UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

HOW IS SEXUAL IDENTITY ACCEPTANCE RELATED TO SELF-

DETERMINATION FOR LGB-IDENTIFIED UNIVERSITY STUDENTS

WITHIN CLASSROOM SETTINGS?

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

Degree of

DOCTOR OF PHILOSOPHY

By

SHERRY KOLLMANN
Norman, Oklahoma
2014

HOW IS SEXUAL IDENTITY ACCEPTANCE RELATED TO SELF-
DETERMINATION FOR LGB-IDENTIFIED UNIVERSITY STUDENTS
WITHIN CLASSROOM SETTINGS?

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

BY

_____
Dr. Patricia Hardré, Chair

_____
Dr. Neil Houser

_____
Dr. Barbara Greene

_____
Dr. H. Michael Crowson

_____
Dr. Ji Hong

This research is dedicated to the loving memory of Eugenia Butala and Teresa Matkovich. The two of you taught me that age and generational differences should not be an excuse for hatred or judgment.

Acknowledgements

There are many people that have encouraged, supported, and loved me through some of my most trying days. The person that deserves the applause for getting me through this journey is Dr. Patricia Hardré. I am grateful that our lives crossed paths seven years ago. Your continued belief in me throughout these years will never be forgotten. I have always known that you were my biggest champion. To my committee, thank you for challenging me to dig deeper. Your insight provoked additional thought into the multi-dimensions of human development. Thank you for never letting me settle. From our very first meeting, I could feel your support.

Table of Contents

List of Tables

List of Figures

Abstract

The social environment in which students operate has been shown to influence psychological well-being (Deci & Ryan, 2000). Through this primarily quantitative study, the research highlights inadequacy of academic research dealing with sexual identity acceptance for LGB-identified university students in classroom settings. This study establishes the implications of the impact of sexual identity acceptance on meeting basic psychological needs and self-determination within the socially contextualized classroom. The findings contribute to the social influences on sexual identity acceptance and begin the discussion that informs current psychosocial development theory. Using the findings of this work, the problem of sexual identity acceptance will be seen more clearly, especially the identified relationships among basic psychological needs and self-determination and their respective subcomponents. The results of this research illustrate the need for LGB-identified university students to be effectively integrated into the academic community. This research seeks a change of perception in how we analyze student needs to ensure academic achievement. Student will benefit if educators view sexual identity acceptance through a broader lens, and understand its full implications.

Chapter 1: Introduction

We know that social influences have the ability to impact psychological well-being (Deci & Ryan, 2000) and that psychological well-being influences identity development (La Guardia, 2009). Critical pedagogy and socio-cognitive processes provide ways of understanding how students' identities integrate into their learning engagement (Kincheloe, 2008; Berzonsky, 1996) and how these processes can influence their self-awareness and perceived choice (Ryan & Deci, 2000). The social influences of heteronormativity also provide insight as to how information is delivered to and processed by lesbian, gay, and bisexual (LGB)-identified students (Martin, 2002; Rich, 1993).

Social influences impact a student's ability to accept his/her identity, motivation to learn, as well as his/her emotional and cognitive engagement (Fiske & Taylor, 2013; Park, Halloway & Arendtsz, 2012; La Guardia, 2009). The social context that a student operates in may have an effect on a student's self-acceptance. Students who conceal themselves and behave as heterosexuals in order to be acceptable to their social surroundings compromise their ability to accept their sexual identity; and this compromise of self-acceptance may eventually create a dissonance between the student's external and internal self as time progresses (Pachankis, 2007); the student may eventually feel the need to seek acceptance and begin integrating his/her internal and external identities into a dual-identification. This dual-identification may create barriers to learning and active engagement within the context of a classroom environment (Kollmann & Hardré, 2012).

This study utilizes the Self-Determination Theory (SDT) as a motivational framework for understanding how LGB-identified students' acceptance of their sexual identities affects learning within classroom environments. This theory offers an explanation of how motivation can influence a student's emotional and cognitive development within the social context of classroom environments. This research also aims to provide an understanding of how compromising identity acceptance can negatively influence basic psychological needs; and how this can subsequently affect LGB-identified students' self-determination, including autonomy, competence, relatedness, awareness of self and perceived choice as researched by Ryan and Deci (2000).

Research Problem

The topic regarding the social influences of LGB-identification on learning and cognitive engagement has little empirical research; however, a recent study illustrates that social environments have the capability of producing powerful perceptions that exert influences on students' learning and development (Kollmann & Hardré, 2012). Kollman and Hardré (2012) also emphasized that the identity of the student impacts his/her manner of processing information. This brings the importance of observing how the factor of sexual diversity affects the students' learning in the context of a classroom into light.

Studies have been made to understand the classroom as a social context. Sobieraj and Laube (2001) did a study built on the premise that the students' response to the information they are given is contingent upon several factors; including the social context, which in this case is the classroom. There has been

continued research on topics related to school bullying and the social classroom context; with most studies focusing on the social classroom context as a milieu for understanding and testing out theories of learning rather than a means for understanding students' identity development.

Most studies relating the classroom context with identity development paint with a wide brush and are most often geared towards emphasizing the impact of the social context to the students' learning process and subsequent identity development, as well as the identity changes that students go through within the classroom (Stables, 2013); however, they do not explore the various aspects that constitute an identity and how motivational strategies within the classroom may be modified to further strengthen the link between deep learning and positive identity development at a more concrete and specific level.

The minimal research explaining identity development at more concrete and attribute-specific levels in the social classroom context are focused more on issues of diversity such as race (Middleton, Dupuis, &Tang, 2013), or socio-economic status (Faitar, 2011). Only minimal attempts to link the impact of emotional and motivational factors to the student's sexual identity acceptance, as well as its influence on learning, have been taken.

Research Questions

The overarching question that will be addressed is how sexual identity acceptance affects self-determination for LGB-identified university students within classroom settings. This research will address the following research questions:

1. To what extent do sexual identity acceptance, psychological needs, and the self-determination of the LGB-university students differ according to their demographic information of sexual identity, gender, current enrollment status in college, and ethnicity?

2. What is the relationship between LGB-identified university students' identity acceptance and having their basic needs met, as measured by the Basic Needs Satisfaction scale?

3. What is the relationship between LGB-identified university students' identity acceptance and their awareness of self and perceived choice, as measured by the Self-Determination scale

Significance of Study

Providing the same learning opportunity to all learners should be a core value and goal of every educator. We know that LGB-identified learners exist within our classrooms, yet there has been minimal research related to the emotional, motivational, and cognitive implications of sexual identity acceptance. The purpose of the study is to discover how sexual identity acceptance, or the lack thereof, affects the self-determination of LGB-identified university students in classroom settings. Due to the gap in research on this specific topic, I will unpack the significance of the study by reviewing the LGB epistemological standpoint, sexual identity development, and the self-determination theory within the context of the commonly social classroom environment.

Motivation in any learning situation relies heavily on a sense of relatedness, belonging, and acceptance of the learner's social identity and understanding of self

(Baldwin, 1992; Latham, 2007; Locke, 2000; VanDellen, Hoy & Hoyle, 2009). As

human beings, we use strategies to navigate our surroundings in order to achieve

basic need satisfaction (Deci &Ryan, 2000). If LGB learners conceal their sexual

identity to gain acceptance, there is a potential barrier to information processing as

cognition and emotions compete for resources (Storbeck, 2011). Using SDT as the

motivational framework allows an examination of how internalization influences

identity acceptance, and engagement in classrooms, factors which ultimately

influence learning. This research fosters awareness and begins the necessary

discussions that will impact educators, curriculum developers, administrators, and

the overall field of educational psychology.

Chapter 2: Review of the Literature

The LGB-identified standpoint challenges the normalcy of the existing interconnectedness between knowledge and power (Code, 1991). Experiences enrich and develop our personal schemas; therefore, we can claim experiences to be knowledge sources. Researches on epistemological standpoints commonly exclude lesbian, gay, and bisexual, (LGB) persons, yet we know that persons with these identities exist within our society and classrooms (Kollmann & Hardré, 2012). Standpoint theory's most important concept is how a person's lived experiences, social environment, and social group influence and shape his/her perspective on different issues (Barnett, 2009). Barnett (2009) simplifies the whole concept of standpoint theory as "a way to understand others' experiences". By means of this theory, we can also posit that the manner through which individuals proceed to process given information has a direct correlation with their personal lived experiences.

For students, educative experiences sometimes serve the specific purpose of developing the clarity of their self-understanding (Beane & Lipka, 1986). Beane & Lipka (1986) posit that students can improve their self-perception by improving their academic achievement; and conversely, they can improve their academic achievement by improving their self-perception. When students are subjected to self-doubt or feelings of inadequacy, they are more likely to experience difficulties with their studies. There are certain educative experiences that provide students with the opportunity to learn more about themselves and how they fit into the world outside of the academia. Hence, there is an essential need to identify a clear and

solid epistemological standpoint for this continuously marginalized group.

The definition of standpoint can be described as a "sense of being engaged…with it the contention that there are some perspectives on society from which, however well-intentioned one may be, the real relations of humans with each other and with the natural world are not visible" (Hartsock, 1997, p. 464). Standpoint theory provides a way to explain this invisible relation between humans and the natural world in more concrete ways. Patricia Hill Collins (1996) theorizes a standpoint for African-American women parallel to the goals of this study; as this dissertation intends to theorize a standpoint focused on LGB-identified persons. For African-American LGB-identified persons, these added components of identity are what Crenshaw (1993) collectively calls intersectionality. Intersectionality aims to investigate how various biological, cultural, and social categories interact with each other on multiple levels. It also posits that discrimination happens in not just one but several forms and configurations; and that it occurs more frequently towards minorities as opposed to dominant ones. These acknowledged standpoints, including the LGB-identified standpoint, challenge the normalcy of how knowledge and power integrate into the current state of epistemology and how lacking it is in terms of catering to the above mentioned standpoints.

Epistemology, the study of human knowledge, has different meanings within different disciplines. Social epistemology, in particular, is the branch of traditional epistemology that studies the properties of groups or social systems; one such example is the transmission of knowledge from one person to another (Goldman, 2009). Palermos (2012) says that knowledge-acquisition is sometimes a social

7

process; and that social epistemology needs to be integrated with the study of mainstream epistemology not only to expand it but also to improve it. In this study, epistemology will be used and applied as the reality of knowledge that lies between a person's truth and belief. The focus on reality will illustrate the need to practice the inclusivity of LGB-identified standpoints in order to foster the construction of knowledge for every type of learner.

Another term that will be critical to unpack is the LGB-identified epistemological standpoint. This term refers to the standpoint that opposes the existing heterosexist domination within the construction of knowledge. This heterosexist domination exists due to the marginalization of these less-represented standpoints. The marginalized LGB-identified group is aware that a line has been drawn to encompass their level of influence and limit their capability to construct and impact knowledge; they also know and clearly grasp the line drawn around their knowledge and aim to go beyond those lines by actively involving the LGB-identified standpoint into the current state of epistemology. Theoretically, I use feminists and black feminist standpoints as frameworks to build upon because these groups represent similar historical patterns of experienced disregard as well as similar levels of discrimination as LGB-identified persons.

The importance of an LGB-identified standpoint is emphasized by studies defining it as a way to understand the experiences of others (Barnett, 2009). In this light, the LGB-identified standpoint can be used as an effective tool for improving various social experiences in different professional arenas. This can be done by improving the social context in a way fitting to the needs of the LGB-identified

persons' perspectives. With Palermos (2012) describing knowledge construction as a sometimes social experience, there is a need to involve the social perspectives of LGB-identified persons into the development of epistemological advancements to ensure that minorities such as LGB-identified persons are involved in the creation of knowledge from a social perspective.

Engagement

Before proceeding to the contributing factors that impact classroom learning and student engagement, let us first define student engagement and how it is to be observed in this study. Trowler (2010) summarized student engagement as "the interaction between the time, effort, and other relevant resources invested by both students and their institutions intended to optimize the student experience and enhance the learning outcomes and development of students and the performance, and reputation of the institution" (p.2).

Studies have tried studying engagement in a number of ways. Some tried to understand engagement through its antithesis by asking the question, "if a student is not engaged, then what are they?" Mann (2001) contrasted engagement with alienation; proposing that if a student is not engaged, then the student is alienated. The engagement-alienation dyad as proposed by Mann (2001) is a useful way to gain an understanding of the relationship between students and what they are being taught. The opposite of student engagement could also be inertia, apathy, disillusionment, or engagement in other pursuits (Krause, 2005). Krause (2005) posits the opposite of engagement as 'inertia' or the tendency of matter to retain its original state of rest or uniform motion. He appropriates the term to the attitude that

students take with regards to their role in the classroom. The term inertia is indicative of the student not exactly being completely detached or separated from the classroom context, but rather of the student simply doing nothing. These studies help provide a contrast through which we can view the importance of student engagement; by simply asking the question "if they are not engaged, what are they?" we can see that engagement is an important aspect of getting the student to participate in the classroom setting in an active manner, or even of getting the student to participate *at all*.

There are three dimensions to student engagement: behavioral engagement, emotional engagement, and cognitive engagement as identified by Fredericks, Blumenfeld and Paris (2004). Behavioral engagement is exhibited by the student complying with the behavioral norms set in the classroom including rules about attendance, recitation, involvement. A behaviorally engaged student demonstrates the absence of negative and disruptive behavior. Emotional engagement is shown by students who experience reactions to given information which are affective in nature. Such reactions could be expression of interest over a given topic, enjoyment, or mere sense of inclusion in the class discussion. Lastly, cognitive engagement can be seen in students who are invested in their learning and would go above and beyond what is required of them in terms of academic requirements. When these three dimensions are piqued, the student has been observed to be productive; whereas when these three dimensions are negative, the student exhibits behavior that could be disruptive and obstructive.

Student engagement being a strong indicator of social behavior emphasizes its underlying social structure. It is based primarily on how interactive the students are within the context of the classroom. Research shows that the extent to which students are engaged in learning activities is positively proportional to the students' learning outcomes (Krause and Coates, 2008). Therefore, there is a need to improve levels of student engagement in the classroom context whenever possible. Based on the abovementioned studies, student engagement is contingent upon several factors; with particular attention to the student's involvement in the discussion. The dialogical nature of class discussion is an important aspect when considering student involvement because the social structure built by this dialogical nature influences the students' ability to develop a sense of belonging in the classroom; and subsequently, the students' ability to contribute to the discussion (Stables, 2003).

Lived Experiences

Code (1991) claims that "cognitive experiences are not found in mainstream epistemology" (p.267). Moreover, Brooks (2006) points out that the experiences, culture, and history of women have been relegated to the "underside" of the culture, experiences, and history of their male counterparts. Women eventually began to acknowledge this gap; and in the late 1960s and 1970s, the voice of feminist consciousness rose both inside and outside the academe; they began to notice the omission of their opinions and the exclusion of their voices in various professional arenas (Brooks, 2006). As a result, females began expressing frustration over the predominantly male structure of knowledge and theories. The feminist ideals' emergence on standpoint epistemology allows the oppressed and marginalized

11

female sector to stand face-to-face with the oppressors comprised of the dominant sectors of society; it also opens up the possibility of engaging them in dialogue that could potentially affect the construction of knowledge.

If we look at this within the class structures of society, the idea that experiences do not offer anything to knowledge development could eliminate valuable information that educational institutions could utilize to foster inclusive inquiry. Beane & Lipka (1986) points out that students' ability to learn is influenced and affected by the students' social experiences; therefore, experiences and the information that can be extracted from them must be utilized to improve the status of the current educational systems. LGB-identified persons are now acknowledging the presence of the relationship between lived experiences and epistemology and are addressing how their lives and its social constructs are a part of how they process information. Having said that, the current state of the educational system in which we operate under which has historically been predominantly heterosexist has several epistemological consequences which are often contradictory to the needs of the less-dominant cultures in society. Therefore, the educational system needs to develop praxis for oppressed and marginalized students (Hartsock, 1997), by introducing a notion of instructional inclusivity. According to Richeson (2009), instructional inclusivity has the potential to get students into terms with their individual differences; and its implementation is indicative of an educational system that is geared towards educating the students in a manner that highlights the students' capabilities and caters to their needs.

Stables (2003) proposes a teaching strategy which has the ability to complement the lives and experiences of students by using life history-based approaches to understanding educational and career trajectories of various people with different social identities. Stables (2003) began his study by exploring the relationship between students' level of learning within the classroom context through consistent classroom dialogue and the students' subsequent identity development. In his study, he also notes the development of an individual's self-identity as a learner with a series of experiences which are defined by four dimensions: conformity, re-definition, non-conformity, and anti-conformity. This explores how experiences help propel the development of an individual's self-identity; and how contextual factors–within and beyond the academia–impact the students' classroom identities.

Interaction with the world grants people with different skills, capabilities, and proficiencies they otherwise would not have been able to attain (Hartsock, 1997). Vygotsky (1962) stated that we learn through our interactions and communication with other people; and that social environments have the capability of influencing our entire learning process. He posits that learning takes place in the interactions students have amongst themselves and with experts; therefore, the learning environment is contingent upon the conversations, discussion, collaboration, and feedback that exist within the classroom setting and among its inhabitants. Encounters with various types of people and experiences help develop the person's perspective; and consequently, the person's standpoint. Vygotsky (1962) further notes that the dominant culture has the greatest determining factor

contributed to knowledge construction; therefore, it can be said that the interactions and experiences you engage in are commonly considered valuable only if you are a part of the dominant culture (i.e., White/Anglo, male, upper to middle class, and heterosexual) that establishes the criteria of what is and what is not societally significant.

The epistemological consequences of these valued interactions among dominant cultures are most often in direct opposition to the experiences and interactions that LGB-identified people live through on a day-to-day basis. LGB persons have perspectives that they consider as irrefutable truths and opinions they consider beliefs which are not the same as that of heterosexuals'. The currently existing value system reduces the experiences from this marginalized group as lesser than that of dominant cultures'. This could become problematic, specifically in educational settings where the foundation is exploration, inquiry, and construction of knowledge about one's self. By letting this value system continue, we are not giving LGB students the opportunity to grapple with their emotions or even learn how to work cohesively among the existing differences.

Inclusivity

United Nations Educational, Scientific and Cultural Organization (2008) says that inclusion involves policy-making, planning, and modification of institutional structures that are geared towards providing all children with an accessible, secure, and child-friendly learning environment. It is defined as a process and acknowledging the existing diversity and responding to the respective needs brought about by those diversities. It is mainly the flexibility of the teaching

14

program in terms of course content, teaching approaches, and strategies with the purpose of increasing student participation and engagement. An inclusive practice has been defined as the inclusion of all; regardless of ethnicity, race, religion, or gender (Wight, 2010). Over the past years, inclusion has been studied extensively in light of students with disabilities or special needs; however, further studies need to be made about inclusion in the classroom pertaining to cultural, ethnical, and gender differences.

Wight (2010) studied gender inclusive practices that as used within the classroom context of primary school students. The study stands on the premise that teachers must pay attention to the gender issues existing within the classroom context. Wight (2010) studied both male-oriented learning approached and female-oriented learning approached and came to the conclusion that the most effective approach to teaching is an inclusive one. Through observation of various configurations of class learning experiences, Wight (2010) was able to identify a baseline of how the teacher in the primary school she was studying addressed gendered teaching. Gender inclusive activities and experiences were then experimentally implemented to draw comparisons between mixed-gender and single-gender groupings. Findings showed that the students' and the teacher's outcomes and behaviors had varying degrees of change. The teacher, despite being aware of learning styles that are associated with genders, was not able to fully integrate inclusion into her already formed educational philosophy; and her personal teaching design continued to dominate her strategy. On the part of the students, however, the inclusion of gender-inclusive teaching strategies, however

inconsistent, helped the students become well-aware of the social dimension of gender that exists in the classroom. This led the author to the conclusion that teaching students about the existence of gender differences early on would help them understand the existence of gender bias in their learning environment and how to adjust and effectively counter its negative effects.

The current epistemological standpoint of LGB-identified persons is being *othered* (less worthy of respect as they are not part of the dominant group) and the interactions they engage in within the world and their social environment are not recognized as anything with value, at least not as anything that is deemed important. This results to the exclusion of the ideas and potential knowledge contributions of LGB persons in the development of society. If everything in our society is developed with only, and by only the dominant culture, how can marginalized groups expect to move forward in terms of obtaining economic security; especially when who they are is not valued or even given thought to? It can be seen that formal education for children does not acknowledge LGB-identified persons and it does not get much better as they progress into college. According to Richeson (2009), full inclusion is necessary to improve the experience of all types of students. Full inclusion means the provision of instructional practices and technological supports are available to accommodate all possible types of students.

Repeated acts of violence and harassment have been inflicted upon LGB persons in the classroom context, either physically and/or emotionally (Bishop & Casida, 2011; Espelage, Aragon, Birkett & Koening, 2008; Hall & LaFrance, 2012). The common belief of normative society is that there must be something wrong with

a person identifying as a lesbian female, gay male, or bisexual. The reality of this
societal norm coupled with the sometimes lewd behaviors exhibited by the
minorities that support and strengthen this belief. This could sometimes create
undesirable experiences that negatively shapes self-perceptions, halts self-
acceptance, encourages self-concealment, influences decision-making processes,
and affects the overall development of knowledge (Abes & Jones, 2004).

In getting people to acknowledge the epistemological standpoint, a
component that needs to be recognized as a requirement is suggested by Adrienne
Rich (1995) when she acknowledged the certainty that oppressed and marginalized
people need to believe in themselves, in order for others to believe in them. In the
classroom context, this is supported by Beane & Lipka (1986) who emphasized the
importance and consequential influence of self-awareness and self-perception on the
students' ability to attain good levels of academic achievement. This same thought
holds true for LGB-identified persons. They need to believe in the significance of
their experiences despite the dictates of the dominant cultures. This is necessary in
order for people to even begin to pay attention to their experiences as well.
However, the lack of positive reinforcement from external factors begins to wear
down at the internal self (Espelage et al., 2008) and this could lead to the person's
concealment of the inner self. The students sometimes resort to the integration of an
external self to an already worn down internal self. Due to the lack of societal
support and a sense of social inclusivity and belonging, the essential steps of
progression in terms of self-awareness and self-belief are never fully taken. It is
necessary to realize that experiences and opportunities are cognitive agents that

impact learning (Thagard, 2005) and through this admission, steps can be taken to tweak the external forces in a way that influences positive identity development.

Learning Environment

The heterosexist educational system we operate under needs to develop praxis for the oppressed and marginalized students (Kincheloe, 2008). Developing a critical consciousness of the privileges heterosexuals have within the context of learning environments would be one step towards recognizing the environments (i.e., hostile, lack of acknowledgement of LGB societal figures) LGB students are expected to foster and share knowledge within. Cognitive and motivational engagement is influenced by the social interactions we experience on a daily basis (Fiske & Taylor, 2013). As these levels of engagement change, LGB-identified students will be required to employ self-control resources to maintain alignment between emotion and cognition so that they limit the competition for resources (Storbeck, 2011).

A National School Climate Survey was conducted in 2009 that focused on LGBT youth (www.glsen.org). The participants were between the ages of 13 to 21 and a total of 7,261 students participated. In this survey, students disclosed that they go to school in a hostile environment, which they attest is directly related to their increased level of absenteeism. Over sixty percent (61.1%) reported that they felt unsafe at school due to their sexual orientation. When asked about reporting incidents that happen at school to an official, the 33.8% of the students who did report an incident to a school official reported that nothing was done after the incident was submitted. Birden (2005) states, "The fact that hostility and violence,

real and perceived, compromise gay and lesbian teens' ability to participate fully in classes and extracurricular activities; to form close friendships; and to find acceptance from peers, teachers, and administrators bears testimony to the poverty of their educations" (p.20). The key to overcoming these realities in our school systems is to change to an open system, versus the current heterosexist system. This will allow students to explore and develop their authentic selves during their formative years without sexual prejudice.

The National School Climate survey attests that sexual prejudice exists among schools. Parrott and Peterson (2008) conducted a study to further understand the motivation behind the existence of antigay aggression. There were 138 heterosexual males interviewed (women were intentionally left out of the study due to their observably lower levels of sexual prejudice). The structured interviews consisted of five different types of rating scales that ranged from attitudinal to self-disclosed behavior. The goal of the study was to observe the role anger plays in mediating the relationship between a person's sexual prejudice and his level of antigay aggression. The male interviewees who have been identified as former perpetrators of antigay assail were also assessed for their motivations exactly one of their earlier assaults. The study used a model previously developed that listed three motivational factors that would cause aggression which are sexual prejudice, peer dynamics, and thrill-seeking. Of the three identified motivational factors, thrill-seeking was the one least accounted for by the collected data. However, sexual prejudice (core religious beliefs of the male subject) and peer dynamics (need to show other males that they are not gay) did support aggressive the male subjects'

responses toward gay males. Learning environments are inhabited by both gay men and heterosexual men, among others. Some of the heterosexual men in the learning environment may hold sexual prejudices; and they may be encouraged to show aggression toward a gay student to impress their peers. The diversity that exists within the educational system and the aggression that it could create among its inhabitants support the research on school hostility (Murdock & Bolch, 2005) as well as the need to ensure safety for the victims of that existing hostility.

Maslow's Hierarchy of Basic Needs (1943) lists safety as the second level of need in his five-stage model. When a person's safety is compromised, his/her ability to focus on moving up the pyramid and achieving subsequent levels of needs which are love or belonging, esteem, and self-actualization is undermined. Life experiences could affect the ability of a person's progress in attaining the higher levels of the pyramid; among those experiences could be ones that influence the person's sense of belonging–which when poor could impede the progress significantly. Being ostracized from peers can have a negative impact on a student's school adjustment, self-esteem and overall psychological belonging because all human beings have a need to belong (Murdock & Bolch, 2005). Having said that, over one-third of LGB students have been physically assaulted at school because of their sexual orientation or gender identity and expression, according to the Gay, Lesbian and Straight Education Network.

Murdock and Bolch (2005) conducted a study over 101 LGB high school students. The study examined the relationship between school climate and school adjustment for high school students who identified themselves as LGB; the

20

relevance of the social support given by family and friends to how well-adjusted the

student eventually becomes were also exposed. The research specifically addressed

the environment of the school including school exclusion/inclusion, personal

victimization, and social support from teachers. The study revealed that higher

levels of school exclusion, accompanied by lower levels of teacher support were

related to the feeling of not belonging; this is supported by the finding that the

cluster of students who were deemed most vulnerable were those who were least

adjusted to the school environment and most victimized by their fellow students, but

receive the least social support from peers, family, and the institution they belong to.

Additionally, victimization for being LGB accompanied by low levels of middle

school grade point average was indicative of discipline problems among LGB

youth. Murdock and Bolch (2005) stated that "It is not one aspect of school climate

alone, but a student's combined personal experiences that affect their academic

success" (p.168). Positive social support within the school is needed to motivate

LGB students to advance and achieve their academic and career goals.

Bowen and Bourgeois (2001) conducted a research study that examined

college students' perceptions of their comfort level when interacting with fellow

students who identify as LGB. The study surveyed 109 students who lived in the

dormitories; both dormitories that were used in this study were situated next to each

other. The Likert-type scale was used to capture the interviewees' perceived

comfort of living with and around LGB-identified students. The questionnaire also

sought the perceptions of the participants as to how their friends and/or the typical

student would respond to the same scenario. The questionnaire asked participants

how many LGB-identified people they knew before attending college and how many they have come to know now. The equal number of men and women were asked to participate to ensure that equal perspectives are coming from both genders. Findings indicate that people often perceive their friends and other students as less comfortable around LGB-identified person than themselves. Without more than a theory of pluristic ignorance to explain the significant difference in beliefs, this finding lingers without explanation. Pluristic ignorance is a term used in the academia that refers to the incorrect belief that one's private attitudes, behavior, or prejudices towards something is different (or better) than that of other people. Another important finding that the data shows is that college students on a whole know more LGB-identified students than prior to attending college. Correlating this data with perspectives of friends and other students should have illustrated a more positive perception but the data conveys just the opposite; there is no change to the perceived perception even after students have been more exposed to LGB-identified persons. Furthermore, the researchers note that by means of the cognitive dissonance theory, students who perceive their comfort level with LGB students but perceive their peers' or other students' comfort levels as less positive than their could eventually change their own behavior to be consistent with those beliefs. This could further exacerbate the often hostile environments that LGB students have to go through.

Longerbeam, Johnson, Inkelas, and Lee (2007) did a study on the experiences of LGB students during college. This study takes on the less-explored perspective of LGB students about their own college experiences; aiming to

contribute to the portrait of the national college experience and how it could be improved in the future. LGB students often conceal their identities because of the hostility they observe in the college campuses. Longerbeam et al. (2007) says that the campus climate that LGB students experience influences their identity development. In this particular study, they aim to use the college environment as a milieu for relating learning environment to LGB students' identity development because it is often the context for the LGB students' coming out process. The researchers closed in on an important aspect of the college environment which affects the experience of LGB-identified students that is coupled with the learning environment, the residence halls. LGB students said that being surrounded by supportive people, perceiving their overall living situation as safe and non-judging, and having LGB role models in the residence halls encouraged LGB students' progress in eradicating their self-concealment.

The social and emotional climate within a learning environment influences students' engagement in group tasks and risk-taking (Espelage et al., 2008; Järvenoja & Järvelä, 2009). By falling outside of the generalized classification, LGB students commonly lack the needed representation that would provide them with equal learning opportunities as their heterosexual counterparts. The psychological and social impact that being given appropriate levels of learning opportunities has can ultimately influence how learners develop a sense of identity and how invested they are in connecting cognitively with the content (Kollmann & Hardré, 2012).

Identity Development

Identity is the interplay between the individual's biology, psychology, social recognition, and response within varying contexts. Erikson (1968) defines *ego identity*, in particular, as both a conscious sense of individual uniqueness and an unconscious desire for continuity of experience. Achieving both gives a person an optimal identity which is associated with psychosocial well-being (Kroger, 2008). Another facet of identity development that Erikson (1968) defines is *identity vs. role confusion*, which commonly occurs during adolescence. During this period, the adolescent is faced with the challenge of having to find a semblance of resolution between these two poles; this could yield one of three possibilities. Ideally, the adolescent is able to go through this well and proceed to the *identity-formation process* which is the process of forming an optimal ego identity, one that is inherently unique but allows the person to be well-adjusted. Another possibility is Erikson's (1968) concept of *psychosocial moratorium* in which young adults freely experiment with various possible adult roles in hopes of finding one that fit uniquely with their ego identity. The last one is the concept of *identity crisis* in which the person experiences a highly-critical turning point in the course of the individual's life. The person proceeds to a new direction because it is the only perceptible way for the person to connect the two poles of identity and role confusion.

Social influences interact with the development of one's identity and changes over the lifespan of a person (Erikson, 1968). It is this continuum of identity that influences self-concept, self-understanding, and self-esteem (Sternberg, 1998). Manning (2007) defines self-concept, in the context of a classroom

24

environment, as the student's perception of his/her competence or adequacy in both academic and non-academic domains. Self-esteem, on the other hand, refers to the student's overall evaluation of himself or herself; not restricted by competence or adequacy but relies more on feelings of general happiness or satisfaction (Manning, 2007). It is very important that the facets of identity development cater to these factors, to make sure that a person is able to properly form an ego identity.

Self-concept (perception of one's self in comparison to others), self-understanding (comprehension of one's self), and self-esteem (value of one's self) are critical aspects of every person's identity development; however, the dynamic of developing an authentic identity for LGB-identified learners who experience negative social messages (Bishop & Casida, 2011; Hatzenbuehler & Keyes, 2012) in the form of bullying and harassment also need to be considered. These negative social messages create doubt within their perception of self (Cho & Knowles, 2013), a lack of comprehension as to why they are different from the societal norm, and these doubts create a ripple effect of LGB-identified students not loving and valuing themselves (Friedman, Koeske, Silvestre, Korr & Sites, 2006), which begins to create an unstable identity (Sternberg, 1998) that hinders the pursuit of goal attainment (Orlofsky, Marica, & Lesser, 1973).

Identity development for LGB-identified students has an added component of needing conscious thought during development. Heterosexuals generally do not have to consciously think through in order to fit within their development and understanding of self (Potoczniak, Aldea & DeBlaere, 2007). Another added component is the need to control the influences of bullying. Bullying and

25

harassment are often inflicted upon LGB-identified students and research shows this harassment negatively impacts students both academically and emotionally (Bishop & Casida, 2011; Espelage et al., 2008). There are more than two million students walking the halls and sitting in the classrooms who use their cognitive resources to work through and deal with their sexual identity acceptance rather than engage themselves in the activities implemented in the classroom (Swearer, Turner, and Givens, 2008). If their cognitive resources apportioned to classroom learning are limited due to their identity struggles, how will the current educational system prepare these students for a future after school?

Bilodeau and Renn (2005) did an overview of LGBT identity development models and its implications on educational practices. They observed that the emergent models describing homosexual identity during the 1970s were more focused on resolution of internal conflict, with particular focus on the coming out process of lesbians and gays. The theoretical perspectives presented by the models assert that homosexuals move through series of stages of identity development in their adolescence that heterosexuals do not have to go through. These models typically begin with individuals using defense strategies to not recognize their own homosexual feelings; this process produces a cognitive and emotional burden to the student (Bilodeau & Renn, 2005). This makes the process of resolving the two poles of identity and role confusion much more difficult for homosexuals than heterosexuals. The next stage is a period of both emotional and behavioral experimentation with homosexuality which is similar to Erikson's (1968) concept of psychosocial moratorium. This is often followed by the person growing a sense of

normality, or comfortableness with his/her identity. According to Bilodeau et al. (2005), some models describe the end of a heterosexual relationship as a common identity crisis for homosexuals as the individual begins to come to terms with his/her non-heterosexual feelings.

The emergence of issues with the traditional binary constructions of sexuality brought about by bisexual and transgender cases calls the need for an improvement on the existing identity development models that cater to sexual orientation and gender identity. D'Augelli (1994) suggests a "life span" model which takes social contexts into consideration; a feature which earlier stage models did not include. This framework presents human development as unfolding in multiple paths including the person's self-concept, familial bonds, and relationships with peers. This model entails the need for taking the environmental and biological factors that a person has to deal with into account when observing the development process. The model describes six identity processes which are not necessarily connected to each other: exiting heterosexuality, developing a personal LGB identity, developing a social LGB identity, becoming an LGB offspring, developing an LGB intimacy status, and entering an LGB community. These processes are experienced by LGB individuals to varying extents; with one process experienced much greater than another. This model takes the various aspects of coming to terms with an LGB identity into account and was developed to represent the identity development process in a multi-faceted manner.

A study done by Schmidt and Nilsson (2006) examined the relationship between variables related to LGB adolescents' sexual identity and career

development. The age of participants ranged from 15 years to 19 years and all were

members of organizations that served LGB youth. The study indicates that sexual

identity development involves the acknowledgement and definition of how their

sexual orientation will be enmeshed within the current state of heterosexism and

homophobia (Schmidt & Nilsson, 2006). There is an added level of development

for LGB students and the results indicate that the bottleneck effect (availability of

limited psychological energy) experienced by a high percentage of LGB students is

due to the different stages that they go through during adolescent identity

development. The psychological resources of the person are devoted to managing

an LGB identity and seeking proper social support during the different stages during

the person's adolescence. The stages, supported by research from Yarhouse, Tan

and Pawlowski (2005) are interactions the LGB-identified person has with the

sociocultural environment.

These stages (identity confusion, identity comparison, identity tolerance,

identity acceptance, identity pride, identity synthesis) are simultaneously taking

shape as the student's sexual identity creates intrapersonal and social conflict

(Bilodeau & Renn, 2005; Schmidt & Nilsson, 2006). The conflicts they experience

hold LGB students back from also developing a good career trajectory (goal

attainment). Survey data demonstrated that internal conflict about sexual identity is

reflected in vocational indecision and a shared variance in career maturity in that the

more the internal conflict is, the higher the career indecision is. In addition to the

stages just listed, Berzonsky (1988) identifies another stage of processing that

influences identity and cognitive attributional strategies. This study reveals the

28

processing of informational, normative and diffuse/avoidant individuals. Just as Schmidt and Nilsson (2006) point out, these stages of identity processing are happening in addition to the cognitive dissonance that is taking place as they are relating their identity to the outside world (Lev, 2010). "LGB individuals who are early in their sexual identity development might put other aspects of development on hold to cope with confusion over their sexual identity and other stress-producing changes related to recognizing oneself as LGB" (Schmidt & Nilsson, 2006, p.25). As Schmidt and Nilsson (2006) discuss, this bottleneck effect has a direct correlation to the inner sexual identity conflict. Not only does this study show that development of future needs is being set aside by the constant changes and conflict with identity development, it also infers a potential cognitive load that limits the student's ability to focus attention in meeting educational achievement and in the future, career development.

When stereotypes and the pressures of conformity are embedded in living ideals within the educational system (Cho & Knowles, 2013), a student's self-perception becomes interlinked with his/her gender identity (Tobin et.al, 2010; Friedman et al., 2006) meaning how a student views himself/herself becomes contingent on his/her sexual orientation. Growing up in a society that is culturally heterosexist creates barriers to exploration and identity development. Gender schema theory tells us that portraying their understanding of their authentic self (what they feel they know of themselves at that time) is related to and helps in maintaining cognitive consistency and appropriates their interpretation of themselves. These barriers force individuals to cultivate their identity from the

29

outside in, which would be seamless and relatively easy unless your identity does not match the majority (Lev, 2010).

Society has created a label (e.g., masculine or feminine) that insinuates a component of an individual's identity and influences a person's self-perception (Tobin et.al, 2010; Sternberg, 1998). These labels and idealized heterosexual identities, excluding gender identities that do not conform to the general classification, have urged an increasing number of young adults that identify within the LGB community to attempt killing themselves (Friedman et al., 2006; Hatzenbuehler & Keyes, 2012; Hawton, Saunders & O'Connor, 2012). Creating gender standards (e.g., girls wear pink dresses, play with dolls, and learn to bake; whereas boys wear blue, play with toy guns and are physical) creates a social pressure to conform to society's patterns, to identify in a gender typical manner (Friedman et al., 2006; Lev, 2010). Adolescents are most affected by these social stresses and pressures of conformity; however, after adolescence, we begin to explore who we are and how we relate to the rest of the world (Sternberg, 1998; Tobin et.al, 2010). The issue is that children are taught to develop a schema that dictates identity by the anatomy that they were born with (Lev, 2010; Tobin et.al, 2010). The student's social identity is taught to be directly correlated to one's biological identity, adding to the cognitive burden of having to conform to the typical gender.

To further explore this issue of dictated identity, Egan and Perry (2001) conducted a study that identifies 182 children in grades fourth through eighth to determine the relations between their gender identity and psychosocial adjustments.

The ability of the students to adjust their psychological state based on the constructs their social context imposes upon them is tested. Feeling of psychological compatibility with one's biological sex is assessed, along with the feelings of pressure the students feel to conform to gender stereotypes. In order to test these relations, the researchers utilized two instruments; the first one is a self-reported questionnaire including 10 scales that ranged from global self-worth to male and female-typed activities. The second instrument gathered data on the students' perceptions of likability with each of the different sexes within the context of their class. The study found that even though the children had developed an understanding of the gender they identify with, it is the felt pressure to conform to gender stereotypes that impacts their psychosocial well-being. This reinforces the effect that gender has on the overall psychosocial well-being of a person, and how this can be improved by removing the pressures of social conformity.

It is the pressure of conformity that this data highlights as being harmful as illustrated by the psychosocial adjustment relationship to (a) the degree to which they typify their gender category, (b) contentedness with gender assignment, (c) free to explore cross-sex options or conform to gender stereotypes, and (d) sex superiority. These dimensions of gender identity may not have proven a strong relationship to one another; however, they did provide a positive correlation to students' psychological and social well-being, with the first two having a positive correlation and the last two having a negative correlation when pressured into conformity.

Social Influences

　　Social influences have an impact on all types of learners (Ellmers, Spears, & Doosje, 2002, Martin, 2007), but the added layers of complexity (e.g., heteronormativity, bullying, and identity acceptance) are not shared experiences among LGB-identified and heterosexual peers (Bishop & Casida, 2011; Friedman et al., 2006). In examining social influences in the perspective a broader spectrum outside of just an LGB-identified population, I reviewed a study conducted by Pool, Wood, and Leck (1998) that examines the importance of self-esteem in social influence. The hypothesis indicated that attitudes of groups that were perceived as the majority would and can affect individuals' self-esteem if their attitude was not aligned with the group. Conversely, people who wish to detach themselves from a minority group, despite natural alignments with the beliefs and attitudes of that minority group, experiences reduced self-esteem. The findings supported the overall hypothesis in that self-esteem is influenced by social norms and constructs. If we know this to be true for all persons, we can safely predict that the added layer of identity development for LGB-identified persons living and learning in a heteronormative society will face even greater challenges accepting their identity. The social norms make it difficult for the person to proceed with his/her otherwise natural process of self-acceptance. This added layer of complexity is possibly brought about by cognitive dissonance. This cognitive dissonance, as described earlier, is an effect of attempting a dual identity.

　　In narrowing the social influences on identity development to LGB-identified persons, Potoczniak, Aldea, and DeBlaere (2007) examine the

relationship between social anxiety, commitment, and exploration through the facilitation of social support and self-concealment with lesbian, gay, and bisexual individuals. The study stands on the premise proposed by earlier studies that people adopt certain attitudes and behaviors that allow them to maintain a positive perception of themselves (even if it's not aligned with their personal truths). The study explores self-esteem as a moderator to the dissonance-related phenomena brought about by the deterioration of self-integrity. While the findings on this study can infer that social support is a positive indicator that reduces social anxiety and increases one's ability to explore and commit, the data was not significant to illustrate causality. However, the data did uncover statistical significance between social support to commitment, exploration, and self-concealment.

A similar study done by Hogg and Terry (2000) explored self-categorization theories in the context of organizations. They say that people have a tendency to derive parts of their identity and sense of self from the organizations and work groups they belong to. They relate the social identity development of the person to the effects of his/her self-categorization and possible depersonalization. The self-categorization theory says that people who self-categorize themselves into social groups are no longer represented as individuals with unique identities but rather as embodiments of the group; which leads to the person's depersonalization. Depersonalization does not necessarily hold the negative connotations of terms like de-individuation or dehumanization, but it simply means a change in self-concept. However, for LGB-identified people, the added complexities of heteronormativity might add a burden to the person's ability to self-categorize or depersonalize; and

the whole idea of self-categorization no longer becomes an inclination but rather a defense mechanism.

Self-Determination

Self-determination theory (SDT) provides an understanding of motivational factors that consider the psychological need for competence, autonomy, and relatedness (Deci & Ryan, 2000). The three innate psychological needs are used to determine levels of goal pursuit, goal attainment, and overall well-being and growth. These factors are based on the basic ongoing psychological needs of human beings, with the focus on the interaction and connectedness between an individual's sense of self and the socials norms and constructs they are surrounded with. If these three needs are fulfilled, then the individual is expected to grow and enjoy vitality and a healthy process of identity development throughout their life; however, if at any point one of these factors is not fulfilled, then the individual will likely experience significant psychological consequences (Deci & Ryan, 2000). Human beings are organisms that grow and develop and a way to foster continued growth is through basic need satisfaction of competence, relatedness, and autonomy.

According to Van den Broeck, Vansteenkiste, De Witte, Soeenens, and Lens (2010), several studies have suggested various sets of needs as fundamental determinants of human behavior; with the more popular ones being Maslow's hierarchically ordered needs and McClelland's proposed set of needs (achievement, affiliation, and power). Self-determination theory, as developed by Deci & Ryan (2000) postulates the three psychological needs that individuals needs to satisfy in order to properly develop: competence, autonomy, and relatedness. Unlike other

proposed sets of needs which are hierarchical in nature, SDT's view on psychological needs is that all of them need to be met. SDT does not specify an order by which the needs have to be met, but rather emphasizes on the importance of each and every one of them. SDT also considers the three psychological needs as innate in humans rather than something developed as lower-order needs are acquired or satisfied. SDT's suggested set of needs has been empirically studied and has proven to be beneficial in several areas of identity development–both general and life-specific.

Intrinsic motivation is a key factor within the self-determination theory. In order to satisfy this internal driver, you must actively engage with a task you actually desire. These are activities one would engage in because one is willing to and because they provide inherent satisfaction to the person. These tasks are normally experienced spontaneously and voluntarily; however, the ability to "actively engage" in their desired tasks may potentially be a disconnect for LGB-identified students. If there is a dissonance between internal and external self, self-acceptance may hinder and impede the fulfillment of internal needs, which will then develop negative psychological outcomes.

The importance of extrinsic goals to the well-being of a person has been observed as negatively related; whereas the importance of intrinsic goals to the person's psychological well-being has been seen as positive. An interesting perspective to the importance of intrinsic motivation was illustrated by Deci in a study done on two groups of college students placed in rooms with a Soma cube and magazines. One group was motivated using extrinsic motivators and the other was

motivated using intrinsic motivators. The first group was tasked to build designs using the Soma cube and was offered money for each design they could assemble; and the second was merely asked to work on the same task without anything in return. After a period of time, Deci told the groups that their time was up and for the following 10 minutes, Deci observed both groups and saw that the group that were motivated by money were more likely to put down the Soma cube and start reading the magazines over the other group. This shows that the first group has shifted their focus to the compensation whereas the unpaid participants who were motivated by how enjoyable the task remained motivated (Painter, 2011).

Intrinsic motivation requires both autonomy and exploration for ensured satisfaction; as well as the encouragement of people surrounding the person. Examining this condition further establishes the understanding of the undermining concerns that involve the internal self. In knowing that intrinsic motivation is positively associated with learning and active engagement (Deci & Ryan, 2000), an LGB-identified person who lacks acceptance of their identity thwarts their ability to freely engage and pursue natural interests (Deci & Ryan, 2000; La Guardia, 2009).

Motivation is a driving force that leads to achievement (Appleton, Christenson & Furlong, 2008; Järvelä, Volet & Järvenoja, 2010). In a study by Levesque, Copeland and Sutcliffe (2008), they reviewed the implications of motivation to conscious and non-conscious processes using the foundation of the self-determination theory. The foundation of the literature was to establish that automatic non-conscious processes are not always faulty and that conscious process utilizes more cognitive resources (Anderson, 1983; Levesque; Copeland and

36

Sutcliffe, 2008). LGB students will analyze and consciously process their experiences with teachers and peers and having repeated [negative] experiences could create automatic, non-conscious responses (Levesque; Copeland and Sutcliffe, 2008) which associate the school environment with hatefulness and a lack of freedom to demonstrate an authentic identity. The emotional response (e.g., fear) is associated with the triggered stimuli, which invokes an immediate process that scans similar situations and tells the brain how to react (Levesque; Copeland and Sutcliffe, 2008).

After an emotional response to a situation, it is critical to have positive social support (Ryan, et al., 2005). Classroom environments provide a setting where students are expected to be active participants and exhibit functional significance (Ryan, et al., 2005). Functional significance refers to the students' perception of how important they are to how well their classroom environment functions. Without having a sense of their functional significance, the three basic psychological needs (competence, autonomy, relatedness) of the students are threatened and compromised. It is in this context that teachers and peers need to employ timely emotional response (La Guardia, Ryan, Couchman, & Deci, 2000) to help students whose autonomy, competence, and relatedness have been threatened by the lack of perceived importance to the class they belong to. However, emotional response is dependent on the student's ability to trust another person's offers of emotional support during these vulnerable situations. If an LGB student self-conceals their sexual identity, the emotional response support will be limited because the information the student is willing to share about himself/herself and his

situation is often limited as well.

In a recent study conducted by Kollmann and Hardré (2012), LGB-identified students reported that the biggest regret they have is not sharing who they were and their inner identities to other people earlier in their lives. Self-concealing has a number of negative effects on the people who practice. Actively self-concealing is a well-studied defensive coping mechanism (Ritz & Dahme, 1996) that increases the threat of negative psychological well-being (Cramer & Berry, 1999) and limits the emotional response that they can receive from their support systems due to limited emotional openness. In addition, actively self-concealing maximizes the already limited cognitive resources of the person (Pachankis, 2007).

One reason LGB-identified persons self-conceal is their usual perception that they will be less valued if they reveal their inner self and that they will lack in social support from the people surrounding them. This creates a cognitive and emotional pressure and chaos to conform (Pachankis, 2007). This negative integration creates a lack of well-being for individuals but also, the community as a whole. The LGB community faces higher mental health issues, alcoholism, and tobacco usage than other sectors (Espelage et al., 2008; www.healthypeople.gov). This lack of stability within the LGB community is related to the pressures of conformity, experiences of bullying, and physical and psychological harassment (Bishop & Casida, 2011) that are created by and inflicted upon them by their heterosexual peers.

With each new social interaction, an LGB person has no way of knowing who will be accepting of their identity or who will choose to cause them physical

and psychological harm. This consistent lack of need satisfaction, particularly lack of volition and control over their situation, has implications to an LGB person's overall well-being, and specifically, to the person's learning performance and subsequent goal attainment (Deci & Ryan, 2000). The lack of stability yields unreliable paths toward the fulfillment of these psychological needs; such a case indicates critical harm to the mental health of this population (Deci & Ryan, 2000). Internalization of societal messages, norms, and prejudices effectively limits the need satisfaction of a person, which can already be observed based on the increased prevalence of depression and those numbers only represent individuals that have sought treatment (Hawton, Saunders & O'Connor, 2012; Pachankis, 2007).

Internalization

Internalization is a critical process influencing lack of identity acceptance. Deci and Ryan (2000) describe internalization as dictated social standards that become internally regulated. Wallis and Poulton (2001) defined internalization, as a psychological construct, as external events penetrating the inner self; and how the outer world shapes the inner experience of an individual. It revolves around the concept of internal versus external as a point of inquiry. The term is often associated with conformation, or compliance. Kelman (1958) did an early study of the effects of internalization on the attitude changes of a person and how this impacts the person's opinions on certain issues. He posited that internalization occurs when an individual accepts new ideas because it is less difficult to align with his/her ideal value system.

The concept can be understood simply as the outer becoming the inner; and

the extent to which this happens is sometimes very difficult to discern (Wallis and

Poulton, 2001). Kelman (1958) confirms that the nature a person operates in could

bear heavily on his/her personal ideas and behavior; with conforming as an easy

way to find intrinsic satisfaction; this case, however, may not necessarily be as

applicable to people who identify themselves as LGB, because the value system

they consider as may not always be aligned to their inner identity. In this case,

internalization takes the form of compliance which occurs when an individual

chooses to accept the influence of his/her outer world in hopes of achieving

favorable responses from their social surroundings. The satisfaction is no longer

intrinsic, but rather an effect of social influence (Kelman, 1958).

This process of internalization enforces and reinforces societal normalcy,

which for LGB-identified students, depending on their level of identity acceptance,

will cause the student's self-regulation of either an authentic identity or dual-

identities. These external regulations bring about a self-imposed control and

restraint over being able to accept and openly communicate one's LGB identity.

Adolescents adopt an awareness of the difference between what they feel (e.g.,

same-sex attraction) and what their straight peers communicate they feel, (e.g.,

opposite sex attraction) and are urged to forcibly adopt the same emotions.

However, the act of communicating (or not) what adolescents feel, in relation to

their identity, is central to the start of internalization based on external regulations

that morphs into introjection.

Introjection stems from external regulations but unlike external regulations,

other people do not administer these consequences; these are consequences that

individuals give to themselves (Deci & Ryan, 2000; Ryan & Deci, 2000). Introjections are mental mechanisms built on instincts and are influential in the construction of an ego-identity. It's a subtype of internalization that actually transposes elements of the outer world into one's inner world and exists to protect the person's from psychological anxiety (Wallis and Poulton, 2001). These thoughts have the capability to harm a person's sense of self and ability to positively interact and engage in the world. For LGB-identified students', thoughts of worthlessness, shame, and uncertainty are reinforced by society and soon these thoughts go through the process of introjection and become parts of their inner world and a part of their integrated identity.

The internalization of extrinsic motivation establishes a process that takes place from the outside in. The concern about this process is that it does not address the identity conflict and psychological impact it has over individuals who have more complex internalization processes; particularly, LGB-identified students. When identity is grounded on negative societal messages and self-harming thoughts brought about by social influences, the person's motivation and cognitive engagement will become regulated.

Self-regulating interactions and being open to other people is considerably important to the satisfaction of a person's social need for contingent love and intimacy (Deci & Ryan, 2000). Contingent love is a type of emotional support that is given only when the recipient is able to meet a certain standard, and is given only on the merit of certain behaviors and necessary attributes. Having parents who display "contingent love" blocks the necessary autonomy needed for identity

exploration. This need for autonomy, in a healthy parent-child relationship, is met with emotional support (e.g., relatedness) and encouragement throughout their life journey. Additionally, when self-worth is dependent on the opinion of a parent or another authoritative figure, such as a teacher, the level of competence becomes questionable to the person. There is always that lingering feeling of not being able to do enough to obtain the approval of a certain authoritative figure. Experiencing this level of instability with people who supposedly provide love and care creates emotional and behavioral concerns during interactions with peers, as reported within findings by Shields, Ryan and Cicchetti, (2001).

Narrowing in on a key aspect within competence and motivation, Park, Holloway, and Arendtsz (2012) examined psychological predictors of emotional engagement within specific learning contexts. Ninety-four low socioeconomic status ninth grades students were asked to participant in a 3-year, multi-method longitudinal study. The researchers used the needs as specified by the self-determination theory as the three psychological predictors of emotional engagement and the Experience Sampling Method (ESM) to identify emotional engagement and perceptions of learning interactions. With a total of 4,388 responses and 46 questionnaires per student, the results indicated that students' engagement increased when learning contexts met the psychological needs for autonomy, competence and relatedness. Perceived relatedness was also identified with a stronger relationship to higher achieving students than lower achieving students. This shows that an environment that maintains autonomy and competence and does not produce a

notion of having to internalize the outer world is helpful to the engagement of the student.

Autonomy

The need for autonomy fosters the desire to believe in one's own actions and becomes an endorser of self (Deci & Ryan, 1985; Ryan & Deci, 2000). Feeling autonomous limits the social influences of people's judgments, opinions, and even norms and focuses on self-approval (Deci & Ryan, 2000). Fulfilling the need for autonomy can be accomplished by establishing relationships that foster positive positions of support, understanding, and care to actively engage (Ryan, et al., 2005). As one of the three factors that influence psychological well-being, it is necessary to provide choice and acknowledge lived experiences. Establishing this open environment that highlights and fosters individual differences offers people the opportunity to accept and gain confidence in whatever task they are performing (Deci & Ryan, 2000). Establishing the opportunity for autonomy not only offers freedom of choice, it also emphasizes support and respect for one's feelings (Deci & Ryan, 2000; Ryan, et al., 2005).

Autonomy represents an individuals need to feel in control. This need pertains to a person's desire for choice and psychological freedom when engaged in an activity (Van den Broeck, Vansteenkiste, De Witte, Soeenens, & Lens, 2010). Some definitions of autonomy remark that a person would want to have control over how he/she will use his/her set of skills, to have a personal discretion on the scheduling of the tasks he/she has to work on, and the procedures one would take to carry out the task. SDT's definition of autonomy, on the other hand, is focused

more on the subjective experience during activity engagement; and whether or not one felt psychologically free during the task rather than focusing on the task's autonomic capacity. According to Painter (2011), autonomy is the degree to which individuals see themselves as the source or initiator of their own behavior and he also reiterates that the more voluntary the person perceives his/her actions to be, the more motivated they are intrinsically.

The classroom as a social context is commonly characterized by the degree to which they are supportive of autonomy as opposed to controlling. Classroom contexts which are autonomy-supportive have been confirmed to enhance the voluntary engagement of the students; whereas controlling contexts reduce the voluntary engagement and motivation of the students (Vansteenkiste, Lens, & Deci, 2006). Painter (2011) explores autonomy in educational settings and they noted that providing students with the choice of what to do or how to do it increased the students' intrinsic motivation; and this freedom is very important, particularly so during a student's adolescent years. Controlled environments that enforce threats of punishment, deadlines, competition among students, and student evaluation decreased the motivation of students based on desire.

Competence

A person's need for competence is defined as the person's desire to feel effective when operating in their environment. It is the inherent desire of individuals to satisfy their intrinsic motivation by engaging in tasks and activities that are intellectually stimulating to them (Deci & Ryan, 2000). It is evident in people who like to explore and adapt the environment in a way suited to their own

44

skills. People who have their needs for competence suitably satisfied are more able

to deal with the complexities of their environments; whereas people who experience

competence frustration are more likely to experience feelings of restlessness,

helplessness, and motivational deficiency. The need for competence is an inborn

need characterized by a person's need to be effective at what they do (Van den

Broeck, Vansteenkiste, De Witte, Soeenens, & Lens, 2010).

The learning environment is a domain highly-driven by competence, both

academic competence and non-academic competence; and it has been found that a

student is more likely to engage into a learning activity both cognitively and

emotionally if the material is suited to something that he/she would be able to

materialize his/her competence into the discussion (Vansteenkiste, Lens, & Deci,

2006). This supports the claim by Vansteenkiste, Lens, and Deci (2006) that

competence is a structure that heavily influences intrinsic motivation

Competence as a need is not one that is objectively measurable but is still

rather reliant on a person's feelings; and external social influences could still affect

the intrinsic motivation of a person despite high-level of objective competence

(Painter, 2011). According to Painter (2011), the inherent desire of students to meet

their need for competence, students are likely to seek for particular activities that are

in accordance to their personal capacities.

The need for competence can be rooted in cognitive and social growth,

which stems from intrinsic motivation. Gaining competence in a domain specific

area establishes a level of satisfaction in learning so they can further develop that

interest (Deci & Ryan, 2000). It is the interaction with the environment that

provides clarity and focus based on knowledge, skills, and abilities, which over time, creates confidence through the pleasure of being effective (Deci & Ryan, 1985).

Relatedness

From the moment we are born, studies have shown a positive association with infants who are securely attached to their parent (Sternberg, 1998). This type of security relatedness does not change as we progress throughout our life. When a student feels a positive connection and sense of security with their teacher, the student will actively engage (Kollmann & Hardré, 2012) through intrinsic motivation (Ryan, Still, & Lynch, 1994). Teachers and peers have a critical social influence (Hardré & Sullivan, 2008) in the level of active engagement as LGB-identified students have the need to relate within the social setting that learning is often situated within (Kollmann & Hardré, 2012). For LGB-identified students, the most significant aspect of engaging and feeling a sense of security within a learning environment is when the teacher is perceived to be open, caring, and sensitive to the inclusivity of the LGB population (Kollmann & Hardré, 2012).

Relatedness refers to the individual's propensity to feel connected to the people that surround him/her. It could be the need to self-categorize, or to simply share a relationship with another person. This need is satisfied when a person experiences a deep sense of communion with other people, and this comes with intimate relationships with other people (Van den Broeck, Vansteenkiste, De Witte, Soeenens, & Lens, 2010). Social support, which has been a very popular concept in organizational psychology, is aligned with the concept of relatedness. This need is

aligned with a student's subsequent engagement such that when teachers are warm and caring towards the students, the students are inclined to be happier and more engaged during class (Painter, 2011). Students who also show relatedness with their parents and other family members reflect high levels of self-reported intrinsic motivation. This particular need is heavily tied to the sense of inclusion that a classroom context provides for its students.

For LGB-identified persons, connectedness can also be a protective element so that offers sameness with other people who are different from the societal norm. Establishing relatedness with others within the community offers the feeling of connection, belongingness, sameness (Deci & Ryan, 2000), which then fosters the opportunity to achieve the need satisfaction of competency and autonomy. Kollmann and Hardré (2010) also highlight that experiences of harassment can disrupt cognitive engagement, which reduces learning performance and goal attainment.

Self-Determination theory brings together, within the social context, the emotional, motivational and cognitive aspects that impact the three basic psychological needs. For LGB-identified students, lack of identity acceptance may create an environment that thwarts their basic psychological well-being due to their own external identity-related behaviors. Due to this conflict and dissonance with external and internal identities, this theory also provides an added level of perspective into students' awareness of self and perceived choice (Sheldon & Deci, 1996). Although SDT has been used as an approach to establish healthy identities (La Guardia, 2009), this theory has not yet been used to explain the acceptance of

one's sexual identity and the impact it has on a student's well-being and their ability to learn.

Summary

Standpoint theory proposes that the lived experiences of a person in various social environments and under different forms of social influence impact his/her social perspective (Barnett, 2009). People process information in direct correlation to these lived experiences; Beane and Lipka (1986) says that educative experiences have a direct effect on a student's development of his/her self-understanding. LGB-identified students experience discriminatory treatment in certain social structures. When this happens, students experience self-doubt which is observed to negatively impact academic performance. The standpoint of LGB-identified people challenge the current state of epistemology and its connection to power (Code, 1991).This presents the need to identify a clear LGB-identified standpoint that can influence epistemology and knowledge creation.

The concept of intersectionality (Crenshaw, 1993) posits that discrimination towards less dominant affiliations happens in several forms; and they serve as added components to a person's identity. LGB-identified people who experience the effects of intersectionality are relatively neglected in the current state of epistemology. With epistemology being a sometimes social process affected by power struggles and other social norms (Palermos, 2012), the definition of an LGB-identified epistemological standpoint is considerably important. Fostering epistemology for all types of learners would require adjusting epistemology to cater to minorities, including LGB-identified people.

The LGB-identified epistemological standpoint challenges the existence of heterosexist domination over knowledge construction. Code (1991) says that experiences are not commonly observed in mainstream epistemology. Epistemology, as a social construct, leaves for much to be studied. Vygotsky (1962) adds that dominant cultures influence knowledge construction most; thus, a person's experiences are considered less valuable if they do not belong to the dominant culture. The rise of the feminist epistemological standpoint can be traced to the acknowledgment of these observations. The experiences and history of women have been oppressed and considered less valuable than that of men for centuries (Brooke, 2006). Women began trying to close this gap; this gave rise to feminist consciousness in various social and academic arenas. The rise of the feminist consciousness gave women the opportunity to engage their male counterparts in encounters that influence the construction of knowledge. Similar to females, the LGB-identified group now acknowledges the existence of marginalization and the limitations that it has placed on their ability to contribute to knowledge. Now, there exists a need to go beyond the lines drawn by dominant cultures; and this entails embedding the LGB-identified epistemological standpoint into the current state of mainstream epistemology.

Student engagement has three dimensions: behavioral, emotional, and cognitive (Fredericks, Blumenfeld, &Paris, 2004). These three dimensions are observably social in nature. They are based highly on the interactions that students partake in the classroom context. When these three dimensions are positive, students exhibit positive classroom behavior; whereas when they are negative,

students can be observed to be disruptive and obstructive. The underlying social structure of student engagement is indicative of the need to maintain positive social interactions within the classrooms. With LGB-identified persons acknowledging the relationship between their experiences and their ability to process and contribute to knowledge, the educational system must now provide for these intersectionalities (Hartsock, 1997). Richeson (1997) suggests that a way to acknowledge the intersectionalities is by implementing instructional inclusivity. This could be applicable to the intersectionalities experienced by LGB-identified persons in particular. Instructional inclusivity can influence students into being more accepting of the social differences that exist within and among themselves. Full inclusion is necessary to improve educational experiences for all types of students (Richeson, 2009); thus, normative society must be adjusted to make sure that formal education acknowledges the social burden experienced by LGB-identified persons. Normative society has the common belief that people who identify as LGB are flawed or faulty; and this norm, coupled by a lack of social support, could create experiences that negatively affect an LGB-identified person's self-perception and self-acceptance. This could lead to self-concealment and a halted identity development.

In addition to the perceptions of normative society, LGB-identified persons have to deal with the hostility and violence directed towards gay and lesbian teens in school settings. The diversity within the education system and the hostility that it creates calls for the need to ensure the safety of students who commonly stand at the receiving end of this hostility (Murdock & Bolch, 2005). Hostility influences their capability to participate in their respective schools to their fullest capacity; it also

halts their capacity for social intimacy (Birden, 2005). The hostility within the school setting influences their identity development. Normative society's constructs of generalized classifications negatively impact a person's self-esteem if they do not fall inside one of the classifications (Longerbeam, 2007). In addition, the underrepresentation of LGB students impedes the provision of equal learning opportunities in comparison to that received by their heterosexual counterparts. The additional burdens of experiencing negative social messages and experiences of bullying affect the nature by which LGB-identified students mold their self-concept, self-understanding, and self-esteem; all of which are critical aspects of a person's identity (Bishop & Casida, 2011; Hatzenbuehler & Keyes, 2012).

The added level of development for LGB-students creates a bottleneck effect due to the additional stages of identity development they have to go through during their adolescence. A student's self-perception and subsequent social experiences become contingent on his/her sexual orientation; and their psychological energy is channeled to more areas because of the additional burdens brought about by their dynamic social experiences (Schmidt & Nilsson, 2006). Social influences have an effect on all learners; but the added levels of development for LGB-students are not experienced by their heterosexual counterparts. An LGB-identified student's self-esteem is also influenced by the social norms of the environment he/she is participating in; thus, he/she will face greater challenges with accepting his/her identity within a heteronormative society.

Self-determination theory (SDT) is driven by three psychological needs: competence, autonomy, and relatedness (Deci & Ryan, 2000). Being autonomous

51

would limit the effect of social influences on a person's self-acceptance because the person would feel in control over their own behavior and how he/she will integrate into society. The more a person feels volition or control over a situation, the more he/she will feel motivated to participate in social and academic interactions (Painter, 2011). A person also has an inherent desire to engage in activities or tasks that they feel they are going to excel in. This eventually helps them into reeling in more self-confidence due to the pleasure of being effective at what they do (Deci & Ryan, 1985). A person has a propensity to feel a sense of belongingness or connectedness to their environment. A core necessity for maintaining relatedness is the provision of social support. A social context which offers a sense of sameness to a person or even a sense of acceptance and equity would enable to a person to establish better relationships with his/her environment and function better as an interactive human being (Deci & Ryan, 2000).

SDT consolidates the emotional and cognitive factors that affect the attainment of the three basic psychological needs in a social context. LGB-students who experience low levels of self-acceptance may behave in a way that thwarts their ability to achieve their basic psychological needs by means of concealing their true identities from others. The conflicts that rise from the cognitive dissonance brought about by adopting a dual identity could impact the student's well-being and their ability to process information in a negative manner. While SDT has been used to observe what constitutes a healthy identity, it can also be used to explain how sexual identities impact functional well-being and academic performance.

This study provides the necessary foundation for future research on LGB-

identified students.   As research continues to progress with this student population, this study will provide the groundwork that will allow research to indicate causal relationships of sexual identity acceptance and academic achievement. Limited empirical research on LGB-identified students created the need to first piece together the framework, as illustrated by this literature review.

Research Questions

The overarching question that will be addressed is how sexual identity acceptance affects self-determination for LGB-identified university students within classroom settings. This research will address the following research questions:

1. To what extent do sexual identity acceptance, psychological needs, and the self-determination of the LGB-university students differ according to their demographic information of sexual identity, gender, current enrollment status in college, and ethnicity?

2. What is the relationship between LGB-identified university students' identity acceptance and having their basic needs met, as measured by the Basic Needs Satisfaction scale?

3. What is the relationship between LGB-identified university students' identity acceptance and their awareness of self and perceived choice, as measured by the Self-Determination scale?

Chapter 3: Methodology

This study used four online instruments to determine how sexual identity acceptance affects self-determination for LGB-identified university students within classroom settings. Participation to these online instruments maintained participant anonymity, which allowed the necessary time to reflect on each of the given questions, and allow each participant to decide, without pressure, to participate in the qualitative portion of this study. The quantitative data describes an LGB-identified student's self-determination within the context of a classroom environment based on their sexual identity acceptance. The supported qualitative data provides clarification and insight into the quantitative findings. Through this quantitative approach supplemented with qualitative experiences, *social context, level of internalization, experience of need fulfillment in classrooms*, and *experience of self-determination* are explained through correlational findings between these subconstructs.

Rationale and Evidence for a Quantitative Approach

The rationale for a quantitative approach supplemented with qualitative experiences include, enhancement, and clarification (Greene et al., 1989). In order to provide sufficient inferences from the data collected, the use of quantitative and qualitative data will create an account of the relationship sexual identity acceptance has on the learner's self determination. Without the pairing of the quantitative demographic profile, the sexual identity instrument (Mohr & Kendra, 2011), the basic needs satisfaction scale (Deci & Ryan, 2000), the self-determination scale (Sheldon & Deci, 1996), and supportive qualitative experiences through semi-

structured interviews, the findings would lack a sufficient and complete explanation of the relationship between sexual identity acceptance and self-determination within classroom settings. The combination of quantitative and qualitative data closes a gap in the literature and allows instructional designers, educators, and administration to begin developing learning strategies that foster equal learning opportunities for the LGB-identified student.

A critical aspect to the supplemental qualitative data is the need to know how classroom experiences influenced where the students are in regards to their sexual identity development, basic psychological well-being, and their awareness of self and perceived choice. This data provides credibility and context (Bryman, 2006) to the quantitative data. With this study being quantitative, the semi-structured interviews enhance the overall study. The ability to further explain responses to the given instruments will help explain variations in the educational implications. In addition, this supportive data will also create parallel measures to students' overall perceptions between who they believe they are, their perceived psychological well-being, and the classroom experiences they share.

Research Design

The study utilizes a sequential structure to gather the quantitative and supplemental qualitative data (Creswell & Plano-Clark, 2007). This explanatory design followed a quantitative design, with supplemental qualitative data. The dominant quantitative design utilized the responses from the questionnaire to develop and direct the semi-structured interview questions (Onwuegbuzie & Leech, 2006). The responses from the quantitative data determined what level students

55

were accepting of their sexual identity, their current satisfaction of their basic psychological needs, and their awareness of self and perceived choice. The student perceptions regarding their classroom experiences and overall social support were used to illuminate quantitative findings.

The relationship between social context, level of internalization by LGB student, experience of need fulfillment in classrooms, and experienced self-determination were analyzed through correlations. The following figure (*figure 1*) illustrates the components of the proposed model. The model indicates a sequential influence of these components that influence a student's overall ability to learn.
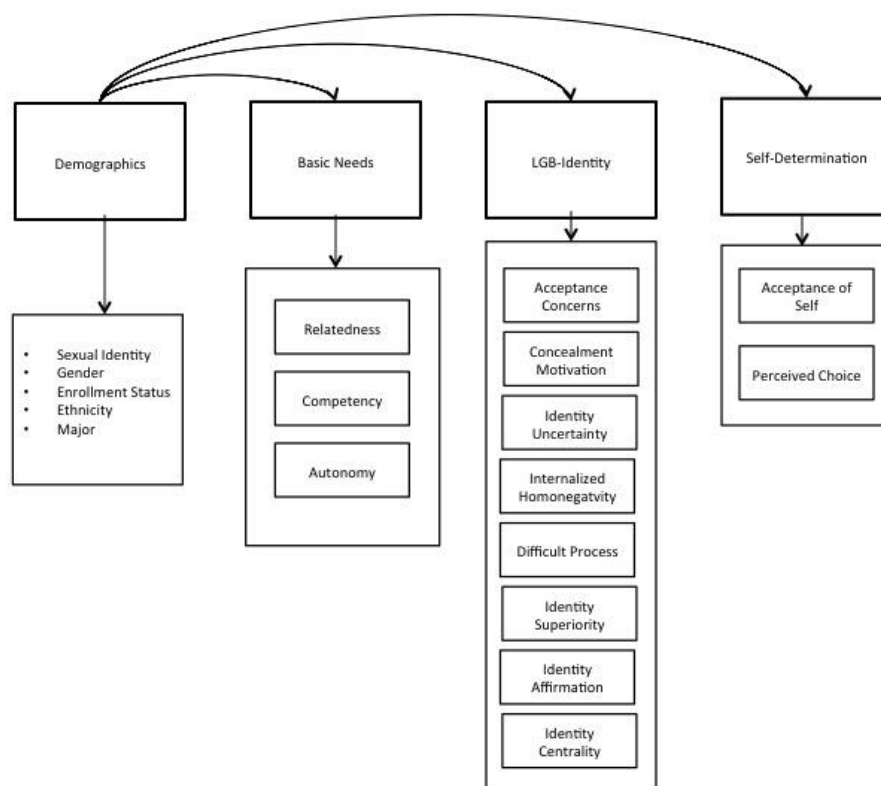
Figure 1. Illustration of the study design.

Participants

The participants for this study included 77 university students within the Midwest. Quota sampling was employed for the distribution of the online-based instruments and criteria sampling was used for the semi-structured interviews (n=15) to allow for specific criteria (e.g. selecting participants who were on the high and low end of the identity acceptance spectrum) of students (Creswell, 2007). In order to have participated in the quantitative aspect of the study, participants met the criteria of self-identifying as a lesbian, gay or bisexual and were enrolled in a college or university within the Midwest region of the Unites States. The 15 participants who were selected to proceed with the semi-structured interview met the criteria of ranking a 3 and below to meet the low level of acceptance and a ranking above 3.25 to meet the criteria for a high level of acceptance.

Students indicated consent to participate by continuing to complete the online-based instruments. The online instruments allowed for anonymity as there were no personally identifiable factors requested. For those students (n=15) who wanted to participate in the semi-structured interview, they were asked to provide an email address or phone number for future contact.

Seventy-seven students from colleges and universities completed the online instruments. The responses included 31 (40.3%) lesbian women, 23 (29.9%) gay men, and 21 (27.3%) bisexual. There were 46 (59.7%) females and 29 (37.7%) males, with no other gender being specified by the participants. Average age of the participants was 20.87 years old. The current enrollment status included 15 (19.5%) freshman, 12 (15.6%) sophomores, 22 (28.6%) juniors, and 26 (33.8%) seniors.

Ethnicity of participants includes 13 (16.9%) African-American, 4 (5.2%) Asian-American, 3 (3.9%) American Indian, 46 (72.7%) Caucasian, and 4 (5.2%) Hispanic. School majors ranged from Accounting to Women and Gender Studies with Business (15.6%) being the most frequent major within this sample. Participant GPA ranged from 2.0 to 4.0 with 3.375 being the median. Without knowing the total number of students these instruments were sent to, a response rate is unknown.

Data Collection

The quantitative design began by collecting data from the demographic questionnaire, sexual identity acceptance instrument; basic needs scale, and self-determination scale. This collection of data provided an understanding of the student demographics, students' level of identity acceptance, their basic psychological needs satisfaction, and their awareness of self and their perceived choice. The responses received from these online-based instruments informed the development of the interview questions. This second phase of the data collection used semi-structured interviews with a criterion sample from the students who participated in the on-line instruments (e.g., 10% of high and 10% low identity acceptance scores). The interviews took 30-40 minutes per interview, which depended on the level of elaboration and experiences the participant shared.

The instruments were administered online using the SurveyMonkey© digital administration system. The instruments were sent out to each of the participant's email addresses from organized group of which they were a part. This allowed the students to complete the instruments in the privacy of their own home or in another

designated safe area on their own time. The qualitative interviews were conducted

using WebEx™, a web-conferencing and collaboration technology. All

instruments, including the semi-structured interview, were approved by the

University of Oklahoma Institutional Review Board. Participant confidentially was

protected throughout this study.

Quantitative data, supplemented with qualitative data collection included

instruments, and semi-structured interviews. Data was collected the first two

months of spring semester to ensure that perceptions were based on sexual identity

and not unfamiliarity with faculty and students.

Besides the validity contained within the highly utilized instruments, a

systematic qualitative analysis (Creswell, 2007) was also employed to support the

quantitative data. Trustworthiness of the data includes descriptive and theoretical

validity, which Maxwell (2002) describes, based on two critical aspects within

qualitative research. The descriptive validity is found in the capturing of the

students experiences, just as they explained. The interviews were transcribed from

the audio recording without any additions from the researcher. The researcher

revisited the audio to ensure that all pieces of data were accurately captured.

Theoretical validity was intentionally embedded through the application of Self

Determination Theory (Deci & Ryan, 1985), which provides a lens for analysis.

The potential bias of concern within this research is my own lived

experiences as an LGB-identified person. This conscious awareness influenced the

researcher to apply epoche (bracketing). Bracketing requires the researcher to

identify potential areas of preconceptions that may influence analysis. Additionally,

knowing the title of the research, the responses could have been altered to support the idea that their lack of self-determination in school was due to their pressure of conforming to an identity that was not their own.

Data Sources

The study distributed a packet of online instruments that included demographics and perceptions of identity acceptance, awareness of self, and perceived choice. All instruments were previously tested and have acceptable internal consistency, Cronbach's *alphas* of .70 or greater. The range of data sources are described below.

Demographic questionnaire. This 6-item questionnaire offers general profile information on items concerning: 1) sexual identity; 2) gender; 3) current enrollment status in college; 4) ethnicity; 5) major; and 6) willingness to participate in a follow up semi-structured interview. These items were developed to provide a more holistic perspective and quantifiable understanding of the profile of this sample of LGB-identified student. This questionnaire is provided in Appendix A.

Basic needs satisfaction in classroom scale. This reliable and valid 21-item (Deci & Ryan, 2000) self-reporting instrument contains questions that assess the degree to which students feel that three basic psychological needs (autonomy, competence, and relatedness) are satisfied. The original measure demonstrated internal consistency ($\alpha = .84-.90$). The instrument and associated instructions were contextualized to focus on the experiences of students within a classroom setting (see Appendix B for items). Participants are asked to indicate how true each of the statements are for them, as it relates to their university classroom experience.

Responses to each statement are based on a scale of 1 (not at all true) to 7 (very true). High scores on these subscales indicate that an individual has these basic needs more fully satisfied and thus has a more positive motivational profile. Each of the nine negatively-worded statements were reverse scored for analysis.

Lesbian, gay, and bisexual identity scale. This 27-item self-reporting instrument (Mohr & Kendra, 2011) contains eight subscales: acceptance concern (3 items) (e.g., "I often wonder whether others judge me for my sexual orientation"), concealment motivation (3 items) (e.g., "I prefer to keep my same-sex romantic relationships rather private"), identity uncertainty (4 items) (e.g., "I keep changing my mind about my sexual orientation"), internalized homonegativity (3 items) (e.g., "If it were possible, I would choose to be straight"), difficult process (3 items) (e.g., "Admitting to myself that I'm an LGB person has been a very painful process"), identity superiority (3 items) (e.g., " I look down on heterosexuals"), identity affirmation (3) (e.g., "I am glad to be an LGB person"), and identity centrality (5 items) (e.g., "My sexual orientation is an insignificant part of who I am"). The original measure demonstrated internal consistency (α = .72 -.94). Students rate how accurately each statement represents their current experience on a 6-point Likert-type scale ranging from 1 (disagree strongly) to 6 (agree strongly). The subscale scores will be determined by reverse scoring on the necessary items (items 11 and 23) and averaging the subscales item ratings. The scale is reported to have good reliability measures (e.g., internal consistency), and construct validity (Mohr & Kendra, 2011). The scale was designed to ensure that the internal structure

supports the internal structure of the construct, which is why it is comprised of multiple, complex scales.

Self-determination scale. This scale assesses individual self-determination, which is a strong predictor of acceptance of self and perceived choice (Sheldon & Deci, 1996). The original measure demonstrated internal consistency (α = .85-.93). Given this study's specific group and context that historically includes bullying, self-concealment, negative body image, and societal conformity (Bishop & Casida, 2011; Hawton, Saunders & O'Connor, 2012), there was a necessity to unpack the scale to check the relationships among the response statements. For this study, the original 10-item scale was modified from paired statements, separated into 20 discrete statements, each on its own 5-point rating scale (anchored with "very true" to "not at all true", See Appendix D). Items include: "I feel pretty free to do whatever I choose to" and "My body sometimes feels like a stranger to me."

Interviews. Interviews were conducted using a semi-structured interview protocol, covering: personal experiences with acceptance or lack of acceptance, perception of faculty acceptance, social contacts, and class learning experiences and environment. Interviews were used to confirm and elaborate the data gathered by the online instruments. Sample questions: "Growing up, what do you recall were your parents view of lesbian, gay, and bisexual persons?"; "Please describe your experiences with other students in the classroom when the topic of homosexuality would come up." and "How would you describe your social life?"

Procedures

A commonly recognized and utilized program within most universities is an LGBT Ally program. Allied programs are a supportive resource that strives to improve college campus climate advocating for equal rights. These programs are founded on the basis of a common cause that seeks social justice and supports overall well-being of identified members. Maximizing this resource helped reach a large population of LGB-identified students and students who are already actively engaged in the pursuit of equality.

Thirty-one Allied programs throughout the Midwest were contacted via email to gain approval for participant participation in the study. Department leaders received an email that explained the study procedures, a hyperlink to the packet of instruments, and the institutional review board information for anyone who may have been concerned about anonymity. The Allied leaders mass distributed the email to partnering participants to provide them with an opportunity to participate in the study.

The data was collected for a period of two months at the beginning of Spring semester using the web-based data collector SurveyMonkey©. This timeframe ensured that students would have adequate time to be acclimated with their classes. The instruments were mass distributed via email to students who are involved in their college and university allied program. Students who selected that they were willing to participate in the semi-structured interview were contacted via telephone or email, whichever form of communication the participant identified. Once

63

communication was established, each participant selected a meeting time and was contacted via WebEx™ for the semi-structured interview.

Quantitative: Data Preparation and Analysis

There are five dependent variables (DV) in this study; they include the three basic psychological needs (e.g., autonomy, relatedness, and competence) and self-determination (e.g., awareness of self and perceived choice). The independent variable (IV) in this study is sexual identity acceptance. The satisfaction of basic psychological needs and their self-determination depend on LGB-identified students' level of sexual identity acceptance.

Prior to performing analysis, the data was reviewed for survey response completeness. Univariate descriptive and multivariate inferential statistics were used to analyze data in relation to how sexual identity acceptance could potentially relate to self-determination for LGB-identified university students within classroom settings. Analysis of data collected from the survey included descriptive, correlational and analysis of variance. Descriptive analysis summarizes the data providing a basis for inferential statistics. Capturing the correlation of variables began by recording inferential statistics. The correlational analysis determined that relationships do exist between sexual identity acceptance and the variables of psychological needs and self-determination. Further statistical analysis was used using Analysis of Variance (ANOVA) to determine the association of demographic variables with the variables of sexual identity acceptance, psychological needs and self-determination.

The demographic questionnaire used five characteristics (e.g., sexual identity, gender, current enrollment status in college, ethnicity, and major). The scales have a total of 11 factors. The basic needs satisfaction scale has three factors (e.g., autonomy, relatedness, and competence), there are eight factors from the sexual identity acceptance scale (e.g., concealment motivation, identity uncertainty, internalized homonegativity, difficulty process, acceptance concerns, identity superiority, identity centrality, and identity affirmation), and two factors from the self-determination scale (e.g., awareness of self and perceived choice). All statistical analysis was conducted using Statistical Package for Social Science (SPSS).

To more specifically discuss the preparation for quantitative analysis, each research question is addressed individually. The first set of research questions focus on sexual identity acceptance:

1. To what extent do sexual identity acceptance, psychological needs, and the self-determination of the LGB-university students differ according to their demographic information of sexual identity, gender, current enrollment status in college, and ethnicity?

To answer this set of questions, descriptive statistics, and ANOVA analysis was used. Descriptive statistics determined central tendency and standard deviation of data collected from the LGBIS scale, Basic needs satisfaction in classroom scale, and the Self-determination scale. ANOVA is used to determine the differences of sexual identity, psychological needs, and the

65

self-determination for each group of the demographics of the participants. The ANOVA was used to determine differences in subgroups from the demographic scale that included sexual identity, gender, current enrollment status in college, and ethnicity.

The next research question was designed to determine the relationship between level of LGB-identified university students' sexual identity acceptance and satisfaction of three basic needs of satisfaction.

2. What is the relationship between LGB-identified university students' identity acceptance and having their basic needs met, as measured by the Basic Needs Satisfaction scale?

The analysis consisted of a correlation analysis to determine the relationship between sexual identity acceptance and basic needs met. Correlational analysis was used to assess the magnitude and significance of relationships for each of the eight identified factors of acceptable of sexual identity which include concealment motivation, identity uncertainty, internalized homonegativity, difficulty process, acceptance concerns, identity superiority, identity centrality, and identity affirmation and the three dimensions of perceived basic needs which include competence, relatedness and autonomy. Pearson's correlation test was conducted since the data for both sexual identity acceptance and perceived basic needs were measured as continuous variables. Pearson's Correlation Coefficient identified a

directional relationship for each of the three factors to determine level of basic

needs satisfaction.

The final question answered in this study determined if students' acceptance

of their sexual identity is associated to their self-awareness and perceived choice.

3. What is the relationship between LGB-identified university students'

identity acceptance and their awareness of self and perceived choice, as

measured by the Self-Determination scale?

Pearson's Correlation Coefficient (r) analysis was completed to measure the

magnitude of relationship between student's acceptance of sexual identity and their

awareness of self and perceived choice. The correlation test was conducted to

determine relation of the eight identified factors of acceptable of sexual identity

which include concealment motivation, identity uncertainty, internalized

homonegativity, difficulty process, acceptance concerns, identity superiority,

identity centrality, and identity affirmation and the two dimensions of self-

determination which include awareness of self and perceived choice.

Qualitative: Plan of Analysis

The qualitative analysis of this study utilized a standard inductive to the

qualitative process by first preparing and organizing the data through the

transcription of interviews. Once all data was transcribed, the data was coded and

condensed into themes (Creswell, 2007). The coding process collected significant

and common statements. The statements were then used to support emerging

67

themes (Creswell, 2007) from the quantitative data. In conjunction with applying a

cognitive process to data analysis, which focused on comprehending and

synthesizing, (Morse, 1994) a systematic qualitative analysis (Creswell, 2007) was

used to form a holistic description of the meanings experiences by the LGB-

identified learners. Using the systematic analysis allowed for continual validation

of experiences with high level of identity acceptance and low level of identity

acceptance throughout the thorough process.

Chapter 4: Findings

The purpose of this quantitative study is to determine the association of sexual identity acceptance with self-determination for LGB-identified university students within classroom settings. The following research questions guide the analysis:

1. To what extent do sexual identity acceptance, psychological needs, and the self-determination of the LGB-university students differ according to their demographic information of sexual identity, gender, current enrollment status in college, and ethnicity?

2. What is the relationship between LGB-identified university students' identity acceptance and having their basic needs met, as measured by the Basic Needs Satisfaction scale?

3. What is the relationship between LGB-identified university students' identity acceptance and their awareness of self and perceived choice, as measured by the Self-Determination scale?

This chapter begins with determining the internal consistency of the results of the basic needs satisfaction in classroom scale, lesbian, gay, and bisexual identity scale (LGBIS), and self-determination scale. This is followed by the results of ANOVA to address the first research question and then the results of separate Pearson correlation tests to address research questions two and three. The findings from the quantitative data are then supported qualitatively with emerging themes gathered from the fifteen semi-structured interviews.

Internal Consistency Measure of Survey Instruments

The internal consistency of the three instruments of Basic Needs Satisfaction in classroom scale, LGBIS, and self-determination scale were analyzed to determine coherence for this participant group. Overall internal consistency was computed based on the responses of the 77 participants. The negatively worded items were reverse scored prior to analysis. Cronbach's alpha coefficient was calculated to determine the internal consistency of the responses.

The results showed that the basic needs satisfaction in classroom scale and self-determination scale had a high level of internal consistency (*alpha*= .94 and .96, respectively). The LGBIS had a fair overall internal consistency of .66 (Robinson, Shaver, & Wrightsman, 1991). This showed that the responses among the 77 university students were internally consistent among each of the three scales, since each of the alphas exceeded the minimum acceptable value of .60 that is necessary for reliability in an exploratory study (Robinson, Shaver & Wrightsman, 1991).

However, it was necessary to measure the reliability on each of the subscales for the three instruments. The results are presented in Table 1. The Cronbach's alpha coefficient of each of the seven subscales of the LGBIS were all greater than 0.6 indicating that the measure for each of the seven subscales for sexual identity acceptance were all reliable. The difficult process subscale did require the removal of an item. The item removed was item 17, which states "Admitting to myself that I'm an LGB person has been a very slow process." With this item included, the Cronbach's alpha for this subscale was .53, without this item, it is now 0.69. The

70

item was removed based on the inconsistency of responses within the subgroup.

The Cronbach's alpha coefficient for autonomy (0.81), relatedness (0.90), and

competence (0.89) components of the basic needs satisfaction in classroom scale

exhibited acceptable reliability. Lastly, the Cronbach's alpha coefficient for the

perceived choice (0.94) and awareness of self (0.94) components of the self-

determination scale exhibited more than acceptable reliability. In addition,

descriptive statistics for the three scales are presented in Table 2. The number of

items, mean and SD is provided for each of the demographic subgroups by scale to

show summary of the sample.

Table 1

Cronbach's Alpha Reliability Results for each of the Scale of the Three Survey Instruments Used.

		N of Items	Mean	SD	Cronbach's Alpha
LGBIS	Acceptance concerns	3	4.42	1.31	0.87
	Concealment motivation	3	4.08	1.49	0.91
	Identity Uncertainty	4	1.85	0.92	0.86
	Internalized homonegativity	3	2.60	1.33	0.88
	Difficult process	2	4.08	1.27	0.69
	Identity Superiority	3	2.07	0.99	0.79
	Identity Affirmation	3	3.67	1.36	0.94
	Identity Centrality	5	4.09	1.27	0.93
Basic Needs	Autonomy	7	4.07	1.16	0.81
	Competence	6	4.88	1.23	0.89
	Relatedness	8	4.44	1.18	0.90
SDS	Awareness of self	10	3.62	1.03	0.94
	Perceived choice	10	3.30	0.91	0.94

Table 2

Descriptive Statistics for each of Three Survey Instruments.

Demographic Subgroups		N of Items	LGBIS		Basic Needs		SDT	
			Mean	SD	Mean	SD	Mean	SD
Sexual Identity	Lesbian	31	3.09	0.42	4.40	1.08	3.63	0.90
	Gay	23	3.14	0.45	4.47	1.35	3.51	1.07
	Bisexual	21	3.46	0.33	4.47	0.78	3.17	0.62
Gender	Male	29	3.22	0.46	4.50	1.23	3.22	1.02
	Female	46	3.20	0.42	4.40	1.00	3.55	0.67
Enrollment Status	Freshman	15	3.31	0.39	4.11	1.04	3.16	1.13
	Sophomore	12	3.41	0.36	4.20	1.01	3.11	0.67
	Junior	22	3.21	0.40	4.39	1.14	3.53	0.84
	Senior	26	3.04	0.47	4.77	1.08	3.82	0.77
Ethnicity	African-American	13	3.28	0.43	4.19	1.01	3.42	0.76
	Asian-American	4	3.38	0.33	3.00	1.06	2.20	1.09
	American Indian	3	3.69	0.34	4.31	0.98	2.98	0.39
	Caucasian	46	3.18	0.46	4.60	1.07	3.62	0.89
	Hispanic	4	3.22	0.39	4.46	0.94	3.22	0.47

Analysis and Results for Research Question One

Analysis of variance (ANOVA) was used to assess differences in sexual identity acceptance, psychological needs, and the self-determination subgroups among the different demographic information of subgroups, sexual identity, gender, current enrollment status in college, and ethnicity. ANOVA was conducted since there were multiple dependent variables and multiple independent variables. A level of significance of 0.05 was used in the statistical analysis, which is appropriate for the sample size (n=77).

The results of the ANOVA are presented in Table 3. The dependent variables include the eight factors from the sexual identity acceptance scale (concealment

motivation, identity uncertainty, internalized homonegativity, difficulty process, acceptance concerns, identity superiority, identity centrality, and identity affirmation), three components of psychological needs (autonomy, relatedness, and competence), and two components of self-determination (awareness of self and perceived choice).

Table 3

ANOVA Results of Difference of Sexual Identity Acceptance, Psychological needs, and Self-Determination According to the Demographic Information of the LGB-Identified University Students

	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Sexual Identity	Sexual identity acceptance	LGBIS Overall Scale					
		369.39	2	184.69	1.43	0.37	0.49
	Acceptance concerns	9.85	2	4.92	0.70	0.56	0.32
	Concealment motivation	71.30	2	35.65	213.90	0.00*	0.99
	Identity Uncertainty	195.51	2	97.75	.	.	1.00
	Internalized homonegativity	46.02	2	23.01	1.12	0.33	0.43
	Difficult process	11.90	2	5.95	0.55	0.63	0.27
	Identity Superiority	1.34	2	0.67	0.50	0.65	0.25
	Identity Affirmation	47.96	2	23.98	2.52	0.23	0.63
	Identity Centrality	77.59	2	38.80	1.55	0.35	0.51
	Autonomy	8.16	2	4.08	0.07	0.94	0.04
Psychological needs	Competence	85.93	2	42.96	0.63	0.59	0.30
	Relatedness	1.49	2	0.74	0.01	0.99	0.01
Self-determination	Acceptance of self	116.46	2	58.23	0.51	0.64	0.26
	Perceived choice	11.28	2	5.64	0.07	0.94	0.04
Current Enrollment Status in College	Sexual identity acceptance	LGBIS Overall Scale					
		26.50	2	13.25	0.10	0.91	0.06
	Acceptance concerns	4.50	2	2.25	0.32	0.75	0.18
	Concealment motivation	18.00	2	9.00	54.00	0.01*	0.97
	Identity Uncertainty	14.50	2	7.25	.	.	1.00

	Internalized homonegativity	32.50	2	16.25	0.79	0.53	0.35
	Difficult process	8.50	2	4.25	0.39	0.71	0.21
	Identity Superiority	26.00	2	13.00	9.75	0.05	0.87
	Identity Affirmation	10.00	2	5.00	0.53	0.64	0.26
	Identity Centrality	216.50	2	108.25	4.33	0.13	0.74
Psychological needs	Autonomy	344.50	2	172.25	2.86	0.20	0.66
	Competence	170.00	2	85.00	1.24	0.40	0.45
	Relatedness	52.00	2	26.00	0.45	0.67	0.23
Self-determination	Acceptance of self	377.00	2	188.50	1.66	0.33	0.53
	Perceived choice	228.50	2	114.25	1.36	0.38	0.48
Sexual identity acceptance	LGBIS Overall Scale	103.94	1	103.94	0.81	0.44	0.21
	Acceptance concerns	11.55	1	11.55	1.65	0.29	0.36
	Concealment motivation	10.85	1	10.85	65.12	0.04*	0.96
	Identity Uncertainty	16.38	1	16.38	.	.	1.00
Ethnicity	Internalized homonegativity	0.57	1	0.57	0.03	0.88	0.01
	Difficult process	1.19	1	1.19	0.11	0.76	0.04
	Identity Superiority	1.82	1	1.82	1.37	0.33	0.31
	Identity Affirmation	3.69	1	3.69	0.39	0.58	0.11
	Identity Centrality	3.30	1	3.30	0.13	0.74	0.04
Psychological needs	Autonomy	196.23	1	196.23	3.25	0.17	0.52
	Competence	77.34	1	77.34	1.13	0.37	0.27
	Relatedness	39.09	1	39.09	0.68	0.47	0.19
Self-determination	Acceptance of self	53.52	1	53.52	0.47	0.54	0.14
	Perceived choice	125.01	1	125.01	1.48	0.31	0.33

*significant difference at level of significance of 0.05

From Table 3, the results of the ANOVA showed that concealment motivation of the sexual identity acceptance scale was significantly different between the different sexual identity groups (F (2)= 213.90, p = 0.00), age (F (3)=32.00, p = 0.01), enrollment status (F (2)= 54.00, p = 0.01), and ethnicity (F (1)= 65.12, p = 0.04). This means that concealment motivation is significantly different among the subgroups of undergraduate students. Other than concealment motivation, the remaining factors of sexual identity acceptance, the components of psychological needs, and the components of self-determination of the LGB-Identified university student were not significantly different by demographic subgroups of sexual identity, gender, current enrollment status in college, an ethnicity (p-values were all greater than the level of significance of $p<0.05$).

Table 4 summarizes the post hoc test results of the significantly different variables in the ANOVA test, by conducting a multiple comparison of the concealment motivation factor of sexual identity acceptance for each sexual identity group. This analysis will determine which among the sexual identity groups of lesbian, gay, bisexual university students have significantly different concealment motivation. As shown in Table 4, there was a significant difference in concealment motivation of the university students who were lesbian and gay (mean difference = -1.69; p=0.00), lesbians and bisexual (mean difference = -3.53; p=0.00), and those between gay and bisexual (mean difference = -1.84; p=0.00). University students that were lesbian had lower concealment motivation than gay and bisexuals, while university students that were gay had lower concealment motivation than bisexuals.

These subgroup differences may be illuminated and in part explained by looking at the qualitative data from these same groups. For instance, even though lesbians reported the least need for concealment motivation within the quantitative data, their experiences expressed that even they sought to selectively conceal their identity. Students described being "nervous" when the topic of homosexuality was brought up during classroom discussions. One participant stated, "The topic itself does not make me nervous, but the topic related to me is what makes me nervous." Another student shared that when her sisters would see a masculine female in school they would talk about how "disgusting" and what a "loser" she was for not acting like a girl. These negative messages reinforce concealment, as even this student shared her concern that her sister might see that she was "attracted to other girls" and not love her anymore.

Throughout the qualitative interviews, concealment motivation was the central theme that emerged as the student's experiences also highlighted the influence family plays in maintaining dual-identities. One participant who was uncertain in her identity said, "my sister's best friend is gay [lesbian]…my mom made some kind of comment like, don't you think people will think you are like that too if you hang out with her?" Another participant who was accepting of his sexual identity said, "my mom is cool that way but I think it was a little different when it was me and not the kid next door." LGB-identified students explicitly attributed that the messages received throughout the course of their lives, and the current support they receive, influenced their tendency toward level of concealment motivation.

Table 4

Post-Hoc Test of Mean Comparison of Sexual Identity Acceptance Component of
Concealment Motivation by Sexual Identity

Dependent Variable	(I) Sexual Identity	(J) Sexual Identity	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Concealment Motivation	Lesbian	Gay	-1.69*	0.12	0.00	-2.18	-1.20
		Bisexual	-3.53*	0.13	0.00	-4.06	-3.00
	Gay	Lesbian	1.69*	0.12	0.00	1.20	2.18
		Bisexual	-1.84*	0.14	0.00	-2.40	-1.30
	Bisexual	Lesbian	3.53*	0.13	0.00	3.00	4.06
		Gay	1.84*	0.14	0.00	1.30	2.40

* The mean difference is significant at the level of significance of 0.05

Table 5 summarizes the post hoc test results of the significantly different

variables in the ANOVA test, by conducting a multiple comparison of concealment

motivation factor of sexual identity acceptance for current enrollment status in

college. The analysis will determine which students within their current enrollment

status, freshman, sophomore, junior, and senior university students have

significantly different concealment motivation measure. As shown in Table 5, there

was a significant difference in concealment motivation of the university students

who were freshman and sophomore (mean difference = -2.47; p=0.00), junior and

sophomore (mean difference = -3.14; p=0.00), senior and freshman (mean

difference = -2.09; p=0.00), senior and sophomore (mean difference = -4.56;

p=0.00), and senior and junior (mean difference = -1.42; p=0.01). University

students that were freshman had significantly lower concealment motivation than

sophomore; junior had lower concealment motivation than sophomore while senior

had lower concealment motivation than freshman, sophomore and junior. The results illustrate that concealment motivation is reduced as the students' progress in their enrollment status.

Table 5

Post-Hoc Test of Mean Comparison of Sexual Identity Acceptance Component of Concealment Motivation by Current Enrollment Status in College

Dependent Variable	(I) Current Enroll Status in College	(J) Current Enroll Status in College	Mean Diff (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Concealment Motivation	Fresh	Soph	-2.47*	0.16	0.00	-3.26	-1.68
		Junior	0.67	0.15	0.06	-0.04	1.38
		Senior	2.09*	0.14	0.00	1.40	2.79
	Soph	Fresh	2.47*	0.16	0.00	1.68	3.26
		Junior	3.14*	0.15	0.00	2.41	3.87
		Senior	4.56*	0.15	0.00	3.85	5.27
	Junior	Fresh	-0.67	0.15	0.06	-1.38	0.04
		Soph	-3.14*	0.15	0.00	-3.86	-2.41
		Senior	1.42*	0.13	0.01	0.80	2.05
	Senior	Fresh	-2.09*	0.14	0.00	-2.79	-1.40
		Soph	-4.56*	0.15	0.00	-5.27	-3.85
		Junior	-1.42*	0.13	0.01	-2.05	-0.80

* The mean difference is significant at the level of significance of 0.05

Correlation Between Sexual Identity Acceptance and Psychological Needs

The Pearson correlation was used to determine correlations among the three components of psychological needs (autonomy, competence, and relatedness) with the eight factors of sexual identity acceptance (concealment motivation, identity uncertainty, internalized homonegativity, difficulty process, acceptance concerns, identity superiority, identity centrality, and identity affirmation). A significant relationship exits once the probability value is less than or equal to the level of significance value of 0.05. The Pearson correlation test also investigated the direction of the correlation (positive or negative). This finding demonstrates significant and positive relationships. Results of the Pearson correlation test are presented in Table 6.

The positive basic psychological needs characteristic of autonomy was negatively correlated with the five *negative* identity acceptance characteristics of acceptance concerns ($r = -0.60$, $p = 0.00$), concealment motivation, ($r = -0.38$, $p = 0.00$), internalized homonegativity ($r = -0.43$, $p = 0.00$), difficult process ($r = -0.03$, $p = 0.01$, and identity superiority ($r = -0.53$, $p = 0.00$). Autonomy was positively correlated with two *positive* identity acceptance characteristics of identity affirmation ($r = 0.33$, $p = 0.00$) and identity centrality ($r = 0.27$, $p = 0.02$). This finding addresses the satisfaction of autonomy in one's life for those students who accept their identity as LGB.

The positive basic psychological needs characteristics of competence were negatively correlated with the three *negative* identity acceptance characteristics of acceptance concerns ($r = -0.23$, $p = 0.05$), internalized homonegativity ($r = -0.33$, p

= 0.01), and identity superiority (r = -0.64, p = 0.00). Competence was positively correlated with one *positive* identity acceptance characteristic of identity centrality (r = 0.44, p = 0.00). These data illustrates that satisfaction of competence is positively related to LGB students' positive acceptance of their LGB identity.

The positive basic psychological needs characteristics of relatedness were negatively correlated with the four *negative* identity acceptance characteristics of acceptance concerns (r = -0.64, p = 0.00), concealment motivation (r = -0.30, p = 0.01), internalized homonegativity r = -0.41, p = 0.00), and identity superiority (r = -0.57, p = 0.00). Relatedness was positively correlated with two *positive* identity acceptance characteristics of identity affirmation (r = 0.39, p = 0.00) and identity centrality (r = 0.28, p = 0.02). These data illustrate that need satisfaction of relatedness is positively related to LGB students' acceptance of their LGB identity.

Students illustrated a need and desire for social acceptance throughout the semi-structured interviews. Those who expressed greater identity centrality also articulated stronger feelings of satisfaction of all three psychological needs. A common behavior that emerged within the context of the classroom was observation. Before students were willing to fully engage within the class, they waited to see how peers and faculty would respond to either the topic of homosexuality or them personally. One student said [in relation to how they knew faculty were accepting], "I watched how they treated me…you can just kinda tell. People will stereotype by the way you dress that you may be [gay]…the more accepting I thought they were the more comfortable I was." Another student said, "when I have a connection with a professor or someone else in the classroom, then I

81

am all in and willing to share anything, but otherwise I prefer not to." Even for

those students who are accepting of their identity and believe their identity as an

LGB person is important, the idea and notion of being treated "less than" another

student based on their sexual identity was a pattern of shared concern within the

qualitative interviews.

Table 6

Pearson Correlation Test Results of Different of Relationship between Sexual Identity Acceptance and Psychological Needs

		Autonomy	Competence	Relatedness
Acceptance concerns	Pearson Correlation	-0.60*	-0.23*	-0.64*
	Sig. (2-tailed)	0.00	0.05	0.00
	N	72	72	71
Concealment motivation	Pearson Correlation	-0.38*	0.02	-0.30*
	Sig. (2-tailed)	0.00	0.89	0.01
	N	72	72	71
Identity Uncertainty	Pearson Correlation	-0.20	-0.22	-0.13
	Sig. (2-tailed)	0.10	0.07	0.27
	N	72	72	71
Internalized homonegativity	Pearson Correlation	-0.43*	-0.33*	-0.41*
	Sig. (2-tailed)	0.00	0.01	0.00
	N	72	72	71
Difficult process	Pearson Correlation	-0.03*	-0.03	-0.21
	Sig. (2-tailed)	0.01	0.81	0.09
	N	72	72	71
Identity Superiority	Pearson Correlation	-0.53*	-0.64*	-0.57*
	Sig. (2-tailed)	0.00	0.00	0.00
	N	72	72	71
Identity Affirmation	Pearson Correlation	0.33*	0.18	0.39*
	Sig. (2-tailed)	0.00	0.03	0.00
	N	72	72	71

Identity Centrality	Pearson Correlation	0.27*	0.44*	0.28*
	Sig. (2-tailed)	0.02	0.00	0.02
	N	72	72	71

* Correlation is significant at the 0.05 level (2-tailed).

Correlation Between Sexual Identity Acceptance and Self-Determination

The Pearson correlation was used to determine the correlation among the two components of self-determination (awareness of self and perceived choice) with the eight factors of sexual identity acceptance (concealment motivation, identity uncertainty, internalized homonegativity, difficulty process, acceptance concerns, identity superiority, identity centrality, and identity affirmation). The results of the Pearson's correlation test are presented in Table 7. The significant results were as follows:

The positive self-determination characteristics of awareness of self was negatively correlated with the six *negative* identity acceptance characteristics of acceptance concerns ($r = -0.42$, $p = 0.00$), concealment motivation ($r = -0.30$, $p = 0.01$), identity uncertainty ($r = -0.40$, $p = 0.00$), internalized homonegativity ($r = -0.57$, $p = 0.00$), difficult process ($r = -0.30$, $p = 0.01$), and identity superiority ($r = -0.31$, $p = 0.01$). Awareness of self was positively correlated with two *positive* identity acceptance characteristics of identity affirmation ($r = 0.45$, $p = 0.00$) and identity centrality ($r = 0.46$, $p = 0.00$). This data illustrates that those students who accept who they are as an LGB-identified person is more aware of their feelings and their sense of self.

The positive self-determination characteristics of perceived choice were negatively correlated with the six *negative* identity acceptance characteristics of

acceptance concerns ($r = -0.57$, $p = 0.00$), concealment motivation ($r = -0.37$, $p = 0.00$), identity uncertainty ($r = -0.34$, $p = 0.01$), internalized homonegativity ($r = -0.43$, $p = 0.00$), difficult process ($r = -0.42$, $p = 0.00$), and identity superiority ($r = -0.45$, $p = 0.00$). Perceived choice was positively correlated with two *positive* identity acceptance characteristics of identity affirmation ($r = 0.38$, $p = 0.00$) and identity centrality ($r = 0.37$, $p = 0.00$). The data highlights those students who accept who they are as an LGB-identified person feels more of a sense of choice with respect to their behavior. Overall, this data illustrates that those students who accept their identity as LGB, function in a more self-determined way than those who do not accept their identity. This same theme emerged within the qualitative experiences shared in the interviews.

Awareness of self and perceived choice of students captured different experiences depending on their overall openness with their LGB identity. Those students who lived openly accepted that others may judge them but did not allow that to influence how they lived. One student said, "I accept that people will judge me, but that is no different than someone [in class] being judged on their looks or clothing…people are just ignorant." While another student who was not as open said, "I have been open about my identity to some people, but never in a classroom. I don't want it [LGB-identity] to affect my grade."

Table 7

Pearson's Correlation Test Results of Different of Relationship between Sexual Identity Acceptance and Self-determination

		Awareness of self	Perceived choice
Acceptance concerns	Pearson Correlation	-0.42*	-0.57*
	Sig. (2-tailed)	0.00	0.00
	N	70	68
Concealment motivation	Pearson Correlation	-0.30*	-0.37*
	Sig. (2-tailed)	0.01	0.00
	N	70	68
Identity Uncertainty	Pearson Correlation	-0.40*	-0.34*
	Sig. (2-tailed)	0.00	0.01
	N	70	68
Internalized homonegativity	Pearson Correlation	-0.57*	-0.43*
	Sig. (2-tailed)	0.00	0.00
	N	70	68
Difficult process	Pearson Correlation	-0.30*	-0.42*
	Sig. (2-tailed)	0.01	0.00
	N	70	68
Identity Superiority	Pearson Correlation	-0.31*	-0.45*
	Sig. (2-tailed)	0.00	0.00
	N	70	68
Identity Affirmation	Pearson Correlation	0.45*	0.38*
	Sig. (2-tailed)	0.00	0.00
	N	70	68
Identity Centrality	Pearson Correlation	0.46*	0.37*
	Sig. (2-tailed)	0.00	0.00
	N	70	68

* Correlation is significant at the 0.05 level (2-tailed).

Summary

Chapter 4 presented the results of the study to determine the association of sexual identity acceptance with self-determination for LGB-identified university students within classroom settings. The results of the ANOVA for research question one showed that only the concealment motivation factor of sexual identity acceptance scale was significantly different within groups of sexual identity, age, current enrollment status, ethnicity, and GPA of the university students. These finding were also supported by shared experiences of the selected interviewed participants. The results of the Pearson correlation tests showed that there was a relationship between psychological needs and sexual identity acceptance; and between self-determination and sexual identity acceptance. The overall results suggest that those students who are accepting of their LGB identity have satisfaction of their need for autonomy, competence, and relatedness, and are functioning in a more self-determined way, with awareness of self and feeling a sense of perceived choice.

Study Implications

Educators, instructional designers, and administrators have the potential to address this instructional need by designing instruction that addresses the needs of all learners. This research will at the very minimum, create a consciousness to the education community to consider the LGB learner within the context of a classroom environment. There is a potential that one day we could reexamine the highly utilized instructional design textbooks and identity development models and request inclusion of these students. The language and LGB examples should be included in

the next revised edition to instructional design textbooks. Identity development

models need to begin including the LGB identity acceptance process as this now

recognized process disrupts the current models. In order to create change and

establish implementation of this newly recognized consciousness, we need to inform

the professionals with the field of educational psychology. This research has the

opportunity to address this instructional need and begin the process of creating

positive change, inside and outside of the classroom.

Chapter 5: Discussion

The research study provides a foundation that will inform the impact sexual identity acceptance has on learning achievement for LGB-identified students within traditionally socialized classroom environments. Analyzing the relationship between students' level of identity acceptance, their basic needs (relatedness, competence, and autonomy) and self-determination (awareness of self and perceived choice) within the context of an educational environment provided insight into the LGB-identified learner. Semi-structured interviews were conducted to investigate experiences in order to provide a more robust perspective by adding qualitative experiences to quantitative data. Participant selection for the semi-structured interviews included those students with high and low levels of identity acceptance in order to capture both spectrums of acceptance and their related experiences. The quantitative analysis, supplemented with qualitative experiences, highlighted key aspects that support prior research related to sexual identity development and the overall influence of external (e.g., family, professors, and classmates) and internal acceptance (e.g., acceptance of LGB identity) has on LGB-identified learners.

Concealment motivation emerges as an important finding within the data. The lived experiences, social environment, and social groupings have shaped these students' perspectives. Their concern for equality in grade distribution, family support, and classmate ridicule influence their hesitation to live an open and authentic life. This is where the standpoint theory for these LGB-identified students is necessary. The invisible aspect of their identity as LGB plays a role in their development, internalization, experience of need fulfillment in classrooms and

experience of self-determination. Holding back thoughts and ideas related to classroom discussion were frequently mentioned as most students felt the need to observe their environment before opening themselves up to others. Concealment is a form of internalization and as Wallis and Poulton (2001) discussed, these external events penetrate the inner self, and the outer world shapes the inner experiences. Concealment motivation revolves around the concept of internal versus external as a point of inquiry for these students. This finding supports the research conducted by Potoczniak, Aldea, and DeBlaere (2007) which stands on the premise that people adopt certain attitudes and behaviors that allow them to maintain a positive perception of themselves (even if it's not aligned with their personal truths). For those students that have not fully accepted their LGB identity, the pressures to engage within the classroom provoked the need to conceal their identity.

Research conducted by Logerbeam et al. (2007) found that LGB-identified students are motivated to conceal their identity. This study adds to Logerbeam et al. (2007) findings by highlighting that those students who are motivated to conceal their identity also have a perceived lack of autonomy and relatedness. The motivation to conceal is grounded in the lack of societal support and sense of social inclusivity, which are essential aspects in the development of self-awareness and self-beliefs.

The data indicated that the farther along a student was in their education, the more accepting they were in their LGB-identity. This self-belief fostered social engagement within the classroom. Those who were accepting indicated that they did not think about what others were thinking, they engaged when they wanted to

contribute. Applying what Vygotsky (1962) said about learning through our interactions, these findings highlight how social environments could possibly influence our learning. Students who were not accepting of their identity discussed waiting for a sign of acceptance by faculty and peers within the classroom before interacting. This type of one-way negotiation and conscious thought about their identity appears to create internalized regulation (e.g., withholding authentic identity in order to maintain heteronormative standards), which causes restraint and harms their sense of self and ability to positively interact in the world (Wallis and Poulton, 2001). This study challenges Erickson's (1968) psychosocial theory by including active interaction of internal identity with the social environment, which will then be inclusive of LGB persons over their lifespan.

Interacting in the world means that these students encounter additional societal influences. An important social environment is with family. A key difference between those students who were accepting of their identity and those who were not accepting was based on family acceptance. Identity development begins early (Erickson, 1968) and understandably, this is not just an issue within the walls of our educational institutions. A main difference between positive and negative identity that emerged with parent and siblings communicated level of acceptance toward the LGB community and lifestyle. Children know how parents and family members feel about LGB people simply based on the values and beliefs of the family. All of the participants knew early on in their life that they were different. They explained this difference by describing "crushes" they had on people of the same sex early on in their life. However, to substantiate this finding,

90

not all of the participants were currently open with their families and some never planned on sharing this aspect of their identity. This lack of openness is what Deci and Ryan (2000) call "contingent love." The negative implications to this type of love blocks the necessary autonomy, competence, and relatedness needed for identity exploration, which this study supports.

Those students who revealed uncertainty about their sexual identity indicated that they did not feel competent. In addition, students who internalized negative feelings about being homosexual responded that they did not have autonomy, relatedness, or competency. These finding supports the concern for psychosocial well-being related to identity conformity and the cognitive burden this instills in students. As mentioned above, internalization is a critical process influencing lack of identity acceptance, which causes social standards to become internally regulated (Deci and Ryan, 2000).

Students who had a high level of identity affirmation (e.g., proud to be LGB) indicated a high level of autonomy, relatedness, awareness of self, and perceived choice. Identity centrality (e.g., sexual orientation is important to who I am) also indicated a positive integration of autonomy, competence, relatedness, awareness of self, and perceived choice within their life. This study illustrates that those students who feel their LGB-identity is an important aspect of who they are, are accepting of themselves, feel a sense of choice, and have satisfaction of the need for autonomy, relatedness, and competence. This finding highlights the continuum of identity that Sternberg (1998) discussed influences self-concept, self-understanding, and self-esteem. When the LGB component becomes an important factor in students'

identity, they begin a healthy relationship with themselves. This finding echoes what Rich (1995) said when she acknowledged certainty that oppressed and marginalized people need to believe in themselves.

Limitations and Suggestions for Further Study

The two sample limitations to this study include the recruitment source and the sample size. The sample (n=77) of LGB-identified students was recruited from Allied programs within their respective Midwestern University. Being a part of an allied group would indicate engagement and felt relatedness within this community of peers and faculty on their campus. This sole recruitment source only provides data from those that were publically connected.

As previously mentioned, the next phase of this study should move from an exploratory to a predictive study. Adding predictability to learning achievement based on sexual identity acceptance would provide higher probability of classroom and curriculum inclusivity. Being able to directly see the affect sexual identity has on learning is the missing research that will initiate necessary change. Within this next phase, removing bisexuals from the participant group would offer a clear perspective on those students whose identities do not change. Utilizing only gay and lesbian participants may produce more predictable findings when identifying how sexual identity acceptance affects learning achievement.

Future research on sexual identity development is needed throughout the lifespan of LGB-identified students. Conducting a longitudinal study that captures identity changes of these students as they transition from college to a career, would help identify areas of improvement within their educational experiences. This type

of study would add another perspective to Erickson's (1968) and Sternberg's (1998) research on how social influences interact with self-concept, self-understanding, and self-esteem over the lifespan.

As research on the LGB learner expands, a study that compares heterosexuals to LGB-identified persons would reinforce a difference between these two groups. This type of a study would continue to provide evidence that continued examination is needed for LGB learners.

Conclusion

This study indicates that there is a difference between simply accepting your identity and embracing your identity. Students who embrace celebrating their diversity have higher perceive ability to be successful within the classroom. This level of identity acceptance reduces the potential noise that appears to disrupt factors within students' basic needs satisfaction and self-determination.

Having the ability to freely explore one's identity without judgment allows for a positive transition and acceptance of LGB identity. Students who were accepting and proud of their LGB identity indicated having basic needs satisfaction and self-determination. This study indicates the necessity to further understand LGB-identified standpoint as the lived experiences by these students highlighted the continued decision to conceal their identity in some aspect of their life. This could become problematic in educational settings, as these settings are the foundation of exploration, inquiry, and construction of knowledge about one's self. By not actively seeking ways to reduce concealment of identity, we are not giving LGB students the opportunity to grapple with their identity and emotions, or at the very

93

least, learn how to work cohesively among the existing differences that students

bring to the classroom.

References

Abes, E.S., & Jones, S.R. (2004). Meaning-making capacity and the dynamics of lesbian college students' multiple dimensions of identity. *Journal of College Student Development, 45*(6), 612-632.

Anderson, J. (1983). *The architecture of cognition*. Cambridge, MA: Harvard University.

Appleton, J.J., Christenson, S.L., & Furlong, M.J. (2008). Student engagement with school: Critical conceptual and methodological issues of the construct. *Psychology in the Schools, 45*(5), 369-386.

Baldwin, M.W. (1992). Relational schemas and the processing of social information. *Psychological Bulletin, 122*(3), 461-484.

Barnett, B. (2009). From theory to classroom: Some practical applications of standpoint theory. *Feminist Teacher*. 19(3), 186-194.

Beane, J., & Lipka, R. (1986). *Self-Concept Self-Esteem and the Curriculum*. New York: Teachers College Press.

Berzonsky, M.D. (1988). Self-theorists, identity status, and social cognition. In D.K. Lapsley & F.C. Power (Eds.), *Self, ego, and identity: Integrative approaches* (pp.243-262). New York: Springer-Verlag.

Berzonsky, M.D & Ferrari, J.R. (1996). Identity orientation and decisional strategies. *Personality and Individual Differences, 20*, 597-606.

Bilodeau, B.L., & Renn, K.A., (2005). Analysis of lgbt identity development models and implications for practice. In R.L., Sanio (Ed.), *Sexual Orientation and Gender Identity: New Directions for Student Services, 111*, 25-40.

Birden, S. (2006). *Rethinking Sexual Identity in Education*. Lanham: Rowman & Littlefield.

Bishop, H.N. & Casida, H. (2011). Preventing bullying and harassment of sexual minority students in schools. *The Clearing House, 84*, 134-138.

Bowen, A.M., & Bourgeois, M.J. (2001). Attitudes toward lesbian, gay, and bisexual college students: The contribution of pluralistic ignorance, dynamic social impact, and contact theories. *Journal of American College Health, 50*(2), 91-95.

Brooks, A. (2007). Feminist standpoint epistemology: Building knowledge and empowerment through women's lived experience. doi:10.4135/9781412984270.

Bryman, A. (2006). Integrating quantitative and qualitative research: How is it done? *Qualitative Research, 6*(1), 97-113.

Cho, J.C., & Knowles, E.D. (2013). I'm like you and you're like me: social projection and self-stereotyping both help explain self-other correspondence. *Journal of Personality and Social Psychology, 104*(3), 444-456.

Code, L. (1991). *What Can She Know*? Feminist Theory and the Construction of Knowledge. Ithaca, NY: Cornell University Press.

Collins, P.H. (1991). On Our Own Terms: Self-Defined Standpoints and Curriculum Transformation. *NWSA Journal, 3*(5), pp367-381.

Cramer, K.M., & Berry, J.E., (1999). Psychometric properties and confirmatory factor analysis of the self-concealment scale. *Personality and Individual Differences, 27* (1999), 629-637.

Crenshaw, K. (1993). Beyond Racism and Misogyny: Black Feminism and 2 Live

  Crew, in M. J. Matsuda (ed.) *Words That Wound*, Boulder, CO., pp. 111-

  132.

Creswell, J.W. (2007). *Qualitative inquiry and research design: Choosing among*

  five approaches (2nd ed.). Thousand Oaks, CA: Sage.

Creswell, J.W., & Plano Clark, V.L. (2007). *Designing and conducting mixed*

  methods research. Thousand Oaks, CA: Sage.

Crotty, M. (1998). *The foundation of social research design: Meaning and*

  perspective in the research process. Thousand Oaks, CA: Sage.

D'Augelli, A. R. (1994). Identity development and sexual orientation: Toward a

  model of lesbian, gay, and bisexual development. In E. J. Trickett, R. J.

  Watts, & D. Birman (Eds.), *Human diversity: Perspectives on people in*

  context (pp. 312-333). San Francisco: Jossey-Bass.

Deci, E., & Ryan, R. (1985). Intrinsic motivation and self-determination in human

  behavior. New York: Plenum.

Deci, E., & Ryan, R. (2000). The "what" and "why" of goal pursuits: Human needs

  and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227-

  268.

Egan, S.K., & Perry, D.G. (2001). Gender identity: a multidimensional analysis with

  implications for psychosocial adjustment. *Developmental Psychology, 37*(4),

  451-463.

Ellemers, N., Spears, R., & Doosje, B. (2002). Self and social identity. *Annual*

  Review of Psychology, 53, 161-186.

Erikson, E.H. (1968). *Identity, youth, and crisis*. New York: Norton.

Espelage, D.L., Aragon, S.R., Birkett, M., Koening, B.W. (2008). Homophobic

teasing, psychological outcomes, and sexual orientation among high school

students: what influences do parents and schools have? *School Psychology*

Review, 37(2), 202-216.

Faitar, G. M. (2011). Socioeconomic status, ethnicity and the context of

achievement in minority education. *Journal of Instructional Pedagogies*, 5,

1-8.

Fiske, S.T., & Taylor, S.E. (2013). Social cognition: from brains to culture (2nd ed.).

Thousand Oaks: Sage.

Fredricks, J.A., Blumenfeld, P.C. & Paris, A.H. (2004). School engagement:

Potential of the concept, state of the evidence. *Review of Educational*

Research. 74(1), 59-109.

Friedman, M., Koeske, G., Silvestre, A., Korr, W., & Sites, E. (2006). The impact of

gender-role nonconforming behavior, bullying, and social support on

suicidality among gay male youth. *Journal of Adolescent Health, 38*, 621-

623.

Frye M. (1983). In and out of Harm's Way: Arrogance and Love. *The Politics of*

Reality: Essays in Feminist Theory, pp.52-83.

Greene, J.C., Caracelli, V.J., & Graham, W.F. (1989). Toward a conceptual

framework for mixed-method evaluation designs. *Educational Evaluation*

and Policy Analysis, 11(3), 255-274.

Goldman, A.I. (2010). Why social epistemology is real epistemology. *Social Epistomology*. doi:10.1093/acprof:oso/9780199577477.003.0001.

Hall, J., & LaFrance, B. (2012). "That's gay": sexual prejudice, gender identity, norms, and homophobic communication. *Communication Quarterly, 60*(1), 35-58.

Hardré, P.L. & Sullivan, D. (2008). Student differences and environment perceptions: How they contribute to student motivation in rural high schools. *Learning and Individual Differences, 18*(2008), 471-485.

Hartsock, N. (1997). *The Feminist Standpoint: Developing the Ground for a Specifically Feminist Historical Materialism,* in Feminist Social Thought: A Reader. New York: Routledge.

Hatzenbuehler, M.L., & Keyes, K.M. (2012). Inclusive anti-bullying policies and reduced risk of suicide attempts in lesbian and gay youth. *Journal of Adolescent Health, 53*(2013), 521-526.

Hawton, K., Saunders, K., & O'Connor, R. (2012). Self-harm and suicide in adolescents. *Center for Suicide Research, 379*(1), 2373 – 2382.

Järvelä, S., Volet, S., & Järvenoja, H. (2010). Research on motivation in collaborative learning: Moving beyond the cognitive-situative divide and combining individual and social Processes. *Educational Psychologist, 45*(1), 15-27.

Järvenoja, H., & Järvelä, S. (2009). Emotion control in collaborative learning situations: do students regulate emotions evoked by social challenges? *British Journal of Educational Psychology, 79*, 463-481.

Karagiannis, A., Stainback, S., & Stainback, W. (1996). Historical overview of

inclusion. In S. Stainback & W. Stainback (Eds.), Inclusion: A Guide for

Educators, 17-28.

Kelman H.C. (1958) Compliance, identification, and internalization: Three

processes of attitude change. *Journal of Conflict Resolution*. 2(1), 51-60.

Kincheloe, J. (2008). *Critical Pedagogy*. New York: Peter Lang.

Kollmann, S., & Hardré, P. L. (November, 2012). LGB in the land of the free:

exploring the social and educational implications of sexual identity

development**.** *The International Journal of Diversity in Organizations,

Communities and Nations, 11*(6), 94.

Krause, K. (2005) Understanding and promoting student engagement in university

learning communities. Paper presented as keynote address: Engaged, Inert or

Otherwise Occupied? Deconstructing the 21st Century Undergraduate

Student.

Krause, K. & Coates, H. (2008) Students' engagement in first-year university.

Assessment and Evaluation in Higher Education. 33(5), 493–505.

Kroger, J. Chapter 10. Identity Development During Adolescence.

doi:10.1002/9780470756607.ch10.

La Guardia, J.G. (2009). Developing who I am: a self-determination theory

approach to the establishment of healthy identities. *Educational

Psychologist, 44*(2), 90-104.

La Guardia, J.G., Ryan, R.M., Couchman, C.E., & Deci, E.L. (2000). Within-person variation in security of attachment: A self-determination theory perspective on attachment, need fulfillment, and well-being. *Journal of Personality and Social Psychology, 79*(3), 367-384.

Latham, G.P. (2007). Work Motivation: History, theory, research, and practice. Thousand Oaks, CA: Sage

Lev, A.I. (2010). How queer! The development of gender identity and sexual orientation in lgbtq-headed families. *Family Process, 49*(3), 268-290.

Levesque, C., Copeland, K.J., & Sutcliffe, R.A. (2008). Conscious and nonconscious process: implications for self-determination theory. *Canadian Psychology, 49*(3), 218-224.

Locke, E.A. (2000). Motivation, cognition, and action: An analysis of studies of task goals and knowledge. *Applied Psychology: An International Review, 49*, 408-429.

Longerbeam, S.D., Inkelas, K.K., Johnson, D.R., Lee, Z.S. (2007). Lesbian, gay, and bisexual college student experiences: an exploratory study. *Journal of College Student Development*, 48(2), 215-230.

Mann, S.J. (2001) Alternative perspectives on the student experience: Alienation and engagement. Studies in Higher Education. 26(1), 7–19.

Manning, M.A. (2007). Self-concept and self-esteem in adolescents. *Principal Leadership (Middle School Edition)*, 7(6), 5.

Martin, J.R. (2002). *Cultural Miseducation: In Search of a Democratic Solution*. New York: Teachers College Press.

Maslow, A.H. (1943). A theory of human motivation. *Psychological Review. 50*(4), 370-396.

Maxwell, J. (2002). Understanding and validity in qualitative research. In A.M. Huberman & M.B. Miles (Eds.) The *qualitative researcher's companion* (pp. 37-64). Thousand Oaks, CA: Sage.

Middleton, M., Dupuis, J., Tang, J. (2013). Classrooms and culture: The role of context in shaping motivation and identity for science learning in indigenous adolescents. *International Journal of Science and Mathematics Education*, 11(1), 111-141.

Mohr, J.J., & Kendra, M.S. (2011). Revision and extension of a multidimensional measure of sexual minority identity: the lesbian, gay, and bisexual identity scale. *Journal of Counseling Psychology, 58*, 234-245.

Morse, J. (1994). Emerging from the data: The cognitive processes of analysis in qualitative inquiry. In J. Morse (Ed.), Critical issues in qualitative research methods (pp. 23043). Thousand Oaks, CA: Sage.

Murdock, T.B., & Bolch, M.B. (2005). Risk and protective factors for poor school adjustment in lesbian, gay, and bisexual (LGB) high school youth: variable and person-centered analyses. *Psychology in the Schools, 42*, 159-172.

Onwuegbuzi, A., & Collins, K. (2007). A typology of mixed methods sampling designs in social science research. *The Qualitative Report, 12*(2), 281-316.

Orlofsky, J.L., Marica, J.E., & Lesser, I.M. (1973). Ego identity status and the intimacy versus isolation crisis of young adulthood. *Journal of Personality and Social Psychology, 27,* 211-219.

Pachankis, J.E. (2007). The psychological implications of concealing a stigma: a cognitive-affective-behavioral model. *Psychological Bulletin, 133*(2), 328-345.

Painter, J. (2011). Autonomy, competence, and intrinsic motivation in science education: A self-determination theory perspective. University of North Carolina.

Palermos, S.O. (2013). Extending cognition in epistemology: Towards an individualistic social epistemology. *PhD in Philosophy, University of Edinburgh.*

Park, S., Holloway, S.D., & Arendtsz, A. (2012). What makes students engaged in learning? A time-use study within-and-between-individual predictors of emotional engagement in low-performing high schools. *Journal of Youth and Adolescence, 41*, 390-401.

Parrott, D.J. & Peterson, J.L. (2008). What motivates hate crimes based on sexual orientation? Mediating effects of anger on antigay aggression. *Aggressive Behavior, 34*, 306-318.

Pool, G.J., Wood, W., & Leck, K. (1998). The self-esteem motive in social influence: agreement with valued majorities and disagreement with derogated minorities. *Journal of Personality and Social Psychology, 75*(4), 967-975.

Potoczniak, D.J, Aldea, M.A, & DeBlaere, C. (2007). EGO identity, social anxiety, social support, and self-concealment in lesbian, gay, and bisexual individuals. *Journal of Counseling Psychology, 54*(4), 447-457.

Rich, A. (1995). Taking Women Students Seriously. *On Lies, Secrets, and Silence; Selected Prose*, pp. 237-245.

Richeson, A. (2009). Factors affecting the success of inclusion. *University of Nebraska*.

Ritz, T., & Dahme, B. (1996). Repression, self-concealment and rationality/emotional defensiveness: the correspondence between three questionnaire measures of defensive coping. *Personality and Individual Differences, 20*(1), 95-102.

Robinson, J. P., Shaver, P. R., & Wrightsman, L. S. (Eds.). (1991). *Measures of personality and social psychological attitudes.* San Diego: Academic Press.

Ryan, R., & Deci, E. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68-78.

Ryan, R.M., La Guardia, J.G., Solky-Butzel, J., Chirkov, V.I., & Kim, Y. (2005). On the interpersonal regulation of emotions: emotional reliance across gender, relationships, and culture. *Personal Relationships, 12,* 146-163.

Ryan, R., Stiller, J., & Lynch, J.H. (1994). Representation of relationships to teachers, parents, and friends as predictors of academic motivation and self-esteem. *Journal of Early Adolescence, 14*, 226-249.

Schmidt, C.K. & Nilsson, J.E. (2006). The effects of simultaneous developmental processes: factors relating to the career development of lesbian, gay, and bisexual youth. *The Career Development Quarterly, (55)*, 22-37.

Sheldon, K., & Deci, E. (1996). The self-determination scale. University of
   Rochester.

Shields, A., Ryan, R.M., & Cicchetti, D. (2001). Narrative representations of
   caregivers and emotion dysregulation as predictors of maltreated children's
   rejection by peers. *Developmental Psychology, 37*, 321-337.

Sherry, A., Adelman, A., Whilde, M.R., & Quick, D. (2010). Competing selves:
   negotiating the intersection of spiritual and sexual identities. Professional
   Psychology: Research and Practice, 41(2), 112-119.

Sobieraj, S., & Laube, H. (2001). Confronting the social context of the classroom:
   media events, shared cultural experience, and student response. Teaching
   Sociology, 29(4), 463-470.

Stables, A. (2003). Learning, identity and classroom dialogue. *Journal of
   Educational Enquiry*, 4(1), 1-18.

Sternberg, R.J. (1998). *In Search of the Human Mind* (2nd ed.). Ft. Wroth, TX:
   Harcourt Brace.

Storbeck, J. (2011). Performance costs when emotion tunes inappropriate cognitive
   abilities: implications for mental resources and behavior. *Journal of
   Experimental Psychology: General*, 14(3), 411-416.

Terry, D.J. (2000). Social identity and self-categorization processes in
   organizational contexts. *The Academy of Management Review*, 25(1), 121-
   140.

Thagard, P. (2005). Mind: Introduction to Cognitive Science (2nd ed.). Cambridge:
   MIT Press.

Tobin, D.D., Menon, M., Menoon, M., Spatta, B.C., Hodges, E.V., & Perry, D.G. (2010). The intrapsychics of gender: a model of self-socialization. *Psychological Review, 117*, 601-622.

Trowler, V. (2010). Student engagement literature review. *Department of Educational Research, Lancaster University*.

UNESCO. (2008). Equity and inclusion in education: Tools to support education sector planning and evaluation. Retrieved from www.unesco.org/bpi/pdf/iatt_equity_inclusion_tools_042008_en.pdf.

VanDellen, M.R., Hoy, M.B., & Hoyle, R.H. (2009). Contingent self-worth and social information processing: cognitive associations between domain performance and social relations. *Social Cognition, 27*(6), 847-866.

Vansteenkiste, M., Lens, W., Deci, E. (2006). Intrinsic versus extrinsic goal contents in self-determination theory: Another look at the quality of academic motivation. *Educational Psychologist*, 41(1), 19-31.

Vygotsky, L.S. (1962). Thought and Language. Cambridge, MA: MIT Press. (Original work published in 1934).

Wallis, K., & Poulton, J. (2001). Internalization: The origins and construction of internal reality. Internalization (Core Concepts in Therapy). Open University Press.

Wight, C.L. (2010) Gender inclusive practices within the primary classroom. School of Education, RMIT University.

Yarhouse, M.A., Tan, E.S., & Pawlowski, L.M. (2005). Sexual identity

    development and Synthesis among LGB-identified and LGB dis-identified

    persons. *Journal of Psychology and Theology, 33*(1), 3-16.

Appendix A: Demographic Information

Sexual Identity:
☐ Lesbian
☐ Gay
☐ Bisexual

Gender:
☐ Female
☐ Male
Other (please specify):_____

Current Enrollment Status in College:
☐ Freshman
☐ Sophomore
☐ Junior
☐ Senior

Ethnicity:
☐ African-American
☐ Asian American
☐ American Indian
☐ Caucasian
☐ Hispanic
Other (please specify): _____

Major:

_____

Are you willing to participate in a follow-up semi-structured interview?

☐ **Yes**
☐ **No**

If yes, please provide an email & phone number where you can be contacted.

_____

Appendix B: Basic Needs Satisfaction In Classroom

Please read each of the following items carefully, thinking about how it relates to your experience in the university classroom, and then indicate how true it is for you. Use the following scale to respond:

1	2	3	4	5	6	7

not at all true　　　**somewhat true**　　　**very true**

1. I feel like I am free to decide for myself how to interact in the

classroom...1 2 3 4 5 6 7

2. I really like the students I interact with…………………….......1 2 3 4 5 6 7

3. At school, I often do not feel very competent………………........1 2 3 4 5 6 7

4. I feel pressured to do well in school……………........................1 2 3 4 5 6 7

5. People I know at school tell me I am good at what I do…...........1 2 3 4 5 6 7

6. At school, I get along with people I come into contact with….......1 2 3 4 5 6 7

7. I pretty much keep to myself and don't have a lot of social contacts..1234567

8. I generally feel free to express my ideas and opinions. …………1 2 3 4 5 6 7

9. I consider the people I regularly interact with to be my friends...1 2 3 4 5 6 7

10. I have been able to learn interesting new skills recently. ……....1 2 3 4 5 6 7

11. In my daily life, I frequently have to do what I am told …..........1 2 3 4 5 6 7

12. People at school care about me.………………………................1 2 3 4 5 6 7

13. Most days I feel a sense of accomplishment from what I do. ….1 2 3 4 5 6 7

14. People I interact with on a daily basis tend to take my feelings into

consideration.…………………………...1 2 3 4 5 6 7

15. At school, I do not get much of a chance to show how capable I

am…………………………………………………………………1 2 3 4 5 6 7

16. There are not many people that I am close to. …………………1 2 3 4 5 6 7

17. I feel like I can pretty much be myself in my daily situations. …1 2 3 4 5 6 7

18. The people I interact with regularly do not seem to like me much.1234567

19. At school, I often do not feel very capable…………….................1 2 3 4 5 6 7

20. There is not much opportunity for me to decide for myself how to do things

at school……………………………...1 2 3 4 5 6 7

21. People at school are generally pretty friendly towards me. ….…..1 2 3 4 5 6 7

Reverse Coded Items:

Items 3, 4, 7, 11, 15, 16, 18, 19, and 20

Appendix C: Lesbian, Gay, and Bisexual Identity Scale

For each of the following questions, please mark the response that best indicates your current experience as an LGB person. Please be as honest as possible: Indicate how you really feel now, not how you think you should feel. There is no need to think too much about any one question. Answer each question according to your initial reaction and then move on to the next.

Disagree Strongly	Disagree	Disagree Somewhat	Agree Somewhat	Agree	Agree Strongly
1	2	3	4	5	6

1. I prefer to keep my same-sex romantic relationships rather private. 1 2 3 4 5 6

2. If it were possible, I would choose to be straight. 1 2 3 4 5 6

3. I'm not totally sure what my sexual orientation is. 1 2 3 4 5 6

4. I keep careful control over who knows about my same-sex romantic relationships.
1 2 3 4 5 6

5. I often wonder whether others judge me for my sexual orientation. 1 2 3 4 5 6

6. I am glad to be an LGB person. 1 2 3 4 5 6

7. I look down on heterosexuals. 1 2 3 4 5 6

8. I keep changing my mind about my sexual orientation. 1 2 3 4 5 6

9. I can't feel comfortable knowing that others judge me negatively for my sexual orientation.
1 2 3 4 5 6

10. I feel that LGB people are superior to heterosexuals. 1 2 3 4 5 6

11. My sexual orientation is an insignificant part of who I am. 1 2 3 4 5 6

12. Admitting to myself that I'm an LGB person has been a very painful process.
1 2 3 4 5 6

13. I'm proud to be part of the LGB community. 1 2 3 4 5 6

14. I can't decide whether I am bisexual or homosexual. 1 2 3 4 5 6

15. My sexual orientation is a central part of my identity. 1 2 3 4 5 6

16. I think a lot about how my sexual orientation affects the way people see me.

1 2 3 4 5 6

17. Admitting to myself that I'm an LGB person has been a very slow process.

1 2 3 4 5 6

18. Straight people have boring lives compared with LGB people.   1 2 3 4 5 6

19. My sexual orientation is a very personal and private matter.   1 2 3 4 5 6

20. I wish I were heterosexual.   1 2 3 4 5 6

21. To understand who I am as a person, you have to know that I'm LGB.1 2 3 4 5 6

22. I get very confused when I try to figure out my sexual orientation.   1 2 3 4 5 6

23. I have felt comfortable with my sexual identity just about from the start. 123456

24. Being an LGB person is a very important aspect of my life.   1 2 3 4 5 6

25. I believe being LGB is an important part of me.   1 2 3 4 5 6

26. I am proud to be LGB.   1 2 3 4 5 6

27. I believe it is unfair that I am attracted to people of the same sex.   1 2 3 4 5 6

Reverse Coded Items:

Items 11 and 23

Appendix D: Self-Determination Scale

Instructions: Please each of the statements, and indicate the degree to you feel is very true or not at all true at this point in your life, on the 5-point scale shown after each statement.

1. I always feel like I choose the things I do.

Very true   1   2   3   4   5   **Not at all true**

2. I sometimes feel that it's not really me choosing the things I do.

Very true   1   2   3   4   5   **Not at all true**

3. My emotions sometimes seem alien to me.

Very true   1   2   3   4   5   **Not at all true**

4. My emotions always seem to belong to me.

Very true   1   2   3   4   5   **Not at all true**

5. I choose to do what I have to do.

Very true   1   2   3   4   5   **Not at all true**

6. I do what I have to, but I don't feel like it is really my choice.

Very true   1   2   3   4   5   **Not at all true**

7. I feel that I am rarely myself.

Very true   1   2   3   4   5   **Not at all true**

8. I feel like I am always completely myself.

Very true   1   2   3   4   5   **Not at all true**

9. I do what I do because it interests me.

Very true   1   2   3   4   5   **Not at all true**

10. I do what I do because I have to.

Very true   1   2   3   4   5   **Not at all true**

11.   When I accomplish something, I often feel it wasn't really me who did it.

Very true   1   2   3   4   5   **Not at all true**

12. When I accomplish something, I always feel it's me who did it.

Very true   1   2   3   4   5   **Not at all true**

13.   I am free to do whatever I decide to do.

Very true   1   2   3   4   5   **Not at all true**

14. What I do is often not what I'd choose to do.

Very true   1   2   3   4   5   **Not at all true**

15. My body sometimes feels like a stranger to me.

Very true   1   2   3   4   5   **Not at all true**

16. My body always feels like me.

Very true   1   2   3   4   5   **Not at all true**

17. I feel pretty free to do whatever I choose to.

Very true   1   2   3   4   5   **Not at all true**

18. I often do things that I don't choose to do.

Very true   1   2   3   4   5   **Not at all true**

19. Sometimes I look into the mirror and see a stranger.

Very true   1   2   3   4   5   **Not at all true**

20. When I look into the mirror I see myself.

Very true   1   2   3   4   5   **Not at all true**

Reverse Coded Items:

Items 1, 4, 5, 8, 9, 12, 13, 16, 17, and 20

Appendix E: Semi-Structured Interview Questions

1.   Please describe your experiences with other students in the classroom when the topic of homosexuality is brought up?

2. Growing up, what do you recall were your parent's view of lesbian, gay, and bisexual persons?

3. How would you describe your social life? Is it active? Do you have heterosexual and homosexual friends?

4. How long did you know you were gay before you shared that with anyone else?

5. How have people at school reacted to your LGB-Identity?

6. Can you explain moments when you feel accepting of yourself versus moments in your daily, weekly, monthly life when you don't feel as accepting of yourself, maybe even insecure with your LGB identity?

7. When you start a class, do you prefer students and the teacher to know your identity as LGB? Please explain.

8. Are you aware of the faculty who are accepting of LGB-identified students?

9. How do you know when other students are accepting or not accepting of your LGB-identity?

10. How does the content with the classrooms relate to you as an LGB-identified person? Give specific examples.