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Executive Summary

In the first essay, I explore the American community college. I briefly relate its postwar history, beginning with the Truman Commission and the G.I. Bill, and continuing to its present status as a "people's college." I give an overview of what community colleges do and are expected to do. In particular, I note their evolution from end-in-itself education to preparation for four-year institutions. I also note the egalitarian and inclusive nature of community colleges and their diverse student bodies, especially in recent years. I also touch on their importance as social institutions.

In my second essay, I provide an overview of autism spectrum disorder (ASD) and those who live with the condition. I examine ASD college students and the challenges they face. Then, the objectives of my proposed study are discussed. I also provide a theoretical framework for the study, which is social motivation theory combined with Oldenberg's (Oldenberg & Brissett, 1982) concept of "third places." I then examine the literature on the topic, reporting on various recent perspectives on ASD students. I identify a research gap, in that the lived experiences of ASD students, particularly community college students, have not been well studied. Furthermore, it is not known how they use technology tools to form "third spaces" for needed social interaction. This provides the rationale for the study. I also give the proposed research questions.

In the third essay, I provide a discussion of my methodological choice, which is a qualitative case study. I give reasons for my choice, from both the standpoint of my topic and that of the consensus in the literature about which methodologies are best for given situations. I provide material on recommended sampling and other choices for this type of study. I also defend my choice of theoretical framework. The latter half of this essay concerns my specific

methodology including population, sample, access, and data collection and analysis. I include a brief discussion of my role as a researcher in this study. Finally, I conclude with a discussion of this study's potential benefits and implications.



Question 1: American Community Colleges

Background

The modern American community college was created after WWII in response to the need for citizens to receive higher education in settings other than the traditional four-year university (Gilbert & Heller, 2013). This need was driven by an increasing democratization of higher learning and the realization that not many people had the time or resources to obtain a bachelor's, but that they did need and want higher education. The community college was created as a middle ground, as it were: a two-year institution focused on providing students with practical skills and training (Gilbert & Heller, 2013). Much of modern community college coursework is and has been focused on imparting vocational skills.

The formal legislative impetus for the postwar creation of American community colleges were the findings and recommendations of the Truman Commission. The stated goal was to "redemocratize" higher learning based on the perception that higher education had become elitist and unattainable for the average citizen (Kim & Rury, 2007). Moreover, due to the G.I. bill, there was a flood of potential college students who wished to obtain higher education but did not necessarily want to commit to a four-year degree; also, their academic qualifications may not have allowed them to enter a four-year institution (Kim & Rury, 2007). Thus, from its inception, the American community college system has been highly inclusive, with very relaxed entrance requirements (often, only the possession of a high school diploma is required) and a diverse student body.

The first community colleges were created to serve the needs of urban and later, suburban populations. Many were built where no colleges existed nearby; however, some were created in close proximity to existing four-year institutions (Vaughn, 2006). At present, the nation's largest

community colleges are in urban centers and have student populations rivaling those of the largest four-year institutions. Many smaller, often much smaller communities are also served by community colleges (Vaughn, 2006). Thus, the community college serves as a source of higher education where none existed before, or as an alternative for students who for one reason or another, do not or cannot attend nearby four-year universities.

Community College Curricula

The community college curriculum has historically been focused on practical skills. Business workplace skills training classes such as accounting, bookkeeping, transcription and typing, and office management are and have been very popular. Developmental education is also an important role filled by community colleges; such education can prepare a student for entry into a four-year institution. Moreover, it is often aimed at addressing barriers to learning or overcoming specific obstacles that the learner faces, such as affective or special needs concerns. Many community colleges offer vocational training, such as in carpentry, electrical work, or plumbing, leading to certification in those fields. Also, basic academic skills that can be useful in future coursework are taught; most community colleges offer introductory-level English, writing, and mathematics courses. ESOL programs for non-native English speakers are widespread as well.

Community colleges also offer courses for those who wish to learn skills or crafts without necessarily being interested in pursuing a degree. These are often offered to the public as "adult education" or "adult enrichment" classes. The course offerings range from crafts such as floristry or origami to cooking and home decorating classes. There are also practical skills classes such as personal finance or computer use.

In addition, community colleges offer introductory-level courses in a wide variety of disciplines. These are often the equivalent of 100- and 200-level courses in four year universities. While initially resistant to the idea, most universities now accept such introductory coursework for credit towards a degree and as qualification for admission (Doyle, 2006). In fact, many universities have formal "articulation agreements" with nearby community colleges wherein coursework from the community college is accepted as transfer credit, with exact equivalence between the community college courses and the same courses offered at the four-year university (Doyle, 2006). This is a major boon for students whose financial resources would be stretched to the limit by attending a four-year college. They can complete their lower-division work at a community college at much lower tuition expense and then complete their upper-division work at the four-year institution (Doyle, 2006; Flaga, 2006).

Preparation for Transfer to a Four-year Institution

While an Associate of Arts (AA) degree, the most common degree awarded by community colleges, is an achievement in itself, it is also for many students a "fast track" to admission to a four-year college. A transcript that shows the student's ability to complete college-level coursework satisfactorily is a major boost to such a student's application; this is particularly beneficial if the student's high school work and test scores were not sufficient to give him/her a high ranking for potential admission (Flaga, 2006). Moreover, recent research has shown that for college students entering their junior year, persistence toward obtaining a baccalaureate degree is at least as great among those students who transferred from a community college as those who have spent their first two years at the four-year institution, controlling for several variables, the most important of which is GPA in the prior two years (Wang, 2009). In other words, high academic achievement in lower-division work is a significant predictor of

baccalaureate degree attainment whether it is accomplished at a community college or a fouryear institution; this suggests that the content and rigor of courses are similar at both types of institution (Wang, 2009).

This, in fact, is a major shift in focus from the original perception of what community colleges were meant to provide. Certainly, some students view an AA degree, or simply community college attendance, as an end in itself, as they have specific, focused learning goals in mind. However, more and more students view community college as a stepping stone to a higher degree at a four-year institution. Rising tuition costs at four-year institutions have made it a sensible and practical alternative to take lower division courses at a community college; as noted above, many such courses are considered exact equivalents to those at four-year institutions, especially those with articulation agreements (Doyle, 2006). The tuition at a community college, however, is usually a fraction of that charged at a four-year college, making community college a cost-effective option. (It should also be noted in passing that decreased lower-division tuition makes it easier for a student to obtain financial assistance.) It has been noted by researchers such as Handel (2007) that the transfer process (which the author referred to as a "bridge") should be streamlined, as those who have achieved in community college are ideal potential four-year college students, an observation also noted by Flaga (2006) and Wang (2009).

Demographics of Community College Students

Whether the impression is completely accurate or not, community college has been viewed, especially recently, as a middle-class destination; this is in keeping with the "people's college" articulated goal of the Truman Commission (Gilbert & Heller, 2013; Kim & Rury, 2007). Dowd and Melguzio (2008) observed that in the two prior decades (1980s and 1990s), the bulk of students transferring from community colleges had been of middle-class socioeconomic

status and that such proportion had remained relatively steady. Interestingly, they also noted an increase in transfer students from the highest socioeconomic status quintile over that period. This suggests that even those students who were relatively affluent took advantage of the lower cost and other positive factors, such as convenience, of the community college.

One significant demographic shift has been an increase in the number and proportion of ethnic minority transfer students. Crisp and Nora (2010) noted the recent increase of Hispanic students in particular in the community college system, observing that they were achieving high transfer and degree persistence rates. Additionally, Hagedorn, Cypers, and Lester (2008) observed that ethnic minority students were achieving high transfer rates from urban community colleges. (In many of the urban community colleges the authors studied, Blacks and Hispanics were in the majority.)

A further demographic shift has been that high school students attend community college classes for credit, either to fulfill high school requirements or to obtain credit that can be applied to their future college transcripts. Successful completion of such courses can enhance a student's college application and/or meet an entrance requirement. Lastly, F1 visa students, coming from out of the United States, often begin their higher education journey at community colleges, attracted there for the same reasons as many other students—lower cost and greater convenience compared to a four-year institution.

Characteristics of the American Community College

While the American community college has evolved from its original role as envisioned by the Truman Commission, virtually all these colleges share certain fundamental characteristics:

 Inclusiveness. Admission requirements are usually quite lenient, in most cases confined to graduation from high school with a minimum GPA.

- Low cost. The tuition at community colleges is much lower than that charged by most four-year colleges.
- Job-specific learning. Most community colleges offer business and vocational training, preparing students for employment in the private sector immediately upon graduation; these classes include certification programs in fields such as auto mechanics, welding, plumbing, and nursing, and other health care related careers.
- Accessibility. Community colleges are often in or near the center of cities and
 have parking facilities and access to public transit. Also, many classes are offered
 during evening hours or on weekends, making it possible for a person who works
 full-time to attend classes after work.
- Four-year college preparation. Community colleges offer lower-division courses that mirror those found in four-year institutions. They also have articulation agreements that ensure that the student will receive full transfer credit.
- Career Counseling. Virtually all community colleges offer career counseling,
 upper-division college application help, and transfer counseling.

These features are in keeping with the Truman Commission goals as well as the public perception of the purpose of a community college (Vaughn, 2006). Perhaps only the last feature is different from the Commission's original goals, as at the time, there were no formal agreements in place between the nascent community colleges and four-year institutions regarding credit transfer and student transfer (Kim & Rury, 2007). What stands out is the concept embodied in the very term, "community college"; such institutions are "people's colleges" in every sense of the phrase.

Administrators and Faculty

If a community college is viewed as an intermediate place between high school and college for students, it is also an "in between" for faculty. Many teachers' professional qualifications are insufficient for employment in a four-year institution, or there may simply not be enough job openings there; thus, the community college provides a place of employment for teaching professionals (Twombly & Townsend, 2008). Also, as Levin, Kater and Wagoner (2006) noted, community colleges provide part-time as well as full-time employment for teaching professionals. Moreover, much as a community college student may enhance his/her chances of being admitted to a four-year institution by obtaining an AA degree, a community college faculty member may enhance his/her resume with a few years of teaching at a community college, with the hope of being hired at a four-year institution (Levin, Kater, & Wagoner, 2006; Twombly & Townsend, 2008).

This is not to imply that community college administrators or faculty are less skilled or qualified than their four-year university colleagues. A community college can be an attractive career destination for administrators and faculty because of the college's mission and the diversity of the student body. Community college faculty are likely to be practitioners in their field of expertise and often, have more experience in a given field than a four-year institution faculty member. While the nature and mission of community college teaching may be somewhat different than that found in a four-year institution, there is no difference in the quality of such teaching.

Demographic Characteristics of Community College Students

From the inception of the American community college system, the student bodies of community colleges have been more diverse than the student bodies of four-year institutions,

particularly in terms of ethnicity and socioeconomic status. These differences are narrowing but still exist. Researchers have attempted to identify how demographics affect characteristics of the student population. For example, Edman and Brazil (2009) examined the perceptions of various ethnicities of students regarding campus social climate, academic self-efficacy, and cultural congruence. The researchers found significant differences from one ethnic group to another: Whites and Blacks reported higher levels of cultural congruity than Asians and higher self-efficacy than Asians and Latinos. They also found correlations between cultural congruity and self-efficacy to GPA among Latinos, academic efficacy to GPA in Asians, and social support and environment and GPA among Whites. Furthermore, they found no significant GPA correlations among Blacks. The varied nature of these findings suggests that the social and academic climate of community colleges can vary greatly according to the ethnic makeup of the student body (Edman and Brazil, 2009).

Ethnicity has an effect on student persistence and retention (two factors that are essentially different sides of the same coin) (Fike & Fike, 2008). The authors noted that the retention/persistence of first-year community college students depended on several factors: ethnicity (specifically, Hispanic students were more likely to persist; the authors speculated that this was due to community colleges often being Hispanic students' only access to higher education), age (older students were more likely to persist), and socioeconomic status (those of higher such status were more likely to have the resources to complete their AA degree programs). This finding aligns with that of Edman and Brazil (2009), in that the demographic makeup of the student body of a community college can affect how it operates in fundamental ways, such as attrition rates (the reverse of retention rates) (Fike & Fike, 2008).

Given the ethnic diversity of community college students, a characteristic that is shared by faculty, it is a provocative question whether students of a given ethnicity are more engaged with instructors who share their ethnic identity. This question was asked by Fairlie, Hoffmann, and Oreopoulos (2011) in a study conducted at a large and diverse urban community college. The researchers found that the gaps in academic performance between Whites and other ethnicities were narrowed by 20-50 percent when the instructor was non-White. They also found that retention and degree completion for ethnic minorities were similarly enhanced when the instructor was non-White. The authors did not make any recommendations for faculty composition or matching faculty to class ethnic composition (which would seem to be a practical impossibility anyway); they only noted the effect (Fairlie et al., 2011) of instructor ethnicity on student success.

Researchers' Criticisms of the Community College System

There is a broad consensus in the literature that community colleges generally manage to fulfill the function for which they are intended and meet societal expectations thereof. However, the system is by no means immune to criticism. Researchers have noted flaws in curricula, funding mechanisms, adaptation to changing conditions, and infrastructure at community colleges.

For example, Mellow and Heelan (2014) observed the great difference in economic opportunity between having and not having a college degree. They opined that therefore, one of the major tasks of the community college system was to provide economic opportunity for the disadvantaged. Mellow and Heelan (2014) noted that community college was a uniquely democratic American institution due to its inclusive nature. However, they also noted a growing democratic polarization between two-year and four-year colleges; the student bodies of the

former were becoming poorer and more ethnic minority concentrated, while those of the latter were becoming wealthier and Whiter. The authors observed that the American community college had been and still was a steppingstone to the "American dream" of economic opportunity and higher education, but also criticized the system in that the community college was increasingly becoming a place where the poor and ethnic minorities went rather than a four-year college.

Moreover, while many praise the inclusive nature of community colleges, many populations have been and remain underserved by the system. These populations include ethnic minorities, persons of lower socioeconomic status, and first-generation students (those who are the first in their families to attend college) (Green, 2006). Green noted that it was not so much admission policies that mattered in this regard but the fact that many underserved populations were simply not as well prepared for the college experience. Ethnic minorities may need language and/or cultural adjustment; the materially poor may need financial assistance for even the basics (such as housing, books, etc.), and first-generation students may need mentoring. Yet, Green (2006) observed, while programs were in place to help underserved student populations with these obstacles, those programs were often inadequate. One problem was that funding for such programs was often given relatively low priority and that when resources were limited, those programs were often defunded (Green, 2006).

In fact, proper funding of community colleges is and has been a major topic of controversy and criticism. For example, Alstadt (2012) parsed the community college as a mechanism for supporting the economy and creating jobs. Alstadt was critical of the accommodation and support provided to lower-income, disadvantaged, and ethnic minority students, observing that higher education was a societal investment and that more resources

should therefore be allocated with it. Alstadt had several recommendations, the specifics of which are beyond the scope of this review, but virtually all of them involved greatly expanding funding at the state and local level for community colleges.

Similarly, Bueschel (2009) examined programs aimed at community college student success, from the state to local to individual classroom level, and found them wanting. The author noted that while programs and funding were in place to help students get into community colleges and support them once they were enrolled, relatively little effort was directed toward supporting their successful exit: career placement or transfer to a four-year institution. Bueschel said that community college should be goal-oriented and therefore, student support efforts should be focused on helping them achieve their long-term goals.

The community college is an institution but also a concept—it is a part of the community in which it resides. Butin (2010) noted the value of service learning, which is when students (at any level) engage in community projects to help foster the ties that both students as well as institutions have with the community. Butin was critical of the fact that such programs, while common at the elementary and secondary level, were not often found at the community college level. The author observed that community support was just as critical for the success of a community college as for that of other educational institutions, if not more so. Butin therefore recommended the expansion of service learning programs in community colleges.

Debates and Controversies: Faculty Development

One of the most contentious ongoing issues for community colleges has been faculty training and development. Many teachers arrive at a community college with little or no higher-level teaching experience. Also, for all teachers, there is a period of adjustment to the institution, particularly if the community college is large and diverse.

While many large urban community colleges have faculty development programs, most smaller, rural community colleges do not (Eddy, 2007). Thus, there exists problems in staffing, training, and faculty retention (Eddy, 2007). This can result in students being underserved and the quality of education offered suffering (Eddy, 2007). These problems resultant from a lack of faculty development programs suggest how important such programs are for community colleges.

Such programs can have a significant effect on student achievement, which includes greater academic performance, retention, and degree completion (Perez, McShannon, & Hynes, 2012). Perez et al. examined a faculty development program called GRASP at a community college in Las Cruces, New Mexico, where 70% of the students were ethnic minorities. They observed a 7.9% increase in academic performance and a 4.0% increase in student retention among those students whose teachers had taken part in the faculty development program. This suggests that student academic performance and retention can be optimized by training faculty for the community college environment (Perez et al., 2012).

The need for community college instructors to become community members was articulated by O'Banion (2006), who emphasized community service and service learning program participation. O'Banion noted that for many teachers at all levels, teaching was just a job and they felt that there was no need for or purpose in engaging the community outside the classroom. O'Banion stated that this was creating a crisis in the community college environment because such engagement by faculty was vital to a community college's success. This is a controversial issue in that many community college faculty are modestly paid and they may resist the idea of taking on after-hours community obligations (O'Banion, 2006).

A possible solution to this problem would be to ensure that all community colleges, large or small, have departments and staff dedicated to the post-hiring training of teachers. Moreover, it can and should be emphasized, from the inception of a faculty member's employment, that community engagement is not merely extracurricular; it is part of the job and an inherent and vital aspect of the teacher's responsibilities. Of course, that could be encouraged by raising pay levels to attract the best staff, but that is not always an available strategy.

Debates and Controversies: Meeting the Needs of All Students

The needs of community college students have evolved as the nature of that population has evolved. Community colleges now serve three distinct roles: as a stepping stone to higher education, as a source of continuing education, and as a final educational goal. Goldrick-Rab (2010) noted this distinction in that the democratizing influence of community colleges was affected by low persistence (high attrition) rates; a semester or two in a community college was unlikely to confer any great benefits on the student if he/she had dropped out. The author observed that while those who were focused on community college as a pathway to an eventual four-year degree were well served by the system, those who viewed community college and an AA degree as a final goal were not. This, Goldrick-Rab stated, was because the social, economic, and emotional needs of those students were not taken into account by authorities and stakeholders. In other words, such students had to be mentored, encouraged, and even pushed to persist at the community college, but were not often offered such support (Goldrick-Rab, 2010).

One important function of the community college for students intending to progress toward a four-year degree is remedial classes, where a student who is deficient in a core competency such as reading or math can close the deficit. Levin and Calcagno (2008) observed that the success of remediation programs (both academic and social, as in teaching students to

adjust to the college environment) had not been thoroughly examined in the literature. They proposed a number of models to be used to examine such success, though they did not conduct any such research themselves. The overarching question is whether and to what degree resources should be allocated toward remediation: to serve those incoming students who, objectively speaking, are not ready for college (Lewis and Calcagno, 2008). This is a philosophical and social question, in that one might ask if getting people ready to attend college is a proper function for the community college. The principle of inclusion suggests that all who wish to attend a community college should be allowed to do so, but one might ask if that includes those who are academically under-prepared.

In addition, authorities and stakeholders are tasked with anticipating and meeting student needs, but can only make educated guesses as to what those needs are and will be. O'Gara, Karp, and Hughes (2009) sought to obtain the perspectives of community college students regarding their needs. In a study conducted at two large urban community colleges, O'Gara et al. found not only that college success courses, from the perspective of those who had taken them, were beneficial but also that the skills learned in a given course, such as study skills, learning about the college, planning coursework, etc. were useful in other such courses. The authors also noted that college success courses directly addressed student needs and helped them form relationships with faculty and peers, which contributed significantly to students' overall success.

The overarching conclusion from the literature regarding student needs is that community college students often need and usually greatly benefit from support mechanisms and programs. For those whose community college experience is their first attempt at higher education, not having to go it alone and access to needed information and advice are highly influential on retention and degree-seeking success. Yet, while most community colleges do offer some such

programs, there appears to be not enough emphasis on them. A student entering community college and then dropping out is a societally and financially undesirable outcome and resources should be allocated toward preventing it.

Training Future Community College Leaders

The American community college is and will continue to be a major educational and social resource. As noted above, a college education enhances the earning power and productivity of almost any individual; it also has social benefits in that people become better informed and can make better life decisions when they have such an education. Therefore, society should ensure that educational resources, including the obtaining and training of staff and leaders, are properly allocated. These include both faculty and administration.

Some researchers have noted a gap in community college leadership development. For example, Campbell, Syed, and Morris (2010) observed a leadership development program that emphasized interpersonal development and noted that such programs were, though needed, relatively rare. Areas that had been targeted for improvement included developing workplace personal relationships and adjusting to and for personality issues. Also, at the highest levels of leadership, McNair, Duree, and Ebbers (2011) examined the leadership evolution of community college presidents. They used narratives obtained from such persons to discover how they had met the challenges of their positions. Related to the findings of Campbell et al. (2010), above, participants reported that they had received little professional guidance in leadership development and that what progress they had made had been at their own behest.

The question of what leadership style is most appropriate in the community college setting comes up frequently. Eddy and VanDerLinden (2006) drew a distinction between what they considered the traditional role of such a leader: top-down management, and what they saw

as an emerging trend: collaborative community college leadership. They saw that trend as extant without recommending that one style was superior to the other, noting only that it was easier for a collaborative leader to obtain follower buy-in to new initiatives.

Summary

It is evident from the literature that the American community college continues to fill a vital role in society. The democratizing effect of inclusion policies dating back to the Truman Commission has enabled millions of students to obtain a college degree when they had not had the resources, time, or funds to do so in the past. Moreover, community college has proved to be a stepping stone to a baccalaureate degree for millions of students.

That said, there is much room for improvement. The nature of student populations has been changing, particularly in the increased participation of ethnic minorities and other previously underserved groups. However, the system has not changed to accommodate these new demographics to the extent that it needs to. The class of student that needs the most attention and support is those who are on the cusp of college-entrance competency and need to be helped over the hurdle of college entrance and attainment. Also, at all levels and for all students, there must be robust support and advisory mechanisms in place for encouraging student retention, persistence, degree attainment, and successful transfer. A lack of such mechanisms is a potential waste of resources. At the point a student enters a community college, he/she is a societal investment and should be treated and developed as such.



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588Question 2: ASD Community College Students

Background

Autism spectrum disorder (ASD) is prevalent in the U.S. population, with approximately 1% of the population suffering from the condition (APA, 2013). As the name implies, ASD is actually a range of related disorders; it can also be described as a varying level of severity of the same disorder, which is a brain disorder characterized by difficulty in communicating and forming relationships with others, in understanding abstract concepts, and in understanding language (APA, 2013). It is possible that the same percentage of humans throughout history have suffered from ASD, but only recently has the condition been definitively identified, classified, and diagnosed.

The difficulties that make up the ASD condition cause struggles in learning. As ASD usually exists in an individual from birth, and the condition is usually diagnosed early in life, individuals with ASD are often placed in special learning environments. These learning environments are more often than not segregated in nature, as the difficulties in social interaction attendant to the condition make learning in the regular classroom problematic or impossible (White, Ollenbeck, & Bray, 2011; van der Aa et al., 2014). As ASD is a developmental disorder, it is thought that early accommodation can help avoid the issues associated with ASD from increasing: an untreated ASD individual will usually grow more withdrawn and isolated as he/she grows older. Conversely, an individual treated early can often achieve a high level of functioning.

Some of the highest-functioning ASD individuals in the U.S. attend institutions of higher learning, which include community colleges. While these individuals may have learned to overcome their disabilities and function in the classroom environment, their conditions persist. Many authorities and stakeholders as well as laymen assume that any ASD individual who copes with the condition to the extent that he/she is able to attend college does not need any help. This, however, is not the case: such individuals still need support mechanisms (Knott & Taylor, 2014; van der Aa et al., 2014). These include the counseling and mentoring that any college student receives as well as assistance specific to ASD students (Hewitt, 2011).

The topic of the proposed study is online social interaction by ASD college students. The nature of online social interaction is that it allows the individual to control the level of such interaction, which may make it ideal for an ASD individual seeking to develop social skills with a minimum of attendant stress and anxiety ("neuro-typical" individuals who are shy or introverted use such social interaction tools as well). The study purpose is to examine the perspectives of ASD college students in the community college environment. These aspects of the study, as well as the theoretical framework supporting it, are described in detail below.

Problem Statement

Despite growing numbers of autistic spectrum disorder (ASD) students in post-secondary education, academic and social integration and support of ASD students is limited in educational institutions (Gardiner & Iarocci, 2014; Gelber, Shefyck, & Reichow, 2015; Nevill & White, 2011; Nirmal, 2015; Shattuck et al., 2014). Many ASD individuals are academically advanced but face social challenges that inhibit their academic achievement, to the point where some of them drop out of school due to inability to achieve adequate social interaction (Gardiner & Iarocci, 2014; Gelber, Shefyck, & Reichow, 2015; Nevill & White, 2011; Nirmal, 2015).

Research has indicated that providers of university support services often fail to effectively understand the particular needs of ASD students. ASD students also face barriers to forming independence and transitioning to university settings; such students have the worst transition outcomes of all disability groups (Gelber, Shefyck, & Reichow, 2015). One cause of this problem is that there is little empirical research on ASD student experiences and the barriers and facilitators to academic achievement that they encounter (Gardiner & Iarocci, 2014; Gelber, Shefyck, & Reichow, 2015; Nevill & White, 2011).

Research has suggested that online social interactions and technology use can help improve quality of life, elicit social support, and build positive relationships for ASD students (Burke, Kraut, & Williams, 2015; Hong, Yarosh, Kim, Abowd, & Arriaga, 2013; Mazurek, Shattuck, Wagner, & Cooper, 2012; Mazurek, 2013; Mineo, Ziegler, Gill, & Salkin, 2009; Wadley & Schutt 2013; Zhao & Qiu, 2011). In these studies, it was noted that many ASD individuals have difficulty interpreting nonverbal cues and understanding perspectives and/or may be insufficiently sensitive to environmental stimuli during face-to-face interactions. It has also been suggested that Internet-based communication and technology-oriented academic interfaces such as Blackboard and academically-oriented social media websites often provide new ways for ASD individuals to communicate and interpret information; however, the benefits of such interfaces for ASD students in terms of improving academic outcomes has not been examined in the literature. The problem to be studied is the need to understand the impact of online interactions and technology on academic self-efficacy in ASD community college students, as ASD students are increasingly enrolling in academic institutions (Shattuck et al., 2012).

Social motivation theory, which posits that motivation mechanisms drive human acceptance-seeking and rejection-avoidance behavior, and Ray Oldenburg's (1982) concept of "third places," describing neutral spaces defined by a sense of play, sociality and equality, and individuality will guide the proposed research (Chevallier, Kohls, Troiani, Brodkin, & Schultz, 2012; Foster, 2013; Swain, Scarpa, White, & Laugeson, 2015; Wadley & Schutt, 2013). ASD study participants have suggested that online interactions help improve their quality of life, elicit social support for them, and help them build positive relationships (Burke, Kraut, & Williams, 2015; Hong, Yarosh, Kim, Abowd, & Arriaga, 2013; Mazurek, Shattuck, Wagner, & Cooper, 2012; Mazurek, 2013; Mineo, Ziegler, Gill, & Salkin, 2009; Wadley & Schutt 2013; Zhao & Qiu, 2011). This study's goal is to examine whether the employment of Web spaces as "third places" improves academic outcomes for ASD students.

Purpose Statement

The purpose of the proposed interpretive case study analysis is to examine the perspectives of U.S. ASD community college students regarding online social interactions, in terms of how such interactions help them to function socially and achieve academically. These perspectives on online interactions will be examined as single cases in an interpretative case study design (Stake, 1995). At this stage in the research, online social interactions will be defined as the use of online course supplements, social media, and Internet-based academic platforms such as Blackboard. The theories guiding this study are social motivation theory, centering on human acceptance-seeking and rejection-avoidance behaviors that are driven by motivation, and Ray Oldenburg's (1989) theory of "third places," positing that certain spaces outside of work and the home are used as neutral spaces defined by individuality, equality, and a sense of play. The proposed study will examine the experiences of 12 ASD students and their

perspectives on the use of social media as a form of social interaction. Field observations will be made and participants will be interviewed individually using in-depth open-ended interviews.

Data will be triangulated with interpretive observational analysis of online platforms to compare similar themes and patterns (Glaser & Strauss, 1977).

Theoretical Framework

The theories guiding the proposed study are social motivation theory and the concept of the "third place" proposed by Ray Oldenburg (1989). Social motivation theory as it relates to autism centers on the examination of social motivation deficits prevalent in ASD individuals (Chevallier, Kohls, Troiani, Brodkin, & Schultz, 2012; Swain, Scarpa, White, & Laugeson, 2015). Social motivation is seen as the intrinsic drive for acceptance seeking and rejection avoidance behavior; this motivation is deficient in ASD individuals. Understanding social motivation requires the use of proximate and ultimate explanations.

Proximate explanations involve how certain behaviors function, whereas ultimate explanations focus on why behaviors were selected by evolution (Chevallier et al., 2012; Swain et al., 2015). At the behavioral level, social motivation is manifested through interaction behaviors; the theory posits that: objects with social importance are prioritized in social interactions and considerations; social interactions are deemed rewarding; and the desire to maintain relationships is influenced by interpersonal behavioral mechanisms (Chevallier et al., 2012). At the biological level, the network of brain regions including the amygdala, the ventral striatum, and the orbital and ventromedial regions of the prefrontal cortex mediate social motivation functioning (Chevallier et al., 2012; Swain et al., 2015). These regions of the brain moderate responses to environmental stimuli, reward recognition, decision-making processes, and forming connections with others (Chevallier et al., 2012; Swain et al., 2015). At the

evolutionary level, collaborative social exchanges are positively selected for as beneficial to humans; thus, social motivation moderates behaviors geared toward social orientation, rewarding experiences, and maintenance of social activities (Chevallier et al., 2012; Swain et al., 2015).

The concept of "third places" centers on social environments separate from the home and workplace (Foster, 2013; Wadley & Schutt, 2013). Third places are characterized as being inexpensive, possibly providing food and drink, being highly accessible, having regular visitors, and welcoming and comfortable environments consisting of the inclusion of new and old friends (Foster, 2013; Wadley & Schutt, 2013). Internet spaces have recently been characterized as third places for their ability to provide neutral ground, temporarily level one's status, provide a focus on conversation, maintain accessibility, accommodate regulars, maintain low profiles, exhibit playful moods, and operate as a "home away from home" (Foster, 2013; Wadley & Schutt, 2013). In the proposed study, the relationship between social media and social motivations influencing interpersonal relationships of ASD individuals will be examined.

The proposed study will have as an ingoing premise that online social environments can serve as a "middle ground" for ASD students in that their intensity, frequency, and duration can be controlled by the participant. This, it seems to the researcher, is an ideal condition for the ASD student, who might shy away from or be intimidated by full-blown social interaction (such as a social gathering or a class meeting). The proposed study will verify this contention by gaining the perspectives of ASD students who use these online social interaction tools.

Literature Review

Few studies have qualitatively examined ASD college student experiences and perspectives (Bolte, 2014; Shattuck et al., 2014). Managing academic expectations, experiencing support, managing ASD and related symptoms, moderating the influence of past experiences,

having a sense of appreciation, having an understanding of ASD and communicating that understanding to friends and peers, managing transitions, and entering a new social world are all elements of ASD college students' experiences (Gardiner & Iarocci, 2014; Gelber, Shefyck, & Reichow, 2015; Nevill & White, 2011; Nirmal, 2015; Shattuck et al., 2014). ASD students face academic barriers due to issues with socializing, independence, developing self-determination skills, and academic functioning (Gardiner & Iarocci, 2014; Gelber, Shefyck, & Reichow, 2015; Nevill & White, 2011; Nirmal, 2015; Shattuck et al., 2014). ASD students and social interaction barriers, self-efficacy, social motivation theory, and the use of third places are examined in the following sections.

Social interaction barriers. ASD individuals face barriers to effectively communicating with faculty and peers due to difficulties with understanding social cues, empathy, and socialization norms; these difficulties are inherent in and even define ASD (Charman et al., 2011). Several studies have indicated that effective communication improves the success of ASD students; conversely, communication barriers significantly impact their academic functioning (American Psychiatric Association, 2013; Barnhill, 2014; Bishop-Fitzpatrick, Minshew, & Each, 2013; Brady et al., 2013; Brugha et al., 2011; Burke, Kraut, & Williams, 2015; Charman et al., 2011; Chiang, Cheung, Hickson, Xiang, & Tsai, 2012; Fombonne, 2012; Gantman, Kapp, Orenski, & Laugeson, 2012; Gelbar, Smith, & Reichow, 2014; Geller & Greenberg, 2012; Gobbo, & Shmulsky, 2014; Griffin, Summer, McMillan, Day, & Hodapp, 2012; Hewitt, 2011; Hong, Yarosh, Kim, Abowd, & Arriaga, 2013; Howlin, & Moss, 2012; Howlin, Moss, Savage, & Rutter, 2013; Howlin, Savage, Moss, Templer, & Rutter, 2014; Johnston, Madden, Bramham, & Russell, 2011; May, 2012; Mazurek, Shattuck, Wagner, & Cooper, 2012; Joshi et al., 2013; Kapp, Gantman, & Laugeson, 2011; Knott & Taylor, 2014;

Koegel, Ashbaugh, Koegel, & Detar, 2013; Mazurek, 2013; Mineo, Ziegler, Gill, & Salkin, 2009; SFU Teaching and Learning Centre, 2011; Shattuck et al., 2012; Wadley & Schutt, 2013; White, Ollendick, & Bray, 2011; Zhao & Qiu, 2011). Several studies have shown that ASD individuals particularly have difficulty in interpreting nonverbal cues, understanding perspectives, and interacting face to face (Burke, Kraut, & Williams, 2015). Lower self-esteem due to social interaction difficulties can occur in individuals with ASD. Furthermore, ASD students who face barriers to interacting socially often receive less support in post-secondary education (Gelbar, Smith, & Reichow, 2014). Supervisors and staff in academic facilities frequently fail to effectively understand ASD students (Gelbar, Smith, & Reichow, 2014). In order to understand coping mechanisms with social interaction difficulties, self-efficacy must be examined, as experiences in academia are mediated by self-efficacy, in ASD students as well as in the general population.

Self-efficacy in ASD students. Social support improves ASD student self-efficacy and quality of life (Burke, Kraut, & Williams, 2015; Dipeolu, Storlie, & Johnson, 2014; Hong et al., 2013; Mazurek et al., 2012; Mazurek, 2013; Mineo et al., 2009; Shattuck et al., 2014; Shepherd, 2015; Wadley & Schutt, 2013; Zhao & Qiu, 2011). Research has shown that lack of awareness and understanding by peers can make interactions difficult for ASD students (Gardiner & Iarocci, 2014; Gelber, Shefyck, & Reichow, 2015; Nevill & White, 2011; Nirmal, 2015; Shattuck et al., 2014). Peer contact and experience with ASD students is likely to result in greater understanding of ASD student needs (Gardiner & Iarocci, 2014; Gelber, Shefyck, & Reichow, 2015; Nevill & White, 2011; Nirmal, 2015; Shattuck et al., 2014). Moreover, comfortable communication with ASD students enhances relationships and self-efficacy of those students (Gardiner & Iarocci, 2014; Gelber, Shefyck, & Reichow, 2015; Nevill & White, 2011;

Nirmal, 2015; Shattuck et al., 2014). According to studies on student self-efficacy, academic and college support is also a factor in ASD student self-efficacy and resultant success (Gardiner & Iarocci, 2014; Gelber, Shefyck, & Reichow, 2015; Nevill & White, 2011; Nirmal, 2015; Shattuck et al., 2014). Academic success can also be understood in terms of motivation, using social motivation theory as a theoretical framework to understand how ASD individuals perceive social interaction.

Social motivation theory. "Emotion dysregulation," or difficulty in regulating emotions, and social motivation frequently drive feelings of social anxiety in ASD individuals (Chevallier, Kohls, Troiani, Brodkin, & Schultz, 2012a; Chevallier, Molesworth, & Happe, 2012b; Delmonte et al., 2012; Dichter, Richey, Rittenberg, Sabatino, & Bodfish, 2012; Ewing, Pellicano, & Rhodes, 2013; Olu-Lafe, Liederman, & Tager-Flusberg, 2014; Shah, Gaule, Bird, & Cook, 2013; Solomon et al., 2015; Stavropoulos & Carver, 2013; Swain, Scarpa, White, & Laugeson, 2015). Anxiety develops in ASD individuals due to emotion dysregulation and lesser social motivation than that of individuals without the condition (Chevallier et al., 2012b; McEvoy, Rogers, & Pennington, 1993; Swain et al., 2015). Social motivation influences avoidance, inhibition, and empathy (Chevallier et al., 2012b; Swain et al., 2015). Social motivation theory posits that social motivation is inherently influenced by biological, evolutionary, and social moderating effects of behavior (Chevallier et al., 2012b; Kurzban & Leary, 2001; Nielsen, Slaughter, & Dissanayake, 2012; Pittman & Heller, 1987; Swain et al., 2015). In other words, social interaction is adaptive behavior and thus, humans are naturally drawn to it (Chevallier et al., 2012b). Social motivation can also be understood by behaviors used to moderate social interactions. Social media platforms as third places are used by ASD students to develop relationships and interact in a comfortable environment (Swain et al., 2015).

Third places and social capital in ASD students. Third places are characterized by regular attendance, a sense of play, sociality and equality, and the recognition of individuality (Oldenburg & Brissett, 1982; Rizzo, Schutt, S. & Linegar, 2013; Seamon, 2013; Stendal & Balandin, 2015; Wadley & Schutt, 2013). Online communities offer increased social support and quality of life benefits for ASD students (Burke, Kraut, & Williams, 2015; Foster, 2013; Irish, 2013; Kandalaft, Didehbani, Krawczyk, Allen, & Chapman, 2013; Wadley & Schutt, 2013). Online communities have been shown to help ASD students make new friendships, improve mental health, develop technical skills, cease harmful behaviors, manage medication positively, motivate learning, increase academic engagement, and increase exposure to career opportunities (Wadley & Schutt, 2013). Social networking also reduces barriers to obtaining independence (Graham, 2012; Hong et al., 2013; Nikopoulos, Nikopoulo-Smymi, & Dillenburger, 2012; van der Aa, Pollmann, Plaat, & van der Gaag, 2014). Technology applications can be particularly useful in promoting social skills (Cheng, Huang, & Yang, 2015; Mineo et al., 2009). ASD individuals often use social media to connect with individuals, learn, and seek advice (Mazurek, 2013). To improve ASD student experiences and academic success, research is needed to understand barriers and facilitators to success.

Rationale for the Study from the Literature Review

ASD individuals cover the entire social spectrum; also, their conditions vary widely in severity (APA, 2013). Those who manage their disorders to the extent that they graduate from high school and attend college could be considered to have overcome their ASD to some extent at least; such individuals have been called "high-functioning" in the past, a somewhat oversimplified term (van der Aa et al., 2014). The review of the literature shows, however, that ASD college students still are hampered by their condition despite their achievements and

therefore, they still need support and guidance. College students are expected to be independent and to manage their own educational pathways to a major extent, but the social interaction deficits experienced by ASD students may be a significant barrier to normal functioning as a college student (Hewitt, 2011).

The research suggests that online interaction and social media can be highly beneficial for ASD students seeking to adjust to college life. The limited and controlled nature of such social interaction (the user initiates contact at his/her volition and can terminate it at any time) is ideal for ASD individuals, as they often dislike the sometimes chaotic nature of regular social interaction (especially those that take place on a college campus) (Knott & Taylor, 2014). The concept of "third places" applies to virtual as well as real locations; in fact, many younger people do not draw a distinction between the "real" and "virtual" social worlds. The key for ASD students is that they both need and are relatively unskilled at social interaction and that technology-driven social interaction meets that need and helps them become more adept at such interaction.

Individuals at the "high" end of the ASD spectrum are often well aware of their conditions and how their ASD hampers their functioning in the world (Hewitt, 2011; van der Aa et al., 2014). This is undoubtedly true for ASD college students. While the literature touches on the concept only tangentially, it suggests that an individual, ASD or otherwise, can form an intellectual understanding of an emotional condition or construct even if lacking the "normal" perspective of that emotion. I, therefore, believe that ASD students could realize the necessity to improve their social skills and make social contact even while not having an instinctive understanding of why one forms social bonds. It is possible that ASD college students view social interaction dispassionately, as simply one of the many skills that must be learned to be

successful in college. While this concept will not be an empirical finding of this study, I look forward to exploring the "why" of social interaction with the ASD students who will participate in this study.

The individual nature of an ASD student's experiences supports the case study approach that I will use. It is important to have an in-depth understanding of the lived experiences of such students, which a case study approach is ideally designed to provide (Johansson, 2003). I will provide a detailed explanation of and rationale for the proposed study's methodology in the answers to Question 3.

The rationale for examining community college ASD students, as opposed to those in a four-year college, is simple: the former type of student may experience more struggles than the latter and thus, the experiences of community college students may be best for answering the research questions. The review of the literature in the answer to Question 1 suggests that the community college environment is unique and that the experiences of community college students are unlike those in any other setting. Also, as a practical matter, it might be easier to identify and solicit for participation ASD students in the more open environment of a community college as opposed to a four-year college.

Research Questions

The goal of the proposed study is to understand the lived experiences of ASD community college students. To examine experiences, it is essential to understand how participants describe their perceptions, beliefs, desires, and social interaction experiences. In this study, how ASD students use social media and online communication platforms will be the focus; an important finding will be whether social media as "third places" improve academic outcomes. Therefore, the following research questions are proposed:

- **RQ1.** How do ASD community college students interact socially?
- **RQ2.** What are ASD community college student perspectives on social media use?
- **RQ3.** How do ASD community college students use social media and online social interaction tools?
- RQ4. How do ASD individuals describe their lived experiences in community college?Research Gap and Relation of the Current Study to the Literature

The proposed study has two aspects that have not been thoroughly examined in the existing literature. First, though ASD-diagnosed individuals have been studied in detail, especially recently, very few studies have examined the experiences of ASD college students. Moreover, I could find no studies that focused on community college students in particular. Second, social media and Internet interaction are relatively new phenomena; therefore, they have not been studied in detail in some aspects, such as the approach taken by the proposed study. Interestingly, social media and Internet interaction have been examined as phenomena in such settings as online dating, job-related networking, etc.—situations where social contacts are desired by individuals but at the same time, they wish to control and moderate such interactions. The need for control would seem to be felt by ASD individuals as well. Thus, examining how ASD community college students use technology to construct safe and comfortable places for their social interactions could add to the literature and the understanding of the lived experiences of high-functioning ASD individuals who are trying to assimilate into the higher educational system and society in general; doing so could also add to the overall understanding of technology-constructed social meeting places: the "third place' referred to in the theoretical framework.

The approach taken for the proposed study, first of all, is qualitative. It is my opinion that data such as lived experiences, struggles, coping, and strategies to handle one's environment are much better expressed qualitatively than quantitatively: "how," "why," and "what" are fundamentally qualitative expressions. The case study approach is a detailed examination of lived experiences of a select group of individuals. Only with the depth of examination inherent in a case study approach can the experiences of this unique cohort of individuals be properly understood. I am in particular looking forward to conversing with the participants to find out how highly functioning individuals with ASD perceive and cope with their conditions. As mentioned above, this has not been well examined in the literature. This could be because the recent focus has been on early diagnosis and treatment of ASD; it could also be because people perceive anyone who has been admitted to college as doing pretty well and not needing help (and therefore, examination). This is not the case, however; such students still need help, understanding, and support (Hewitt, 2011; Knott & Taylor, 2014; White et al., 2011; van der Aa et al., 2014).

The gap in the literature, then, is twofold. The literature on ASD individuals has rarely focused on ASD college students. In general, it has treated high-functioning ASD individuals more lightly than those who are more severely impaired by the disorder. Thus, the lived experiences of those ASD individuals who are attempting to cope with a college environment (something that can be very difficult for any individual, ASD or not) have not been examined in the literature to any real extent. Moreover, the effect of social media and Internet-based interaction on the coping strategies and success of ASD students has not been well examined in research.

It is possible that past researchers have been reluctant to talk directly to ASD students because they felt that such persons would not be communicative. Furthermore, there could be privacy concerns, as ASD identification depends on medical records, which are almost always confidential, and self-identification of an individual as suffering from ASD, which is also a confidential matter. I describe in the following essay portion how I intend to overcome these difficulties. For now, it is sufficient to note that the potential value of the data gathered will be more than worth any difficulty in obtaining it.

The research examination validated the concept that social interaction is a vital part of obtaining a college education for all students, not just those with ASD. Interaction with peers, classmates, and faculty can greatly assist a student in coursework and degree completion; conversely, a lack of such interaction can greatly hinder it. The literature shows that while ASD college students may be less skilled and less inclined toward social interaction than other students, such interaction is just as important for them. As I remarked above, it is very likely that even those ASD students who do not have an inherent urge to engage in social interaction (which, presumably, exists in most individuals and the relative lack or absence of which is part of what defines ASD) recognize its value.

Moreover, social interaction can improve quality of life for ASD students (Knott & Taylor, 2014). College is not just about learning things; it is also about personal growth. In other words, while many students are goal-oriented and completing a college degree may be done with a specific purpose in mind, attending college can be a goal in and of itself. If society wishes to understand and aid those with ASD, it is valuable to examine the lived experiences of those who are moving closest to a "neuro-typical" life. While there is no "cure" for ASD (and indeed, some researchers have suggested that it is not a condition that needs to be cured as such), it is an

inescapable fact that American society is not ideally structured for the ASD individual. Great value is placed on social skills, social interaction, and social development. Not being sensitive to social cues places the ASD student, worker, and community member at a disadvantage, often a severe one. Therefore, the more we understand the experiences of those who have ASD, the better we can assist their integration into society and thus, help them to improve their quality of life.



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Question 3: Choice of Methodology

The First Choice

In research design, there are two basic categories of approach: quantitative and qualitative. The former, as the name implies, is employed when the researcher seeks to measure something numerically: this could be an amount, the relationship of two numeric variables, percentage changes in a quantity over time, etc. The research questions that can be answered by quantitative methodologies include the words "how much," "to what degree," "to what extent," and so forth. Also, such research can seek to establish numeric correlations between variables: how much B changes when A changes, to what extent does the amount/number of A influence that of B, etc. The researcher must decide if the concept/phenomenon/effect to be examined is best expressed numerically.

If that concept is best expressed in non-numeric fashion, the better approach is qualitative (Bolte, 2014; Yin, 2003). Such research attempts to understand a concept or phenomenon descriptively. The research questions in such research tend to be worded as "why," "what," or "how." In qualitative research, the range of data can be very wide and it is the researcher's task to analyze and "code" that data, which refers to assigning themes to it. For instance, an interview transcript could be analyzed by the researcher and themes coded based on the salient aspects of the interview. The researcher would then analyze the aggregate coding to look for emergent, recurrent, and dominant themes.

There is also the approach called "mixed-methods." This is where the research has both qualitative and quantitative aspects. This is a method often used when the researcher wishes to "weed out" subjects from a larger population. For example, a researcher could seek to examine the phenomenon of workplace anxiety (qualitative) in lower-income individuals (quantitative).

Conversely, a researcher could examine parents of four or more children (quantitative) regarding their attitudes toward birth control (qualitative).

Sample Sizes

Quantitative research usually requires a larger sample than qualitative research to achieve significance (Moustakas, 1994). This is because numbers are inherently less nuanced than qualitative expressions, and statistically, a larger sample is needed when data replicate from sample to sample (Moustakas, 1994). For instance, a measure of self-reported happiness based on a Likert scale (1=unhappy, 2=somewhat unhappy, and so forth) would have more replicated data than the transcript of an interview question: "Describe how happy or unhappy you are." Thus, sample sizes of 10-20 are common in qualitative research, while several hundred may be needed in quantitative research. The goal in either case is to achieve "saturation," the point at which added samples would not produce significantly different results.

A researcher can sometimes be forced to choose a qualitative approach simply because it is difficult or impossible to gather a large enough sample for quantitative significance. The needed sample size for quantitative analysis can be calculated using G*Power, SPSS, or a similar tool, and if such a calculation reveals that the population studied will not yield enough participants, the researcher will need to reconsider the quantitative approach. Conversely, if the researcher has access to a large population, it may be viable to choose a quantitative approach even to a concept that is fundamentally qualitative. Qualitative concepts or phenomena can be quantified by using such tools as Likert scales and surveys where participants are asked to answer questions in a numeric range. This is analogous to a doctor asking a patient to describe the pain he is suffering on a scale of 1 to 10, with 10 being "the worst pain you have ever

experienced." The patient, up until that point, would have been inclined to express his pain qualitatively ("it hurts a lot," "it only hurts a bit," etc.).

Qualitative Choices for the Current Study

I have chosen the qualitative case study approach for my research. This decision is based on several criteria. First and foremost, the research questions are qualitative in nature:

- **RQ1.** How do ASD community college students interact socially?
- **RQ2.** What are ASD community college student perspectives on social media use?
- **RQ3.** How do ASD community college students use social media and online social interaction tools?
- RQ4. How do ASD individuals describe their lived experiences in community college? The bolded words form the nature of the questions. This is because data such as how ASD students socialize (Gardner & Iarocci,2014), what are their perspectives regarding social media (Nickopoulos et al., 2012), how they use social media (Kapp et al., 2011; Zhao & Qiu, 2011), and their lived experiences (Koegel et al., 2013; Nevill & White, 2011) cannot be expressed numerically, or at least not adequately. Furthermore, the answers to such questions are likely to be complex and highly nuanced; they will be expressed by language. Such nuance cannot be described by numeric labeling, when the only variation is of magnitude or degree (Yin, 2003).

Returning to the analogy of the patient in the doctor's office, the patient who reports severe pain as an "8" would probably not consider it an adequate description. Similarly, if I asked RQ3 in a quantitative fashion: "How much do you use social media, on a scale of 1=not at all, 2=occasionally, (etc.)," the data would not be as meaningful or as nuanced as it will be with analysis of transcripts and thematic coding.

There is also a practical consideration, in that ASD college students are a relatively small population (Griffin et al., 2012). It is likely that the sample needed for a quantitative study would have to be gathered over a large geographical area, even nationwide. I have neither the resources nor the time to do so. Moreover, there are ethical considerations in that I will be obligated to use snowball sampling due to the sensitive nature of the basic criterion for participant inclusion in the study: having been diagnosed with ASD (Knott & Taylor, 2014; White et al., 2011). It would be a practical impossibility to gather a large population for sampling due to this restriction alone.

Case study approach. It is my contention, and the impetus for this study, that ASD individuals who have managed to function to the extent that they are able to attend college are a unique group (Howlin et al., 2013; 2014). I expect that their lived experiences both up to now and while they are attending college are highly unusual and well worthy of study. It is also a premise of my study approach that ASD community college students may be a distinct subgroup of ASD college students in general and may answer the RQs differently than a group of four-year college ASD students might. This could suggest future research.

Thus, I have chosen the case study approach because I wish to examine these students' lived experiences in depth (Yin, 2003). I also wish to allow them the greatest possible latitude to describe these experiences. A case study approach combines the benefits of narrative and phenomenology: participants are asked to describe their experiences in terms of something that has happened to them or that they have done (Yin, 2003). To achieve that purpose, I intend to ensure that the interviews are open-ended and unstructured.

Moreover, I expect the analysis of the interviews to yield "rich" (complex) as well as "thick" (layered; nuanced) data. In my opinion, such data is needed in order to describe and understand ASD community college students' lived experiences. From my review of the

literature, it is evident that there is a lack of understanding of those students, the challenges they face, and the strategies they employ to overcome those challenges (Knott & Taylor, 2014; Neville & White, 2011). Yet, the need for such understanding is great, as the population of ASD college students is growing. I remarked earlier that college administrators as well as the general public may consider that any ASD individual who achieves college enrollment has coped successfully with his/her condition (Fombonne, 2012). This is only true to a limited extent, however; such students still need guidance and support (Hewitt, 2011).

Validity of the Theoretical Framework

The theoretical framework for this study is a combined perspective of Social Motivation Theory and Oldenberg's (1989) "third place" concept. Social Motivation Theory posits that behavior is motivated by social cues. The third place concept is that individuals often seek out places to interact outside of the home and the workplace (Foster, 2013). The combination of these perspectives suggests that individuals are socially motivated to seek out third places in which to interact.

The ASD individual is classically seen as not having the motivation to socialize. While this may be partly accurate, it is also simplistic. Chevallier et al. (2012a) stated that while ASD can be viewed as a deficit in social motivation, it is also true that "deficits in social cognition are therefore construed as a consequence, rather than a cause, of disrupted social interest" (p. 1). In other words, the deficit exists because the ASD individual perceives little need for social interaction. However, motivation can come not only from an emotional source; it can also come from a need for goal fulfillment. For ASD college students, social motivation can come from a perceived need to establish social contacts in order to succeed in school.

Third places can be worthwhile environments for ASD students to engage in social activities. Moreover, for ASD students, the measured nature of online social interaction can be ideal (Irish, 2013; Zhao & Qiu, 2011). They can control the depth, intensity, frequency, and duration of such interaction. Of course, this feature has equal appeal for many non-ASD individuals. Social interaction can be chaotic, and many individuals, ASD and non-ASD alike, feel much more comfortable when they retain control over major aspects of it. The theoretical framework for the proposed study provides a useful perspective on how online third places might serve as places for ASD students to achieve the level of social interaction that they desire, or that they perceive they will need—these are two aspects of social motivation for them.

Methods and Strategies

Based on a review of the literature on the subjects of community colleges and ASD students, I have chosen a qualitative interpretive case study approach. Following is a discussion of the strategies I will employ to conduct the proposed study. These choices have been informed by the literature on methodological approaches as well as my perceptions of the best ways to answer the research questions.

Population and Sample

The population to be studied will be ASD students at a large suburban, multi-campus community college near the researcher's place of residence. The college is large enough that the researcher expects to be able to gather a sufficient sample; this target number is 12, as suggested by case study methodological guidelines (Yin, 2003). In the event that the contemplated snowball sampling does not obtain enough participants, the researcher may examine ASD students at other nearby community colleges.

Because this study will involve a vulnerable population, snowball sampling methods will be utilized, whereby specifically chosen persons (samples) will serve as initial contacts in order to provide access to other ASD student individuals (LeCompte & Schensul, 2010). A colleague of the researcher in the Disability Support Services Office will serve as a gatekeeper to start the process of identifying participants. In addition, some ASD students from the researcher's current work place will be potential participants in this study. Identifying ASD students would be difficult in a randomized sample; therefore, snowball sampling will allow for the identification of the sample at a particular locale. The sample will depend upon screening a community college student population for 12 participants based on particular criteria. The sample size of 12 participants was chosen because it allows for the collection of enough in-depth data to be generalizable without exhausting resources (LeCompte & Schensul, 2010). The criteria for inclusion will be that participants are ASD-diagnosed and attend community college. Eligible participants must have English fluency and will be excluded if they report any type of co-morbid psychological diagnosis or intellectual disability that would impair their ability to participate in the study.

Measurement. Open-ended interviews will be conducted with participants, digitally recorded, and coded for significant themes. Confidentiality will be ensured, and participant data will only be used with signed consent. Participants will be informed of their ability to end participation at any time. Information will be gathered using systematic observations and written and taped field notes and interviews (LeCompte & Schensul, 2010; Stake, 1995; Yin, 2003). Photographs, the use of Internet websites, and mobile phone social media use will be used during open-ended interviews to elicit responses. Photographs will be used to elicit responses on how participants feel about social media website layouts and functioning. For instance, some

participants may find that the ability to easily access articles and information on Facebook allows them to more effectively communicate with peers about current events. Participants will be observed using Internet websites, academic online platforms, and social media to examine how they use online interactions, their facilitators and barriers to communicating using online platforms, and the quality of their online social interactions. Interview data will be recorded, transcribed, and coded for common and outlying themes.

Data Collection and Analysis

In-depth, open-ended interviews will be conducted individually. In addition, field notes and observational data will be recorded to observe how participants behave when confronted with virtual processes. Open-ended interviews will be employed to effectively understand participant perceptions and experiences. These open-ended interviews will be used to gain a sense of the types of experiences and concerns that participants have with social interactions. Online social interactions will also be observed in the study.

Data analysis will follow a case study methodology that examines the unit of study by observing interactions of a particular community of people. The case study will be framed to include holistic characteristics that are case-oriented, contextually understood, empirical, and interpretive. Case descriptions will be created using the study's theoretical framework (social motivation theory combined with the concept of third places) to organize the cases. Interview questions will be created to interpret cause and effect relationships and evaluative conceptualizations. Interview data and observational data will be read holistically to determine raw themes. Data will then be reviewed using NVivo coding software to search for patterns, such as participants' online interaction activities and their reported academic outcomes, and draw tentative conclusions (Stake, 1995). Interview data will be triangulated with observational data,

and all data will be reviewed to seek alternative conclusions or explanations. Because the study is focusing on creating meaning from understanding the case, correspondence (or strong patterns) will be examined to illustrate how the case manifests in certain behaviors and contexts (Stake, 1995). Finally, member-checking will be implemented to review data for accuracy and palatability (Stake, 1995). The focus of the research will involve the examination of social media use as forms of social interaction and communication in ASD community college students while also considering how identity, individuality, and disability concerns are expressed (LeCompte & Schensul, 2010; 2013).

Thematic coding. The themes derived from analysis of the interview transcripts will be analyzed and coded. Coding is the process of classifying themes and relating them to one another (Stake, 1995). The first step is open coding, where the researcher assigns codes (a word or short phrase, usually) to identified themes. The next phase is axial coding, where thematic pairings are identified for frequency and relevance. The final phase is selective coding, where themes are analyzed and selected for inclusion or discarded, based on criteria such as frequency.

I realize that such coding has a subjective element to it in that another researcher might code the interview transcripts' themes in an entirely different fashion. I intend to make my analysis as objective and free of bias as possible, but a person cannot eliminate his/her point of view and be totally objective. Therefore, I intend to seek the help of professional and/or academic colleagues to validate my thematic coding. Any significant discrepancies between my and their coding will warrant an additional round of coding for validation purposes.

Ethical Considerations

In all research, ethical considerations should be paramount. Even the most compelling and relevant research should not be performed if it violates ethical researcher behavior. I feel that

this is especially true when the violation of confidentiality could cause significant harm to participants or to others. As the participants in this study will be students with ASD, a condition that is often poorly understood and often misinterpreted by the public, I will strive to the utmost to maintain participant privacy and confidentiality.

ASD individuals could be stigmatized by being identified as such. In a college environment, students must interact with peers, faculty, and staff. It would be potentially disastrous if as a result of this study, a participant or participants were identified as having ASD and as a result, they were treated differently by peers or faculty. While some ASD individuals undoubtedly do not mind if others know of their condition, it is a certainty that at least some consider it a private matter. This consideration informs the choice of snowball sampling, as it is a private, one-to-one method of participant solicitation.

Specific measures to protect data and participant privacy are as follows. Participants will be referred to by a research-assigned number only. After contact information is obtained and the interviews conducted, that information will be destroyed. At no time will the data used contain any personal information by which the participants could be identified, even inadvertently—if such data exist, they will be erased from the audio recordings of the interviews and not included in the transcripts. Researcher notes and audio recordings will be kept at all times in a locked file cabinet to which only the researcher will have access. Electronic data will be stored on the researcher's password-protected computer, to which only the researcher will have access. Three years after the completion of the proposed study, all physical data will be destroyed and electronic data erased.

Informed consent. It is absolutely necessary to obtain informed consent from study participants, especially when the population is vulnerable, as is the case for the proposed study.

Therefore, an informed consent form will be provided to all study participants. Participants will not be included in the study until they have signed such a form. Potential participants (at the solicitation/sampling stage) will be fully informed of the purpose of the study, the researcher's goals and objectives, and what will be done with the data collected. At that time, potential participants will be fully briefed on measures that will be taken to protect their privacy.

Participants will be afforded the opportunity to examine the results of the completed study. I feel that this is a particularly appropriate move when because of the snowball sampling technique, the participants are likely to know one another. It is very possible that they will wish to know how their fellow ASD students deal with the need to socialize in the academic setting.

In fact, this could be an additional benefit to the study. Research is conducted with the goal of informing the scientific community at large about a problem and possible ways to solve it. However, at times, participants can also directly benefit from it. I expect that to some extent, only an ASD individual can fully understand what an ASD individual goes through. As noted earlier, our world is not constructed for the ASD individual. It seems to follow that growing up and living in a highly social world, we might not comprehend what it is like to live with a cognitive social deficit, especially for highly intelligent individuals such as the ASD students to be examined in this study. Therefore, I/we might be biased in our views of ASD. This can be compensated for, at least partially, by the data being the reported lived experiences of ASD students. That is what will make the proposed study valuable.

Role of the Researcher

In any research, the researcher affects the outcome by his/her choice of methodology, setting, research questions, and overall, topic and focus. My choice of the proposed study topic is informed by my professional standing as well as my considerable interest in the subject. Also,

ASD research regarding those individuals who are considered "high-functioning" is relatively lacking; as I noted earlier, this could be because such individuals are considered to be less in need of help. However, my observations are that college life can be difficult for anyone to adjust to and ASD students are certainly no different in this regard. Thus, I am motivated to do this research because I wish to understand what such persons go through in adjusting to college life.

I also feel that this study can benefit society in that ASD individuals are a part of it.

People are only recently becoming aware of the prevalence of ASD, and ASD individuals may have been described in the past as "shy," "withdrawn," "odd", or "uncommunicative," implying that their behavior is due to a personality characteristic rather than, as we know now, a cognitive disorder. The fact that ASD is a wide spectrum of disorders, varying greatly in severity and manifestation, only adds to the confusion. I therefore hope and expect that this study can add to the general public's understanding of ASD as well as supplement the existing literature, particularly on ASD community college students.

As I noted in my essay regarding Question 1(above), the American community college is a distinctive and in many ways unique environment. While an institution of higher learning, it is egalitarian rather than elitist. Though its curricula at times mirrors that of lower-division courses in four-year institutions, its focus has always been on practical skills. Finally, it is a highly inclusive, heterogeneous environment and more often than not, closely aligned with the community in which it is located. These characteristics make community colleges ideal for this study. My professional and personal experience has also been substantially in this setting.

Importance for the Body of Research

There are many gaps in the literature regarding ASD students. Most literature has focused on young ASD students (elementary, primary, pre-school) and to a lesser extent, adolescents

(secondary school). This could be because ASD's severity can be lessened if the condition is identified and accommodated for early in life. Thus, higher education ASD students might have gotten to that point because their ASD was diagnosed and accommodated early.

Nonetheless, the increased diagnosis and acceptance of ASD has created, by its very success, a population of individuals who cope with their ASD to the extent that they can function in society and fulfill "neuro-typical" roles; this includes being a student at an institution of higher learning. Thus, we have a population that in part did not exist previously or at least, was not identified as having ASD. Approximately 1% of all individuals in the U.S. have ASD (APA, 2013), meaning that over three million persons have the disorder. If even a small percentage of that three million attend college that is still several thousand people. Thus, there is great potential societal benefit from studying this population; there is also significant benefit to the ASD population itself.

We in society and the academic community generally have a poor understanding of ASD, if for no other reason than it is difficult to comprehend what it is like to have the condition. From infancy, we are taught—and indeed, we are hard-wired, with the exception of ASD individuals—to respond to facial expressions, nonverbal cues, social interactions, and subtle expressions of what other people are thinking. It is difficult to imagine on an emotional level what the inability to respond to these cues must be like. We can understand it on an intellectual level, but we cannot fully understand what it feels like to be an ASD individual—except by talking to such individuals, gaining their perspectives, and understanding their experiences.

It is my hope that this proposed research, in some small way, can add to that understanding. It is necessary for society to understand any condition that affects 1% of its

members. It is also necessary for society to adjust for the presence of ASD individuals and their participation in society. Such understanding will come slowly and incrementally.

As ASD individuals are part of the community college community as well as the larger societal community as a whole, their needs and experiences should be understood by those communities. Yet, there appears to be a lack of understanding regarding the condition of ASD and the characteristics of ASD individuals. I think and have observed on occasion that people tend to shy away from persons with ASD or feel uncomfortable in their presence. This may be due more to that lack of understanding than anything else; therefore, this study's aim of addressing that lack has societal importance and could provide significant benefits.

Moreover, the recent emergence of social media technology and its widespread use has offered an extremely useful tool for ASD individuals to develop and mediate social interactions in a manner that makes them most comfortable. This could mean that in the future, ASD individuals who are academically qualified to enter college but have been reluctant to immerse themselves in the often chaotic and socially demanding higher academic world may put aside their reservations and join community colleges.

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