, health care seeking behaviors, information seeking practices, patient-provider communication, and contraception.

Chapter 5 discusses the findings from the research study within a theoretical framework guided by critical medical anthropology and situates my work within the current literature. Lastly, Chapter 6 includes the implications of this research for the student community at the University of South Florida, as well as the recommendations that I made to Student Health Services. I conclude by suggesting future opportunities for research that would build upon the work I have done, by expanding the literature and producing further applied outcomes.
Chapter 2: Background and Literature Review

Literature Review

Student Health Services

Research in the past has been done to assess the availability of Internet resources through university health services, in particular regarding women’s health. One study focusing on California State University’s Student Health Services concluded that there is a need to more broadly assess campus health center use of the Internet, and to establish guidelines for Student Health Services to communicate essential women’s health information to the female student population (Judson, Goldsack and Sonnad 2010). The research I performed works towards fulfilling the suggestions made in this study by assessing student perceptions of Student Health Services and working to amend Internet resources to reflect student need. In addition, research in this area has been improved by the use of multilevel models exploring resources available versus resources utilized, and the perceptions of administrators, providers, and students. Much work has been done to determine the association between availability and quality of school health services and reproductive health outcomes among sexually active students (Denny, Robinson, Lawler, et al. 2012). It was my aim to build on this and make recommendations for ways to improve access to Student Health Services and sexual health information, in order to ultimately improve delivery of services. One way I addressed this is by incorporating the survey portion of the research into a Quality Improvement Assessment. This did not change the methodology of the research but does provide greater potential for future use of the data collected and will allow the data collected to
The Quality Administrative Specialist at USF Student Health Services and I began working together to complete the Quality Improvement Assessment to the standards of USF’s accreditation board. The assessment was unable to be performed during the 2013-2014 school year but it may be used in the future.

University student health centers in Florida have been assessed for their willingness to provide emergency contraception to students, and results showed that institutions have quite varied policies and procedures for students to obtain contraception. Barriers such as university policy, controversy and liability concerns were raised, while some institutions felt emergency contraception would undermine use of traditional contraceptive methods (Hemmick and McCarthy 2007). Universities also varied in whether or not they would include information about emergency contraception in routine contraception counseling. The findings of this study indicated that increased promotion and awareness of all methods of contraception, as well as university procedures regarding the obtainment of contraception be attempted (Hemmick and McCarthy 2007). In addition, this study suggested the elimination of pelvic examinations and pregnancy testing as treatment requirements for the obtainment of contraceptives (Hemmick and McCarthy 2007). This study was useful for my research because it highlighted the barrier created when students do not understand university health policies, and ultimately what procedures they should follow in order to obtain sexual health services. There should be assurances that all student health clinic patients seeking sexual or reproductive information are obtaining comprehensive and consistent education.

A comprehensive observational study, which surveyed sexual health resources available to students and campus social environments, found that sexual health resources on college campuses vary greatly. This study pioneered the use of College Resources and Sexual Health
(CRaSH) inventory, which is an instrument designed to measure sexual health resources on college campuses using data that can be ascertained by website review or brief conversation with campus health personnel (Eisenberg, Lechner, Frerich, Lust and Garcia 2012). The study concluded that a greater presence of resources likely contributed to a healthier climate around sexuality for students, however, they called for additional research to be done in order to establish which domains and resources are associated with sexual risk behaviors, such as not using contraception (Eisenberg et al. 2012).

An exploratory study looking at health issues and service utilization by university students found that “Although students appeared quite knowledgeable about the health services offered on campus, awareness did not translate into use” (Fletcher, Bryden, Schneider, Dawson, and Vandermeer 2007:482). The researchers surveyed students and faculty and determined that students were familiar with health services on campus, among other services, however their knowledge did not make them more likely to use the services, which begs the question, what is stopping them? The researchers in this case suggested that, “University personnel should become more actively involved in promoting on-campus services to first year students” (Fletcher et al. 2007:482), and suggested referring students to services and following up with them afterwards.

To improve upon this study in my research I would not simply ask students if they are aware of student health services, as I expect the majority of students know they exist, rather, asking students if they feel comfortable accessing the university clinic, and asking the likelihood of themselves or a friend using Student Health Services. In addition, differentiating between the general health services clinic and the Sexual Health and Gynecology Clinic would be useful in determining more specific barriers. Research done at the University of Kentucky to assess student knowledge of student health services found that while the majority of students cited
orientation as the source of their knowledge about health services on campus, they did not know about all the services available to them, such as mental health counseling or consulting (Stephenson 1999). The research resulted in a student guided video presented during orientation which featured the school mascot navigating the entire process of obtaining an appointment, checking in at the clinic, and consulting with a health care provider. This model is useful for my research because it emphasizes increasing knowledge of procedure necessary to access student health services, not simply repeating to students who may be overloaded with information that services are available.

*Patient-Provider communication*

One of the issues that can be considered a problem in accessing contraception and reproductive health care is poor patient-provider communication. Poor patient-provider communication and contrasting expectations between doctors and patients often leads to poor clinical care and less effective appointment outcomes (Kleinman 1978). Health communication has been recognized as a marker of quality health care by the Institute of Medicine and has shown to be correlated with patient outcomes such as, medication adherence and satisfaction (Dehlendorf, Kimport, Levy and Steinaur 2014). Additionally, it has been shown that ‘lay’ concepts or experiential knowledge help determine how, why and when a patient presents their problem, as well as significantly affects their compliance with provider recommendations (Fitzpatrick 1978). Researchers have shown that medicine is most effective when practiced in a holistic way, incorporating the biological and the social context of the individual, in order to prevent a conflict of interest between practitioner and patient. Care needs to be offered and provided in a way that incorporates not just the patients’ physical bodies, but also their home
lives, their perceived needs, and their personal histories or outlooks on the world. “Hidden values when unaddressed clinically can come to undermine personal lives and clinical interactions creating inauthentic and false scenarios for teaching about, clinically engaging and working out policies for caregiving” (Kleinman 2011:6).

Studying the perceptions of both health care practitioners and patients in a health care setting is essential in order to understand whether patient-provider interaction is impacting client perceptions and ultimately their use of services or their health seeking behaviors. In reproductive health care, patient assessment of the quality of interpersonal aspects of care has been linked to contraceptive use and consistency of use (Dehlendorf et al. 2014; RamaRao et al. 2003; Rosenberg, Wraugh and Burnhill 1998). Studies have noted that the intricacies of patient-provider interaction have great impacts on whether a patient feels comfortable enough to ask questions, whether they feel respected, and if they choose to accept the recommendations of the provider (Kleinman 1978; Hemmings 2005). It has been shown that high-quality interaction between patient and provider results in improved contraception use, and that contraceptive counseling can be characterized into three methods; these are 1) shared decision making, which is the most effective but least often used where the provider serves as a source of information, introduces methods, and interactively discusses method selection with the patient, 2) informed choice approach, in which the provider may introduce methods and shares information with the patient but all the decision making is left up to the patient, and 3) foreclosed approach, in which the providers gives information only about the methods introduced by the patient and does not play a role in the decision-making (Dehlendorf, Kimport, Levy, and Steinauer 2014). This study found that women 25 and younger were more often involved in the type of contraceptive counseling without shared decision-making. This may be due to provider perceptions of young
adults as unmotivated to use certain types of contraception, or young adult apprehension asking questions of a provider based on the perceived authoritative knowledge providers hold. It has been hypothesized that “younger patients may be most in need of active facilitation of the decision-making process, given that they likely have had less experience with contraceptive methods and less interaction with family planning providers” (Dehlendorf et al. 2014).

It is worth noting that contraceptive counseling sessions are more effective when the patient is able to actively engage with the provider, or the contraceptive educator, and come to a mutual agreement on contraceptive type. This shared contraceptive decision-making should be in conjunction with patient-centered contraceptive counseling that focuses on the concerns and preferences of the patient, the provider’s clinical expertise, and scientific evidence (Donnelly, Foster, and Thompson 2014). While of course, both perspectives should be addressed and are important to the patients successful use of contraception, addressing anticipated patient concerns via a discussion may provide young women with the knowledge and empowerment necessary to use their chosen method correctly and consistently.

*Perceived barriers to reproductive health care*

The Alan Guttmacher Institute has researched why one third of all women in the U.S. who are at risk of unintended pregnancy do not use contraceptives, use them inconsistently or incorrectly, or have gaps in use (Barot 2011). Guttmacher lists potential barriers for women in need of reproductive health care such as, problems women face when accessing or using methods, concerns about side effects, difficulties in paying for contraceptives and lack of time for medical visits (Barot 2011). In addition to studying barriers women face in pursuing reproductive health care it is important to address factors that influence sexual health behaviors.
and perceptions, such as preference, influence of peers and partners, and the propagation of misinformation or health myths among friends. Past studies have shown that a woman’s preference for a specific contraceptive method is based on the method’s reliability, prevention of sexually transmitted infections, and it’s effect on the woman’s health (Bryant 2009). Another study found similar results, that effectiveness, protection against sexually transmitted infections, and partner’s disapproval were found to be the most important factors in the decision process (Delavande 2008).

“Despite recent portrayals of patients as educated consumers, the gap between patients’ beliefs and doctors’ knowledge may have actually increased, owing to advances in specialized scientific knowledge” (Hemmings 2005:92). This disconnect between provider’s authoritative knowledge and the ‘lay’ or experiential knowledge patients have about health behaviors and their own bodies, can create a barrier to care that ultimately influences patient use of services and contraceptives. Knowledge about contraceptive methods has also been shown to be a strong predictor of effective and consistent use among young adults. Among unmarried women aged 18–29, for each correct response on a contraceptive knowledge scale, the odds of currently using a hormonal or long-acting reversible method increased by 17% (Frost, Lindberg and Finer 2012).

Misinformation about contraception and fertility are some of the reasons that women stop using their prescribed method of birth control or use it inconsistently. One study of young adults found that 90% viewed themselves as having all the information they needed to protect themselves from unwanted pregnancies, but when they answered specific questions it was apparent that their knowledge was deficient (Kaye, Sullentrop, and Sloup 2009). Another study conducted a knowledge assessment among college students that tested general knowledge of female anatomy, contraception, pregnancy risk, and several other basic reproductive health
topics; their findings were consistent with previous studies that showed general knowledge was low in this population (Volck et al. 2013). Some authors have concluded that this lack of knowledge regarding contraception and fertility underlies the gap between desire to prevent pregnancy and actual prevention behaviors (Kaye, Sullentrop, and Sloup 2009).

The issues associated with health literacy and its links to individual use of contraception and reproductive health seeking behaviors show the importance of health education. Given that 40% of the women in one study indicated that they were not getting enough information from their health care provider and that providers were not discussing methods of birth control in-depth, there is evidence to support that more effective health education is likely needed during contraceptive appointments (Our Moment of Truth 2013). Based on the literature reviewed thus far, several areas of health knowledge should be the focus for patients in a college-aged population. First, anatomical knowledge and the basics of how contraception works should be explained to patients, “generally poor understanding of gynecologic anatomy is concerning because it is the basis for understanding the mechanism of action for contraceptive methods” (Volck et al. 2013). Second, providers or educators should focus on discerning between health facts and fiction in order to reduce the misinformation being shared among peers and to ease concern about side effects. As noted above, young women are influenced not only by the experience of unwanted side effects but also by their underlying concerns about the nature of hormones in contraception (Cheung and Free 2004).

Two methods of educating that have proven to be effective in sexual health care are peer education and brief motivational counseling, also known as motivational interviewing. Among younger women peer counselors have been shown to increase contraceptive compliance. Counseling must be individualized, which requires knowledge of factors that predict compliance
and an understanding of the patient's decision-making process as it relates to medications (Rosenberg et al. 1995). This puts peers in a unique position to be able to understand the concerns and thought processes of one another. When a peer educator is trained effectively they can provide an alternative to traditional provider education, which can be uncomfortable for young women due to power dynamics and a fear of appearing immature or unknowledgeable with an authoritative figure (Halpern, Grimes, Lopez, and Gallo 2006).

Next, the goal of motivational counseling is to assess the patients readiness for change and to help the patient move through the phases of readiness for change in order to address risky or unhealthy behaviors, in this case it would be misusing contraception, or assessing whether an individual was motivated enough to effectively use certain types of contraception (ACOG 2009). Health care providers and educators assume a position to counsel women about behaviors that place them at risk of unintended reproductive consequences. Prevention strategies such as counseling, should include specific attention to the risk taking behaviors of that individual or population, and should emphasize targeted risk reduction, which can be achieved using motivational interviewing skills (Petersen et al. 2007; ACOG 2009).

As of 2012, 71% of female high school graduates enrolled in college, indicating that the majority of young women are going to college and are being influenced by the social and environmental factors present in that setting (Bureau of Labor Statistics 2013). With such a large percentage of U.S. women currently attending college, my work is able to produce insight into trends in sexual health, since the practices adopted as young adults will affect this generation’s future reproductive trajectory. In addition, this work adds to the knowledge base of college-aged sexual behaviors, contraceptive behaviors, and motivating forces behind family planning decisions, as well as producing information on how to increase use of Student Health Services.
Sexual Health and Gynecology Clinic among this demographic. Potential impacts of this research include, greater community awareness of sexual health options, increased communication and trust between patients and providers, and greater access to clear and factual family planning information. Raising awareness of available services and increasing knowledge can empower students to make more educated decisions. Identifying whether there is trust and communication between students and health care providers is crucial to understanding a potential barrier to increased clinic attendance and positive health outcomes.

**Theoretical Framework**

*Critical Medical Anthropology*

Throughout analysis, theory was incorporated and used to situate results and make conclusions. Some theories I anticipated being useful included political economy of health, reproductive and behavioral ecology, and feminist theory. Using a political economy of health model transitioned to using a critical medical perspective but continued to assist me in identifying whether economics or policy were exerting a notable influence on student use of university health services, or if students perceived these topics to effect their health (Szreter and Woolcock 2004). A critical understanding calls for attention to be paid to the vertical links that tie a specific social group to the larger political and societal community, as well as the “configuration of social relationships that contribute to the patterning of human behavior, belief, attitude, and emotion” (Singer 2004:24; Mullings 1987). Critical medical anthropology concerns itself with the micro-level, including human personalities, cultural motivations and local relationships, and with the macro-level. This perspective is distinct not only because of this dual inclusion, but also because it situates individual health seeking and behaviors within a historical,
political economic framework with the goal of acknowledging the relevance of culture within complex issues of power, control, and resistance, as they relate to health (Singer 2004; Morsy 1996). This framework fits my research because I examined the power dynamics between patient and provider, the resistance of students to obtain reproductive health services, and how these issues are contained within in health systems dictated by policy. Individuals make their own decisions and perceptions within this system, however, they are influenced by the aforementioned, invisible social and political forces, which is what makes the entire process worth investigating. Situating this exploratory case study in this way also increases the relevance of my findings since many of the relationships elucidated in this study are translational to other health settings. A key focus of critical medical anthropology explored in this work is medical hegemony in the form of patient-provider interaction and communication. Gramsci (1971) defines hegemony as domination that is achieved through consent rather than by force. In the case of this research it can be seen that within the health clinic there is a biomedical hegemony, where the provider is considered dominant based on knowledge and medical technology, while the patient is expected to comply with the expert’s interpretations or prescriptions.

Reproductive Ecology and Feminist Theory

Another framework that proved useful to understanding this situation is human behavioral ecology, or more specifically here, reproductive ecology, which aims to determine how environmental and social factors influence and shape behavioral flexibility within and between populations (Mace 1998). Human reproductive ecology explores human fertility and the decisions surrounding it from an evolutionary perspective in a variety of contexts. Using this perspective ties in the importance of the unique college environment and it’s unique social
pressures on decision-making. Evolutionary theory predicts that individual’s ultimate goals revolve around maximizing reproductive success, therefore, when plentiful resources are available fertility will be maximized and birth rates will increase. However, the demographic transition is counterintuitive to the theories of evolution because in a high resource setting, individuals are favoring low fertility rates (Mace 1998). This evolutionary ecological framework is often left out when discussing the issue of family planning and sexual practice among a college-aged population. The current mismatch between evolutionarily anticipated fertility strategies and modern reproductive strategies, indicated by the demographic transition, is particularly interesting among college educated women in the U.S. who are choosing the reproduce later, and sometimes not at all with the help of modern contraceptive technologies (Blossfeld and Huinink 1991). However, there is a large body of work that rejects traditional transition theories and aims to replace them with anthropological perspectives that better account for societal structure, cultural difference and individual autonomy (Greenhalgh 1995). Rather than continue to separate the issues of policy, culture, economy and fertility, the anthropology of reproduction aims to situate fertility, “to show how it makes sense given the sociocultural and political economic context in which it is embedded” (Greenhalgh 1995:17). Combining these issues with work already done on university sexual health practices and past university student health services data allowed me to situate USF Student Health client’s perceptions of barriers into a framework useful for identifying opportunities for improvement.

Feminist theory presents it’s own stance on the issues of biomedical hegemony over women’s reproductive decision-making and health, as well as how women react to the ecological conditions they face. According to Inhorn (2006), some women have consented to biomedical hegemony as Western biomedical care and medications have become the gold standard.
However, others have turned to “counter-hegemonic resistance” in an attempt to free themselves of the confines of the biomedical system. I witnessed this scenario in my research, where some participants found a place for themselves with the biomedical system of the clinic and submitted themselves to their providers, while others rejected biomedical contraception based on their own knowledge of their bodies. Feminist anthropology also contributes that researchers must be careful to not remove individual autonomy when discussing hegemonic forces acting on women (Greenhalgh 1995; Inhorn 2006). Therefore, while using this theoretical framework to construct my views on this research I made an effort to recognize the women involved were not passive objects being acted upon by others, they were autonomous agents acting within a culturally and politically constructed system.

**Research Setting**

The University of South Florida (USF) Student Health Center served as the overall research site for this project because it was conveniently located and has a large student body to sample. The university health center provided the unique setting necessary to complete this research, because it incorporates the financial insecurity of emerging adulthood, and guarantees that the women sampled have chosen to pursue higher education, which will be an important demographic factor. The university setting is a good match for my methods because it allowed for multiple modes of contact, and provided an environment in which individuals felt comfortable participating in research. Ultimately, USF Student Health Center acts as a case study representative of other university health services at public universities in the United States.

Student Health Services was assessed as a site providing information and health services to the students enrolled at the University of South Florida. I worked within Student Health
Services to gain a greater understanding of their methodology behind raising student awareness of sexual health, and family planning options. “Anthropology emphasizes the value of data gathered informally, the distinction between what people say and what they do, and knowing not just ‘lay’ but professionals’ beliefs too” (Hemmings 2005:99). Student Health Services, specifically the Sexual Health and Gynecology Clinic was an excellent place for ethnographic observation, because I was able to look for patterns relevant to my research and document whether student and provider practices at the health center align with what they stated as their beliefs or missions. Molding the research it fit within the Student Health Clinic allowed me to fully explore my research questions. I was able to survey students on why they were choosing to use Student Health Services Sexual health and Gynecology instead of other reproductive health services, as well as asking attendees of the general Student Health Services Clinic if they have ever used the sexual health clinic, and finally, surveying all clinic clients on their past experiences accessing university health services.

Clinic demographics

In fiscal year 2013-2014, Student Health Services serviced 11,734 unique patients for a total of 28,946 visits. Patients came for a wide range of reasons, but the top ten appointment requests were for, non-specific counseling, gynecological exam, upper respiratory infections, oral contraception, pharyngitis, STI counseling, MMR vaccination, anxiety, contraceptive surveillance, and urinary tract infection; four of those top ten reasons are covered exclusively by the sexual health and gynecology department (SHS Annual Report 2014). The total number of students seen by the general clinic in the last year was 15,500. The total number of students seen by the sexual health and gynecology clinic, still referred to at Women’s Health in the annual
Services obtainable at University of South Florida Sexual Health and Gynecology include, STI and pregnancy screening, which are free through student health. An annual Well Woman’s Exam is $30, and includes a Pap test, gynecological exam and breast exam (USF Student Health Services 2013). USF Student Health Services advertises that registered students have no out-of-pocket charge for visits with providers (physician, nurse practitioner, physician assistant) because visits are covered by the Health Fee, which is included in the cost of tuition. However, the fees for specialty procedures, medications, lab tests, and immunization shots are additional (USF Student Health Services 2013). This is important because, cost related issues and financial constraints can lead to sporadic use of contraception. Women aged 20-24 have higher rates of sporadic use and lower rates of effective uninterrupted use when compared to women over 25 years of age (Glei 1999).
Chapter 3: Methodology

Mixed Methods Approach

For this study, I took an inductive, exploratory approach guided by grounded theory. While I used theory to understand and situate my research, I do not consider theory to be the driving force of this research project. Luker (2008) explains grounded theory can be used to connect the personal and the political, but modifications are required in order to incorporate the social and political frameworks within which personal experiences are embedded. I started with several potentially competing variables and then gathered information to situate each of the factors in relation to one another. This was done in order to let the results speak for themselves; recommendations were then modified based on the results to best suit the needs of the community stakeholders.

The overall methodology of this project took a mixed methods approach in order to incorporate qualitative and quantitative data. This approach resulted in a more complete picture of the situation than just one method could have provided, because both statistical data on rates of knowledge and contraceptive use in the sample, as well as explanatory data on needs, motivations, and perceived barriers of the population were collected. Apart from the three main methods of data collection, which are 1) the orientation and observation portion of research, 2) the recruitment and online surveys, and 3) student interviews, I conducted a review of available data and statistics from previous research done in a university health setting. Assuring the research sample was random was important for increasing the generalizability of this exploratory
research, and to discourage critics from assuming the research was done with a biased
certainty sample (Luker 2008). Approval was obtained from the Institutional Review Board
at the University of South Florida before the human subjects portion of the research project
began; this includes the surveying and interviewing portions.

Ethnographic Observations

The first methodological step in this study was an orientation period at USF Student
health services. This process included meeting the staff, reviewing clinic records (no personal or
individual records), exploring the layout of the clinic and learning how the departments interact,
as well as attending staff meetings and observing the everyday workings of the clinic. During the
orientation process I had the opportunity to discuss research themes with Student Health Services
employees. Participants in staff meetings included administrative workers at Student Health
Services, front desk operators, and health care providers, such as the nursing staff and doctors.
The meetings had a conversational feel, and helped me to become familiar with processes and
dynamics of the clinic. I recorded hand written notes during the provider and staff meetings,
which were each approximately 30 to 60 minutes. I was able to conduct individual 60-minute
meetings with all three Sexual Health and Gynecology providers, and the senior director of
Student Health Services, as well as multiple meetings with the medical director and the quality
administrative specialist. These conversations covered a variety of topics, for instance, I asked
how long the employee had been on staff at USF Student Health Services, what they perceived to
be the strengths of the clinic, what they perceive as barriers for students accessing the clinic, and
what they perceive as goals for the clinic. I did not use a set script or questionnaire for these
exploratory meetings, but I did address similar themes with each participant and many answered similar questions.

Observations were conducted at USF Student Health Services and Sexual Health and Gynecology for a total of 27 hours between March and April of 2014, in order to collect ethnographic data. At Student Health Services I observed interactions to explore whether there were changes in behavior in this setting dependent on who is communicating with whom. Participating in the everyday functioning of Student Health Services allowed me to investigate how programs are planned, and how awareness campaigns are created to target students in regards to the topics of sexuality, contraception, and sexually transmitted infection screenings. In addition, I was be able to gather insight to the motivations of the Student Health Services employees and hear their concerns in regards to issues of finance and insurance coverage, access to services, and knowledge of effective contraception. I followed a loose protocol when performing overt observation which helped me to stay focused, this protocol included three major areas, 1) the check in and clinic navigation process, 2) client to client interaction and comfort, and 3) nurse/provider to client interactions. I kept a log while working at Student Health Services and conducting my observations, which allowed me to keep field notes of things I saw and heard in a day (Bernard 2011). Most observation and note-taking within the clinic took place from behind the front desk, where students check in and out of appointments, and from the nurses station, which is an island of desks located in the clinic where nurses complete paperwork and wait for patients. Using the key anthropological approach of observation within the context being studied throughout my research was done to increase the significance and future implications of my work, because it will provide a more holistic understanding of the situation.
Sampling and Recruitment

The next step in the research process was recruitment and survey collection. Recruiting for research participants was done in-person at Student Health Services. My research sample was women, who are enrolled at the University of South Florida, are between the ages of 18 and 26, have never had a child, and are in the Student Health Services waiting area for an appointment. All women who met the sampling criteria were invited to participate in the survey by myself when they checked-in for their appointment. Women were the focus of this research because the majority of contraceptive methods are female centered, and women represent a larger proportion of the client base at USF Sexual Health and Gynecology, formerly called the USF Women’s Clinic. The age demographic was selected because the majority of college students fall within this range and women within this range have the possibility of continuing health insurance coverage under their parent’s plans, which I intend to explore as a potential factor contributing to patterns of health care access. The study was originally going to exclude women who were not sexually active, defined as having had sexual intercourse in the past year, in order to better assure that the participants had reason to consider sexual health concerns, such as sexually transmitted infection and family planning options, as they dealt with the possibility of conceiving. However, respondents who were not sexually active were ultimately included in the sample because 26.3% of recruited participants were not sexually active. This indicated that non-sexually active individuals make up a significant portion of Student Health Service’s client base and their opinions would therefore be useful in making recommendations to the clinic. While I have chosen to focus on the most fecund sample of women possible, I limited the research sample to women who are childless, because having a dependent changes financial status, as well as reproductive health care experiences. Students were able to decline participation in my study
prior to completing the recruitment survey. I did not record refusals with complete accuracy because some students would take the informed consent form to review and never return it. However, I did record at least 35 refusals to participate.

After contact was made with potential participants at the Student Health Services clinic, I used the Internet as a method facilitating interaction with a select sample that agreed to further communication during in-person recruitment. E-mail messages that were used for recruiting online survey participants are included in Appendix IV. As Luker (2008:16) states, understanding the changing social location of research and researchers gives us permission to break free from limiting and traditional ways of conducting social research. Recruitment and online surveys provided quantitative and demographic results, in addition to measuring baseline knowledge and use of contraceptive methods. I created my own survey rather than using standardized surveys that researchers have used in the past, this allowed me to create a survey that is fit for my research questions and could be initiated quickly in a clinic check-in setting. The desired online survey sample size was 150 students from the pool of Student Health Services patients, however the sample size of the recruitment survey being 152 individuals limited the online survey sample.

In an attempt to reduce external confounding due to seasonality, which has the potential to change demographics, I conducted all of the recruitment surveys in the same month. The process was originally meant to take one week, however due to the low number of clinic participants and the number of completed online surveys, I continued to recruit in the clinic until the online survey response rate approached the desired sample size. Recruitment would have continued longer but was closed due to the ending of the spring semester, which coincides with a change in clinic use rates and a change in eligibility for students not enrolled in summer
Therefore, recruitment began April 7, 2014 and ended on April 25, 2014, with a total of 27 hours spent surveying in the clinic.

Surveys

The survey process began with a form of consent, presented at the Student Health Services front-desk, by myself, when the student was checking in for their appointment. The consent form was given to the student along with a brief verbal introduction to the research topic. They were told to review the informed consent form while they were in the waiting room, and in the exam room. Originally, I had planned to be waiting near the nurse’s station for clients exiting their appointments, at which point they would either present their completed informed consent to me or decline participation. However, due to the clinic layout it was not possible to see all students exiting their appointments from the nurses station, so after the first three hours of recruitment I switched to staying behind the front desk at all times, this allowed me to see all students exit because they are required to check out at the front desk. If the client agreed to participate and returned the informed consent form to myself I offered to escort them to a partitioned area where they would be given the recruitment survey. The vast majority of students preferred to be given the recruitment survey along with the informed consent form so that they could look it over before consenting. Due to this request by students I began handing out both the informed consent form and the recruitment survey at the front desk on clipboards and collecting them at either the front desk or from the waiting room.

The recruitment survey asked questions regarding study inclusion and exclusion criteria, and asked respondents if they would agree to being emailed a link to the full online research survey. If they agreed to provide an email contact, they were agreeing to potentially take the
online survey that would be emailed to them by myself. The recruitment survey introduced the opportunity for respondents to be contacted at a later date for a one-time follow-up interview. They were asked if they would be in the Tampa Bay area during May 2014, if they would be local and provided an email contact then they were agreeing to be contacted for a possible one-hour interview to take place during May 2014. If the participant met study inclusion criteria, provided email follow-up information, and agreed to complete the de-identified full research survey, they were considered eligible for follow-up interviewing. Due to the de-identification of the online survey, I was unable to check if a respondent had completed it prior to the follow-up interview, but that information was not necessary to complete the interviews. Upon review of the recruitment survey by myself, if a student did not meet the inclusion criteria their recruitment survey data was coded and entered into the total sample accessed for recruitment but they were not contacted for follow-up. Once the information from the paper and pencil recruitment survey was entered into the digital database, and emails were sent to those individuals who volunteered to participate further and met the study criteria, the paper and pencil surveys were destroyed and the emails were no longer linked to the recruitment answers in any way.

The online survey was distributed and conducted using the survey platform Qualtrics. Following the student’s completion of the recruitment survey, and my review of their eligibility for the study, participants were emailed a link to the survey on Qualtrics. The email included a brief introduction that restated the purpose of the research study, and reminded the recipient of the informed consent they signed at the clinic. The online survey contained short answer, multiple-choice questions, and Likert scales. The inclusion of Likert scales and yes or no questions was intended to provide information on what the sample had experienced, and what their current patterns of service use are; this data was useful in guiding the refinement of the
interview questions. Free-listing areas were incorporated and asked participants to identify contraceptive methods with which they are familiar, and then to rank the methods of contraception they listed in order of their likelihood of using each. To assess whether their desired and most often used methods match up, they were asked if their most often used method is their preferred method and if they face barriers in using their preferred method.

The online survey began with demographic questions, followed by questions about health insurance and previous or current health care providers. This section included questions about where participants go when seeking sexual or reproductive health care, whether or not the student is insured, and whether they have ever accessed health services on campus. The third section included the most sensitive and personal questions, including whether the subject is sexually active, if they are concerned about sexually transmitted infections, whether they use contraceptive methods, and their reasoning for using specific methods. The final section asked questions about how students obtain family planning information, as well as whether or not they felt comfortable in past provider-patient settings. Individuals were not required to answer all questions and there was an option to skip questions, this was allowed in order to assure participant comfort with the questions and to reduce the number of participants who started but did not complete the survey. After completing the survey, many student’s commitment to the study was complete. The students who had agreed to follow-up were emailed about scheduling a interview regardless of whether they had completed the online survey. The survey was pretested among the focus population in order to gain feedback and evaluations of the tool, this allowed for modifications before the true survey collection began (Bernard 2011). While not all suggestions could be incorporated, I tried to arrange the questions so that they flowed naturally,
and I tried to make the language accessible for participants. The final online survey tool is included in Appendix II and the recruitment survey is included in Appendix I.

**Interviews**

Finally, after conducting the orientation, observations, and surveys, I sent an email to the 63 recruitment survey respondents who agreed to a follow-up interview during the clinic recruitment survey and indicated that they would be in the Tampa Bay area during May, 2014. I sought to schedule and complete at least ten interviews. I originally planned to determine my interview sample based on initial analysis of the survey results. As I was analyzing the survey data and looking for themes that arose, or gaps that required further explanation, as well as stratifying the respondents based on whether they were attending the Sexual Health and Gynecology clinic or the general Student Health Services clinic, I was hoping to flesh out the data using particular interviewees. Unfortunately, due to low response rates and time constraints I decided to interview the women who were willing to participate and were able to schedule a time to meet during May 2014. Of the 63 participants contacted for an interview, thirteen expressed interest in being interviewed; one individual was interviewed in order to test the tool, and six were interviewed to be included in the research data.

The interview guide was created by myself and modified based on initial survey results, allowing for the interview to focus on aspects that are identified as important by participants in the surveys. The final interview guide is included in Appendix III. The interviews were all conducted in private study rooms in the USF main campus library. The interviews were all one-on-one and were audio recorded using my personal laptop computer. The interview included a similar flow of question topics as was found in the survey, as well as using a similar structure
which included consent, a warm-up section and a wrap-up section. The topics to be covered in the interview will be, finances, history of care, which includes patterns of health services use and barriers to access, sexual patterns, and finally contraceptive use and decision-making. The interviews took approximately 30-45 minutes each, allowing for time for the interviewees to elaborate further on the topics addressed in the survey, namely client perceptions of Student Health Services. I probed to understand the decision-making processes students go through when seeking reproductive services and contraception. In addition, the interviews aimed to provide clinic attendees an opportunity to express what they want from USF Student Health Services and suggest improvements to be made to the Sexual Health and Gynecology services in the future. These two topics, student perceptions and future goals helped to illuminate barriers that may be hindering the effectiveness of USF’s sexual health and gynecological services.

**Data Analysis**

Analysis of field notes was a continuous process during this research. I pursued a grounded approach in my analysis and developed analytic interpretations of the data to focus consequent data collection, and ultimately, to inform and refine my theoretical analyses (Charmaz 2000). For instance, instead of hypothesizing what students would say about their experiences using Student Health Services, I surveyed them about competing ideas and used the survey responses to shape the interview guide. Then, I used all the responses in turn to formulate interpretations about student’s experiences and how they fit within a theoretical framework. In addition to the survey and interview tools I used to collect analyzable data, I analyzed the notes I collected while memoing participant observations. Memoing is a term used to refer to the process of recording field notes while performing participant observations, it includes not only
observations from surroundings but also personal ideas and feelings about the observations, this
aids in the development of themes during analysis. Memoing field notes further assisted me in
building explanations from the data itself and helped to remove some of my influence from the
theoretical decision-making (Bernard 2011).

Building from the inductive analysis that took place throughout data collection, I
triangulated data responses from surveys, participant observations, and interviews. This
triangulation was done using generalized coding to identify themes and patterns important to the
data. In order to operationalize this process, I began with the survey and interview responses,
then moved to Student Health Services participant observation and employee meetings, all the
while looking for convergence, inconsistency, and contradictions between the administrators and
providers, and the student patients. Making note of the themes that arose through this inductive
methodology of analysis resulted in the deduction of patterns and theories about the processes at
work in the field. I coded and compiled all the de-identified recruitment and online survey data
using Microsoft Excel and then SPSS Statistics software in order to analyze and identify trends
and then used basic thematic analysis, in the form of hand coding, for the interview data.

Pearson’s chi-squared test was used to test if there was a significant association between
the observed distribution and the expected distribution. In other words, determining whether two
variables are related or if the correlation between variables was due to chance. Tests were
performed by compiling survey responses in Microsoft Excel, then exporting the spreadsheet
data to SPSS, where chi-square tests were performed and outputs were analyzed. Results were
considered statistically significant if the p-value was less than, or equal to .05, which means there
is only a five percent chance that the observed relationship between the variables would be
expected to be due to random sampling error.
Limitations

There were several limitations of note within this study. First, during survey design, gender was listed on the recruitment survey but only male and female were given as response options. The question would have been more functional had it asked for the participants ‘sex’ instead of gender and if it had listed an ‘other’ category, rather than being dichotomous. Additionally, on the online survey respondents were given the ability to skip questions and the ‘smart response feature’ was activated, which allows the questions to redirect based on an individual’s answers, therefore, not all online survey respondents answered all questions. Response rates to questions vary from 100% to 69.7% (n=30), with the free-listing section completed by only 46.5% of participants (n=20).

Throughout the study, sample size was a limiting factor because response rates were lower than anticipated, due to small sample sizes certain statistical analysis could not be performed. Therefore, only Pearson chi square tests were performed on the quantitative data. Additionally, the sample may have been skewed because students were recruited while waiting to be screened for STIs on the day of the Get Yourself Tested event. This may have resulted in more sexually active students being recruited than is representative of the university as a whole, or the sample may include more students motivated to seek reproductive health services than is representative. I do not anticipate that this potential volunteer bias had a negative impact on results. This research did employ a convenience sampling method, which can have limitations related to representativeness. However, because I was only researching the use of the Sexual Health and Gynecology clinic, yet I recruited from the entire population of students using all
Student Health Services during the recruitment sample, I believe I was able to avoid a completely medicalized sample.

During the interview portion of the research, I was hoping to flesh out the data gathered during surveying by using particular interviewees. Unfortunately, due to low response rates and time constraints I decided to interview the women who volunteered to participate first, and were able to schedule a time to meet during May 2014.
Chapter 4: Results

Results from Surveys and Interviews

Recruitment Survey

![Pie chart showing sex distribution of respondents]

Figure 1: Sex of Respondents

The recruitment survey gathered 152 respondents (n=152). Average age of respondents was 20.66 (Standard deviation= 2.204). Seventy-four percent of survey respondents reported having had sexual intercourse in the past, defined as sexual contact involving penetration of the vagina by the penis. This definition of sexual intercourse comes from Merriam-Webster Dictionary (2014) and was used in order to specify to respondents that the survey was referencing heterosexual intercourse. No respondents reported giving birth to a child.

There was some confusion to the question, “Was your appointment today with Student Health Services Sexual Health and Gynecology, or General Medical Care?” Rather than answering it according to the dichotomous variables of SHG or general medical care, some
participants responded “yes” or “no” and “other.” Therefore, I grouped answers into Sexual Health and Gynecology, General Medical Care, Yes (meaning one of those two options), and Other, which includes immunizations, people who answered no, and potentially people who were getting free STI testing on Get Yourself Tested day but did not consider that to be a part of SHG because it does not require an appointment. Sexual Health and Gynecology was the response for 43.4% of the survey respondents, followed by 30.9% for General Medical Care, then 7.2% who answered “Yes” meaning they were seeing either SHG or GMC, leaving 17.1% who answered with either “other”, “immunization”, or “no” (2 people left this question blank).

All respondents were asked if they would like to be contacted again in order to complete the online survey and possibly be interviewed, 76.9% agreed to follow-up. Of those who agreed to follow-up, 82.1% (92 people) self-identified as female or wrote in the option “other” and were therefore eligible for the online survey. The two respondents who wrote in “other” told me that they did not identify within the binary gender categories of male and female. They considered themselves to be binary, which I considered to be eligible for the survey if they had female sex organs and were therefore, able to become pregnant. Respondents were also asked whether they would be in the Tampa bay area during May 2014 to determine if they were eligible to participate in the in-person interviews, 63 individuals identifying as female or other agreed to follow-up and answered that they would be in Tampa Bay during May 2014.

**Online Survey**

The online survey gathered a sample of 43 individuals (n=43) out of the 92 eligible. Due to the ability to skip questions and the incorporation of the smart response feature, which allows the questions to redirect based on an individuals answers, not all survey respondents answered all
questions. Response rates to questions vary from 100% to 69.7% (n=30), with the free-listing section completed by only 46.5% of participants (n=20).

Average age of respondents was 21.71 (Standard deviation= 2.71), however this question was only answered by 72.1% of online survey takers (n=31). The majority of respondents identified as non-Hispanic or Latino, 74.4%. Additionally, the majority of respondents described themselves as White, 60.9%, followed by 19.5% who identified as Asian, and 17% who identify as African American (n=41).

Table 1: Ethnicity of Respondents

<table>
<thead>
<tr>
<th>Ethnicity (n=41) participants could select multiple options and were included in both categories (n=3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
</tr>
<tr>
<td>Black</td>
</tr>
<tr>
<td>Asian</td>
</tr>
<tr>
<td>Native Hawaiian or Pacific Islander</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

Table 2: Respondent’s Year in School

<table>
<thead>
<tr>
<th>Year in School (n=43)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1st year undergraduates</td>
<td>12</td>
</tr>
<tr>
<td>2nd year undergraduates</td>
<td>3</td>
</tr>
<tr>
<td>3rd year undergraduates</td>
<td>5</td>
</tr>
<tr>
<td>4th year undergraduates</td>
<td>9</td>
</tr>
<tr>
<td>Masters level graduates</td>
<td>10</td>
</tr>
<tr>
<td>Doctoral level graduates</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 3: Respondent’s Type of Insurance

<table>
<thead>
<tr>
<th>Type of Insurance Coverage (n=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Insurance</td>
</tr>
<tr>
<td>USF Health Plan</td>
</tr>
<tr>
<td>Public Insurance (e.g., Medicare or Medicaid)</td>
</tr>
<tr>
<td>No Health Insurance</td>
</tr>
</tbody>
</table>
The majority of the sample, 69.7%, reported living off-campus, and the same number of students reported that they were considered in-state students for tuition purposes. Students were about split on whether or not they currently had a primary health care provider, with 54.7% reporting that they do have one (n=42). Then asked if they consider USF Student Health to be their primary health care provider 45.2% said that they do (n=42). Fewer students reported currently having a reproductive health care provider, 40.4%, but 64.2% reported that they had a well woman’s exam at some point in the past (n=42).

When asked if they had ever made an appointment at USF SHS Sexual Health and Gynecology 45.2% reported that they had. They were then asked if the hours of operation at USF SHS met their needs, and the majority, 80.9%, said that they did. Those who felt the hours did not meet their needs were asked to explain why, and responses included that the clinic was not open on weekends or holidays, and that because the hours are during normal business hours students with full time jobs cannot use the services.

Table 4: Where Respondents Report Seeking Care

<table>
<thead>
<tr>
<th>Where students reported seeking sexual or reproductive health care (n=36)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>USF SHS</td>
<td>20</td>
</tr>
<tr>
<td>Gynecologist or OBGYN</td>
<td>7</td>
</tr>
<tr>
<td>Not Applicable</td>
<td>7</td>
</tr>
<tr>
<td>Health Department</td>
<td>4</td>
</tr>
<tr>
<td>General Practitioner</td>
<td>3</td>
</tr>
<tr>
<td>Planned Parenthood</td>
<td>1</td>
</tr>
<tr>
<td>Hospital</td>
<td>1</td>
</tr>
</tbody>
</table>

The responses to a subsequent Likert scale question asking respondents if they felt like they had convenient access to sexual health information and sexual health services was in line with these results on satisfaction with the hours of operation. The majority of survey takers,
84.6% (n=39) responded that they strongly agreed or agreed that they have convenient access to information and services; only .07% disagreed or strongly disagreed with the same statement.

In the personal history section of questions students were asked about their sexual orientation, 92.8% reported being heterosexual or straight, no one reported being gay or lesbian, and .07% or 3 individuals reported being bisexual (n=42). They were asked who they had sex with in the past year, 21.4% had not had sex with anyone, 66.6% answered that they had only had sex with men, .07% answered they had sex with women only, and .04% answered they had sex with both men and women (n=42). They were then asked about the types of sex they had participated in within the past year, .08% had participated in anal sex, 79.4% had participated in oral sex performed on a male, 23.5% had participated in oral sex performed on a female, and 88.2% had participated in vaginal sex (n=34).

Participants were then asked if they were currently sexually active, defined as having sex within the past six months, 71.4% replied that they were sexually active (n=42). If the respondent answered ‘yes’ they were then asked if they were currently sexually active with one, or multiple partners, 90% (n=30), were active with one partner in the past six months. All respondents were asked if they were currently in a committed relationship with one person, 42.8% (n=42), were in a relationship with one person.

Respondents were asked to write in their number of lifetime sexual partners that were male, responses ranged from zero to 40, 17.5% reported having zero (n=40). The average was 5.77 with a SD of 8.15. After the 7 individuals with zero lifetime partners are removed the average becomes 6.9 for the remaining 33 respondents. The majority of respondents reported having zero lifetime sexual partners that were female, 87.1% (n=39).
When asked if they were concerned about contracting sexually transmitted infections the majority, 73.8% (n=42), said that they were not concerned. When asked to explain why they were not concerned about contracting STIs responses included being in a long term, monogamous relationship, regularly using condoms, being careful and getting tested, and not being sexually active. However, responses to this question contradict the answers given by the respondents when they were asked to identify their top sexual health concerns in a subsequent question (See Figure 2).

![Figure 2: Top Sexual Health Concerns](image)

Interestingly but not surprisingly, 100% of survey respondents answered that they are currently not trying to become pregnant (n=42). The survey asked if the individual had ever used contraception, 73.8% reported that they had used contraception before, but fewer, 52.3%, reported that they currently used contraception (n=42). The 22 individuals who reported
currently using contraception were asked to list the methods they use or consider using in order of most used or most likely to use first, and least used or least likely to use last. Condoms and ‘pills’ were the most used or most likely to be used by far. The only items listed in the bottom four, least used or least likely to be used include oral contraception (2 individuals), Depo-provera shots (2 individuals), IUD (2 individuals), Nuva Ring (1 individual), contraceptive patch (1 individual), female condoms (1 individual), male condoms (1 individual), and Implanon (1 individual).

![Diagram](image1.png)

**Figure 3:** 1st Choice for Contraceptive Method

![Diagram](image2.png)

**Figure 4:** 2nd Choice for Contraceptive Method
Respondents were then asked their reasons for using contraception, 63.4% cited avoiding pregnancy as a reason, 39% selected wanting to regulate their menstrual cycle, 41.4% use contraception to decrease menstrual symptoms (e.g., cramps), 26.8% use contraception to reduce the risk of STIs, three individuals wrote in ‘other’ reasons, which included “medical reasons-PMDD [Premenstrual Dysphoria Disorder],” regulation of acne, and “to decrease the risk of UTI.” Several individuals responded that they do not use contraception, 29.2% (n=41) and were asked to briefly explain why. Reasons for not using contraception included not being sexually active (6 individuals), participating in lesbian sex (1 individual), 2 people cited using the withdrawal method or condoms and did not consider those contraception, and one person said that they did not use contraception because it is “not healthy.”

Participants were asked to rate the extent of their partner(s) influence on the type of contraceptive methods they use, 55% replied not at all, 35% replied somewhat, and 10% replied very much (n=40). They were then asked how satisfied they were with their current method of
contraception, 64.8% reported being very satisfied, 32.4% reported being somewhat satisfied, and .02% reported being not at all satisfied (n=37).

When asked how familiar they were with long acting reversible contraceptive methods (e.g., IUDs, Implanon) only 41% considered themselves very familiar, 33.3% considered themselves somewhat familiar, and 25.6% stated they were not at all familiar with LARC methods (n=39).

<table>
<thead>
<tr>
<th>Responses to: Where do you obtain information about family planning, or contraceptive options?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Respondents could select all options that applied to them (n=39)</strong></td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

Figure 6: Where Respondents Obtain Information

Individuals were given the statement “I would like to receive more information and health education during my health provider visit” and asked to agree or disagree, 38.4% either strongly agreed or agreed that they would like to receive more information or health education during visits, 46.1% neither agreed nor disagreed, and 15.3% strongly disagreed or disagreed (n=39).
The final questions on the survey related to comfort communicating with health care providers, 84.6% of respondents agreed or strongly agreed that they feel comfortable communicating their reproductive health concerns to a health care provider; only .05% disagreed or strongly disagreed with the same statement (n=39). When asked if they agreed or disagreed with the statement that they had been confused during a woman’s wellness exam, 56.4% strongly disagreed or disagreed, while 41% neither agreed nor disagreed, and zero individuals strongly agreed (n=39). When presented with a statement about feeling pressured during a woman’s wellness exam, 74.3% strongly disagreed or disagreed with ever feeling pressured at a check-up, while 23% neither agreed nor disagreed, and zero individuals strongly agreed that they had been pressured in an exam (n=39).

Pearson chi-square tests were performed using certain independent and dependent variables from the online survey. Relationships between variables were considered statistically significant if the p-value result was less than, or equal to .05. Appendix VII shows the results from the chi-square tests. The results that are statistically significant at an alpha level of p = < .05 are in bold.

During initial analysis of the survey data using SPSS and Pearson chi square tests, it became apparent that the sample size was too small to perform chi-squares on the variables of race/ethnicity, year in school, and age, because these independent variables had too many response options. Therefore, I re-coded race/ethnicity into two variables one in which respondents reporting White were counted against respondents reporting any other ethnicity, and one variable that counted Hispanic respondents against non-Hispanic respondents. To address the variable of year in school, I grouped respondents into three categories, 1st year, upper level undergraduate, and graduate. First year students remained alone because the university requires
them to live on campus, while most of the other students live off campus and I thought this could be a factor influencing responses. The variable of age was thrown out because the tests could not be performed accurately using the responses, therefore, living on or off campus, and year in school were used as proxies for age. Additionally, the five questions that were presented as Likert scales were converted from five response options (Strongly agree, agree, neither agree nor disagree, disagree, strongly disagree) to three response options (Strongly agree or agree, neither agree nor disagree, strongly disagree or disagree) for analysis because there were too many cells with fewer than five responses, making the tests inaccurate.

There was a significant relationship between living off campus and ever having a well woman exam ($P=0.019$). This is fairly expected due to the fact that those living off campus must at least be upper level undergraduates, and the likelihood of ever having the exam increases with age. Those living off campus were also found to be significantly more likely to have ever used contraception ($P=0.049$), this is probably due to similar reasons relating to age and experience of those living off campus. An interesting finding relating to those living on campus, was that it was expected more of them would report not having a primary health care provider, while it was expected that more students living off campus had a primary health care provider. However, there was a mildly significant link ($P=0.053$) between living on campus and currently having a primary health care provider. Almost all students living on campus reported having a primary health care provider, while those living off campus were split. A larger proportion of the total students living on campus reported having a primary care provider, while less than half of off campus students reported having one. This link was not seen when the question was asked about currently having a reproductive health care provider.
After re-coding the variable for year in school to include only three options, 1st year students, upper-level undergraduates, and graduate students, I performed Pearson chi-squares using the dependent variables. The first expected but interesting finding was that the higher an individual’s year in school was, the more likely they were to have ever made an appointment at the Sexual Health and Gynecology clinic (P=.044). Echoing the findings from living on versus off campus, a higher year in school was also significantly associated with ever having a well woman exam (P=.026), and ever using contraception (P=.033). This finding serves as a proxy for age, more specifically than living off campus does, and shows a clear relationship between age, advancing in education, and lifetime use of contraception and/or Student Health Services SHG. However, there was not a statistically significant relationship between advancing year in school and currently using contraception.

Interesting results were found relating year in school to currently being sexually active and/or currently using contraception. The number of respondents reporting being sexually active in the past six months increased as the year in school advanced. If the sample size had been larger I believe that this would have proven statistically significant. The same number of first year students reported being sexually active and currently using contraception, indicating that they are all practicing protected sex. Fewer upper-level undergraduates reported using contraception than reported being sexually active. While the most unprotected group was graduate students, 41.6% of graduate students who reported being sexually active were not using contraception. This indicates the need for future work to expand on this trend with a larger sample size.

Reporting being sexually active within the past six months was positively correlated with ever making an appointment at the Sexual Health and Gynecology Clinic (P=.019). This is an
expected finding, but is useful as it confirms the information for clinic staff. Currently being sexually active is also very strongly correlated to ever having a well woman’s exam \((P=.008)\), ever using contraception in the past \((P=.003)\), and currently using contraception \((P=.025)\). Of those who reported being sexually active within the past six months, 36.6\% \((n=11)\) answered that they do not currently use contraception. This alarming statistic could have something to do with the fact that reporting being sexually active had a significant relation to currently being in a committed or monogamous relationship \((P=.00)\). All twelve individuals who reported not being in a committed relationship also reported not being sexually active in the past six months. Additionally, among those who were sexually active in the past six months \((n=30)\), more individuals reported ever using contraception in the past \((n=26)\) than reported currently using contraception \((n=19)\), indicating that there is an issue of consistent contraceptive use among the sexually active sample surveyed. These findings are concerning and give evidence that more outreach is needed to reduce the risk of unintended pregnancy among this population, as well as, exploring the relationship between being in a monogamous relationship and not using contraception. I hypothesize that among this population being in a monogamous relationship is considered protective of STI infection, and therefore causes barrier contraceptive use to decline, thus increasing unprotected sexual activity and the risk for unintended pregnancy.

In trying to identify a profile for the most at risk students, meaning those who are sexually active but not using contraception, I found that the majority of the sexually active sample was White \((62\%, \ or \ n=18)\) and of those 4 were not using contraception. All African American respondents who were currently sexually active were using contraception, however, 2 Asian respondents reported being sexually active and not using contraception, and 3 students classified as, other ethnicities, were sexually active and not using contraception. This
information is included to show that the race/ethnicity of the individuals did not necessarily influence their likelihood to participate in safe sex.

Originally the race/ethnicity variable was coded for eight options and when it was tested some findings did show to be significant despite the number of cells with expected counts less than 5. For instance, ever making an appointment with SHG was significantly tied to reported ethnicity \( (P=.007) \), all African American respondents \( (n=5) \) reported that they had made an appointment, while all Asian respondents \( (n=7) \) reported that they had not, White respondents were split \( (n=22) \). When race/ethnicity was re-coded using the dichotomous options of White or other, the results were not significant \( (P=.775) \). However, when the variable was recoded again using the options White, African American, Asian, or other, there was, once again, a very significant correlation between race/ethnicity and ever making an appointment at SHG \( (P=.005) \). These findings indicate that failure to match provider diversity to client diversity has not deterred those who were going to the clinic, but this research does not show how this issue may influence the reasoning for those minority individuals who did not attend the clinic at all.

Those respondents classified as other ethnicities were more likely than expected to have had a well woman exam, and those identifying as Asian were less likely than expected to have had one. Therefore, ethnicity is significantly tied to whether a participant has had a well woman exam \( (P=.050) \). Ever using contraception was significantly related to race/ethnicity in all three coding options I tested. In the dichotomous test, more Whites answered that they had used contraception than was statistically expected, while more minorities or those listed as other ethnicities said they had never used contraception \( (P=.067) \). The significance increased greatly when the groups were divided into four options \( (P=.010) \), and those identified as Asian were the only group to report ever using contraception less than would be statistically expected. A
significant link between race/ethnicity and current use of contraception was also found (P=.014),
more Whites and African Americans reported currently using contraception than would be
statistically expected, while fewer Asians and those classified as other races/ethnicities used
contraception than would be expected. Familiarity with Long Acting Reversible Contraceptive
methods was related to race/ethnicity (P=.037). However, I believe this to be an exaggerated
correlation due to a small sample size.

Dividing the sample by Hispanic or non-Hispanic ethnicity did not produce as many
significant findings as when ethnicity was divided into broader racial groups. Though, a higher
proportion of participants who identified as Hispanic reported not currently using contraception
when compared to the participants who did not identify as Hispanic (P=.052). Additionally, there
was a link between feeling discomfort communicating with a reproductive health care provider
and identifying as Hispanic (P=.027), though this may be exaggerated due to a small sample size,
it could also be evidence that diversity among staff members could increase the comfort level of
clients when communicating with providers.

*Provider Interviews (n=4)*

Overall provider goals were not always consistent, however, four goals for the clinic
were shared with me and discussed by SHG providers; increasing attendance, diversifying the
patient base, increasing awareness and knowledge of services among students, and incorporating
technology in care delivery and management. The two goals that received mixed support were
increasing patient attendance and diversifying the client base to include more males. While
discussing these goals, operations at the clinic, and each provider’s individual perspective on
student use of and interaction with SHG, four themes began to emerge, which could be seen
throughout the interviews. First, student knowledge, which incorporated not only knowledge of services offered at the clinic and cost of these services, but also general knowledge about types of contraception, health myths, and how to discern fact from fiction in regards to sexual health information. Providers mentioned wanting to dispel health myths on a wide range of topics, such as Student Health Services having lower standards of care than “real providers,” they were also concerned about anecdotal information that students hear and use to shape their expectations of the clinic. Interestingly, providers worried that students may get parental misinformation because parents may be following outdated guidelines, for instance, IUDs used to be much more invasive, and the guidelines on how often a healthy woman needs a pap smear has changed. Web-based information or misinformation is a controversial topic, providers felt that the Internet could be a resource to students, but that students are not always discerning on the web so looking up symptoms or medications can be a good or a bad thing. One stated that sometimes students come in asking for specific labs, as if they assume they should be super prepared for their appointments so they go online and decide what they need. Conversely, it was noted that patients, especially first time gynecology patients, come in nervous because they have heard horror stories from friends about testing or procedures done in the clinic, and the providers must address these fears in order to put the patient at ease.

Contraceptive knowledge was an issue the providers talked about, saying that students do not always consider condoms to be a form of contraception so they have to ask specifically about barrier methods to determine the individual’s history and behavior. When I asked one provider if students had an awareness of services and options at the clinic she replied, “No, they need education, they’re somewhere in between children and adults” she said that she spends time figuring out what they need, “I’ll do whatever they want, but I kind of help them figure out what
they need.” Two providers reported that with new ACA coverage of IUDs the use rate is going up, though they consider it improving it is still not a common request in the clinic. Another provider noted that very few students are asking for long term reversible contraception, but she does inform clients about them including warnings about the potential side effects. Providers noted that they try to educate patients on the side effects of medications, because they feel the side effects especially of hormonal birth control need debunking. Additionally, Gardisil seems to be a point of contention, all the providers felt differently about its popularity with some saying it is being used very often because it is free at the clinic, some saying that the population is not interested in the vaccination because they may have already received it or they figure they have already been exposed. In addition to side effects of medication, students might not understand the importance of consistent birth control use. It was noted by one provider that she sees pregnant clients and they get pregnant for “silly reasons,” which I implied to mean easily preventable reasons, for instance they leave their birth control pills at school when they go home for breaks. On one hand, this population was defined as “young and irresponsible,” they don’t understand their bodies so they will panic about discharge or an itch and come in “wanting to know what is normal.” On the other hand, they were described vaguely as a population that considers itself invincible to pregnancy.

The second theme that arose from the meetings with providers was financing and insurance, which was often mentioned in conjunction with student knowledge or awareness when discussing perceived barriers for students. The staff all agreed that services offered at USF SHG are more affordable than services offered almost anywhere else, but they also agreed that students may not have a good idea of the cost per service and they likely do not know that uninsured students can receive care. For instance, providers felt that if more students knew they
could get oral contraceptives for ten or fifteen dollars, more would want to be prescribed pills. Concerns about the extreme variability in insurance plan’s coverage of services were also raised, though providers pointed out that the student health center does employ individuals in the billing department and the call center to assist students in determining what is and is not covered by their plans. When I asked one provider about IUD use in the student population she told me that more are asking for it lately and insurance seems to be covering them more and “that’s the key.” She told me that the Affordable Care Act is helpful because birth control pills are covered more, as well. Finally, the issue of generic medications and contraception, especially birth control pills, were raised because providers worried students do not understand that they can receive a variety of oral contraceptives for reduced rates through the USF pharmacy. One provider suggested explaining generics to students and providing them with information on how to talk to their pharmacists.

Building on both the lack of student knowledge of services and the affordability of services was the third theme, which focused on actual services available, popularity of services, and the appointment scheduling process. Several providers felt making the appointment is a hindrance, and that often the wrong types of appointments are scheduled because the student was either embarrassed to tell the scheduler why they wanted to be seen or they did not fully disclose the issues they wanted to address. This type of appointment or scheduling error leads to timing issues. Appointments are booked for a 30-minute time slot if it is for a well woman’s exam, and a 15-minute time slot for birth control consultations, urinary tract infections, and STI testing. Providers mentioned the idea of having a scheduler who exclusively does SHG appointments in order to more correctly time them. They also feel online scheduling would be a nice, especially if there was a follow-up phone call as a reminder of the appointment to avoid no-shows. No-shows
were identified as a problem from the outset of this research project, one provider stated “Our schedules are full at the beginning of the day, but then we have no-shows.” This leads to a schedule of 15 clients in the morning turning into 11 total clients seen by the end of the day. This phenomenon is cited as a reason why they cannot see more patients and raise attendance rates at the clinic without adding another provider. The clinic has instated a no-show, no-call fee of 20 dollars for students who do not cancel their appointments up to two hours before it is scheduled to begin.

The fourth and final theme that came from discussions with the providers was communication and comfort of the student patients. This theme was partially made up of provider concerns over providing enough health education during visits while addressing all the topics the patient brings up during their limited time together. The issue of scheduling tied into the provider concern that higher attendance rates at the clinic may lead to lower quality or rushed appointment, as well the issue of trying to address too much in a short appointment. Providers talked about using email to follow-up with patients and the potential for using text messaging to give test results or appointment reminders. One provider felt like students in this age group do not listen to their voicemails, and it is inconvenient for providers to spend time calling and leaving a voicemail just to have the patient call back without listening to it. Another provider pointed out that while emailing to follow-up is convenient, they lose the face-to-face interaction which can help to ease worried patients, she stated that so much is lost, counseling wise, when follow-up is done via email or even over the phone; you can’t hug a person to calm them down after delivering unfortunate results over the phone. Student’s apprehension, embarrassment, fear, and overall discomfort were mentioned by the providers as feelings they try to address, in order to increase the efficacy of the appointment. There was not consensus on the general comfort
level of the patients, some providers said that students tend to be comfortable and forthcoming with issues they may be having, “They don’t seem to have trouble communicating.” While others said they get a lot of first time gynecological clients in the clinic and need to handle expectations the student may have of what will happen and dispel myths they may have heard. I expected to find this sort of variation in the population’s comfort level because a university setting is diverse and the age range of SHG patients is so wide. Some of the ways SHG works to make students comfortable is by working off a preferred provider system, recurring clients will be scheduled with the clinician they have previously been seen by unless that is not possible or a different provider is requested. Additionally, the gender of the providers was discussed as a possible source of comfort for students, some felt that because the three regular SHG providers were female, student’s felt more comfortable with them. They cited instances when students were uncomfortable with male medical students working in the clinic, as well as issues they had with female students not being honest about reasons for their visit when they talked to a male scheduler. One provider stated, in reference to Dr. Puccio, “I hope he never brings a male in,” because she felt the clinic is still essentially a women’s clinic and a male provider would create scheduling problems, as well as discomfort from female students.

Finally, marketing concerns and advertising objectives were discussed in relation to the aforementioned themes, this included past successes, setbacks and lost opportunities to get the word out, as well as ways to expand advertisement for the SHG clinic. I do not consider marketing to be a fifth theme, nor do I consider it to be a goal put forth by providers. However, it is a venue that incorporates all four themes in order to assist in the achievement of clinic goals, and I was able to use to the provider perspectives on marketing to inform my recommendations for Dr. Puccio. A past success in marketing for the clinic was the Get Yourself Tested campaign,
which advertised the free testing services available through the SHG clinic during the first week of April. I was informed that over 300 students were tested during this week in 2013, and providers felt like Dr. Puccio had done a good job of getting DACCO and the health department to come assist with the free screenings. The event was also planned for the first week of April in 2014, but had not yet occurred at the time of my interviews with staff and providers. On the other hand, one lost opportunity to inform students that was brought up in multiple interviews was the fact that SHG was no longer invited to do talks at the residence halls, because the Resident Advisors make their own schedule of events. The staff used to be able to go to the dormitories, set up a table and hand out candy or contraception to get people interested in their services. One provider was brainstorming ways to inform students about how inexpensive SHS and SHG are, and thought freshman orientation would be a good time but worried they are receiving too much information at once and would not retain it all. Finally, ways to expand advertisement were mentioned, the assistant medical director said to me during a meeting that, word of mouth is a big deal for students and it is embraced in sexual health, this form of communication could help the clinic in increasing attendance because it increases marketing. Another provider thought one way to bring students in and at least inform them of SHG’s presence would be to advertise more inside the clinic, so when students come in to be seen by general medical they see information about the SHG clinic.

Student Interviews

Six student interviews were conducted and participants were selected from the 63 eligible women who agreed to follow-up. Five main themes developed throughout the interviews with students; 1) their knowledge of services offered and how to obtain those services, 2) their health
care seeking behaviors and patterns, 3) issues regarding patient-provider communication, which includes health education, 4) health information seeking behaviors, and 5) issues surrounding the use or knowledge of contraception.

Table 5: Interview Participants

<table>
<thead>
<tr>
<th>Age</th>
<th>23</th>
<th>22</th>
<th>21</th>
<th>19</th>
<th>23</th>
<th>22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of insurance coverage</td>
<td>Private-through parent</td>
<td>Private-school plan</td>
<td>Private-through parents</td>
<td>Uninsured</td>
<td>Private-individual plan</td>
<td>Private-through parents</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>White</td>
<td>White</td>
<td>Asian</td>
<td>Hispanic</td>
<td>White</td>
<td>Hispanic</td>
</tr>
<tr>
<td>Sexually active</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Scheduled SHG appointments in the past and talked to front desk</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Recruited from GYT</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Knowledge of Services was the first theme that identified itself as being an issue among the women I interviewed. Lack of knowledge about SHS and SHG also came up as an issue that the interviewees perceived in their friends and peers. One interviewee referred to student’s use of SHS by stating, “they know student services is there, but they don’t know what they’re offering” (C). Another participant felt like her major led her to be more aware of services and therefore think she had more access to health services, “I’m more educated and know more than a lot of other students just because I’m surrounded by it” (I). In addition, I used this theme to incorporate knowledge about service pricing, as well as knowledge about what services are offered, and how to obtain services. These three components were difficult to differentiate from one another, because when an interviewee was unsure about pricing it was often due to how her health
insurance status would affect her ability to obtain services. For instance, when I asked one participant if she had scheduled an appointment at SHG in the past she replied, “No, am I able to do that if I don’t have health insurance, or, if I don’t have health insurance through USF” (H)? When I later asked her if she had convenient access to health services she replied, “I guess I haven’t really tried to access it cause I didn’t know that it was available to me…” (H). This indicated that the knowledge of services, or the knowledge of availability at SHS was influencing student’s use of the SHG clinic.

Finally, outreach and advertising was included under the theme of student knowledge about services because suggestions for outreach often came up when the women gave me ideas on how to increase clinic attendance and advertise services. The majority reported that the Get Yourself Tested campaign had been carried out well, and they recalled seeing information around campus promoting the event. Their suggestions for student outreach and advertising paralleled the plan that was used for GYT by including posters and flyers, but some of their suggestions went a step further by incorporating Canvas banners and email notifications, to get students who pay less attention to flayers on campus. They felt that all of these outreach ideas might have a positive influence on student’s decisions to seek out sexual health services at SHS.

The next theme was health care seeking, which revolved mainly around the influence of cost and insurance status on an individual’s decision to seek services, as well as, the influence of clinic convenience and perceived accessibility on individual health care seeking behavior. Free STI testing was a common topic when I was discussing services available at the clinic with the participants. Many acknowledged that they sought out the testing when it was free, especially during the GYT event. It is worth noting again here that four of the six interview subjects were recruited on the Get Yourself Tested free screening day. I asked a student if money and finances
influenced her reproductive or sexual health decisions she replied, “Yes, that is the main reason I go to Student Health Services, because I know I can get access to those things for free even having insurance, but it is my mom’s insurance so I don’t really like to cause trouble. Like, you were supposed to pay this but I didn’t know I was supposed to pay, so I always make sure I call for the free STI or the free something, and try not to get involved with the insurance” (C). When asked another participant the same question about whether money or finances influenced her sexual health decisions, she replied, “No, but I also have health insurance. I know some people don’t and I’m sure it would, like, if I didn’t have health insurance I probably wouldn’t get a pap whenever I needed one or on a routine basis. I don’t know how much birth control costs but I’m sure it would be expensive if you didn’t have health insurance” (A). This statement actually showed that finances and insurance status do influence her sexual health decisions; because she has insurance she gets her annual exams. She also implies that cost and insurance status could create barriers for purchasing birth control. These two examples indicate that even if a woman does not perceive money or finances to be a barrier or an influential force on her reproductive decision-making, those topics are being considered and could be exerting unperceived force on health seeking behaviors.

Another issue related to insurance’s impact on health seeking behaviors became apparent when I asked one participant if she was covered by one of her parent’s private insurance plans, she replied, laughing, “yes, that’s why I try not to use it” (C). This indicated a trend that I suspected among this population, that despite being able to receive insurance coverage until the age of 26 by a parent’s plan as provisioned by the ACA, some students would not want to bill their parent’s insurance companies for sexual or reproductive services. This also came up when we were discussing free STI screenings, “I tell them it’s free, you can call and make an
appointment, and you can make sure you say you’re looking for free testing not the other one because they [her peers] don’t want to use their insurance” (C). Future research would need to focus more directly on this phenomena in order to draw any conclusions about how prevalent this practice is and to gather a more complete understanding of the motivations students have.

The convenience and accessibility of the SHS clinic came up repeatedly in interviews, when asked what factors helped to determine where they would go when they decided to seek health care participants often mentioned that the clinic being on campus made it accessible and the convenient for them to go whenever they wanted. Only one participant gave additional reasons for choosing to attend SHS, and that was that they accept her insurance. This tied into the issues of scheduling appointments, which fits within this theme because the act of calling and speaking with a scheduler, or the ability to request an appointment online were believed by the participants to potentially influence a student’s decision to seek an appointment at SHS SHG.

I asked students about their experiences making an appointment at the clinic, half of the interview participants had scheduled appointments in the past, and a fourth individual had attempted to schedule an appointment but admitted that she had changed her mind after the scheduler or front desk staff “kind of rude” and “forceful” with her. Of those who had scheduled an appointment over the phone or in-person, most felt that this was the most convenient and direct way of scheduling. I asked them if they felt comfortable telling a scheduler the reason for their appointment and all except one agreed that they were fine communicating with the scheduler. One participant stated, “I think I had a guy when I called so it was kind of uncomfortable for me I guess” (M). When I asked the interviewees if the ability to make an appointment online rather than talking directly to a scheduler would make them more comfortable disclosing the reason for their visit, they seemed receptive to the idea. Several stated
that they felt it was easier to just call and speak to a person, but that their opinions may be skewed because they consider themselves very open people, and they could see how scheduling online would benefit some people. Their assumptions would make sense considering my sample is made up of women who were willing to be interviewed regarding their reproductive and sexual health, and less forthcoming individuals would be less likely to volunteer for my research.

The issue of patient comfort scheduling tied nicely into the provider’s concern over the correct amount of time being scheduled for each appointment. I included the level of comfort patients felt communicating with their providers and whether they felt time constraints in the appointment in the theme I call, patient-provider communication. Two interviewees brought up time constraints when I was asking them about communicating with health care providers, one stated that, “sometimes I do feel like they rush me…I’ve never felt uncomfortable at all but I feel like they just want me in and out” (H). I then moved the interviews to the possibility of receiving more information and health education appointments, one woman responded to the idea by saying, “I can see how it would benefit more because appointments are pretty short, so if there was a patient education section about more specific health education and someone you could easily talk to versus, like, a doctor who is basically just in and out” (I). This respondent indicates that there might be some barrier or discomfort asking a doctor questions and someone else might be easier to discuss education with. Another respondent stated these concerns but framed them as personal discomfort, she stated that she has felt uncomfortable in appointments because, “you’re kind of embarrassed, not embarrassed but afraid of what it is” (V). She also noted feeling pressured in past appointments because she was nervous about getting her first pap smear because “I had heard horrible things about it, but it wasn’t that bad afterwards” (V). This paralleled some of the concerns the providers had about making first time clients
comfortable and ease their fears before being able to proceed with an appointment, meaning more time is spent in each appointment.

After all the participants had responded positively about potentially receiving more health education and information during their visits, I asked them what kind of information they would like and in what form they would want the information presented to them. The responses were mixed but focused around either in-person presentation via discussion, or a combination of face-to-face interaction and a reference to take with them. One respondent started to say a pamphlet and then modified her response, “Maybe give out flyers, pamphlets but then explain them because sometimes you just put them in your pursue and you forget that they’re there and you never read them again…If you’re going to give me something in an appointment I’d rather it be right there, the material…just a little list or informational card” (C). Most, if they mentioned pamphlets, did it briefly and then transitioned to something more personal or interactive. “I think a pamphlet or telling them [patients] verbally, because if you’re relying on them to do the research they’re probably not going to…” (A). One participant immediately replied with, “Definitely more time to talk about things, because honestly, I probably wouldn’t read the pamphlet” (M). Another woman expressed that, “a discussion would be best so if I have any questions I can ask them right then and there, because sometimes you take it home and never read it” (V). The only other suggested form of information presentation mentioned included face-to-face but went a step further, “They always say brochures and stuff, but I think more like interactive, or maybe like an iPad or interactive presentation, and then something that tests your knowledge afterwards, that would be cool” (I).

One statement that I felt tied the issues of comfort communicating, time constraints, health education, and Internet information all together came from a respondent when I asked her
if she would consider bringing information she found online into an appointment, “Maybe, but again, you’re expecting the physician to know certain things that you don’t even know, but if I go there prepared I think I make their jobs easier…and when I have questions I try to have the least amount of questions at the moment because I know there is limited time in my appointment, but I try to prepare myself before and not ask many questions” (C). Then in response to whether or not she felt information from the Internet would benefit an appointment she stated, “I think so, I think it would cut down on time because that’s something that that person should have a lot of experience with that situation, but I don’t think I would be that type of person to be like, here this is, I would feel like I’m offending that person [the provider]” (C). All participants said that they would consider bringing health information they found online into an appointment with a provider. However, they had mixed feelings on how it would benefit the appointment and how the provider would react. “The physician might be kind of annoyed that I’m bringing some kind of outside source in when he’s been to extensive school” (H). One respondent stated that bringing information in from the Internet benefited past appointments, “because it gave me a little bit more stake in everything and more patient-doctor communication than just, okay, stick out your arm” (I). Some participants cited the need to clarify information from websites, or just check if the information was correct, because, “they’re doctors, so they’re more knowledgeable that WebMD is probably” (A). This along with other quotes from this section of interview questions indicated to me that the women do consider health care providers to have authoritative knowledge that cannot be replicated by Internet sources, however, that authoritative knowledge is more difficult to obtain.

This lead to the exploration of where these women are gaining their knowledge, or what their information seeking practices are, as well as, exploring student perceptions of various
health information sources. There were many sources of information discussed in the interviews, but the most commonly mentioned way of obtaining information about family planning or contraceptive options was internet research, or “Googling it.” I was able to create a hierarchy based on the responses I received from my participants on which sources of information influenced their decisions the most. This continuum shows how the women talked about different sources as being more trustworthy, comparatively, and is not a scale of the sources by frequency used. They mentioned discerning between reputable websites or peer-reviewed articles found online, and websites such as, WebMD or Wikipedia. They implied the difference in the quality of information found on different sites but also joked that if they have questions they will Google search the topic and see what comes up. This lead me to question whether they were adjusting their answers based on what they thought I would want to hear. One respondent replied that she performed Google searches to obtain information, but as I probed she questioned what sources influenced her decisions the most, “That’s tough cause I’m really not sure. Probably journal publications or news, things like that. I mean, my friends do influence me too, but I would always want something to back that up, I would always look into something they told me, so probably some kind of professional publications” (H).

Table 6: Continuum of Sources of Information

<table>
<thead>
<tr>
<th>Best</th>
<th>Health Care Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Books and Classes</td>
</tr>
<tr>
<td></td>
<td>Reputable Online Sources (ex. CDC and Research Journals)</td>
</tr>
<tr>
<td></td>
<td>Family</td>
</tr>
<tr>
<td></td>
<td>Websites (ex. Google results)</td>
</tr>
<tr>
<td></td>
<td>Friends</td>
</tr>
<tr>
<td>Worst</td>
<td>Online Forums</td>
</tr>
</tbody>
</table>
Friends were mentioned as being a sounding board for information, to provide guidance and advice about what sort of things are normal, but they didn’t seem to influence how the women felt about Student Health Services. Several women talked about friends influencing their feelings about sexual behaviors or sexual health decisions just through talking, “just talking with girlfriends and them just being like, it’s okay to have sex for fun every once in a while, and things like that, you internalize those things and they do effect your behavior” or they said when they were younger they were more influenced by friends, “Not so much anymore, because I’m in a long-term relationship now but back when I was a freshman in college, of course, you’re easily influenced and you do what your friends do, you listen to your friends but, I don’t know, I think that’s normal” (A). One stated that her friends did not influence her decisions but she would go to them for advice, she referred to this as “friend guidance” and this term seemed to encompass how most of the women felt about the influence their friends had on them and vice versa.

I expected health myths or anecdotes shared among peers to be potentially misinforming young women and to have them report hearing many stories from friends about what could and could not happen. Fortunately, or unfortunately, I did not get a strong response to the probes asking about health myths; unfortunate because I worry they were not comfortable enough with me to unload all the myths they could think of, or they struggled to think of them on the spot. From what I did gather the women were eager to tell me they did not believe myths they heard, then they would recite one, and ask me if it was true. For instance, “…that you can’t get pregnant on your period, which, is that true?” (H). The most interesting aspect of the health myths I heard was that the majority related to how you could or could not become pregnant, the only other topics mentioned involved STI transmission. The confusion over the effectiveness of withdrawal and whether a woman could get pregnant while menstruating combined with the knowledge that
none of my respondents wanted to become pregnant in the near future made me curious about the respondent’s beliefs and use of different types of contraception.

Therefore, the final theme that arose from the qualitative interviews was contraception, which included feelings about different types of contraceptives, contraceptive use, and things that influence contraceptive use. I have previously mentioned that cost, or more specifically insurance coverage, was shown to influence a woman’s decision to use a certain type of birth control. Several other influences came up, including effectiveness, which was mentioned by participants as a reason for choosing certain methods over others, “I’ve considered using, like the patch or the shot, but I don’t know, I’d rather have the pill because it has been out the longest and shown more effectiveness” (I). Relationship status was another confounding influence on a woman’s decision to not use contraceptives. Of the sexually active interview participants (five out of six), only one reported using contraceptive pills and condoms, one was just using contraceptive pills, and the other three were using withdrawal as their only method of contraception. This shows that, in particular, condom usage was influenced by the woman’s relationship status. The woman who did report using condoms cited concerns over STI transmission because she was not in a monogamous relationship. Interestingly, the extent of the partner’s influence on the use of contraceptive methods varied a bit. One respondent reported that her partner encouraged condom use, “He influences me to use a condom versus not use it, because I’m the one to say no, because I think they’re kind of annoying, but they are smart and I should” (H). While another respondent reported her partner discouraged the use of condoms, “Well, we don’t use condoms, so I mean, I want to but he doesn’t want to, so I was like, oh okay” (V). The final respondent using only the withdrawal method stated that both she and her
partner agree to not use condoms, “I’m aware that it’s probably stupid of me because I have no
desire to get pregnant right now, but it seems to be working pretty well” (A).

The most exciting and unanticipated finding about the women’s contraceptive beliefs
related to their concern over the synthetic hormones in hormonal birth control products and how
they expressed this through their lack of use or temporary use of hormonal contraception. Five
out of six women I interviewed mentioned not wanting unnatural products or hormones in their
bodies. Some only hinted at what may be a fear of side effects, for instance, this response to
“have you ever used contraception,” “Well, I use condoms, when I use condoms, and that is it. I
wanted to try birth control pills but I don’t want to mess up my hormones” (V). She went on to
mention taking birth control pills in the past to control acne, but then said she did not want to
mess up her hormones because she heard that people can gain weight on birth control pills.
When I asked another participant if she was happy with her current method, withdrawal, she
replied, “No, but it’s much better than birth control, I would never go on birth control again
because I don’t like being dependent on any kind of drug, or anything that is synthetic or not
natural, I think it messed up my hormones” (H). Another mused, “…all these side effects
nowadays with medications, I just don’t know if it’s worth it” (A).

One of the only instances of questions the authoritative knowledge held by health care
providers came up in regards to this topic, a woman explained why she did not take birth control
when her gynecologist offered her a prescription, “I said no, I don’t want to do that. I just feel
like it messes with your body too much…It works for some people because some people are,
like, out of balance, but I feel like a lot of gynecologists push you to get prescriptions you don’t
necessarily need” (A). Another participant echoed this concern, however she was using hormonal
birth control pills to regulate her period. She stated, “I don’t know, I mean, I’m kind of hesitant
using birth control now as it is, so I mean I know I only want it for a year then I’m stopping” when I asked her to explain her feelings she said, “I don’t know, I don’t like putting things in my body, so I’m just trying to use this one year, hopefully get regulated, and then just get off them” (M). These feelings were consistent when discussing other types of hormonal birth control, but an additional discomfort arose when I moved the topic to Long Acting Reversible Contraceptives (LARC), such as Implanon and IUDs. I asked a participant if she would consider using LARC methods and she replied, “Yes, but not at this time, I would never do the Implanon, I just think that is like an alien thing in your arm” (I). Most of the participants were fairly familiar with LARC methods but none of the respondents considered using them at this point in their lives. They cited different reasons for this, and I suspect some had not considered the idea prior to our interview because of the way they seemed to walk through the decision making process in front of me. “I don’t like the implant, I try not to put too many things in my body, I go with birth control pills because they regulate my period…there were like, certain things that I chose the pills for and all the side effects that could be negative, like gaining weight or those things, I’ve never had thank goodness, and I’m happy with it, I just wouldn’t, like, lets say get vaccinated or put something inside me” (C). These concerns circulating among young women towards hormonal contraception are certainly something that need to be explored further because their perceptions are influencing their behaviors, and negatively impacting their acceptance of sexual health and reproductive knowledge.
Chapter 5: Discussion

Discussion

Student health services, Barriers to care, Patient-provider communication

While exploring environmental or structural factors that may have influenced student responses on the survey regarding use of student health services, ethnicity was found to be significantly (p = < .005) associated with ever making an appointment at SHG. Ethnicity was not a topic I sought out in my review of the literature, as I did not anticipate it having a significant impact within a university community. However, I was wrong to assume that the university community, while linked in many ways, would be homogenized enough to rule out the impact of ethnicity. All African American respondents had made an appointment in the past, while zero Asian respondents had. Ever having a Well Woman’s Exam was also significantly associated with ethnicity (p = < .050). Those who self-classified as ‘other’ were more likely than expected to have had a WWE, while those identifying as Asian were less likely than expected to have had one. Asians were the only group to report using contraception at any point in the past less than would be statistically expected. Additionally, fewer Asians and those self-classified as ‘other’ races/ethnicities currently used contraception than would be expected. These findings led me to consider whether some participants were international students, which may account for such consistent differences between use rates of Asians and the other ethnic groups. USF does have a large international student population on campus, 7.8% of enrolled students are international. Of
those international students, the majority, or 20% are visiting from China with the second highest number, 11% coming from India (University of South Florida 2013).

All of these results point to Asians or international students as a subpopulation of interest among USF students, because, at least in this preliminary and exploratory research, they seem to be utilizing sexual health care at a lower rate than their peers. Further research would be needed to understand why this is the case. I expect that these findings could be due to a language or cultural barrier, and may also tie into the issue of student apprehension communicating with reproductive health care provider that has been established in the literature. Another factor that may be contributing is the ethnic breakdown of the staff at SHG. The three main SHG providers are white women, and the fourth provider, who also serves as an administrator and therefore sees fewer patients, is a white male. However, the majority of the nursing staff is African American, which could help some groups feel more comfortable, it likely does nothing to ease Asian student's discomfort. Evidence of some student bias towards providers that are of similar ethnicity to themselves can be seen in the finding that more Whites and African Americans reported currently using contraception than would be statistically expected. This is a preliminary finding, but indicates that the topic should be explored further in order to prevent the clinic from unintentionally excluding a subpopulation in need.

The findings that linked advancing year in school with likelihood of ever making an appointment at SHG, ever having a WWE, and ever using contraception were confirmatory as it is expected that with increasing age, comes increasing experience. However, among students who reported being both currently sexually active and having higher years in school there was a declining rate of contraception use reported. This trend was not statistically significant, likely due to small sample size, but it was a consistent increase in the number of individuals not using
contraception beginning with upper-level undergraduates, and ending with graduate students who appear to be having the most unprotected sex. This was an unexpected finding based on the literature I reviewed, it is typical for more effective contraceptive use to be practiced increasingly with advancement in age. I expect that this finding could be related to pregnancy ambivalence, which has been established in the literature as a way to avoid the dichotomous, wanting to become pregnant or not wanting to become pregnant. Some studies have noted that rather than having dichotomous feelings about pregnancy, some individuals feel indifferent, or are not actively trying to prevent a pregnancy but do not currently desire one (Higgins, Popkin, and Santelli 2012). Without further research, I cannot be sure where the women in my sample fall on this continuum of avoiding pregnancy. However, the all reported not currently trying to become pregnant on the online survey. This leads me to believe that the graduate sample is not actively trying to become pregnant, but may not consider the methods they use to avoid pregnancy to be notable in all cases. Studies have shown that women under-report the use of the withdrawal method, even though it has been shown to be nearly as effective as the male condom when used correctly and consistently as directed (Jones, Fennell, Higgins, and Blanchard 2009). It would be interesting to see whether rates of withdrawal methods increased along with age, or if the method was used consistently across all groups as either a primary or secondary method.

I expect that these contraceptive use patterns might be influenced by older students transferring to the campus or attending USF for graduate school and never becoming as oriented with the campus health services as someone who attended a freshman orientation session. This relates to the issues of knowledge as a barrier to care that arose so frequently during the student and provider interviews. Knowledge of services provided at the clinic, the cost of services provided, eligibility for services, and how to access the clinic were all issues that the population
cited. All of these gaps in knowledge create barriers to acceptance of clinical reproductive care, and influence health seeking behaviors, because how can a student seek out services they do not know exist, and ultimately, use of contraception, because if they do not see a provider to obtain a prescription or learn about contraceptive options they will be less apt to use anything (Frost, Lindberg, and Finer 2012). The Student Health clinic provides a unique opportunity for students to receive care regardless of income or insurance status. However, if they are unaware they are eligible despite their insurance coverage they will never attempt to use the services available. My favorite example of this situation came during my interview period in May when the day after I interviewed a student and informed her that SHG accepts students with any type of insurance plan and told her the minimal fee scale, I received the following message, “Saw a gynecologist at the USF Health Center. I went in today and they set me up with an appointment right away. The most convenient experience I’ve had with a doctor. She was incredibly informative and personable too. Wouldn’t have gone had you not told me that was available, so thank you very much.” This situation is an example of what is found in the literature and indicates that finances are a force influencing health care seeking and contraceptive use, yet in my research, the issue is not always that cost is prohibitive, the case may be that potential patients are merely unaware of the cost of care and therefore, avoid it. Barriers to using contraception that are discussed in the literature include pregnancy ambivalence, perceived effectiveness of contraception, finances, partner influence, and fear of side effects. My research found agreement with all of these potential forces to some degree. However, while reading the literature insurance status is often mentioned in conjunction with financial constraint, but insurance status was not significantly linked with any health seeking in my findings. This included no influence on whether the
individual currently had a reproductive or primary care provider, or if they had ever been seen at the clinic before.

The interviews indicated that student knowledge about health and contraception is also inconsistent, based on the variety of misinformation participants shared with me, and this knowledge influences student information seeking practices and health seeking behaviors. This was expected based on the literature that indicates students often believe they have more sexual health and reproductive knowledge than they actually do. When individuals seek information from unreliable Internet sources or friends they may be receiving misinformation, and they know it, which means they continue to be unsure about the topic at hand. As my participants reported, health care providers are the most trusted source of information so it was not until they were able to confirm information with certainty that they considered it true and trustworthy. Therefore, young adults in this college community, who participate in lots of peer-to-peer information sharing, should be encouraged to see a reproductive health care provider in order to maintain their own health knowledge and to make sure they are sharing trustworthy knowledge with peers through what was dubbed, “friend guidance” by one of my participants. While my research focused only on female knowledge sharing, studies of college populations have shown that men may influence women’s reproductive choices and that college aged men have less gynecological than women (Volck, Ventress, Herbenick et al. 2013). For that reason, I would recommend a health literacy assessment of both the male and female students at USF in order to gauge their level of knowledge about sexual health, which would help guide future education efforts.

While students consider providers to be the most trusted source of information, consistent with the literature, they also report some apprehension about discussing topics with providers and note that time is so limited in appointments that they try not to ask questions. The issue of
patient-provider communication is well documented in the literature on health seeking behaviors and adherence to prescription regimens. The health education efforts that students desired more of during appointments, and providers noted struggling to fit within brief yet broad appointments should be addressed. In terms of this research, the topic of health education tied itself to the issue of patient-provider communication and comfort. Studies have noted that the intricacies of patient-provider interaction have great impacts on whether a patient feels comfortable enough to ask questions, whether they feel respected, and if they choose to accept the recommendations of the provider (Kleinman 1978; Hemmings 2005). It has been shown that high-quality interaction between patient and provider results in improved contraception use, and that contraceptive counseling can be characterized into three methods, the most effective of which involves discussion between patient and provider (Dehlendorf, Kimport, Levy, and Steinauer 2014). This study found that women 25 and younger were more often involved in the type of contraceptive counseling without shared decision-making. I can not conclude that this is taking place within the USF SHG clinic, however, it is worth noting that contraceptive counseling sessions are more effective when the patient is able to actively engage with the provider, or in this instance the contraceptive educator, and come to a mutual agreement on contraceptive type. This shared contraceptive decision-making should be in conjunction with patient-centered contraceptive counseling that focuses on the concerns and preferences of the patient, the provider’s clinical expertise, and scientific evidence (Donnelly, Foster, and Thompson 2014). While of course, both perspectives should be addressed and are important to the patients successful use of contraception, addressing anticipated patient concerns via a discussion may provide young women with the knowledge and empowerment necessary to use their chosen method correctly and consistently. As noted in the literature, some of these communication and education issues
could be mediated through the use of peer education programs at the clinic, or brief motivational
counseling strategies being employed by the providers.
Chapter 6: Conclusions

Recommendations for the USF Student Health Clinic

Throughout this analysis and discussion, theory was incorporated and used to situate results and make conclusions. I took a critical medical anthropological perspective because it incorporates political economy of health and therefore, the social, political, and economic forces, which shape individual interactions with the medical health care system. I examined differences in perceptions of barriers by reported ethnicity, gender, and age, all of which influence a person’s decisions to seek health care. Critical medical theory grew out of debates trying to unify cultural and biological anthropology research to include both theories of adaptation, medical ecology, and political economy of health. This became known as “critical bioculturalism” or critical medical anthropology and is now widely utilized by medical anthropologists and public health researchers due to it’s inclusion of immediate conditions of human action, responses to adverse conditions, historical precedence, the structure of local social relations, and how individuals use their resources and environment to cope (Leatherman, Goodman, and Thomas 1993). In this case, I used this theory to explore how local structure, individual perceptions of resources and environment, and conditioned notions of authoritative knowledge influenced student’s health seeking behaviors.

After reviewing and coding all the interviews I looked for congruencies and discrepancies between staff and students. Both students and providers are aware of the knowledge gap in the student population about clinic services and reproductive health care. Student knowledge of costs
at the clinic was a clear issue, all the women I interviewed asked me to clarify how much it would cost them to be seen at SHG or mentioned that finances play a role in their decisions to use services. In addition to education issues, staff is concerned about scheduling, however, students are not concerned about the mode of scheduling except that they note feeling rushed in short appointments. All issues seem to converge in the final note that, both staff and students want more health education in appointments to be able to clarify misinformation from the Internet and ‘friend guidance’. Based on the data collected I created the following recommendations for the Student Health Services clinic.

1. Creating a marketing campaign for SHG clinic, with more focus on the cost of services offered and targeting all age groups, not just incoming students. More marketing campaigns are needed that focus on promoting the cost of services, for both students with and without insurance coverage. Increasing attendance at the clinic could be achieved by increasing student awareness of the low-cost services and convenient location of SHS. The Get Yourself Tested campaign had a great response rate and generated positive feedback from students. In the future, similar tactics should be employed to generate interest services offered daily at SHG.

2. Sending out Email reminders once a semester to prompt student use of services and improving the accessibility of SHS website for those who are “Googling” information. To further increase student awareness of services and to remind students that a 75 dollar health fee is applied to their tuition bills every semester, I recommend the use of Email messages urging students to take advantage of services offered. Boosters or notifications should be sent to students once a month or once a semester with a list of services available to them through student health, the wellness center, and sexual health and
gynecology. In conjunction with this, I recommended to administrators that the SHS website be updated and that the accessibility of it be improved. Shortly after I concluded my data collection, Student Health Services informed me that they were about to debut a revamped website.

3. Implementing longer appointments, or more targeted health education during appointments to better utilize limited time slots; this could be done by piloting a peer education program or training providers in motivational interviewing. The addition of more targeted health education during visits is important to improve student knowledge, however, I also noted that students hinted at feelings of insecurity communicating with providers who they perceived as having unquestionable knowledge. Perhaps using educators before appointments, potentially nurses or peer educators, who could use symptom reference cards with STI signs and symptoms of concern, samples of different types of contraception for the patient to touch, and other tools in conjunction with discussion to ease the patient into an appointment with a provider. This option would not require longer appointments with the already busy provider in order to incorporate more information per visit.

**Recommendations for Future Research**

This exploratory study not only led to suggestions for SHS, but also for researchers interested in better understanding university student’s health seeking behaviors, perceptions about sexual health, and contraceptive use practices. One finding that I was not anticipating, based on the literature, was the number of students who reported negative feelings or apprehension regarding synthetic or “unnatural” hormones in certain methods of birth control.
Future work is needed to determine whether this is a growing trend among college-aged females and to understand whether these feelings are a response to growing organic and natural food movements, if they are due to misinformation about side effects, or if they are even having an impact on contraceptive use. Another opportunity to gather information useful to both researchers and practitioners would be conducting an in-depth health literacy assessment among this college aged population. Hopefully, the health knowledge of both males and females could be assessed in order to gain a more complete understanding of what students know about sexual and reproductive health topics such as, contraception, STI transmission and detection, and anatomy. This would be extremely useful for informing the health education work I recommended, by giving them a benchmark for improvement. Finally, I would like to encourage health marketing research to be done on college campuses to gain an understanding of what students respond to, and how they react to advertisements targeted towards them by the university they attend. Social marketing is a burgeoning field within public health and anthropology that could prove to be an asset in the war against misinformation and unprotected sex on university campuses across the country.

**Closing Remarks**

Since the completion of my research at the clinic, the Student Health Services annual report was published. The report states that within fiscal year 2013-2014 Sexual Health and Gynecology visits increased by 18% (SHS Annual Report 2014). This is likely due to the addition of a third SHG provider, who joined the staff in September 2013. In the past, critics of critical medical anthropological work have stated that despite medical anthropology becoming a distinct subfield within anthropology some 50 years ago, the influence of medical
anthropological findings have been limited within the biomedical community and clinical practice (Hemmings 2005). Contrary to this perspective, the influence of my medical anthropological perspectives are already being applied at the USF Student Health Clinic, as evidenced by their addressing my recommendation regarding improving reproductive health knowledge among its student-patient population via a peer-education program. The peer education program is set to begin in January 2015, based in part on my results, in order to train and employ students as educators within the Sexual Health and Gynecology clinic. Additionally, grant funding has been requested by members of the College of Public Health, Department of Community and Family Health that would be used to conduct a health literacy assessment of students using the Student Health Services Clinic, among other things. These applications of my research findings are promising and show the desire of the university community to increase student’s health care seeking and to encourage student’s to feel comfortable and knowledgeable when using health services and contraception at the University of South Florida. The methodology I used, and the recommendations I made have potential value to other large public universities in the United States that are aiming to increase use of clinic services by understanding student perceptions and reproductive health seeking behaviors.

The final stage of this project is the dissemination of findings and data, as well as the anticipated public impact of the research through applied outcomes and deliverables. Sharing results with members of the academic and research community through publication in peer-reviewed journals, and presentation at conferences, such as the Society for Applied Anthropology and the American Anthropological Association meetings, will increase the impact of this work. Sharing progress reports with administrators was done throughout the research process in the form of meetings with Student Health Services. Continuously delivering updates
in this way assured that administrators felt informed and incorporated in the progression of the project and understand the reasoning behind my ultimate recommendations. This on-going dialogue also allowed USF Student Health Services to put plans in motion to build off my work as early as September 2014, which was only three months post-data collection. I also sent SHS administrators an executive summary of the research and results after the completion of my analysis, and invited them to attend a presentation of my research at the USF Department of Anthropology Graduate Research Colloquium in October 2014.

I have concluded that the benefits to Dr. Puccio and the Student Health Services staff is an increased awareness of student needs, in particular regarding women’s reproductive and sexual health. It is my hope that my exploratory study and the resulting recommendations will continue to be used by the clinic in order to further increase student use of the Sexual Health and Gynecology clinic. Ultimately, this should lead to improved delivery methods and increased rates of use of USF Sexual Health and Gynecology. Increasing knowledge and awareness of effective birth control methods and services will hopefully lead to women feeling confident making decisions and disseminating fact-based information to their peers. It is also my intention to facilitate communication between providers and women seeking information and services at the USF Student Health Clinic, which should lead to more productive dialogues in the future.
References

American College of Obstetricians and Gynecologists (ACOG)

Barot, Sneha

Bernard, H. Russell

Blossfeld, Hans-Peter, and Johannes Huinink
1991 Human capital investments or norms of role transition? How women's schooling and career affect the process of family formation. American journal of Sociology, 97(1); 143-168.

Bryant, Kellie Dionne
2009 Contraceptive use and Attitudes among Female College Students. ABNF Journal 20(1):12-16.

Bureau of Labor Statistics

Charmaz, Kathy

Cheung, Eileen, and Caroline Free

Dehlendorf, Christine, Kimport, Katrina, Levy, Kira and Jody Steinauer
2014 "A qualitative analysis of approaches to contraceptive counseling." Perspectives on sexual and reproductive health 46(4).
Delavande, A.  

Denny, Simon, Elizabeth Robinson, Catriona Lawler, Sue Bagshaw, Bridget Farrant, Fionna Bell, and Jennifer Utter, et al.  

Donnelly, Kyla Z., Foster, Tina, and Rachel Thompson  
2014 "What matters most? The content and concordance of patients' and providers' information priorities for contraceptive decision making." *Contraception* 90(3): 280-287.

Eisenberg, Marla, Lechner, Kate, Frerich, Ellen, Lust, Katherine, and Carolyn Garcia  
2012 "Characterizing Sexual Health Resources on College Campuses." *Journal Of Community Health* 37(5): 940-948.

Fitzpatrick, R.  

Fletcher, Paula C., Pamela J. Bryden, Margaret A. Schneider, Kimberly A. Dawson, and Adrianne Vandermeer  

Frost, Jennifer J., Lindberg, L.D., and L.B. Finer  

Glei, Dana  
1999 Measuring Contraceptive Use Patterns Among Teenage and Adult Women. Family Planning Perspectives. 31(2):73-80.

Gramsci, Antonio, Quintin Hoare, and Geoffrey Nowell-Smith  

Greenhalgh, Susan.  
Halpern, Vera, David A. Grimes, Lauren M. Lopez, and Maria F. Gallo  
2006 "Strategies to improve adherence and acceptability of hormonal methods of contraception." The Cochrane Library.

Hemmick, Rob S. and Susan K. McCarthy  

Hemmings, Colin P.  

Higgins, Jenny A., Ronna A. Popkin, and John S. Santelli  

Inhorn, Marcia C  

Jones, Rachel K, Julie Fennell, Jenny a Higgins, and Kelly Blanchard  

Judson, Kim, Jennifer Goldsack, and Seema S. Sonnad  

Kaye, K., Suellentrop, K., and Sloup, C.  

Kleinman, Arthur  

Kleinman, Arthur Michael  
2011 The divided self, hidden values, and moral sensibility in medicine. The Lancet 377(9768): 804-805.

Leatherman, Thomas, Goodman, Alan, and R. Brooke Thomas  
Luker, Kristin

Mace, Ruth

Merriam-Webster Dictionary

Morsy, Soheir A.

Mullings, Leith

Our Moment of Truth

Petersen R et al.

RamaRao S et al.

Rosenberg MJ, Waugh MS and Burnhill MS

Singer, Merrill

Stephenson, Michael T.
1999 "Using formative research to conceptualize and develop a marketing plan for student health services." *Journal Of American College Health* 47(5): 237-239.
Szreter, Simon, and Michael Woolcock

University of South Florida

University of South Florida (USF) Student Health Services
2013 Women’s Health and Fees. University of South Florida Student Health Services.

University of South Florida
2014 Student Health Services Annual Report.

Volck, W., Ventress, Z., Herbenick, D., Adams Hillard, P.J., and Jill S. Huppert

Whiteford, Linda M., and Robert T. Trotter II
Appendices

Appendix I: Recruitment Survey (v.01 03/26/2014)

Thank you for agreeing to participate in our research study. The following is a brief recruitment survey to assure that participants meet the inclusion criteria for this study. Also, if you are open to being contacted at a later date and elaborating on these subjects via an in-depth survey (approximately ten minutes long), or a one-on-one interview with a student researcher, please include a contact email on the space provided at the end of the survey.

What is your age?

What is your gender? Male   Female

Have you ever had sexual intercourse, defined as sexual contact involving penetration of the vagina by the penis?   Yes   No

Was your appointment today with Student Health Services Sexual Health and Gynecology, or General Medical Care?

Have you ever given birth to a child? Yes   No

Will you be in the Tampa Bay area for the majority of May 2014? Yes   No

If you are eligible for this study (which requires completing a one-time 10 minute survey), would you be open to the possibility of participating in the second phase of this research, which includes participating in a one-time confidential interview lasting approximately 45-60 minutes? If yes, please provide an email address where you can be contacted and a first name. Providing a contact does not guarantee that you will be contacted again. If you are contacted, it will be within the next month.

Yes, you can contact me at a later date to complete a research survey, and to explore whether I am interested in participating in one confidential interview about understanding students’ health needs, concerns, and acceptance of Student Health Services.

First name:
Contact email:

No, please do not contact me at a later date to explore whether I am interested in participating in one confidential interview about understanding students’ health needs, concerns, and acceptance of Student Health Services.
Appendix II: Online Research Survey (v.01 03/26/2014)

Administered after Survey informed consent and recruitment survey

Thank you for agreeing to participate in this survey, which will cover issues such as access to healthcare, use of student health services, and use of contraception. The survey will take you approximately ten minutes. All responses will be anonymous and no identifying information will be included with your survey data. If you do not consent to having your answers used please stop the survey now. Thank you again!

Demographics

What is your age? ______ (years)

Are you Hispanic or Latino?
    _____ Yes     _____ No

How would you describe yourself? (check all that apply)
    White, African American, Asian, American Indian/Alaska Native, Native Hawaiian or Other Pacific Island, Other (please describe) ______

What year are you in school?
    1st year undergraduate, 2nd year undergraduate, 3rd year undergraduate, 4th year undergraduate, graduate student

Do you live on campus or off campus?

Are you an in-state student or out of state?

Health Care

What type of health insurance do you have?
    I don’t have any health insurance
    I have private insurance
    I have public health insurance (e.g., Medicaid, Medicare)
    I have health insurance through USF

Is this your own personal insurance or are you on your parent’s insurance?
    I don’t have health insurance; My own health insurance; My parent’s health insurance

Do you currently have a primary health care provider? y/n

Do you consider USF Student Health to be your primary health care provider? y/n

Do you currently have a reproductive health care provider (i.e. gynecologist)? y/n
If yes, please list where you receive care:

Have you ever had a well woman’s exam, which is an annual visit including a breast exam, gynecological exam, pap smears and other health maintenance testing as needed? y/n

Have you ever made an appointment at USF Student Health Services (SHS) Sexual Health and Gynecology (formerly USF Women’s Health)? y/n

Do the hours of operation at USF Student Health Services meet your needs? If no, please explain.

Where do you go when you are seeking sexual or reproductive health care:

**Personal**

Do you consider yourself to be: (check all that apply)
- Heterosexual or straight; Gay or lesbian; Bisexual

In the past 12 months who have you had sex with?
- I have not had sex with anyone else; Men only; Women only; Both men and women

In the past 12 months what type of sex have you participated in? (check all that apply)
- Anal sex; Oral sex performed on a man; Oral sex performed on a female; Vaginal sex

Are you currently sexually active (having sex within the past six months)? y/n
- With one partner? y/n
- With multiple partners? y/n

How many lifetime sexual partners have you had that were male?

How many lifetime sexual partners have you had that were female?

Are you currently in a committed relationship; meaning you are only seeing one person? y/n

Are you concerned about contracting sexually transmitted infections? y/n
- Please explain your answer.

Are you trying to become pregnant? y/n

Have you ever used contraception? y/n

Do you currently use contraception? y/n
- If yes, please list the methods of contraception you use or consider using in order of most likely to use (most used or most likely to use first, least used or least likely to use last)
What is your reason for using contraception? (check all that apply)
   To avoid pregnancy, to regulate menstrual cycle, to decrease menstrual symptoms (e.g., cramps), to reduce risk of STI, Other (please specify)

To what extent do your partner(s) influence the type of contraceptive methods that you use?
   Very much, somewhat, not at all

How satisfied are you with your current method of contraception?
   Very much, somewhat, not at all

Are you familiar with long acting reversible contraceptive methods (LARC) (e.g., IUD – a wire device inserted into your uterus; Implanon – hormone releasing rod inserted into your arm)?
   Very much, somewhat, not at all

What are your top sexual health concerns? (check all that apply)
Preventing pregnancy; preventing HIV transmission; preventing Gonorrhea and Chlamydia transmission; reducing risk of reproductive cancers; Premenstrual and gynecological concerns; Regulating menstruation; Other (please specify)

Information and Communication

Where do you obtain information about family planning, or contraceptive options? (choose all that apply)
Friends, USF Student Health website, other Internet sources, books, Media (TV, movies, magazines), health care provider, school, parents, Other (please specify)

Do you feel like you have convenient access to sexual health information and sexual health services?
   Strongly disagree, disagree, neutral, agree, strongly agree

Do you feel comfortable communicating your reproductive health concerns to a health care provider?
   Strongly disagree, disagree, neutral, agree, strongly agree

I have been confused during a women’s wellness check up:
   Strongly disagree, disagree, neutral, agree, strongly agree

I have been pressured during a women’s wellness check up:
   Strongly disagree, disagree, neutral, agree, strongly agree

I would like to receive more information and health education during my health provider visit:
   Strongly disagree, disagree, neutral, agree, strongly agree
Appendix III: Interview Guide

Obtain written consent using “Interview consent form”

What is your age?

What year are you in school?

Do you live on campus or off campus?

What ethnicity do you identify as?

Do you currently have medical insurance?

Have you ever made an appointment at USF Student Health Services (SHS) to see a primary care provider?

Do you consider USF Student Health to be your primary care physician?

Have you ever had a woman’s wellness check-up?

Do you currently have a reproductive health care provider (i.e. gynecologist)?

Where is your reproductive health care provider located?

Have you ever made an appointment at USF SHS Sexual Health and Gynecology (formerly USF Women’s Health)?

What was your reason for making that appointment?

What places do you consider going when seeking reproductive and sexual health care, and what are the determining factors for you when deciding where to go for sexual health care?

Do you ever talk to your friends about seeking sexual health care or reproductive care?

If so, what are the types of things that come up?

Do you ask your friends for advice before seeking care?

What are your friend’s opinions about USF SHS Sexual Health and Gynecology?

What is the image of USF Student Health Services to you?

What about USF SHS Sexual Health and Gynecology?
What do your friends say about USF Health Services?

What services would you like to see provided by USF SHS Sexual Health and Gynecology?

When scheduling with SHS how did you feel about your interaction with the scheduler or the front desk staff?

Did you feel comfortable telling the scheduler or front desk staff the reason for your appointment?

Would the ability to schedule an appointment online make you more comfortable providing the reasons for your visit, or accessing SHG?

How would you rate your overall experiences at USF Student Health, and SHG if applicable? (Rate 1-10 and explain)

Information and Communication

Where do you obtain information about family planning, or contraceptive options?

Which sources of health information influence you and your decisions the most?

Do you feel like you have convenient access to sexual health information and sexual health services?

Do you find health information on the Internet? What sites do you use?

Have you ever, or would you ever consider bringing information you found online into an appointment to facilitate the appointment? How do you think that could benefit or harm an appointment?

Can you tell me about a time when you felt uncomfortable communicating your reproductive health concerns to a health care provider?

Can you tell me about a time when you felt pressured into a sexual health decision, or when you felt confused by the options presented to you?
How would you feel about a USF health care provider presenting more information and health education during your visit?

What kinds of information would like presented to you and in what form? (ex. additions to the website, pamphlets, etc.)

In your opinion, would more preventative health care from USF SHS Sexual Health and Gynecology benefit you and your peers?

**Barriers**

Do you think money and finances influence your sexual health decisions? Explain how.

Do you think your friends influence your sexual health decisions? Explain how.

What sorts of “sexual health myths” or anecdotes do you hear circulating among your friends?

Do anecdotes from your peers influence your sexual health behaviors and health care seeking? Which ones do you consider based in fact?

What suggestions do you have for increasing student use of Student Health Services, in general and specific to SHG?

How would you rate the accessibility of Sexual Health and Gynecology at USF Student Health Services? (1-10 and explain)

**Personal**

What is your sexual orientation?

Are you currently sexually active (having sex within the past six months)?
   With one partner or multiple?

To what extent do your partner(s) influence your use of contraceptive methods? What about how they influence your use of sexual health services?

Are you concerned about contracting sexually transmitted infections?
Have you ever been screened for sexually transmitted infections at USF Student Health, or another health care facility? Which ones and how regularly?

Have you ever used contraception?

What are your reasons for using contraceptives?

What methods of contraception, if any, do you currently use? Are you happy with your current methods?

What other methods have you considered using, and why?

How familiar are you with long acting reversible contraceptive methods (LARC)?
   Would you ever consider using them? Why or why not?

What is your number one sexual health concern?

Do you have any final recommendations or suggestions for USF SHS, or SHG?
THANK YOU
Appendix IV: Email Solicitation of Online Survey

1st attempt:

“Thank you for agreeing to participate in this survey of female student's perceptions of Student Health Services at USF, which will cover issues such as access to healthcare, use of student health services, and use of contraception. The survey can be reached by clicking the link below, and will take you approximately ten minutes to complete. All responses will be anonymous and no identifying information will be included with your survey data. Please contact me with any questions. Thank you again!
Robin Mowson”

2nd attempt:

“Hello, and thank you again for agreeing to participate in my research study on perceptions and use of Student Health Services at the University of South Florida. If you have already completed the online survey, thank you! If you have not and still wish to participate in the research study, please complete the survey soon as I will be closing it this Wednesday at 8am. To begin the anonymous survey follow the link below, and if you have any questions please contact me.

Thank you,
Robin Mowson”
Appendix V: Informed Consent for Surveys

Informed Consent to Participate in Research
Information to Consider Before Taking Part in this Research Study

IRB Study # Pro00016274

You are being asked to take part in a research study. Research studies include only people who choose to take part. This document is called an informed consent form. Please read this information carefully and take your time making your decision. Ask the researcher or study staff to discuss this consent form with you, please ask him/her to explain any words or information you do not clearly understand. The nature of the study, risks, inconveniences, discomforts, and other important information about the study are listed below.

We are asking you to take part in a research study called:
Identifying and Addressing Barriers to Sexual Health Care among Female College Students

The person who is in charge of this research study is Robin Mowson, a graduate student in Anthropology and Public Health, she is being guided in this research by Dr. Linda Whiteford. Other research staff may be involved and can act on behalf of the person in charge. All research will be conducted at USF Student Health Services.

Purpose of the study

The purpose of this study is to:
• 1) Examine the perceptions female college students at the University of South Florida (USF) who attend the Student Health Center have about available services and contraception,
• 2) Explore female college students’ decision-making process regarding, obtaining sexual health care, and
• 3) Identify perceived barriers to sexual and reproductive health care. Sampling will be based on female students who are willing to be surveyed after an appointment at Student Health Services

Study Procedures

If you take part in this study, you will be asked to:
• Complete a brief recruitment survey immediately following your appointment, which will assure that you meet the inclusion criteria for participation in the full research survey.
• If you do meet the study inclusion requirements and volunteer an email contact, the recruitment survey will be followed by an email invitation for you to complete of the full research survey, which will take approximately 10 minutes to complete. There will also be an option, in approximately one month, for you to take part in a one time confidential interview.
• We ask that if you do receive the email containing a link to the full research survey, that you please complete it, as it indicates you meet the study inclusion criteria and your responses could increase the statistical significance of the study.

• The recruitment survey will take place at USF Student Health Services, in an office not currently being used by office staff, but that is accessible by nurses. The recruitment survey will take approximately 4 minutes to complete. You will be given privacy to complete it, but a researcher will be nearby if you have questions.

• If you do not meet the study inclusion criteria following the recruitment survey and you do not provide an email for follow-up, you will not receive the link to the full research survey and your role in this study will come to an end. If you do not meet study inclusion criteria but you do provide an email for follow-up, there is a possibility that you may be contacted via email sometime in the next month for a one time confidential interview.

• If you do provide an email on the recruitment survey, your recruitment survey will be considered “identified”, however, the email address will only be used to follow-up with you for the full research survey and the possibility of a one-time interview. The online full research survey will be anonymous and will not be linked to your recruitment survey, interview, or email address.

• If you consent to the recruitment survey, but do not meet study inclusion criteria the responses from your recruitment survey will still be used for data analysis. The information will be entered into a private digital statistics database, accessible only by Robin Mowson, after which point the tangible recruitment survey document will be destroyed.

**Total Number of Participants**

About 150 individuals will take part in this study at USF.

**Benefits**

We are unsure if you will receive any benefits by taking part in this research study.

**Risks or Discomfort**

This research is considered to be minimal risk. That means that the risks associated with this study are the same as what you face every day. There are no known additional risks to those who take part in this study.

**Compensation**

You will receive no payment or other compensation for taking part in this study.

**Cost**

There will be no additional costs to you as a result of being in this study.

**Privacy and Confidentiality**
We will keep your study records private and confidential. Certain people may need to see your study records. By law, anyone who looks at your records must keep them completely confidential. The only people who will be allowed to see these records are:

- The research team, including the Principal Investigator, study coordinator, research nurses, and all other research staff.
- Certain government and university people who need to know more about the study. For example, individuals who provide oversight on this study may need to look at your records. This is done to make sure that we are doing the study in the right way. They also need to make sure that we are protecting your rights and your safety.
- Any agency of the federal, state, or local government that regulates this research. This includes the Department of Health and Human Services (DHHS) and the Office for Human Research Protection (OHRP).
- The USF Institutional Review Board (IRB) and its related staff who have oversight responsibilities for this study, staff in the USF Office of Research and Innovation, USF Division of Research Integrity and Compliance, and other USF offices who oversee this research.

We may publish what we learn from this study. If we do, we will not include your name. We will not publish anything that would let people know who you are.

Voluntary Participation / Withdrawal

You should only take part in this study if you want to volunteer. You should not feel that there is any pressure to take part in the study. You are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive if you stop taking part in this study. Decision to participate or not to participate will not affect your student status or job status.

You can get the answers to your questions, concerns, or complaints

If you have questions about your rights as a participant in this study, general questions, or have complaints, concerns or issues you want to discuss with someone outside the research, call the USF IRB at (813) 974-5638.

Principal Investigator, Robin Mowson, can also be contacted at (440) 785-0352.
Consent to Take Part in this Research Study

It is up to you to decide whether you want to take part in this study. If you want to take part, please sign the form, if the following statements are true.

I freely give my consent to take part in this study. I understand that by signing this form I am agreeing to take part in research. I have received a copy of this form to take with me.

_____________________________________________  ________________
Signature of Person Taking Part in Study                Date

__________________________________________________
Printed Name of Person Taking Part in Study

Statement of Person Obtaining Informed Consent

I have carefully explained to the person taking part in the study what he or she can expect from their participation. I hereby certify that when this person signs this form, to the best of my knowledge, he/ she understands:

• What the study is about;
• What procedures will be used;
• What the potential benefits might be; and
• What the known risks might be.

I can confirm that this research subject speaks the language that was used to explain this research and is receiving an informed consent form in the appropriate language. Additionally, this subject reads well enough to understand this document or, if not, this person is able to hear and understand when the form is read to him or her. This subject does not have a medical/psychological problem that would compromise comprehension and therefore makes it hard to understand what is being explained and can, therefore, give legally effective informed consent. This subject is not under any type of anesthesia or analgesic that may cloud their judgment or make it hard to understand what is being explained and, therefore, can be considered competent to give informed consent.

_____________________________________________  ________________
Signature of Person Obtaining Informed Consent                Date

__________________________________________________
Printed Name of Person Obtaining Informed Consent
Appendix VI: Informed Consent for Interviews

Informed Consent to Participate in Research
Information to Consider Before Taking Part in this Research Study

IRB Study # Pro00016274

You are being asked to take part in a research study. Research studies include only people who choose to take part. This document is called an informed consent form. Please read this information carefully and take your time making your decision. Ask the researcher or study staff to discuss this consent form with you, please ask him/her to explain any words or information you do not clearly understand. We encourage you to talk with your family and friends before you decide to take part in this research study. The nature of the study, risks, inconveniences, discomforts, and other important information about the study are listed below.

We are asking you to take part in a research study called: Identifying and Addressing Barriers to Sexual Health Care among Female College Students

The person who is in charge of this research study is Robin Mowson, a graduate student in Anthropology and Public Health, she is being guided in this research by Dr. Linda Whiteford. Other research staff may be involved and can act on behalf of the person in charge. All research will be conducted at USF Student Health Services.

Purpose of the study
You are being asked to participate in this interview because you completed the recruitment survey and were found to be eligible for this research study. The purpose of this study is to:

1) Examine the perceptions female college students at the University of South Florida (USF) who attend the Student Health Center have about available services and contraception,

2) Explore female college students’ decision-making process regarding, obtaining sexual health care, and

3) Identify perceived barriers to sexual and reproductive health care. Sampling will be based on female students who are willing to be surveyed after an appointment at Student Health Services

Study Procedures
If you take part in this study, you will be asked to:

- Participate in a one time, semi-structured interview, which will take approximately 60 minutes to complete.
- This interview will be conducted in a private and convenient place, to be determined by both the researcher and the participant
- Audio recording will be used, and the participant must consent to the recording by signing this form. Only the research staff will have access to the recordings. The

99
recordings will be de-identified and an assigned number will be used to organize the files. The audio files will be saved for no longer than five years after the conclusion of the research study, and will be permanently deleted.

**Total Number of Participants**
About 15 individuals will take part in this portion of the study at USF.

**Alternatives**
You do not have to participate in this research study.

**Benefits**
We are unsure if you will receive any benefits by taking part in this research study.

**Risks or Discomfort**
This research is considered to be minimal risk. That means that the risks associated with this study are the same as what you face every day. There are no known additional risks to those who take part in this study.

**Compensation**
You will receive no payment or other compensation for taking part in this study.

**Cost**
There will be no additional costs to you as a result of being in this study.

**Privacy and Confidentiality**
We will keep your study records private and confidential. Certain people may need to see your study records. By law, anyone who looks at your records must keep them completely confidential. The only people who will be allowed to see these records are:

- The research team, including the Principal Investigator, study coordinator, research nurses, and all other research staff.

- Certain government and university people who need to know more about the study. For example, individuals who provide oversight on this study may need to look at your records. This is done to make sure that we are doing the study in the right way. They also need to make sure that we are protecting your rights and your safety.

- Any agency of the federal, state, or local government that regulates this research. This includes the Department of Health and Human Services (DHHS) and the Office for Human Research Protection (OHRP).

- The USF Institutional Review Board (IRB) and its related staff who have oversight responsibilities for this study, staff in the USF Office of Research and Innovation, USF
Division of Research Integrity and Compliance, and other USF offices who oversee this research.

We may publish what we learn from this study. If we do, we will not include your name. We will not publish anything that would let people know who you are.

**Voluntary Participation / Withdrawal**

You should only take part in this study if you want to volunteer. You should not feel that there is any pressure to take part in the study. You are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive if you stop taking part in this study. Decision to participate or not to participate will not affect your student status or job status.

**You can get the answers to your questions, concerns, or complaints**

If you have questions about your rights as a participant in this study, general questions, or have complaints, concerns or issues you want to discuss with someone outside the research, call the USF IRB at (813) 974-5638.

Principal Investigator, Robin Mowson, can be reached at (440) 785-0352.
Consent to Take Part in this Research Study

It is up to you to decide whether you want to take part in this study. If you want to take part, please sign the form, if the following statements are true.

I freely give my consent to take part in this study. I understand that by signing this form I am agreeing to take part in research. I have received a copy of this form to take with me.

_____________________________________________  ________________
Signature of Person Taking Part in Study  Date

Printed Name of Person Taking Part in Study

Statement of Person Obtaining Informed Consent

I have carefully explained to the person taking part in the study what he or she can expect from their participation. I hereby certify that when this person signs this form, to the best of my knowledge, he/ she understands:

• What the study is about;
• What procedures will be used;
• What the potential benefits might be; and
• What the known risks might be.

I can confirm that this research subject speaks the language that was used to explain this research and is receiving an informed consent form in the appropriate language. Additionally, this subject reads well enough to understand this document or, if not, this person is able to hear and understand when the form is read to him or her. This subject does not have a medical/psychological problem that would compromise comprehension and therefore makes it hard to understand what is being explained and can, therefore, give legally effective informed consent. This subject is not under any type of anesthesia or analgesic that may cloud their judgment or make it hard to understand what is being explained and, therefore, can be considered competent to give informed consent.

_____________________________________________  ________________
Signature of Person Obtaining Informed Consent  Date

Printed Name of Person Obtaining Informed Consent
## Appendix VII: Results from Pearson Chi Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Race</th>
<th>Year in School</th>
<th>Living On or Off Campus</th>
<th>Currently Sexually Active</th>
<th>Insurance Status</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever made an appt. with SHG</td>
<td>Chi=15.945 P = .007</td>
<td>Chi= 10.313 P = .067</td>
<td>Chi= 1.591 P = .207</td>
<td>Chi= 5.536 P = .019</td>
<td>Chi= 2.706 P = .439</td>
<td>Chi= 10.045 P = .262</td>
</tr>
<tr>
<td>Having a Reproductive Health Care Provider</td>
<td>Chi= 5.634 P = .343</td>
<td>Chi= 2.327 P = .802</td>
<td>Chi= .032 P = .859</td>
<td>Chi= 1.67 P = .196</td>
<td>Chi= 4.335 P = .228</td>
<td>Chi= 4.99 P = .759</td>
</tr>
<tr>
<td>Having a Primary Care Provider</td>
<td>Chi= 8.693 P = .122</td>
<td>Chi= 5.099 P = .404</td>
<td>Chi= 3.732 P = .053</td>
<td>Chi= .086 P = .769</td>
<td>Chi= 2.195 P = .533</td>
<td>Chi= 8.657 P = .372</td>
</tr>
<tr>
<td>Ever having a WWE</td>
<td>Chi= 7.942 P = .159</td>
<td>Chi= 7.773 P = .169</td>
<td>Chi= 5.469 P = .019</td>
<td>Chi= 7.010 P = .008</td>
<td>Chi= 5.674 P = .129</td>
<td>Chi= 10.283 P = .246</td>
</tr>
<tr>
<td>Ever used contraception</td>
<td>Chi= 13.448 P = .020</td>
<td>Chi= 8.893 P = .113</td>
<td>Chi= 3.882 P = .049</td>
<td>Chi= 8.979 P = .003</td>
<td>Chi= 4.011 P = .260</td>
<td>Chi= 5.736 P = .677</td>
</tr>
<tr>
<td>Currently using contraception</td>
<td>Chi= 13.142 P = .022</td>
<td>Chi= 4.047 P = .543</td>
<td>Chi= .016 P = .899</td>
<td>Chi= 5.05 P = .025</td>
<td>Chi= 2.144 P = .543</td>
<td>Chi= 5.401 P = .714</td>
</tr>
<tr>
<td>Familiarity with LARC</td>
<td>Chi= 15.957 P = .101</td>
<td>Chi= 7.363 P = .691</td>
<td>Chi= .448 P = .799</td>
<td>Chi= .350 P = .840</td>
<td>Chi= 1.46 P = .962</td>
<td>Chi= 12.398 P = .716</td>
</tr>
<tr>
<td>Feeling like there is convenient access to information and services</td>
<td>Chi= 21.065 P = .393</td>
<td>Chi= 18.82 P = .534</td>
<td>Chi= 3.562 P = .469</td>
<td>Chi= 5.079 P = .279</td>
<td>Chi= 6.595 P = .883</td>
<td>Chi= 23.036 P = .518</td>
</tr>
<tr>
<td>Feeling comfortable communicating with providers</td>
<td>Chi= 39.591 P = .006</td>
<td>Chi= 23.828 P = .250</td>
<td>Chi= 2.801 P = .592</td>
<td>Chi= 8.081 P = .089</td>
<td>Chi= 6.249 P = .903</td>
<td>Chi= 17.872 P = .809</td>
</tr>
<tr>
<td>Wanting to receive more information in an appt.</td>
<td>Rev. Variables</td>
<td>Ethnicity (White v. Others)</td>
<td>Year in School (First yrs, other UG, Graduate)</td>
<td>Hispanic vs. not Hispanic</td>
<td>Ethnicity (4 White, AA, Asian, other)</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ever made an appt. with SHG</th>
<th>Chi= .082 P = .775</th>
<th>Chi= 6.247 P = .044</th>
<th>Chi= .521 P = .470</th>
<th>Chi= 12.780 P=.005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi= 2.903 P = .088</td>
<td>Chi= .988 P = .610</td>
<td>Chi= 1.078 P = .299</td>
<td>Chi= 3.806 P = .283</td>
<td></td>
</tr>
<tr>
<td>Having a Reproductive Health Care Provider</td>
<td>Chi= 2.283 P = .131</td>
<td>Chi= 2.895 P = .235</td>
<td>Chi= 0 P = .987</td>
<td>Chi= 5.894 P = .117</td>
</tr>
<tr>
<td>Ever having a WVE</td>
<td>Chi= .040 P = .842</td>
<td>Chi= 7.324 P = .026</td>
<td>Chi= .003 P = .958</td>
<td>Chi= 7.826 P = .050</td>
</tr>
<tr>
<td>Ever used contraception</td>
<td>Chi= 3.367 P = .067</td>
<td>Chi= 6.851 P = .033</td>
<td>Chi= .798 P = .372</td>
<td>Chi= 11.452 P = .010</td>
</tr>
<tr>
<td>Currently using contraception</td>
<td>Chi= 1.473 P = .225</td>
<td>Chi= .155 P = .925</td>
<td>Chi= 3.767 P = .052</td>
<td>Chi= 10.580 P = .014</td>
</tr>
<tr>
<td>Satisfaction with current method of contraception</td>
<td>Chi= 3.279 P = .070</td>
<td>Chi= 2.749 P = .601</td>
<td>Chi= 4.091 P = .129</td>
<td>Chi= 4.133 P = .247</td>
</tr>
<tr>
<td>Extent partners influence contraceptive use</td>
<td>Chi= 1.226 P = .542</td>
<td>Chi= 2.539 P = .638</td>
<td>Chi= 2.643 P = .267</td>
<td>Chi= 3.222 P = .780</td>
</tr>
<tr>
<td>Familiarity with LARC</td>
<td>Chi= 4.908 P = .086</td>
<td>Chi= .668 P = .955</td>
<td>Chi= 1.686 P = .430</td>
<td>Chi =13.392 P = .037</td>
</tr>
<tr>
<td>Feeling like there is convenient access to information and services (3)</td>
<td>Chi= .139 P = .933</td>
<td>Chi= 6.607 P = .158</td>
<td>Chi= 3.081 P = .214</td>
<td>Chi= 3.685 P = .719</td>
</tr>
<tr>
<td>Feeling comfortable communicating with providers (3)</td>
<td>Chi= 2.775 P = .250</td>
<td>Chi= 3.944 P = .414</td>
<td>Chi= 7.213 P = .027</td>
<td>Chi= 12.141 P = .059</td>
</tr>
<tr>
<td></td>
<td>Chi</td>
<td>P</td>
<td>Chi</td>
<td>P</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------</td>
<td>-------</td>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td>confused in an</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>appt. (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.928</td>
<td>.091</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ever feeling</td>
<td>2.331</td>
<td>.312</td>
<td>2.579</td>
<td>.631</td>
</tr>
<tr>
<td>pressured in an</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>appt. (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9.070</td>
<td>.170</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wanting to</td>
<td>.424</td>
<td>.809</td>
<td>1.852</td>
<td>.763</td>
</tr>
<tr>
<td>receive more</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>information in</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>an appt. (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.039</td>
<td>.671</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
March 31, 2014

Robin Mowson
Anthropology
Tampa, FL 33612

RE: Expedited Approval for Initial Review
IRB#: Pro00016274
Title: Identifying and Addressing Barriers to Sexual Health Care among Female University Students

Study Approval Period: 3/31/2014 to 3/31/2015

Dear Ms. Mowson:

On 3/31/2014, the Institutional Review Board (IRB) reviewed and APPROVED the above application and all documents outlined below.

Approved Item(s):
Protocol Document(s):
Robin Mowson Research Proposal v.01_3.26.2014.docx

Consent/Assent Document(s)*:
Interview Consent Form v.01_3.26.2014.docx.pdf
Survey Consent Form v.01_3.26.2014.docx.pdf

*Please use only the official IRB stamped informed consent/assent document(s) found under the "Attachments" tab. Please note, these consent/assent document(s) are only valid during the approval period indicated at the top of the form(s).

It was the determination of the IRB that your study qualified for expedited review which includes activities that (1) present no more than minimal risk to human subjects, and (2) involve only procedures listed in one or more of the categories outlined below. The IRB may review research through the expedited review procedure authorized by 45 CFR 46.110 and 21 CFR 56.110. The research proposed in this study is categorized under the following expedited review
(6) Collection of data from voice, video, digital, or image recordings made for research purposes.

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

As the principal investigator of this study, it is your responsibility to conduct this study in accordance with IRB policies and procedures and as approved by the IRB. Any changes to the approved research must be submitted to the IRB for review and approval by an amendment.

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,

John Schinka, Ph.D.
Chairperson
USF Institutional Review Board