INVISIBLE INFLUENCE: NEW FORMS OF COOLING OUT IN COMMUNITY COLLEGES

by

Jill A. Anderson

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ABSTRACT

Exploring students’ experiences navigating community college is important for understanding the relevance of community college procedures and personnel as students make decisions about their day-to-day actions and continued enrollment. Data exists about the multiple obligations many community college students have, which may complicate their college enrollment. Yet, little is known about how those outside obligations influence students as they interact within the community college environment to implement their college-going choices. Furthermore, little data exists about the continued educational choices students make during their enrollment and what role college procedures and personnel may play. Choices for students do not end after choosing a college to attend. Rather, decision-making is an on-going process. Ironically, the on-going educational choices of students are missing from college choice, integration, and persistence models.

This study used a qualitative approach to examine how students experienced the institution through the lens of these micro-decisions. A combination of the model of student success, rational action theory, and cooling out provided the framework to understand how community college students made sense of their interactions with college personnel, and in what ways the community college might contribute to cooling out. Overall, findings demonstrate the community college’s procedures constrain students’ available choices. Rather than simplifying procedural requirements, community college personnel often contributed to students’ confusion and difficulty in carrying out a micro-decision. Furthermore, findings suggest the community college continues to play a cooling out function in higher education.
CHAPTER 1
INTRODUCTION

Community colleges provide education for nearly one-half of undergraduate students in the United States (American Association of Community Colleges [AACC], 2014). However, only 45% of students enrolled in community colleges obtain a certificate or degree, transfer to a four-year institution, or remain enrolled after six years since entering despite reporting an intention to do so (Center for Community College Student Engagement [CCCSE], 2013). What is happening during their college-going experiences leading students away from their goal? Perhaps we can begin to find answers by studying decisions beyond enrollment and focus on decisions students face every day while attending community college and the influence of college structure on those decisions.

Borrowing from business and economic theories, the present study uses the term *micro-decisions*. Specifically, a micro-decision is process-related, individual, frequent, and recurring (Aurum & Wohlin, 2003; Davenport, 2009). Using this term provided a method for focusing on daily decisions. For the present study, examples of micro-decisions included course-taking behavior (course selection, time of day, sequencing, delivery method), management of work and family while enrolled (Deil-Amen, Gonzalez, & Rios-Aguilar, 2012), financial aid (Deil-Amen & Rios-Aguilar, 2014), and other process-related, recurring deliberations students report as they progress through community college. Furthermore, students may change their goals over time, highlighting the importance of studying frequent, recurring choices.
Related to micro-decisions is the concept of choice, which is at the center of action. In a landmark study, Burton Clark (1960b) described the latent process of *cooling out*, where students choose, seemingly on their own, to lower their educational aspirations from a transfer-oriented degree to a terminal occupational degree. Clark revealed that student choices were not solely individual decisions. Rather, they resulted from a college-initiated, systemic process in which students were unknowingly guided toward terminal degree choices through multiple interventions with college personnel. The student decision was at the center of that process documented decades ago, yet we know little about community college students’ decisions today. Thus, studying aspects surrounding micro-decisions provides insights into how cooling out, along with other consequences, might be occurring in current community college environments.

A complicated triad of policies, structures, and the students themselves combine to create a complex community college environment. At the macro level, policies influence the operations of community colleges. For example, rather than using scarce resources to directly serve students, community colleges today tend to use resources to respond to regulatory compliance demands, legitimation pressures, and decreased funding. At the next level, structural influences can stem from colleges’ reaction to policy through the rise in the number of *managerial professionals* (college employees responsible for non-instructional activities supporting students and administrative goals), the decline of full-time faculty, and by seeking alternative funding. Lastly, at the micro level, students are influenced by policies and structures, such as college-created deadlines, required signatures, or student support services that do not adequately address their needs while enrolled.
Policies from state and federal agencies influence the operations of community colleges. Regulatory oversight is increasing expectations to ensure colleges are held accountable for the services they provide (Alexander, 2000). As policies are enacted affecting practice, colleges react in varying ways, such as hiring a larger number of service professionals to oversee new programs or by replacing full-time faculty with part-time faculty to maintain budget restrictions. As such, colleges create positions and/or departments to oversee those practices to show compliance as well as to demonstrate they are legitimate colleges (DiMaggio & Powell, 1983).

One trend shows student service professionals, such as personnel from admissions, finance, advising, human resources, athletics, computing, and business analysis, as the fastest area of personnel growth for colleges (Desrochers & Kirshstein, 2014). Within the group of employees referred to as managerial professionals, these positions are on the rise and often play a role in the many growing administrative areas of college operations (Rhoades & Sporn, 2002), such as student support, regulatory compliance, revenue generation, and workforce development partnerships. The rising number of managerial professionals replace administrative work previously done by faculty and move toward the central focus of college operations (Rhoades & Sporn, 2002).

The growth of college professional staff is outpacing other student-centered personnel growth, such as full-time faculty, where a negative growth rate of 16% has occurred (Desrochers & Kirshstein, 2014). Ironically, despite the growing numbers of student services personnel, research findings suggest students are still confused about how to navigate college (Rosenbaum, et al., 2006; Scott-Clayton, 2010). Perhaps
because so many different categories of staff are represented in this “professional”
category, the personnel growth is occurring in areas other than those directly related to
serving students.

Furthermore, the increased reliance on part-time faculty contributes to students’
inability to obtain information about college procedures. According to Desrochers and
Kirshstein (2014), over the past 20 years, part-time faculty have increased by 97% at
community colleges, compared to 31% for full-time faculty. By nature, part-time faculty
spend less time on campus, do not have dedicated private office space for student
meetings, and likely do not have in-depth knowledge of college procedures when
compared to full-time faculty (Schuetz, 2002). For students who may only have time to
interact with the faculty member in class, those classes taught by part-time faculty might
receive less useful information when compared to students interacting with a full-time,
permanent faculty member.

Additional and related research suggests that a lack of academic structure at
community colleges negatively affects students’ ability to earn a degree (Rosenbaum et
al., 2006; Scott-Clayton, 2010). Scott-Clayton (2010) wrote, “For many students at
community colleges, finding a path to degree completion is the equivalent of navigating a
river on a dark night…without a guide” (p. 1). In an attempt to provide students with a
more directed path through college, studies suggest making organizational changes to
alleviate this reported lack of structure, such as limiting choices and using cohort models
(Rosenbaum et al., 2006; Scott-Clayton, 2010). The structure of community colleges
affects how students interact with it.
However, before continuing to invest in student services professionals or adding structures that limit the diverse options typifying community colleges, we need to know more about how students themselves experience the institution, particularly as they navigate community college organizations. It is this student perspective that will help identify where to invest resources to effectively influence student progress through college. One way to obtain this information is to understand better the micro-decisions students’ encounter as they move through community college, as well as where students seek information and support, and the frameworks of understanding that informs those decisions.

Statement of Problem

Little is known about all of the decisions students make while engaging in the college-going process and while interacting with the bureaucratic college environment. Examining decisions through the lens of the student can lead to an understanding of their lived experiences as they attend college. Additionally, this point of view will shed light on the contexts influencing the students’ decisions. The contexts students face as they make decisions may present obstacles or provide a source of strength, or warm up or cool out students’ aspirations. Viewing college-going in this manner can show educational leaders how students experience the institution. An understanding of the contexts influencing students’ college-going decisions may help us to recognize the college procedures that either hinder or enable continued college-going, as well as target processes that might influence cooling out.

College students continue to make choices after their initial enrollment, and these decisions often involve bureaucratically complex steps that could impact their
persistence, engagement, funding, time to degree, and ultimately, their economic opportunities. Yet, prevailing frameworks have largely overlooked this point of view, emphasizing choice at the start of the college-going process (Hurtado, Inkelas, Briggs, & Rhee, 1997; Paulsen, & St John, 2002; Perna, 2006; St. John, Paulsen, & Starkey, 1996) with choice less integrated into theories addressing patterns and processes of the later phases of college persistence and goal attainment (Astin, 1993; Cabrera, Nora, & Castenada, 1993; Deil-Amen, 2011; Rosenbaum, et al., 2006; St. John, Paulsen, & Starkey, 1996; Tinto, 1988, 2006). I contend that students’ college-choice processes do not end at enrollment. Instead, decisions are on-going throughout college as students decide such things as whether to continue attending college, or simply whether or not to attend class, study, or join a club. Without knowing the decisions that students encounter, as well as where and how they seek information to inform those decisions, colleges are not optimally equipped to provide adequate support to assist students. Even though colleges try to solve continued enrollment problems, how students experience the bureaucratic institution is still unclear.

Minimal attention has focused on the academic and other related decisions that students make while in college, or the sources used by students to inform and assist them in these decisions (Latz, 2012; Person, Rosenbaum, & Deil-Amen, 2006; Rosenbaum et al., 2006; Scott-Clayton, 2011). Research about the decisions of college students often focuses on choice of college, selection of a major, or reasons for dropping out of college (Barreno & Traut, 2012; Cabrera, et al., 1993; Perna, 2006; Perna, Steele, Woda, & Hibbert, 2005; Tinto, 1988, 2006). These topics could be thought of as large-scale, or
macro-decisions. Rather than focusing on the macro, the present study focuses on seemingly smaller topics, in which little research exists.

Learning about the micro-decisions students’ encounter provides specific insight about whether college processes intended to assist students to navigate the institution have the desired effect. Likewise, it provides us with a general indication of how policies community colleges create in response to regulatory pressures trickle down to affect students. This student perspective leads to information useful to policy-makers at the college, state, and even the federal level, to more effectively direct scarce resources, and create/modify policies, structures, and programs to improve processes for supporting students.

**Statement of Purposes**

The purposes of this research were threefold. The first purpose was to discover the micro-decisions students make while in college, in the case of currently enrolled students at an urban community college. For the present purposes, micro-decisions were generally defined as the frequent, routine, recurring decisions students make while proceeding through college that impact their continued enrollment. To capture students’ feelings and opinions about their experiences with micro-decisions, the present study used subjective rationality, an element from Goldthorpe’s (1998) rational action theory. Subjective rationality occurs when an individual deems an action rational based on their beliefs, values, and goals, but it may not be objectively rational from an outsider’s perspective. Knowing the nature of their micro-decisions revealed what students encounter during college-going as they connected with the institution and its procedures.
The second purpose of this study was to identify what informs students’ micro-decisions, including information sources and *habitus* (Bourdieu, 1977). Information sources may have included people, published written/digital material, observation of the environment and people interacting within it, as well as individual feelings and perceptions experienced by being on campus. Assimilation of information and its subsequent use in decision-making is dependent upon habitus, which is a set of values, perceptions, ideologies, and ways of acting (Bourdieu, 1977). Passed on from generation to generation as humans construct their reality together, habitus is learned through social interaction and practiced since birth, resulting in knowledge and ways of being integrated into a person’s perspective as common sense within their social class (Bourdieu, 1977). Multiple sources of information exist for students to access and use in decision-making. Decisions are made based on beliefs, goals, and quality of information. This scenario involves various factors contributing to the final decision.

Third, using the *proposed conceptual model of student success* (Perna & Thomas, 2006) the present study explored which features of students’ situated contexts shaped decision-making experiences. “Context is the set of circumstances that frames an event” (Bazire & Brézillon, 2005, p. 29) situated specifically at the community college, thus creating ‘situated contexts.’ The layers of the model signify specific circumstances thought to influence student access and use of information, as well as their college-related decisions. The conceptual model (Figure 2) layers each context and each layer signifies a degree of influence on the student, who is located centrally in the model. The closer the layer, the more influence it has on the student. The order from the core to the outer layer is: internal, family, school, and policy context (Perna & Thomas, 2006).
The overall effect of student information gathering and decision-making, as influenced by situated contexts and subjectively rationalized, was used to explore the existence of elements of cooling out, where students are counseled systematically to eventually self-discover that they should lower their college aspirations (Clark, 1960b). Historically, those elements included counseling, terminal coursework, poor grades, and academic probation (Clark, 1960b). One half century later, cooling out may involve different elements since the community college institution itself has changed, along with changes in regulations, finances, staffing, and student population. The present study considered what, if any, elements of cooling out remain or if new elements emerged in today’s community colleges.
CHAPTER 2
LITERATURE REVIEW

Research on college choice abounds in higher education literature (Barreno & Traut, 2012; Deil-Amen & Tevis, 2010; Perna, 2006; St. John, et al., 1996). However, decision-making does not end after choosing a college to attend. Yet, limited research exists about the repeated, informed choices students make while proceeding through college. I contend that students make a choice every day to remain actively engaged in college and progress through academic study to degree completion. For example, if a student chooses to attend the local community college, the student may then encounter additional decisions about continued course enrollment, whether to join a club, or participate in a study group. Alternatively, when personal demands arise, overshadowing course-taking activities, students must decide how to divide their time and resources. Knowing how students’ personal situations intersect with situations created by the college environment through this decision-making process can provide student-centered insight regarding how they do college in certain circumstances. Policy-makers can benefit from a targeted point of view, via the lens of student perspectives, to learn more about contexts, both school and personal, that influence decisions.

This literature review begins by describing the concept of integration and its purported role in continued college enrollment to degree completion. It then covers the information access challenges of students navigating the community college organizational structure. Student decision-making is then presented. The literature review concludes with an overview of the conceptual model of student success (Perna &
Thomas, 2006), rational action theory (RAT) (Goldthorpe, 1998), and cooling out (Clark, 1960a, 1960b), which combine to frame the present study.

**College Integration and Persistence**

According to a dominant model of persistence, college integration leads to persistence, which leads to degree completion (Tinto, 1988). Integration is important for continued college enrollment and is measured by the amount of involvement/interaction students have with other people within the college environment (Tinto, 2006). Due to its cause and effect linkage, integration cannot be described without also describing persistence. Throughout this simplistically stated cause and effect process, students make decisions affecting the outcome, yet many of those decisions are absent from prominent models.

Elements of student integration differ between open access colleges, such as community colleges, and selective four-year universities. Mostly, college integration research focuses on, and identifies, experiences typical of selective residential four-year institutions, such as living on campus, becoming involved in college organizations, and going out with friends (Astin, 1984, 1993; St. John, et al., 1996: Tinto, 1988, 2006). However, the opposite typically happens for open access, commuting college students who spend minimal time on campus (Clark, 1960b; Deil-Amen, 2006; Dougherty, 2001). Additionally, students at community colleges reported more faculty contact when compared to four-year college students (Dougherty, 2001). These examples highlight just a few of the differences between selective four-year institutions and open access community colleges.
Likewise, persistence has also been widely researched in higher education, but again mostly related to selective four-year institutions (Astin, 1993; St. John, 1996; Tinto, 1988, 2006). The period of persistence begins when starting college and ends with degree completion (Tinto, 1988). The traits associated with increased four-year student persistence include academic and social integration, along with time spent living/working on campus, grades, mother’s educational level, and economic status (Astin, 1993; St. John, 1996; Tinto, 1988, 2006). While previous research focused on the role of staff in persistence and integration efforts, newer research supports the influence of faculty within the classroom on students, especially related to learning communities (Tinto, 2006). This newer finding is important for commuting community college student integration and persistence, where student attendance patterns differ from residential four-year institutions.

With regard to community college students, integration strategies focus on when and where students spend their time on campus. For community college students, findings suggest academic integration is more important for persistence than social integration (Braxton, Hirschy, & McClendon, 2004). One qualitative study of community college students showed that student engagement in community colleges occurred during interactions with faculty just prior to, during, and after class (Deil-Amen, 2011). These interactions, termed socio-academic integrative moments were found to relate positively to student integration (Deil-Amen, 2011). Given the limited time community college students spend on campus, these seemingly impromptu meetings were paramount for student/faculty interaction (Deil-Amen, 2011). Another study also showed the importance of faculty intervention on positive community college student
outcomes (Cox, 2009). The previously separated concepts of academic integration and social integration were found to occur simultaneously in community colleges and emerged as the primary method of student engagement (Deil-Amen, 2011; Tinto, 2006).

In the context of student-teacher interaction, the significance of decreased numbers of full-time faculty and increased use of part-time faculty cannot be overlooked. Analyzing survey data from 1,500 faculty members, 29% of whom were part-time, Schuetz (2002) concluded, “part-timers tend to be less familiar with availability of campus services…and express less knowledge of students’ need for and use of support services” (p. 44). Compared to full-time faculty, this result indicates part-time faculty members are less prepared to assist students in the classroom regarding available college resources. Furthermore, in the same study, part-time faculty reported spending ‘no time outside of class with their students’ at a rate twice that of what full-time faculty reported. From these findings, one conclusion is that socio-academic integrative moments occur less frequently between part-time faculty and students compared to full-time faculty.

These above research findings suggest students must choose to be involved in college activities to create the best circumstances for continued enrollment. However, research neglects to give attention to the fact that participation is a choice and also fails to explore the contexts influencing decisions, as well as the access and/or use of information to guide these choices. The research assumes students have no other responsibilities beyond attending college and, therefore, can readily participate. Yet, this is not typical for most community college students, who have multiple responsibilities outside of college (CCCSE, 2013). Since college student integration is a factor in continued college enrollment (Astin, 1984, 1993; Tinto, 1988), it is important to understand their choices.
Overall, research addressing integration processes frequently focuses merely on quantitative measures of the traits and activities influencing persistence, such as grades, economic status, and time spent on campus (Astin, 1993; St. John, 1996; Tinto, 1988, 2006). More recent qualitative studies about how community college students, in particular, experience integrative processes, such as socio-academic integrative moments with faculty in and around the classroom (Deil-Amen, 2011), as well as the importance of positive faculty interaction (Cox, 2009) are informative, yet have not specifically explored the ways students make on-going decisions during their enrollment or how they learn to behave as a college student. Nor does available research explore what circumstances/factors students consider when deciding how to approach their coursework or whether to continue their college enrollment. Such micro-processes, and the contexts that influence them, have not been explicitly identified nor systematically analyzed in higher education research.

Community Colleges and Student Access to Information

The organizational structure of community colleges can create challenges for students as they actively proceed through college. The open access nature of these institutions means that any able and willing person can enroll and attend (Clark, 1960b). Community colleges serve multiple educational purposes, including occupational, liberal arts, academic transfer, developmental, continuing education, and community education (Cohen, Brawer, & Kisker, 2014; Meier, 2013). With these varied educational opportunities, comes the need for students to make decisions affecting their college-going experience. This section identifies the structural processes within community college organizations that influence information gathering. It also describes the intersection of
college structure with student traits. Lastly, this section identifies the sources of information students consult related to their college-going decisions. Throughout this section, the relationship between information access and use in decision-making is described.

**Community college organizational structure.** Serving multiple missions, community colleges respond to varying state and federal policies, as well as legitimation pressures. Recently, significant reductions in state financial contribution to community colleges, especially in the state where the present research study took place, resulted in tuition increases (College Board, 2013) and the potential need for alternative revenue generation. One method for increasing revenue is through partnerships with local businesses (Bailey, 2003). This effort fosters a possibility for increased funding and/or sponsorship of faculty/staff positions in return for training their labor force.

Declining state aid and greater focus on the labor market increases the need for managerial professionals leading to administrative bloat (Rhoades & Sporn, 2002). Because they are neither faculty nor administrators, these professional staff lack the autonomy afforded to faculty and fall under the confines of administrative control on their time and duties (Rhoades & Sporn, 2002). Yet, they are legitimized through their “professional associations, conferences, journals and bodies of knowledge that inform their practice” (Rhoades & Sporn, 2002, p. 16). Often, the work of managerial professionals involves revenue generation, professional development for instructional resources, and delivery of student support services such as advising or counseling (Rhoades & Sporn, 2002). The rise in managerial professionals as a response to the
changing environment of education is seemingly meant to assist colleges to continue serving students and operating effectively as an institution.

Decreased funding also means less money to hire full-time faculty, whose ranks have declined compared to the rise of managerial professionals, and whose role part-time faculty is increasingly fulfilling (Desrochers & Kirshstein, 2014; Rhoades & Sporn, 2002). Declining faculty levels relative to the rising staff positions effectively shifts the power of peripheral units to the core of the institution (Rhoades & Sporn, 2002). The net effect of these actions is a shift in institutional mission. Rather than focusing on educating students, the focus is on revenue generation, regulatory compliance, and the staff needed to manage those activities. Peripheral services become core, shifting the focus away from education. Already a marginalized population, community college students become further marginalized by this lack of focus on education.

The community college organizational structure can also affect students as they contemplate and implement decisions related to progression along their academic path. Such decisions typically require information, which can be difficult to obtain and/or insufficient at community colleges (Rosenbaum, et al., 2006). Results from qualitative interview data indicated inadequate information hinders decision-making among community college students (Person, et al., 2006). Barriers to obtaining adequate information may result from confusing course descriptions, unknown consequences of remedial courses, and staff providing deficient advice (O'Gara, Mechur Karp, & Hughes, 2009; Rosenbaum, et al., 2006). Part-time faculty, who are not fully integrated into the college system but often a primary contact for students, are ill-equipped to provide
students with procedural information (Schuetz, 2002). These studies show how organizational structures play a role in community college students’ information access.

Problems obtaining information may stem from college procedures (Person, et al., 2006), identified as “bureaucratic hurdles,” late timing of college success courses (O’Gara, et al., 2009), as well as the inability to meet with advisors due to their high student load (Rosenbaum, et al., 2006). Even in today’s digital age, when many students seek information online, college websites provide confusing information resulting in students misunderstanding its content (Margolin, Miller, & Rosenbaum, 2013). Confusing, contradictory, or missing information causes students to lose self-confidence, decreasing their decision-making ability (Schuetz, 2005). Clearly, community colleges attempt to provide students with information they need and can use during their college enrollment. However, the structures in place and perhaps implicit norms seem to confuse, rather than clarify.

Finally, the process of cooling out (Clark, 1960b), when low achieving students are urged toward a lower degree aspiration by teachers or counselors, may also transpire in today’s community colleges. In the 20th century, elements of cooling out included: taking terminal courses, receiving grades not conducive for transferring to a university, counseling geared toward lowering aspirations, and being on academic probation (Clark, 1960b). These multiple actions were designed to lead a student to determine, seemingly on his or her own, that college aspirations were higher than ability. These students were also referred to as latent terminals describing those who initially desired university transfer, but were “cooled out” through the strategies above, instead realizing they were destined to end their education at the community college with a vocational/terminal
degree (Clark, 1960b). These structures were present many years ago, but it is unclear if any still exist today. Instead of this traditional definition of cooling out, there may be another possible definition relevant for the current political and structural community college climate affecting a student’s ability to access and proceed through timely education. A more detailed discussion of cooling out occurs in the theoretical framework section.

**Community college structure intersecting with student circumstances.**

Overcoming institutional barriers for acquiring information may be more or less difficult depending on a student’s background and individual life circumstances functioning within the college structure. Individual background and life circumstances can contribute to a student’s ability to navigate the structure of community colleges (Deil-Amen, 2011; Goldrick-Rab, 2010) and influence decision-making (Cox, 2009; Galotti, Ciner, Altenbaumer, Geerts, Rupp, & Woulfe, 2006; Morey & Dansereau, 2010; Scott-Clayton, 2011). Institutional structures tend to disempower, neglect, or fail to meet the needs of community college students in structured and systematic ways. For example, required entry testing may lead to placement in remedial courses resulting in prolonged time to degree completion and increased college costs (Rosenbaum, et al., 2006). College costs directly influence persistence, with a lower cost improving the likelihood of persistence in community colleges (Braxton, et al., 2004). Other examples include high student-to-advisor ratios hindering access to that service, along with the lack of, incorrect, or even too much information causing confusion for students (O’Gara, et al., 2009; Rosenbaum, et al., 2006). Depending on individual circumstances, some students may struggle in
response to the college structures as they make their way through the college environment.

The academic institution’s procedures intersect with student circumstances affecting various aspects of college-going. Students bring with them individual characteristics and must then learn how to function within the community college environment based on their habitus and cultural capital. Specifically, students from low socio-economic backgrounds are less likely to navigate college to obtain information successfully (Goldrick-Rab, 2010; Person, et al., 2006; Rosenbaum, et al., 2006). When navigating college procedures, students with non-college educated parents also experience greater challenges obtaining information (Person, et al., 2006). These marginalized populations are enrolled disproportionately in community colleges (Dougherty, 2001; Levin, 2007; National Conference of State Legislatures, 2006). Thus, individual characteristics seem to collide with institutional structures resulting in disempowerment, rather than empowerment, of already marginalized community college students. Nonetheless, these students work hard pursuing their college aspirations and their determination is likely born from their circumstances.

Besides familial and individual characteristics, such as the ones above, students’ feelings and perceptions influence their college-going decisions. The amount of fear or anxiety regarding potential failure in college, including level of commitment, may be instrumental in students’ ability to navigate college procedures (Cox, 2009), which are multiple, potentially conflicting, and/or not explicit. Students’ levels of fear influence their success in college courses, especially without college personnel, namely faculty, intervention (Cox, 2009). While researching students in one specific required community
college course, trends indicated that the greater the students’ fear of failure, the more likely they were to choose delaying the course, delaying coursework/assessment, or withdrawing from the course altogether and emerged as a method of managing fear (Cox, 2009). Additionally, students also struggled with fears and doubts when they felt confused or when they perceived a real possibility of making mistakes (Cox, 2009).

Concerns about being able to successfully transition into the college student role were at the base of these students’ fears (Cox, 2009). Engagement/integration research suggests that successful transition into the college student role, especially during the first year of college, is required for persistence (Astin, 1984; Tinto, 1988). These research findings illustrate how fear influences decisions and why it was important to consider in the present study.

Analyzing Tinto’s (1988) model of student departure, Braxton, et al. (2004) found support for the influence of entry characteristics on two-year college persistence. Level of fear could be considered an entry characteristic located within the ‘internal’ context of Perna and Thomas’ (2006) conceptual model of student success. However, this element is neglected despite the fact that it has an obvious influence on decision-making and student success. As important as Cox’s (2009) findings are to understanding community college student decision-making, there is a lack of attention to situated contexts, other than the internal context, which may also influence level of fear and the resulting course-related decisions used to mitigate that fear. The present study considered fear as a part of internal context, as well as how other contexts intersected with fear.

In summary, research indicates that background and life circumstances of marginalized community college students contribute to diminished information access in
an already confusing and structurally rigid institution. Regardless, community college students attempt to obtain and use information. The source, use, and influence of information on students’ actual decisions, many of which have yet to be identified in community college settings, requires additional research to determine the linkage between implemented decisions and the contextual influences of college policies, processes, and the students’ external demands, such as family and work. The interrelationships of community college organizational structures hinder information access based on student’s internal context, such as fear of failure or level of self-confidence. Thus, the present study moved beyond a primary focus on students acting on or within the community college environment, to a focus on how the college environment influences students’ decisions during their college-going experience.

**Sources of information for students about college-going.** It is important to understand the sources students use to obtain information. Even though a source may be present, this does not dictate that it is available to the student. Likewise, even though a student may access information, it may lack quality or relevance. Additionally, students’ situated contexts can influence information gathering. Information sources also provide an indication of how students experience the institution, whether they use available information, or even if they know the information is available and where to find it.

Students can seek information from multiple individuals from outside or within the college environment. An *institutional agent* is someone who holds a high socio-cultural position who provides information or resources to assist students with a lower socio-cultural position to perform/operate within an institution (Stanton-Salazar, 2010). Specifically, “resources can include information about school programs, academic
tutoring and mentoring, as well as assistance with career decision-making and college admission” (Stanton-Salazar, 1997, p. 6). In a study of ethnic minority students, referred to as low-status youth, Stanton-Salazar (2010) found that those who had assistance from institutional agents were more likely to succeed. Sources of information include friends, family, or classmates (Deil-Amen, 2011; Person, et al., 2006; Scott-Clayton, 2011). However, the information obtained from them may not yield the best results since many community college students are often the first in their family to attend college and their peers are often pursuing different goals (Scott-Clayton, 2011). These other information sources qualify as institutional agents, according to Stanton-Salazar (1997), who noted, “a segment of society gains the resources, privileges, and support necessary to advance and maintain their economic and political position in society” (Stanton-Salazar, 1997, p. 6).

Additional research has shown the importance of institutional agents in the community college. For example, studying transfer from community college to a four-year institution, Bensimon (2007) reported on the positive influence college personnel had on student success, highlighting that student success requires more than an individual desire to succeed. Assistance from institutional agents knowledgeable about the community college can be beneficial for students. For community college students, navigating implicit procedures often necessitates assistance from the professionals within the institution or those who have already learned the procedures, such as peers/classmates.

However, as previously stated, the information obtained from college personnel can be a source of confusion or non-existent. Increased part-time faculty means more
institutional agents who are not highly informed about college services (Schuetz, 2002). Broadly, institutional agents working at the college are referred to as managerial professionals (Rhoades & Sporn, 2002). The managerial professionals are mostly student services, non-instructional personnel and the number of managerial professional positions is growing at a faster rate when compared to faculty (Desrochers & Kirshstein, 2014; Rhoades & Sporn, 2002). It seems logical that such growth would benefit students. Yet, even though there is growth in student services personnel, there is evidence that student services staff have a very high staff to student ratio (Rosenbaum, et al., 2006), and students remain confused about how to navigate community college structures (Rosenbaum, et al., 2006; Scott-Clayton, 2011). The extent to which managerial professionals, specifically advisors, financial aid staff, and registration personnel play a role in student micro-decisions was explored in the present study.

Determining the sources students use to inform micro-decisions is an important aspect of higher education persistence. Beyond managerial professionals, resources may also include written material (digital/print), environmental cues, and/or perceptions about campus. One of the present study’s goals was to identify the sources of information students’ use for decision-making as they advance through college, including how they interpret the information within their habitus, situated contexts, and subjective rationality. This information provides community colleges with a greater understanding of how their culture, policies, and organizational structure influence students as they pursue their degree and inform institutional practices to more specifically assist students as they progress through college.
Student Decision-making

Student decision-making does not end after choosing a college to attend. Along with habitus, constraints from community college structure, and students’ demands outside of college-going, the information students have available influences their decisions while progressing through college. This section describes research on student decisions and decision-making as they proceed through community college.

Select decisions students encounter. Studies of decisions students make while in college are limited in scope. Research about decision-making often focuses on a single type of decision, a subgroup of the student population, or a specific kind of institution (Kiyama, 2010; Morey & Dansereau, 2010; Rosas & Hamrick, 2002; Salisbury, Paulsen, & Pascarella, 2010). For example, consider a student’s intent to study abroad, which was researched quantitatively and focused on the Hispanic and Asian-Pacific Islander populations in liberal arts colleges (Salisbury, et al., 2010). For the study populations, results showed the influence of gender, socio-economic status, and parental education level on students’ intent to study abroad. Another example is from a qualitative study of community college students about whether to take courses online or face-to-face. The results indicated that students were more likely to take classes they considered easy or less important online and to take difficult or important courses face-to-face (Jaggers, 2013). These decisions are important, yet focus only on limited aspects of students’ community college experience.

Other studies focused on select decisions of students within selected racial minority groups described how personal traits, high school academic preparation, and family pressures influenced the choice of a major (Galotti et al., 2006; Rosas & Hamrick,
This choice may happen prior to college enrollment, making it less relevant to a decision encountered while proceeding through college. However, since students can and do change their major after enrollment, these contextual influences may be relevant to the present study. Finally, the personal trait of a students’ level of fear resulted in decisions to delay course-taking, withdraw from the course, or drop out of college (Cox, 2009). As a characteristic of internal context, the influence of fear on students’ decision-making was considered in the present study.

Although the aforementioned studies are helpful to inform practices for specific college types, college activities, or student success strategies, these examples of decisions made in college focus on narrow subsets of the population and only select segments of students may encounter them. Nonetheless, some aspects of these studies were incorporated into the present research study, such as the reasons for selecting in-person or online courses and the influence of students’ level of fear. These aspects of decision-making were explored as contexts under which students constrain their decisions.

**Effect of external demands on decisions.** Demands outside of the on-going academic process may force students to contend with continued college enrollment decisions. Community college students are more likely than four-year students are to be employed while going to school (Astin, 1984; Perna, 2010; Roksa, 2006). Qualitative studies show that community college students have multiple demands outside of academics, such as family and work, challenging their ability to proceed through college (Horn & Nevill, 2006; Latz, 2012; Perna, 2010). This is congruent with quantitative data that showed in 2011, 67% of full-time and 78% of part-time community college students worked (CCCSE, 2013). In the same report, dependent family responsibilities affected
53% of full-time and 60% of part-time students (CCCSE, 2013). Clearly, community college students have multiple, possibly simultaneous, demands complicating college-going activities.

The influence of multiple external demands on decision-making needs additional research since current literature primarily identifies the existence of these demands, but does not include their direct impact on student decisions. Although less than half of community college students graduate (CCCSE, 2013), there are students who have successfully managed these multiple demands. Besides merely identifying the existence of these demands and their purported limiting effects, research should focus on understanding how students coordinate all of these demands to make on-going college-related decisions.

**Micro-decisions.** As students proceed through college, they make recurring decisions affecting their college-going experience. Navigating college, or making the journey from entrance to completion, requires students to make decisions about “what they want to do, plan how to do it, and then follow through on these plans” (Scott-Clayton, 2011, p. 3). For the purposes of this study, these recurring college-process decisions are referred to as micro-decisions. Little is known about which specific micro-decisions community college students encounter during college-going, with the exception of research previously presented which focused on the specific topics of study abroad, course delivery method, choice of major, and anxiety level, each among specific population subsets or college types.

Research suggests some micro-decisions may include the sequence of courses, number of courses per semester, or what to do if a required course is full (Rosenbaum, et
al., 2006; Scott-Clayton, 2011). These course-taking decisions are on-going, recur term after term, and are an important factor in college completion (Rosenbaum, et al., 2006; Scott-Clayton, 2011). However, decision-making for community college students includes so much more than course-taking choices. I contend that students decide every day about whether to go to class, continue with a difficult course, complete homework, participate in classroom activities, or continue in college altogether; the choice to participate in school clubs or utilize academic resources on campus are additional decisions students face. Likely, other student micro-decisions exist that have yet to be identified. The present research study begins to fill that gap.

**Information use in decision-making.** Few studies address the college-going decision-making of community college students. Of those that do, similarities emerge related to the lack of information students receive to help them persist (Goldrick-Rab, 2010; Latz, 2012; Person & Deil-Amen, 2006; Rosenbaum et al., 2006; Scott-Clayton, 2011). One qualitative research study found students use only a minimal amount of information for decision-making and often do not consider alternative choices (Person, et al., 2006). The same study found that a lack of information discouraged students and interfered with planning (Person, et al., 2006). In short, planning requires decision-making.

Without adequate information to plan and make decisions, students are disadvantaged by possibly taking the wrong course, delaying completion (Deil-Amen, 2011), or not enrolling in college altogether (Scott-Clayton, 2010). These situations impact students in ways that have only been a minimal focus in higher education studies. Knowing the micro-decisions students encounter while attending college, proceeding
through coursework, and navigating institutional structures will lead to greater understanding of student support needs. Therefore, it is important to study students’ experiences with decision-making and the sources used to inform those decisions, while enrolled at a community college.

**Summary**

This literature review began by presenting the importance of integration for the continued enrollment of college students. It also showed how integration differs between two-year commuter community colleges and residential four-year institutions, where most research appears. Of primary importance to integration for community college students are socio-academic integrative moments, which are where commuter college students’ main interaction with faculty occurred before, during, and/or after class (Deil-Amen, 2011). Students may not benefit as greatly from their socio-academic integrative moments when those moments occur with part-time faculty, whose numbers are rising. This is because part-time faculty were shown to spend less time on campus and possess less knowledge about college support services to help students compared to full-time faculty (Schuetz, 2002). Although we know integration is important to continued college enrollment (persistence), we do not know what factors influence students’ decisions to interact with others at the college or spend time on campus.

Next, the literature review described some of the structural barriers within community college organizations hindering students’ attempts at information gathering. Such barriers included high student-to-advisor ratios and managerial professionals increasingly doing the work of fundraising and legitimation activities rather than student support services. These two items contribute to the difficulty students have in obtaining
information. However, the literature review also showed that once students gain access to information, it could be confusing, contradictory, and/or inaccurate (Rosenbaum, et al., 2006). We know there are more managerial professionals in the community college whose role often is to help students, but we do not know how their increased presence actually impacts students as they attempt to make decisions that affect their college-going.

In addition to information sources and access, information quality can influence students’ decisions. Sources of information for students about college-going include college personnel (faculty, advisors, financial aid personnel, registration staff, other college employees), family, friends, and college peers. Referred to as institutional agents, these various individuals provide resources to help students access information and navigate complicated college procedures (Stanton-Salazar, 1997, 2010). Although the literature findings reveal that information quality, and even access, is lacking or confusing, we do not know how that affects students’ decision-making or the various contexts influencing information gathering.

Additionally, personal traits may affect decisions, which are influenced by the information gathered, as well as the ability to obtain information. The influences of individual characteristics on information access within the community college structure were identified. When college structure intersects with certain student traits, additional barriers emerge. The student population typical of community colleges (first generation, low socio-economic status) experience greater challenges navigating institutional procedures (Person, et al., 2006). Additionally, required college courses intersect with student’s level of fear, influencing course-taking behavior (Cox, 2009). Thus, research
points to the importance of considering personal traits when exploring access to information from within community college structures.

The research presented does not encompass a wide-range of decisions community college students encounter since that information is not entirely explicit in the literature. Some decisions students make while in college have been presented, such as the choice to study abroad (Salisbury, et al., 2010) or take a course online instead of face-to-face (Jaggers, 2013). Narrowly focused, these studies only affect a small number of college attendees. Likewise, little research exists about how community college students’ multiple external demands, such as working full-time or supporting a dependent family, affect their college-going decisions. We know multiple demands exist for students as they attempt to proceed through college, but we do not know how these intersect with the college environment, or how this affects them or the decisions they ultimately make.

As a way to start filling the gap left from a lack of explicit attention to students’ college-going decision-making, I introduced the concept of micro-decisions as process related, individual, and recurring decisions. The present study begins to discover students’ micro-decisions as they interacted with bureaucratic community college procedures, identifying the sources students use to inform those decisions, and ways students use the information within their situated contexts. Knowing the sources of information, how students use information, as well as the micro-decisions students make, can inform policy-makers on where they should invest scarce institutional resources and guide the development of strategies to assist students as they persist through community college.
Although presented as individual topics, the interconnectedness between information access, college structure, individual traits, and decision-making are inextricable. Complicating this interconnectedness is the students’ level of knowledge about navigating college, which may result from their marginal status, access to institutional agents, or level of commitment. Likewise, the long-standing process of cooling out (Clark, 1960a, 1960b) may exist today, stemming from institutional structure, personal traits, too many external demands, or a combination thereof. Similarly, a student’s response to the college environment, its cues, and processes may play a role in maintaining cooling out, as may college structure. The influences of these intersections were explored in the present study through the research questions, theoretical framework, and openness to emergent themes during data analysis.

**Theoretical Framework**

This section describes the theoretical framework used in the present study about community colleges. The conceptual model of student success introduced by Perna and Thomas (2006) provided a contextual foundation for framing the present study. For the present study, the contexts were used as categories to show how they influence students’ micro-decisions. Then, drawing from two aspects of Goldthorpe’s (1998) rational action theory, ‘situational understanding’ and ‘subjective rationality’ provided a means for capturing student perceptions of their experiences with micro-decisions, information gathering, and interacting with the bureaucratic community college institution. Finally, the present study considered the theory of cooling out (Clark, 1960b) and how it might transpire in today’s community colleges.
Situated Contexts: A Foundation for the Theoretical Framework. One purpose of the present study was to identify the micro-decisions community college students describe making within the community college institution. Since students are actively attending college and attempting to fulfill all of the requirements necessary for enrollment, paying for classes, attending/completing classes, among other things to be identified in the present study, these micro-decisions provide insight into how the institution operates and its potential consequences for students. Additionally, it also identified which features of students’ situated contexts most shape their decisions and the sources used to inform them. To understand what influences on-going choices students make after entry into college, the present study applied the conceptual model of student success (Perna & Thomas, 2006).

Before presenting their elaborated model, Perna and Thomas (2006) drew conclusions from their research about policy level college accountability measures in order to identify “10 indicators of student success representing four key transitions in a success process” (see Figure 1, unaltered from original) and “define student success as the completion or maximization of these indicators” (p. 4).

![Figure 1. Key transitions and indicators of student success. SOURCE: Pern & Thomas (2006).](image-url)
The college achievement transition consists of three success indicators: academic achievement, transfer, and persistence. To achieve any and/or all of these indicators of college achievement successes, community college students must make on-going decisions regarding their academics as well as whether and how they will persist and transfer. The present study focused on these micro-decisions while paying close attention to the institutional context in which such decisions occurred.

Perna and Thomas (2006) recommend applying their elaborated conceptual model of student success to research on any of their 10 success indicators (Figure 1). Based on psychology, education, economic, and sociology research, their model shows the student at the center with four surrounding situated contextual layers. The model’s use is intended to guide the creation and implementation of policies for student success using qualitative and/or quantitative data (Perna & Thomas, 2006) (Figure 2, unaltered from original).

The layers signify contexts shaping student success. The four situated contexts of the model (listed from closest to furthest from the student) are “internal, family, school, and social, economic, and policy context” (Perna & Thomas, 2006, p. 8). These layers of contextual influence often interact simultaneously in a mutually reinforcing way to shape the processes contributing to student success.

Perna and Thomas (2006) wrote, “the proposed model assumes that student decisions are shaped by four nested contextual layers. The multilayered nature of the proposed model recognizes the possibility of interactions between layers” (p. 10). The present study intended to move beyond assumption to offer actual student perspectives on how these multiple and cross-cutting layers of context influenced their decisions.
The students’ attitudes and behaviors are within the centermost layer (layer 1), referred to as internal context, indicating their direct influence on the student. Other examples of qualities within this context include cognitive and motivational processes (Perna & Thomas, 2006), habitus, and self-efficacy expressed as a level of fear. Three years after this model’s creation, Cox (2009) found students’ level of fear influenced course-taking decisions. Therefore, this emotional motivator was considered as another component of internal context in the present study.

Figure 2. Proposed conceptual model of student success. SOURCE: Perna & Thomas (2006).
The next context (layer 2) is family. Perna and Thomas (2006) describe students as dependents of and influenced by, their parents. Family context is missing characteristics of non-traditional students, such as being a parent or primary/contributing wage earner. This is a potential shortcoming in the broad nature of the model and its intended uniform application across the four key transitions. The present study considered both dependent and independent students in the family context.

Signifying the “compounding effects” of resources, preparation, and orientation, the school context (layer 3) identifies the “seamless continuum from primary school through college” (Perna & Thomas, 2006, p. 16). Thus, this layer includes the college level contexts relevant to the present study, such as organizational structure, culture, resources, policies, processes, faculty, and staff. In particular, the present study considered the relevance of managerial professionals (advisors, financial aid personnel, and registration staff) on students’ attempts at information gathering and influence on students’ decision-making. Specifically related to community colleges are the rise of both managerial professionals and part-time faculty. This may have a ‘compounding effect’ on the quality of assistance/information students receive since the role of managerial professionals is being diverted to non-student-oriented roles (Rhoades & Sporn, 2002) and since part-time faculty lack knowledge about available services to assist students (Schuetz, 2002). Lastly, the outermost situated context (layer 4) — social, economic, and policy can have a direct or an indirect effect on the student, exerting influence via policy changes, such as adjusting in-state tuition requirements, or economic turbulence, such as unemployment.
In conclusion, the conceptual model of student success (Perna & Thomas, 2006) offers guidance about how and what situated contexts influence decision-making. The model provides a way for understanding how these four layers of context, and any interplay occurring among them, are relevant to students as they make on-going decisions that either immediately or ultimately impact their community college goal(s). The present study identifies the aspects of these situated contexts that appear to shape students’ decision-making experiences and describes students’ interpretation of how they are relevant. Applying situated contexts provides a foundation for understanding how students access and utilize various sources of information and structures of support in continuous/recurring college-going micro-decisions within these multiple layers of context as they progress through community college.

**Situational Understanding and Subjective Rationality.** Influenced by contexts, perhaps concurrently, students encounter scenarios requiring decision-making, which impact on-going community college attendance. Both personal and college-related contexts intersect when students attempt to navigate complex bureaucratic procedures. Information students obtain from managerial professionals or institutional agents serve to set the stage for micro-decisions. These circumstances create a level of understanding for the student, who then takes action based on that understanding. Two concepts from rational action theory, ‘situational understanding’ and ‘subjective rationality’, (Goldthorpe, 1998) provide a means for framing students’ perspectives of their micro-decisions.

Rational action theory stems from economics and is a term coined by Goldthorpe (1998) in lieu of the pre-existing rational choice terminology. Goldthorpe advocates the
use of rational action theory as a sociological tool for analyzing decisions of individuals within a situational context. According to Goldthorpe, “Rational action may be understood as an ‘outcome-oriented’ kind, in which certain requirements are met regarding the nature of, and the relations among: actors’ goals, their beliefs relevant to the pursuit of these goals, and the course of action which, in given circumstances, they then follow” (p. 169). This definition of rational action corresponds to what happened in the present study, since students chose a course of action based on their community college goals and circumstances (contexts).

According to Goldthorpe (1998), ‘situational understanding’ occurs when “actors [pursue] their goals as best they know how in the situations in which they find themselves” (p. 185). This scenario precisely describes students who are actively involved in college-going and facing on-going, repetitive choices. For the student, ‘situational understanding’ develops in response to interactions with community college personnel and knowledge about community college procedures, as well as the contexts influencing the situation as they attempt to complete a short/long-term goal or simply complete a college procedure. It follows, then, that a decision results from the student’s situational understanding. Therefore, these are the scenarios analyzed in the present study.

Additionally, situations created by community college procedures and/or interactions with managerial professionals intersect with students’ attempts at rational action (decision-making). Goldthorpe (1998) presumes that individuals typically act rationally. Subjective rationality happens when individuals who, “have ‘good reasons’ for doing so” (Goldthorpe, 1998, p. 179), act on their understanding and beliefs of a
situation. Based on this explanation, it may appear as though there are only rational decisions when solely viewed from the perspective of the individual who is carrying out the decision. However, irrational and non-rational actions do occur, but as Goldthorpe asserts, prior to such a conclusion, an understanding of rational decisions is first required.

Situational understanding was used in the present study to capture students’ feelings and opinions about their experiences with college-going, specifically in response to how they perceive the process and outcome of interacting with the community college environment, its personnel, and its procedures. For the purpose of the present study, students were considered as making rational decisions based upon their available information and the situated context, especially considering an outsider cannot experience the impact of someone else’s contexts.

The present study accepts Goldthorpe’s (1998) assertion that individuals, in this case students, are rational and act in the most rational manner possible according to their beliefs, goals, and understanding of the situational context(s). Although rational action theory may be a source of debate, its use in the present study involved only two concepts to capture students’ feelings and perceptions (rationality) surrounding decision-making while attending community college. These two concepts, ‘situational understanding’ and ‘subjective rationality,’ are compatible with the rest of the theoretical framework used in the present study. Building in multiple and/or simultaneous contextual influences may provide new ways to understand these two components of rational action theory.

Perhaps viewing decisions in this manner is more accurate and considerate of community college students’ perspectives. For example, low-income students have been described as ‘debt averse’ (Cunningham & Santiago, 2008; Dowd & Coury, 2006) as if it
were a character deficiency. Rather than applying external judgments upon student preferences, rational action theory may more accurately capture how students with multiple responsibilities make decisions in context regarding financial aid, as well as other micro-decisions about course enrollment or number of credits per semester. The various contexts influencing students may provide additional insight for understanding decision-making and more closely resemble these students’ lives.

The contexts Perna and Thomas (2006) identify provide categories for analyzing rational actions emerging from situations students encounter while attending community college. Under the assumption of students acting rationally, these contexts provide a basis for identifying what influences students’ micro-decisions as they attempt to navigate community college procedures and obtain information from managerial professionals. Combining the situated contexts of the conceptual model of student success (Perna & Thomas, 2006) and select components from rational action theory (Goldthorpe, 1998) provide the current framework. The two theories and conceptual model work together to guide the exploration of which contexts most influenced students’ micro-decisions, students’ perceptions of their resultant actions/experiences, the impact of managerial professionals as information sources, and what/if elements of cooling out exist as students attempt to act rationally in pursuit of their community college goal(s).

**Considering Cooling Out.** The long-standing notion of cooling out may still be a function performed by community colleges. However, the methods contributing to it may differ from those originally reported by Clark (1960b), which were terminal courses, low grades, academic probation, and counseling students to acknowledge their academic aspirations were unfeasible. Entrance testing leading to remedial courses begins the
academic record supporting poor performance, and results in counseling sessions aimed at gently guiding a student to choose more suitable courses other than the rigorous transfer-oriented courses (Clark, 1960b). In addition, these students participate in a mandatory orientation class, also taught by counselors, designed to guide students toward occupational/terminal coursework through somewhat covert methods of self-reflection on aptitude based on low entrance exam scores, along with vocationally oriented survey tools designed to identify a student’s occupational interest and aptitude (Clark, 1960b). These are the first steps of the cooling out process designed to convince transfer-oriented students to self-select out of transfer curricula and into occupational degree tracks.

During the cooling out process, students retain decision-making capability. Guided by counselors and teachers after receiving poor grades, students self-select into lower level courses. Then, after a few semesters (if not sooner) and repeated encounters with counselors and teachers encouraging the student toward an alternate, lower-level educational path, the student himself decides to declare a vocational/terminal degree rather than university transfer. Although the student believes he made this conclusion and decision on his own, the cooling out process, as defined by Clark (1960b), worked as planned. For cooling out to be effective, “it needs to remain reasonably latent, not clearly perceived and understood by prospective clientele. Should the function become obvious, the ability of the junior [community] college to perform it would be impaired” (p. 165). This statement speaks to students not being aware of this function, while full awareness existed for those working at the community college. If cooling out exists today, it may not be an explicit practice of managerial professionals or faculty.
Another important aspect of the cooling out process is the notion that “the student also moves through a funnel, with various persons and devices gradually narrowing his movement” (Clark, 1960b, p. 163). Clark used the aforementioned statement to highlight the intentions of staff and instructors to convince students toward recognizing their failure early on in their college career and coming to acknowledge that their original aspirations are unfeasible. Once students realize university transfer is not an option, “the junior college teacher-counselor practices the art of consolation” (Clark, 1960b, p. 164). Currently, however, the ‘funnel’ statement may have more relevance to the organizational structures in place at the community college which, over a more lengthened period of time, constrain a student’s choices, information access, and ability to navigate both the implicit and explicit procedures of college-going, thus resulting in a similar acknowledgement that their original aspirations were unfeasible.

Currently, there may be other aspects of community college personnel leading students to determine their aspirations are unfeasible. Community colleges no longer primarily provide a place for those who could not enter a university directly from high school, nor do they primarily ease over-crowded four-year institutions or help them maintain a higher-level selective student population, as Clark declared (1960b). Nor do they primarily serve dependents living at home with minimal obligations external to school. Many students attending community college’s today work and have to care for family (National Center for Education Statistics [NCES], 2015). Community colleges are changing and now serve multiple student populations, many of whom are first-generation, ethnic minority, non-traditionally aged, and financially independent (NCES, 2015), who have varying educational goals. Since the mission of community colleges
has evolved, cooling out may have evolved, as well, to include processes other than those identified 55 years ago.

Today, the cooling out process may reveal itself in differing, as well as similar, ways as those described by Clark (1960b). For instance, some community college students still take terminal courses and receive grades non-conducive to university transfer (Rosenbaum, et al., 2006). However, the role of counseling likely does not play such a prominent role as it did in Clark’s era, because there are so many more students than there are community college counselors, leading to a lack of access to counselors by students (Rosenbaum, et al., 2006). In addition to the now minimized and marginalized role of counselors, when contact does occur, it may often be to enact simply procedural requirements while encouraging, rather than discouraging, student aspirations (Brint, 2003; Cox, 2009; Rosenbaum, et al., 2006) in a process termed *warming up*, which is when a student aspires to a higher educational degree than originally intended (Rosenbaum et al., 2006). As a potentially dissimilar process, community college personnel may no longer actively participate in the cooling out process, but they may not be actively assisting students either. These potentially dissimilar processes, given the evolution of community colleges, may present today in novel and unaccustomed ways. Currently, an entirely new definition may best describe cooling out.

Since there is no academic standard for open access community college programs, there are rarely criteria for academic probation. However, students receiving scholarships or financial aid often have criteria, such as minimum GPA, number of concurrently enrolled credit hours, and percentage of credits completed each semester in order to continue receiving the financial support (Deil-Amen, Rios-Aguilar, 2014). In
these instances, students could be placed on financial aid probation if they are not meeting the required criteria. Thus, this element may still be enacted today, but under slightly different circumstances from those originally described by Clark (1960b).

I contend a form of procedural cooling out may be occurring in today’s community colleges based on organizational structural barriers, such as the time it takes to navigate the system by waiting in long lines to register and/or see an advisor (Rosenbaum, et al., 2006). Even with the growth of managerial professionals, who are typically responsible for assisting students (Rhoades & Sporn, 2002), research shows students still struggle with college procedural navigation (Rosenbaum, et al., 2006; Scott-Clayton, 2010). Students with multiple demands, which is becoming increasingly common in community colleges, often do not have the free time to devote to the aforementioned activities since many must work and/or attend to family (NCES, 2015), resulting in procedural cooling out. Facing such a scenario, students may conclude their educational aspirations are unattainable.

Another potential process for procedural cooling out may result from confusing financial aid application processes, late disbursement of financial aid monies, or financial aid probation (Deil-Amen & Rios-Aguilar, 2014). There is cooling out because students may not be able/or willing to obtain a short-term loan to cover costs, pay out-of-pocket for classes, get the books they need to be successful in the course, or take the required credits while maintaining the necessary grades given their multiple demands (i.e. work, family). The additional time needed to enroll in a course, successfully complete coursework, and earn a degree means these marginalized students must choose to take time away from other activities, such as working, which may not be an option for
students with low socioeconomic status. The lengthened enrollment increases the students’ college expense and may become a procedural method for cooling out.

The traditional definition of cooling out is to decrease community college student aspirations from a transfer to a terminal degree, without the student becoming upset with the college personnel for not helping them achieve their original goal (Clark, 1960b). Instead of applying the traditional definition, I offer the following possible definition relevant for the current political, structural, and cultural community college climate: ‘procedural’ cooling out is the process of hindering a community college student’s ability to access and proceed through education in a timely manner.

The present study analyzed students’ micro-decisions that may reveal elements of cooling out present today from the perspective of students that might not have been present during Clark’s (1960b) seminal work. This new form of procedural cooling out has the potential of leading students away from their educational aspirations. The complex organizational structure of community colleges, the ways students interact within it, how they experience managerial professionals, and their resulting micro-decisions were mined for clues about the existence of cooling out in the 21st century and what it might look like.

**Research Questions**

The research questions used to guide this study are:

1. What micro-decisions do community college students identify when asked about their experiences navigating the college to achieve their goals?
   
   1.a. How do community college students describe and rationalize their on-going college-going micro-decisions?
2. How do students describe and make sense of their interactions with managerial professionals in informing and/or assisting with their micro-decisions?

3. How do students’ current realities/contexts and information access/use resemble old forms of cooling out and how do they suggest new forms of cooling out emerging?

   3.a. Which, if any, decisions, contexts, and interactions with managerial professionals appear to contribute to or prevent cooling out and in what ways?
CHAPTER 3
DESIGN AND METHODOLOGY

This section describes the research design and methodology of the present study. Topics presented include the research questions, data collection, sample, data analysis, validity, and positionality. It concludes with the study significance.

Approach

The present study employed a qualitative methodological approach. Qualitative methods originate from humanities, such as anthropology and sociology (Creswell, 2014). Gaining popularity since the 1990s, qualitative research focuses on individual perspective and meanings of situations (Creswell, 2014). This method provides an opportunity to obtain participants’ viewpoints of their experiences (Corbin & Strauss, 2008). Qualitative methodology was appropriate because only the individual can ascribe meaning to their decision-making and information-gathering experiences. Such perspectives illustrate how students in the community college setting experience the college and its personnel, processes, events, as well as how these elements interact with their personal lives to form the basis of various choices.

Data Collection

Data for the present study were collected as part of a larger, grant funded (The Bill & Melinda Gates Foundation), collaborative research project (League for Innovation in the Community College) about how community college students benefit from using social media, entitled Getting connected: Harnessing the power of social media to enhance community college student success (Deil-Amen, 2014, gettingconnectedresearch.com). As part of the grant, quantitative data were gathered on
community college students’ social media use. Additionally, qualitative data were collected through student and staff interviews on not just social media use, but also on students’ general strategies for trying to navigate and succeed in college, their perceptions of the challenges they face, and their feelings of engagement, connection, and belonging. The present study examined the latter.

The examined data originated from a set of open-ended interview questions covering multiple topics such as student educational experiences, goals, success strategies, college navigational experiences, and financial aid, among others (Appendix A). A team of researchers (hereafter called the grant team) conducted the interviews. Interviewers were diverse, including male and female, African-American, Latino, White, and multiracial. Interviews were individual, face-to-face, approximately one-hour, and recorded, with the interviewer taking notes. Paid transcriptionists transcribed the tapes verbatim. To experience the transcription process and gain an understanding of the interview experience, I personally transcribed three of the interviews.

Sample

The entire sample for the grant team included nine community colleges in eight states that were selected through a national request for proposal process. Participants self-selected for the interview by responding to a flyer posted around campus, an email notice, or an announcement on a college-supported social media application. The particular sample for the present study included students at one local community college operating as an educational institution for over fifty years. It offers a range of courses and programs typical of community colleges, such as academic, transfer, occupational, workforce, developmental, and community education.
The students sampled included one urban community college in the southwest. Sixty unique students were interviewed over a two-year period, with four of those students interviewed in both years. The gender representation mirrored national community college gender demographics (AACC, 2015), and was similar to the aggregate, with a larger proportion of females than males. Similarly, the sample’s age distribution resembled the aggregate population, with the percentage of non-traditional students slightly greater than traditional aged. Regarding race/ethnicity, the study population of students interviewed consisted of a mix of students reflective of the aggregate college demographics of 33% White, 33% Hispanic, and 11% African-American. Some variation from the aggregate occurred within the sample population. However, the sample was not intended to be fully representative of the college population or local demographics.

Data Analysis

Data coding proceeded through examination of each complete interview and then coded into predetermined codes created for the present study using NVivo software. Even though there were predetermined codes from the grant team (Appendix B) for this dataset corresponding to the interview questions (Appendix A), specific codes related to information sources and decision-making were added (Appendix C) to categorize informants and decisions not represented by other categories, as well as for ease of analysis. The grant teams’ codebook captured topics from the interview questions, which focused on such things as technology and social media use, financial aid, and life and college experiences. For example, the technology topics included social media and use of a specific school application. Financial aid topics included loan sources, eligibility,
and qualifications, as well as the students’ experiences with financial aid and the staff members responsible for administering it at the college. Finally, life and college experiences included topics about the type of student they are now and were in the past, sources of encouragement and discouragement, reasons for choosing the particular college, goals, and career connections, among others. These topics, although able to generate the type of respondent information relevant to the present study, did not explicitly capture via coding information about decision-making or information sources. Therefore, a separate codebook was created for the present study.

Specific questions from the interview protocol sparked student narratives, providing the bulk of the data for the present study. Those questions included asking students to describe their experiences navigating college procedures (i.e. enrolling, financial aid, information gathering, guidance, support, issues), how they are involved at the college, what fosters feelings of connection to and engagement at the college, and where they were related to their educational/life goals. Other questions included asking what they felt confused about, what they wish they had known earlier, and if they considered dropping out of college. Some questions contributed to the present study through the lack of student narrative, such as the questions asking students about both good and bad instructors. Coding occurred through a full review of each respondent’s transcribed interview.

The predetermined codes for the present study were created to capture interview responses related to the research questions and from prior literature about known or speculated college-going decisions (Cox, 2009; Perna, 2006; Rosenbaum, et al., 2006; Scott-Clayton, 2011). To begin coding for the first research question about identifying
students’ micro-decisions, the parent code ‘decision’ was created. Then, sub-codes related to ‘decision’ were: course, major, transfer, this college. To capture responses about from whom or where students obtained college-going information to inform their micro-decisions, the parent code ‘informant’ was created. Then, sub-codes related to ‘informant’ were: sibling, parent, peer, college agent, self. A combination of the decision and informant code analysis yielded data to assist in answering research question two regarding students’ experiences with managerial professionals and question three, which considers the presence of cooling out today. While the predetermined codes were expected, others emerged during the initial coding process.

During initial data coding, other topics emerged in both the decision and informant categories as students discussed their conflicting role demands of working, caring for family, and attending college. Emerging ‘decision’ codes included: participate in learning, family obligation, continued enrollment, active in college. These topics were at the forefront of students’ minds as they discussed their experiences, challenges, and desires while attending community college toward their educational goal(s). Different from the 2012 interview data, the 2013 interviews included a new question about paying for college. Therefore, when coding the 2013 data, the code ‘pay for college’ was added to the decision category. Then, other emerging ‘informant codes’ were ‘family’ to capture relatives other than a parent or sibling, and ‘other’ capturing rare instances of someone, such as a high school teacher, providing college-going information. These emerging codes presented early in the coding process while reviewing the interview responses.
Data analysis explored the relationship of situated contexts on decision-making, as well as information sources while students proceeded through college by applying the conceptual model of student success (Perna & Thomas, 2006). To begin the analysis, I organized the participant data by topically related, expected codes created for the present study. Data categorization occurred via descriptive coding, which also assisted with “further analysis and interpretation” (Saldaña, 2013, p. 89). For example, two of the expected codes included ‘course decisions’ and ‘continued enrollment decisions.’

Coding into the first topic occurred whenever a student discussed decisions about course enrollment, withdrawal, or other influencing factors on course related decisions. The next topic consisted of reports about contemplating continued enrollment and the reasons it may, or may not, be jeopardized. When necessary, simultaneous coding occurred to capture complex student narratives. Saldaña described simultaneous coding as “the application of two or more different codes to a single qualitative datum” (p. 80). Used sparingly, this method allowed for coding of multiple decisions or informants across codes to capture their interconnectedness and the multiplicity of decision-making scenarios.

After the initial coding was complete, another round of coding occurred using data in the separately coded categories. This process, termed recoding, serves to refine the codes and/or categories and may result in codes “subsumed in other codes, relabeled, or dropped altogether” (Saldaña, 2013, p. 11). Specifically, after analyzing data within the course decision category, additional sub-codes formed refining ‘course decision,’ which were: withdrawal, timing, selection, delivery, credits (Appendix C). Further analysis of course withdrawal decisions, resulted in yet another sub-category of codes to
identify reasons for ‘course withdrawal,’ which were: grade, time, financial. Following the recoding process, data were analyzed to identify emerging themes.

The data were analyzed for related, emerging themes across participants both inductively and deductively (Bloomberg & Volpe, 2012; Corbin & Strauss, 2008; Creswell, 2014). Analysis occurred inductively based on responses to the interview protocol questions and deductively through mining the responses searching for content about decisions and informants. Both of these categories contributed information about the situations influencing decision-making. Resulting from “coding, categorization, or analytic reflection” a theme is a “pattern, trend, or concept” (Saldaña, 2013, p. 14). Thus, themes such as self-blame, college procedural barriers, and a lack of narrative about helpful information sources emerged from the inductive and deductive analysis.

Using the Excel spreadsheet program, coded student responses underwent additional analysis. After selecting the most relevant text from each respondent in each category, data were transferred to the spreadsheet program. Along with researcher notes, I created particular categories relevant to each code based on the information garnered from the narratives. Three of the codes and included sub-codes provided the majority of the data leading to the identified patterns. In particular, the ‘college agent informant’ spreadsheet included identifying the specific type of college agent, the situated context (internal, family, school, policy) using Perna & Thomas’ (2006) model of student success and evidence of cooling out. The ‘course’ code elaborated in the spreadsheet to include identification of the course selection informant, course selection errors, course withdrawal, who or what influenced/informed withdrawal, and other course related challenges. Finally, in the ‘self as informant’ category, only specific quotes and
researcher notes led to deeper understanding of the data. A combination of these three elaborated spreadsheets led to discovering the themes identified in the findings from the presence or absence of narrative to complete the spreadsheets.

Patterns in students’ narratives emerged during attempts to diagram the main themes. Attempts at flow-charting and diagramming all of the main themes from data analysis proved awkward. Themes did not naturally flow from one experience to another. Each attempted flowchart resulted in a few themes missing from the diagram. Therefore, this method was abandoned. Next, I charted the main themes from each participant using a separate spreadsheet. This allowed for frequency counting and viewing the themed data for the presence of relationships. The connections and conclusions drawn from the identified themes are presented later using narrative story (Creswell, 2014; Maxwell, 2005). This process revealed the six patterns discussed in the findings chapter.

Validity and Reliability

Strategies used to enhance validity include presenting divergent participant perspectives, rich descriptions, and researcher positionality to expose potential interpretation bias (Corbin & Strauss, 2008; Creswell, 2014; Maxwell, 2005). Presenting divergent participant perspectives offers contrary information showing that not all perspectives are similar, and provides new ways to view the concept, which enhances the credibility and reality of the present study (Corbin & Strauss, 2008; Creswell, 2014). Using rich descriptions reveals the detailed perceptions and experiences of multiple respondents (Creswell, 2014; Maxwell, 2005). Details about researcher positionality are presented in the next section. Finally, reliability of data collection was checked through
random transcript review to determine evidence of errors (Creswell, 2014). Validity and reliability strategies followed typical practice for qualitative research.

**Positionality**

Qualitative research is infused with the researcher’s own influence and perceptions, a potential source of bias (Creswell, 2014; Maxwell, 2005). Being acutely aware of a researcher’s bias frames data analysis and adds integrity to the results (Maxwell, 2005). Awareness of researcher bias is important to ensure separation of researcher meaning and participant meaning during data analysis (Corbin & Strauss, 2008; Creswell, 2014; Maxwell, 2005).

I work as a community college faculty member and am currently serving a second two-year term as elected program director and division chair. The research site is not the particular college where I work, but it is part of the larger network of community colleges in the same district in which I am employed. Within this multi-college district, age of an institution is spoken of in a similar manner as hierarchy, with the older institutions at the top. In that sense, this particular community college site would be considered in the top tier of the multi-college district. As such, some faculty and staff have been at the institution for a very long time, resulting in perceptions that the processes and people can be inflexible, averse to change, and pretentious. Although I do not work at the research site, I am familiar with it, having been there infrequently for meetings. Changes in staffing in multiple areas have left me unfamiliar with college leadership personnel. However, I am familiar with some faculty at the site. Yet, none of the participants in this study took courses from the faculty I know, thus, no conflict of interest exists.
I believe that community colleges should support open access and employees should readily assist students. I have helped students obtain sought after information and provided guidance as they navigated community college processes. These beliefs and experiences may influence data interpretation by potentially directing my focus mostly on reports of college personnel assisting students. Conversely, it may also lead to harsher analysis in situations where students describe a lack of assistance. Awareness of these personal perceptions and the potential influence assists in separation of bias and respondent meaning during data analysis.

Working in the community college environment provides me with knowledge about institutional processes that I capitalized upon during data analysis (Corbin & Strauss, 2008). A strength I bring to the present study is the ability to understand the contexts described by the students in the study. From my role as faculty, program director, and division chair, I have a view from two different specialty areas of college operations. As a faculty member, I have experience teaching students who come to campus only for class and seek socio-academic integrative moments around the classroom (Deil-Amen, 2011) rather than return for office hours. Contextually, I have had successful students drop out due to financial constraints, as well as students who could not earn a passing grade.

From the viewpoint of a program director and division chairperson, when students struggle with class (teacher interaction issues, grades, drop for non-payment), I listen, console, and advise both on personal options as well as college processes they could choose to invoke. I have had to enforce policy, at times not to the students liking, while
also attempting to explain how the policy creates fairness for all students, regardless of personal/college structural context.

Knowing community college operational processes provides me with an opportunity to identify where the “system” worked to support students as well as expose where it did not. I see my role as division chair and my role as faculty within the community college resulting in a strength for understanding context during data analysis, theming, and the subsequent recommendations drawn from the present study’s research findings about why students may not persist despite their best efforts and intense personal desire to do so.

Limitations

Limitations emanate from the interview data collection approach. Those limitations include a non-natural setting where the interview occurs, potential for response altering due to the researchers’ presence, differing ability of participants to communicate their responses, and respondent perception bias (Creswell, 2014). The non-natural interview setting involves respondents being in a designated interview room, rather than in their natural environment (Creswell, 2014) which may have potentially altered the respondent behavior. Having the researcher present may have hindered the ability of the participants to respond candidly or may have resulted in responses participants thought the researcher wanted to hear (Polkinghorne, 2005). Additionally, participants have differing abilities to convey their message, and responses were filtered through their understanding of the question, personal opinion of the situation, and the potentially distorting effect of historical recollection leading to perception bias (Polkinghorne, 2005). Lastly, I did not perform the interviews personally, resulting in an
inability to add questions during the interview itself or to the interview protocol. Also, since all interviews were completed prior to data analysis, I was unable to ask additional questions as themes emerged.

Furthermore, the present qualitative study is a snapshot in time of participants at one particular college. One-time participant interviews, rather than multiple, may limit the opportunity to garner the trust necessary for full participant disclosure or provide enough time for the participant to fully recall their experience about the subject under study (Polkinghorne, 2005). One-time interviews are not able to capture changes in the environment or the participant over time. However, four of the participants were interviewed twice, one year apart; adding depth to the study to discover if or how these students’ perceptions might have changed during that time and through their college-going experiences.

Despite the aforementioned limitations, one of the strengths of the qualitative approach is to link individual experiences with the context in which those experiences occur (Corbin & Strauss, 2008). Studying where institutional structure collides with student college-going behaviors fosters an understanding of how such context shapes the lives of students. Institutional structures, such as those related to the multiple missions of community colleges, may evoke an influence over student decision-making and information gathering activities.

As another example, students may be an unwitting partner in the legitimation of community colleges through cooling out. Responding to legitimizing pressures (i.e. serving business and/or accrediting agency requirements) community colleges may seek to increase credential conferment through increased occupational degrees/certificates.
These institutional structures are the contextual realities intersecting with students as they move toward their educational degree. A qualitative study was the appropriate method for understanding the influence this context has on students meaning-making and behaviors during the college-going process.

**Significance of Study**

As noted, less than half of community college students meet their intended goal of a degree or certificate within six years of entering college (CCCSE, 2013). This is consistent with historical research on community college student degree and certificate attainment (Baily, Jaggers, & Jenkins, 2015; Brint & Karabel, 1989; Clark, 1960b; Cohen, et al., 2014; Dougherty, 2001; Roksa, 2006). Because of the low degree attainment, community colleges need to find ways to increase student degree completion.

One strategy may include a better understanding of the micro-decisions students’ encounter while proceeding through college, the sources used to inform those decisions, and the contexts within which these decisions occur.

Although integration research provides information on college-related activities influencing student retention, it neglects important micro-decisions students make that may influence retention, or even their choice to integrate and participate in college-related activities. These micro-decisions (i.e. extra-curricular participation, family/work management, course selection, sequencing, delivery method, financial aid, etc.) are less explicit in research findings. The present study begins to fill that gap and incorporates the influence of college personnel/student interactions and instances where students choose to be involved in college activities, including the contexts influencing those choices. It is important to study this phenomenon in order to provide evidence to
improve future institutional practices (Deil-Amen, 2011; Goldrick-Rab, 2010; Latz, 2012; Rosenbaum et al., 2006). An understanding of these decisions, from the perspectives of the students themselves, is useful to influence the creation of suitable student support services and institutional processes, as well as larger district, state, and federal policies, to meet student needs. It can also provide guidance on where to invest scarce institutional and other resources.
CHAPTER 4

FINDINGS AND DISCUSSION

The findings presented next came from a sample of 60 students who all attended the same urban community college in the southwestern United States. Generally, the interview sample consisted of slightly more females than males and more non-traditionally aged students than traditionally aged. The majority of the sample identified as being from an ethnic minority group, such as Hispanic, African-American, Native American, among others. When reported, most students came from a low socio-economic status background. Overwhelmingly, when indicated, most of the sample were first generation college students. All participants were interviewed once over a two-year period, with the exception of four participants who were interviewed twice, one-year apart.

There were three purposes of the present study. The first purpose was to begin discovering students’ micro-decisions while enrolled at a community college. The second purpose was to identify the sources of information students use to inform those micro-decisions. Finally, the third purpose was to explore which situated contexts shape academic decision-making. Of particular interest were the ways in which information sources and contexts influenced students’ decision-making as their lives intersected with the community college’s bureaucratic procedures during the students’ college-going experiences. Then, a scenario was created through a combination of the above purposes from which to identify how students use situational understanding and determine whether elements of cooling out are present.
Overview of Findings

“I didn’t know how college worked and no one took the time to explain it to me.” Julio made this statement. The present study used the lens of micro-decisions to view students’ college-going experiences and interactions with managerial professionals. The most frequently discussed categories of managerial professionals worked in the student support services areas of advising, financial aid, and registration departments. In this section, the term ‘student support services’ will be used to capture these specific categories. Through open-ended, face-to-face interviews, student narratives similar to Julio were gathered about their experiences navigating the community college while pursuing their educational goal. Student responses were audio recorded and transcribed verbatim. Data analysis began with coding in NVivo with predetermined and emerging codes. Then, a reanalysis used themes and patterns that emerged from the coded data. Multiple types of micro-decisions surfaced, which provided a lens through which to view the ways the students’ other responsibilities, and information quality, influenced their choices while attending community college. As students described progress toward their educational goal and experiences navigating community college procedures, patterns and themes emerged. This chapter begins with a discussion of the contextual influences found to have an impact on student decision-making. This is followed by a presentation of six patterns that emerged. Finally, the theme of cooling out is considered.

Not surprisingly, work and family obligations surfaced as responsibilities vying for students’ time and attention, and limited students’ available options for college-going decision-making. Then, through its time-consuming processes and inconsistent information, the college institution became another source further limiting students’
decisions. As students tried to carry out college-going micro-decisions, at times, those limitations intersected to constrain students as they attempted to make rational decisions in pursuit of their educational goal. In essence, the community college’s institutional processes made students’ individual rational decision-making difficult.

From the students’ narrative about their experiences with seeking college-going information and assistance, six patterns emerged (Table 1); the first can be described as (1) opting-out from the beginning. Patterns two through five occurred because of students’ attempts to seek information from student support services in advising, financial aid, and/or registration departments. The second through fifth patterns included (2) opting-out preceded by unhelpful student support services; (3) helpful student support services; (4) assertiveness; (5) recognizing inefficiencies. Patterns two through five also involved more than one visit to a student support services staff member to try to obtain information in a process termed repetitive queuing in the present study. The final pattern

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<th>Pattern 1</th>
<th>Opting-out from the beginning</th>
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<td>Pattern 2</td>
<td>Opting-out preceded by unhelpful student support services</td>
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<td>Pattern 3</td>
<td>Helpful student support services</td>
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<td>Pattern 4</td>
<td>Assertiveness</td>
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<td>Pattern 5</td>
<td>Recognizing inefficiencies</td>
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<td>Pattern 6</td>
<td>Self-blame</td>
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was an emotional response (6) self-blame. Each pattern is elaborated in detail, with student experiences presented as examples later in this chapter.

Finally, students’ micro-decisions, obligations, and information quality combined to show how cooling out might transpire in the structural environment of today’s community college. Parts of cooling out include the existence of self-blame and a lack of institutional blame (Clark, 1960b). In the present study, many students who received unhelpful assistance from student services did not confront nor blame the college institution. Instead, they blamed themselves for not asking the right questions, not being assertive enough or not understanding college information. Even students who did not seek assistance from student services expressed self-blame for making their own mistakes about college-going micro-decisions. To reveal other current elements of cooling out, an updated definition is necessary based on today’s contextual realities and students’ perceptions of their interactions with complex bureaucratic college processes.

Presented next is a discussion about the contextual influences on students’ decision-making while attending college. Contextual influences for students include work and family obligations, as well as financial concerns, personal goals, and level of fear. Additionally, the college is a contextual influence by how it enacts policies and how the staff interacts with students. There are four overarching contexts, based on the conceptual model of student success (Perna & Thomas, 2006), which are internal, family, school, and policy. For the present study, internal context includes goals, fear, work, and financial challenges. Family context includes having any type of responsibility for other family members, such as being a wage earner or caregiver. The school context is the college institution, its policies, and its personnel. Lastly, policy includes high-level
policy changes or an employment crisis. These contextual influences on student decision-making are described next.

**Contextual Influences on Student Decision-Making**

“I had all these other things that were going on.” Carol made this statement, which represents how similar students described managing school with other obligations. Students have complex lives that intersected with the way colleges operate, such as when they attempt to navigate through enrollment processes, see advisors, and make course-taking decisions. Work and family responsibilities surfaced as visible when discussing on-going decisions throughout college. The contextual influences of work and family limited students’ choices during their college-going experience. In addition, college operational practices, such as how and when courses are offered, further limited students’ ability to choose. The idea about how to enact a rational decision became more difficult, since the community college seemed to add unnecessary complexity. Therefore, students’ ability to make rational choices was not only limited by work and family obligations (contextual influences), but was additionally limited by constraining college procedures.

A combination of internal, family, and school contexts most limited micro-decisions. This triad of contexts combined in an increasingly limiting manner, adding constraints upon students’ attempts at rational decision-making. Moreover, school context seemed to create additional limitations through its procedural complexity for students to navigate, which intersected with often already complex student lives (Figure 3). Rather than finding the support and assistance needed to smoothly accomplish college-going procedural tasks, students encountered additional constraints upon their
decision-making. Even though there was a service in place to assist students, it seemingly diverted students away from using that service due to complicated procedures and overburdened student-to-staff ratios.

Figure 3. Constraining contextual influences. Adapted from Perna & Thomas (2006), Proposed Model of Student Success.

The context of a situation, as Goldthorpe (1998) asserts, is an important consideration when trying to understand a rational action. With the constraining force of college operational procedures potentially at odds with personal goals and other obligations, a student’s situational understanding may lead to a seemingly irrational decision from an outsider’s perspective. However, Goldthorpe would argue that
subjective rationality (the perspective of the individual making the choice) is always rational based upon the available information along with their beliefs and goals. Therefore, the constraining influence of intricate college procedures intersected with students’ work and family responsibilities and created situational understanding from which students made subjectively rational decisions. In other words, from the students’ point of view, their decisions were rational when considering their work and family obligations combined with the college’s operational procedures.

**Course selection, withdrawal, and offerings.** The influence of contexts on decision-making is multifaceted. For instance, course withdrawal highlights how work, family, and school limited on-going college-going choices. Specifically, students chose course withdrawal to allow more time to complete other coursework, save grade point average, spend more time with family, or to earn needed income for living expenses. Even though course withdrawal lengthens the time to goal attainment, students reported it as a rational decision based on their situation.

For example, in an attempt to maintain full-time enrollment, Jim revealed how personal goals and college operations intersected to constrain his choices. Jim explained, “I wanted to take a world religion class because it’s required for my major but the class was full and I ended up with a geography class and it was online.” In addition to being an online course, Jim also revealed, “you had to sign up for another account and I couldn’t do it so now I’m only ¾ time.” Therefore, Jim was unable to complete a required course for his major and unable to maintain full-time status. Due to a procedural requirement to sign-up for an additional online account the immediate consequence for Jim was course withdrawal and a subsequent consequence of waiting to take the world
religion class delaying timely completion of required courses toward his degree. This situation illustrates what happened when college operations did not align with students’ goals. It also shows how attempts at rational decision-making could be hindered by institutionally structured course offerings and full-time enrollment policies.

In an example of work, family, and school contexts constraining a student’s decision, Jerrie chose to withdraw from a course. She framed her decision within the entire college-going experience, stating she “[dropped] one class instead of dropping out completely.” Jerrie, who was taking four classes toward a teaching degree, working two part-time jobs, and raising three children, elaborated,

[I had] two papers due and a math test coming up and it was all within like the same week and that’s why I dropped the computer class, but there was like so much homework in it and I thought my time would be better served dividing my homework time, divided between these three rather than all on the [computer class].

Even though Jerrie maintained college enrollment by decreasing the number of courses in which she was enrolled, she was proud of herself for taking 11 units. For Jerrie, the typical rhythm of a college semester created a situation where major course assignments and tests were due simultaneously. Therefore, academic college operations created an additional burden on Jerrie’s already limited availability for college, due to her work and family obligations.

Another example of available course offerings limiting student choices is Beth, a returning adult student taking classes at both the community college and a university. Beth enrolled in an online math course despite knowing she preferred taking math in
person. She explained, “I couldn’t get into one [class] because it was an honors class, I couldn’t get into the other [class] because I didn’t have the time frame because I pick up my nephews in the afternoon.” Concurrently, internal (college goal), family (caregiver to nephews), and school contexts (course offering options) constrained Beth’s choice so much that she enrolled in the online math course, despite knowing she did not want to take math online. Beth’s understanding of this complex situation led her to believe she was making a rational decision. However, she ultimately withdrew from the math course “to try to slim down and be able to have more time to do what I needed to do.”

Ironically, limited by family obligations and available college course offerings, Beth’s attempt at rational decision-making resulted in course withdrawal after enrolling in a course she knew was not ideal.

The three contexts of internal, family, and school also influenced course withdrawal in other similar ways. Whereas the previous examples presented work obligations as a characteristic of the internal context, another characteristic was financial concerns. In Carol’s case, personal financial concerns extended into her college-going experience. Carol was a non-traditional student struggling to complete coursework while also dealing with family issues. Carol shared,

The English class that I had, that I was in at the beginning of the semester, the professor went so fast and then I had, like I said I had all these other things that were going on along the side, and I knew that if I kept in this class that I was going to fall behind. I just couldn’t keep up, I didn’t have any of my books yet, because the majority of my money had to be used in buying groceries, paying bills, things that you know the rest of my family considers priority.
Ultimately, Carol withdrew from the course. Carol’s situation demonstrated how financial challenges limited her ability to purchase the required textbook. When combined with a fast-paced course and an ill family member, not having a textbook additionally limited her chances to complete the course.

**Fear.** In the next example, fear and college policy drove student decision-making. Even though Arturo, an Asian-American, first-generation, non-traditional student cited university admission policies for choosing to withdraw from a course late one semester, the underlying motivation was fear, which is another characteristic of the internal context. Understanding how a low course grade could limit his transfer opportunities, Arturo, a STEM (science, technology, engineering, and mathematics) scholar who aspired to be a chemical engineer pointed out,

> I was passing with a C in her class, but when it came to the final I had missed a couple of classes, I emailed her [the teacher] talked to her and stuff like that, and told her, if I did good in my final, what would I get? [She said] ‘You’ll probably get to a B but if you don’t you’ll probably get a D. So I mean it’s up to you if you want to withdraw or turn in the final.’ I mean I already had my final but I didn’t want to mess up my GPA, and fail the class, so I just had to withdraw. And she withdrew me a week within the final, I mean I was passing but I still didn’t want to fail…You know as long as I get a B or an A I’m good.

His fears of earning a low grade led to his course withdrawal. Now Arturo will have to retake the class, potentially lengthening the time it will take him to meet his educational goal and increasing his college costs as he pays for the course again. Perhaps, had the
teacher chosen to encourage Arturo, he may have felt able to complete the course and earn his desired grade since the teacher said it was possible for him to earn a ‘B.’

Arturo’s situation was just one example of fear influencing decision-making. Some of the interviewed honors students who received financial aid feared how the more difficult coursework might affect their grade point average. Therefore, those students decided either not to enroll in honors courses or to limit the number of honors courses in which they participated. Cox identified one fear management behavior as “withdrawing prior to attempting the coursework” (2009, p.65). The findings from the present study confirm the role of fear in academic decision-making, as Cox (2009) suggests. Surprisingly, the interviewed students rarely mentioned seeking advice from student support services personnel prior to their decision. Therefore, it is unclear if such encounters would alleviate or exacerbate the fears driving course withdrawal.

The examples presented are just a few of those found throughout the sample population, illustrating how institutional complexities can intensify an already challenging college-going effort. Because these students need to repeat the courses later, course withdrawal has the potential to lengthen college enrollment and increase the overall cost of going to college. Lengthened enrollment not only increases the amount of time the student is attending school, but it is also time not spent working and earning money at a potentially higher wage due to gaining a college credential. With continued influences from personal, financial, and family obligations, a lengthened enrollment also provides more chances for the student to decide not to continue attending.

This section about contextual influences on student decision-making demonstrated how seemingly minute decisions became complex as multiple contexts
limited students’ ability to choose. Students encountered community college procedural requirements that contributed to complex decision-making scenarios, which affected the accomplishment of their intended goals. The college related micro-decisions presented in this chapter focused on course-taking, which include delivery method, number of credits, selection, time of day, and withdrawal. The present study identified other micro-decisions (Appendix D), demonstrating additional choices students may encounter. For example, students minimally discussed changing majors or intentions to transfer to a four-year college. Two additional micro-decisions, participating in learning activities and in college clubs or events, were predictably influenced by a students’ available time. Through the course-taking micro-decisions, and the ways in which students implemented them, revealed how college structure often collided with student goals.

Community colleges have a built-in system of support and assistance, typically offered through student services departments and personnel. Ironically, instead of providing assistance to ease the burden of complex college procedures on the student, this system created scenarios where student decisions were constrained. The multiple obligations already present in students’ lives intersected with a complex institution, perhaps exacerbating an already difficult college-going effort and potentially contributing to cooling out. In the next several sections, I elaborate on the complex nature of students’ experiences with college support services procedures and then discuss how it might be contributing to cooling out.

Six Patterns

Six patterns emerged from the students’ narratives about their experiences with seeking college-going information and assistance. In the first pattern, students described
themselves or family and friends as information sources. In this pattern, students opted-out of assistance from student support services from the beginning of college-going. In doing so, the repetition of semester-to-semester decisions became an information source in a process termed *trial and error*.

Patterns two through five occurred because of students’ attempts to seek information from certain types of student support services, such as advisors, financial aid staff, and registration personnel. In the second pattern, students sought information from student support services but received none, chose not to return, and then relied on themselves alone. Working alone is similar to the students in pattern one, who also experienced trial and error. In the third pattern, students found a helpful student support services staff member from whom to seek information. The fourth pattern highlighted assertiveness as a necessary quality when interacting with student services. Pattern five depicted those students who recognized inefficient student support services. Each pattern involving student support services (patterns two through five) also involved more than one visit to try to obtain information in a process termed *repetitive queuing* in the present study.

Finally, pattern six described an emotional response of self-blame, which resulted from a less than optimal outcome either due to working alone (pattern 1) or with student services personnel (patterns two through four). Throughout this section, each pattern is elaborated in detail, with students’ experiences presented as examples. The next six subsections will address the patterns noted above.
Pattern one: Opting-out from the beginning. “You kind of had to find out the steps by yourself.” Christopher made this statement. When talking about navigating community college procedures, such as enrollment, financial aid, or finding courses, over one-third of the sample were similar to Christopher in describing instances of seeking information on their own, from family, or friends. In fact, there were slightly more males than females in this pattern, which is opposite of the overall sample. In this first pattern (Figure 4), students chose not to seek assistance from student support services from the beginning of their college-going experience. Instead, they relied on themselves, or at times a family member, to help them navigate the community college. Perhaps, since slightly more non-traditionally aged students comprised this pattern, they had a network from which to seek college-going information. Nearly half of the students who described instances of seeking information on their own used repetition as their method of acquiring information. For the present
study, this repetition was termed *trial and error*, meaning a process by which students rely on the recurring nature of college semesters to better navigate the complex college procedures, which occur semester-after-semester, as well as make to course-taking selections and class schedules. So, prior decisions informed future ones by how the student perceived her choices in relation to her educational goal and current obligations outside of college. Students who reported relying on family or friends found the information helpful.  

As an example of relying on oneself, Monique was surprised to find out how alone she was when learning to navigate college, admitting, “It’s kind of a wide awakening experience because you have to do this on your own.” Then there was Anna, who described selecting courses, stating, “Sometimes it’s confusing because you don’t know what classes you really need, what classes mix and all of that stuff. You (emphasis added) have to figure out all of that stuff.”

Alone, attempting to select his classes, Douglas reported about needing to find all of the information himself, including searching online and seeking out college personnel who could provide information. He said, “I was confused about classes and whether or not they were going to actually help me get to where I want to go.” Despite the presence of services and personnel in place to assist, Douglas’ experience showed how he relied upon himself to find the information he needed to inform his course-taking micro-decisions. His declaration about having to look for people to talk to indicated that he did not know where within the community college to seek information.
Rather than utilizing student support services at the community college to seek assistance, Scott learned how to carry out his decision from other sources. Scott explained,

At first I really didn’t know that much, like on what to do. And then I actually had asked one of my sisters friends who actually came here and she told me the steps to do… I didn’t have like somebody here specifically tell me what to do, I just had somebody else [who] had the experience for it.

A small portion of the students in the sample talked about the college-going experiences of friends or family serving as a source of information about college procedural requirements, rather than student services systems at the college to inform them.

When seeking information on “all that college stuff,” Lucinda indicated that she moved away from her parents who knew little about college, never having attended themselves. Instead, she preferred to live in another state with an extended family member who “works with doing college stuff all the time. So, he showed me how to do it. I didn’t have anyone back home that could show me the financial aid and things like that.” As a first-generation college student, Lucinda thought being around her cousin would be more helpful to her while attending college than being with her parents who did not complete high school.

Examples of trial and error come from experiences with course-taking and enrollment processes. When speaking about his experience navigating the college, Gerardo explained, “a lot of trial and error… just keep testing it to see if it works and keep testing it and fixing it.” Charles, who helped his significant other enroll prior to enrolling himself, described it as, “the blind leading the blind and there was a lot of
misinformation.” Putting it more bluntly, Jerrie asserted, “It was a crap shoot” when talking about selecting classes. After creating an erratic first semester schedule for themselves, Arturo and Gerardo used trial and error to construct better future schedules. Likewise, Charlotte found subsequent course enrollment simpler the second time she enrolled in classes after experiencing the process during the prior semester. Even more significantly, Emily could not complete procedural requirements when she initially attempted to enroll in the community college, delaying her entry one entire semester.

To summarize, when students talked about course selection and procedural requirements of college, some described having to figure out how to do it on their own. When these students did not access the support services in place at the college to assist and inform them, a small portion reported relying on family or friends who have some type of college experience for information. Just under half of the students in this category described trial and error as a method of figuring out how to navigate the community college. These student narratives share a common theme expressing confusion, as well as being alone in attempting to select courses and seeking information to help themselves independently enroll.

**Patterns related to students’ experiences with student support services.**

“Sometimes it depends on who I talk to.” Linda made this statement. In addition to the first pattern noted above, several patterns emerged that were directly related to the students’ interactions with student support services. Students similar to Linda described experiences seeking assistance from student services as time-consuming, confusing, inconsistent, unhelpful, and ineffective. This illustrates how the role of student services personnel at times can be seen to hinder, rather than assist, students. For the present
study, student services personnel were defined as categories of managerial professionals whose primary role included assisting students in their college-going activities, such as advisors, financial aid staff, and registration department personnel.

Over half of the students in the overall sample described their interactions with student support services when asked to describe their experience navigating the community college. Two different patterns of action emerged from the students’ narratives about their interactions with student support services. In both patterns, students overwhelmingly made more than one attempt to seek assistance. The term *repetitive queuing* is used to describe more than one attempt to seek assistance from student support services. Students in the sample rarely discussed in detail their interactions with student services personnel that were positive on the first attempt. Therefore, most narratives about interactions with student services personnel resulted from students’ repeated attempts to obtain assistance.

Interactions with personnel in student support services are prevalent in the present study. Integration and persistence research (Astin, 1984, 1993; Tinto, 1988, 2006) suggest interactions with college personnel increase feelings of belonging and contribute positively to degree completion. In the community college, socio-academic integrative moments, where student and faculty interact just prior to, during, and/or after class time (Deil-Amen, 2011) were found to contribute positively to students’ sense of belonging. Beyond merely interacting with college faculty and staff, and beyond only social and academic integration, there may be another realm to consider, which is procedural.

Including procedural integration with social and academic integration for commuting community college students is relevant given the findings from the present
study indicating that choosing to engage in student support services may result in non-helpful, confusing information, opting-out, and/or self-blame. Interactions with student services staff did not consistently provide a sense of community or support, which is important for integration. Therefore, whether or not students benefit from engaging in interactions with student services staff to complete the colleges’ procedural requirements must be considered.

Presented next is the pattern of students’ opting-out of the services designed to assist them, because their interactions with student services personnel produced no useful information. Then, I present the other pattern where students found helpful information from their interactions with student services personnel. Students’ experiences with repetitive queuing are illustrated within each pattern.

*Pattern two: Opting-out preceded by unhelpful assistance from student support services.* “They didn’t really help. I’m like ‘I’m not going to wait.’” Paulina made this statement. In pattern two, students similar to Paulina opted-out of the services designed to help them because their interactions with student services staff produced no useful information (including contradictory information). From the original group of 32 students who sought assistance from student support services, four opted-out after the first visit (Figure 5).

![Figure 5. Pattern Two: Opt-out after first visit.](image-url)
An additional six students from the original group of 32 students who sought assistance from student support services opted-out after repetitive queuing (Figure 6).

Figure 6. Pattern Two: Opt-out after more than one visit.

In this second pattern, nearly one-third of the original group of students who sought assistance from student support services opted-out and decided not to return. The majority of students who opted-out in this pattern were non-traditional aged males. This may suggest that they have alternate sources from which to seek assistance, due to older age contributing to greater opportunities to create an information network compared to younger traditional aged students. Reasons for opting-out included receiving inconsistent, confusing, or unhelpful information. Another reported reason was the time-consuming process of repetitively queuing while attempting to complete a college procedural requirement. These school contexts limited students’ attempts at rational decision-making. At times, the college’s processes made a seemingly irrational decision seem rational, such as the decision to opt-out of support services.

More students opted-out after repetitively queuing indicating ineffective service from student support personnel. Likely, this time-consuming college-going procedure constrained students who already had limited time for college-going activities. Rather than easing procedural complexities of the institution, the community college seemed to pass the complexity to the student creating a situation that constrained their attempts at
rational decision-making. Thus, the students made a rational decision to opt-out from this college service to spend their time on more pressing responsibilities or fulfill other obligations.

Opting-out has the potential to negatively affect students as they proceed alone to carry out their micro-decisions. Of the students who opted-out after visiting student support services more than once, all of them relied on trial and error to carry out their college-going task. As mentioned above, trial and error is the process of using previous experiences with decision-making in college to inform the next similar decision. The cyclically recurring semester system of this community college provided the predictability necessary for trial and error. However, it created situations limiting students’ on-going college-going choices or lengthening their enrollment. There is no difference between trial and error due to opting-out initially from student support services discussed earlier or opting-out after visiting student support services for assistance.

Despite trying to act rationally and appropriately by seeking college-going assistance from student services, these students reported not being helped and then decided to seek assistance elsewhere or not at all. Gary asserted, “I did the advisement a couple of times before…but they led me astray too many times.” Meanwhile, Paulina shared her experience with inconsistent information from advisors, stating, “It depends on who you talk to. You can talk to one person and they tell you one thing. You talk to another person and they tell you another thing. You’re running back and forth.” After choosing to opt-out, Paulina reported that she “did everything online. I looked at my financial aid; I did my schedule, because every time I came and saw an advisor, they
didn’t really help. I’m like ‘I’m not going to wait.’” Both of these students represent others with similar experiences leading them to opt-out of student support services.

For Dale, after taking his college placement tests he explained, “they [advisors] tell you where you’re at and they pick your classes out for you, but then after that, like, I guess it’s up to you to keep on going to get your classes.” Therefore, self-informing his course selection decisions, Dale took mostly electives and is now struggling to complete the more difficult core courses. Even after experiencing assistance from an advisor, Dale believed he was subsequently on his own after taking his placement tests.

In discussing the multiple courses and degrees available at the community college, Darrel called it “mind boggling” and said, “You can go to the academic advisors and one advisor will tell me something today and another advisor will tell me something else tomorrow, that’s the tricky part.” Because the information was contradictory and reportedly guided him “off course,” Darrel decided to find the course requirements by himself. He explained the difficulty of trying to find the courses in which to enroll himself, alone,

I wouldn’t be quite too sure because it’s not transparent enough to see what credits transfer well to the universities. The academic advisors might know that information, but I don’t know where to find it, though, so I just pick my best.

This example shows the consequence of a student experiencing contradictory information from advisors. Ultimately, he relied on guessing by “just pick[ing] my best” to select the courses necessary for a university transfer degree. Not only did Darrel choose to self-inform, he chose to opt-out of the student services system created by the college to support and assist him. Darrel’s experience illustrates how opting-out of student support
services, due to unhelpful interactions with advising personnel, led to using trial and error to learn how to navigate college procedures alone.

The next example illustrates the negative impact of repetitively queuing, opting-out, and trial and error. Emily, a traditional aged Latina, had a delay of an entire semester in college enrollment because it was difficult to find someone who knew about the courses she needed for her major. Attempting to find information online proved difficult as well. Then, once she found the information, it was incomplete about how to enter her chosen major and its required courses. Emily described her experience,

The first time I actually tried registering for classes [was] last semester and it was very difficult for me. I didn't know how to use the website, or any of it, and I ended up figuring it out on my own. It took me the whole semester.

Emily’s experience highlights the role of confusing information and lack of college resources on lengthening her timely access to education. Information provided online was unclear and created an obstacle to enrollment instead of easing access. Ironically, instead of technology providing a means to locate information and facilitate college enrollment, it actually created a barrier to educational access, delaying this first-generation students’ enrollment one semester. The information access procedures Emily encountered online contributed to delaying her entry into community college. Her confusing experience continued after entering community college when interacting with financial aid personnel.

Trying to ensure financial aid paid for her classes on time, Emily reported, “I did go back, and I had to...I was in the financial aid office for a while, and I would go back day in day out.” As she continued, she announced not having a car, which made getting
to campus “somewhat difficult.” Further explaining how an incorrect form also resulted in multiple visits to the financial aid office, Emily realized, “I'm used to it because, if I look in reality, this is my second semester applying. I just never got in my first semester, so I'm used to it now.” Emily accepted confusing information provided online and poor access to financial aid information from a support system presumably designed to help her attend college. She also accepted an entire semester’s delay in enrollment. Emily was not upset at, nor blamed, the community college. Instead, she lowered her expectation about the assistance she would receive and began overseeing the college’s process for completing her financial aid to ensure her enrollment.

These experiences involved students still attending the community college. They remained enrolled despite the negative effects of repetitive queuing, complex college procedures, and inconsistent information. Since students who reported these challenging situations still persisted, we might assume students who did not persist had similar, or even more troublesome, experiences that contributed to their departure from college.

This section presented student narratives about receiving non-helpful information from student support services personnel and choosing to opt-out of college created student assistance services altogether. It also presented student experiences of repeatedly standing in line for assistance (repetitive queuing), leading even more of them to opt-out. As a consequence of opting-out, students proceeded alone to carry out their micro-decisions. In doing so, students described how trial and error over recurring semesters helped them make better choices.

**Pattern three: Helpful assistance from student support services.** “One academic advisor was fantastic and he told me to ask for him by name.” Connor made this
statement. In the third pattern, students similar to Connor found helpful information from their interactions with student support services personnel. Six of the original group of 32 students who sought assistance from student support services found it helpful after the first visit (Figure 7). An additional 11 of the original group of 32 students who sought assistance from student support services found it helpful after repetitive queuing (Figure 8). More often, students needed to visit student support services more than once to obtain helpful information. In comparison to those who opted-out after repetitive queuing, more students found it helpful than not helpful.

In this pattern, two-thirds were female, two-thirds were non-traditionally aged, and most were from an ethnic minority group. This is somewhat similar to the sample
demographics, yet far more females and non-traditionally aged students are represented. Perhaps, ethnic minority females (nine of the 10 females in this pattern) are seen as helpless by those assisting them, and therefore, are more likely to receive useful information. When compared to pattern two where students opted-out after visiting student support services, there may be some merit to that speculation since more males adopted-out than females. Taken together, this suggests that fewer males receive helpful assistance. Adding the total of males compared to females who opted out, either before or after visiting student support services, well over half were males. This raises the question about whether males, likely ethnic minority since they are largely represented in the present study, experience bias from those assisting them resulting in decreased access to useful information to help them navigate implicit college procedures.

In pattern three, most students who found helpful information from student support services on the first visit rarely elaborated about their experience. Therefore, the following examples illustrate students who found a helpful student services staff member after more than one visit. In addition, this section presents students’ experiences with a student services system housed entirely in one building, which students described as helpful.

For example, speaking about her experience with the advising department, Linda replied, “it’s really hard for them to help guide me towards the next transition, sometimes it depends on who I talk to.” Trying again to get the sought after assistance, she described another experience with an advisor who, “really helped me and he gave me all the courses that I need.” When students found an advisor who really helped them, they continued seeing that specific person when needing additional information or assistance.
That was the situation for Connor, who had experiences similar to Linda. Connor explained, “I’ve gone in twice to talk to an advisor, one time it didn’t go so well.” The second time Connor worked with “one academic advisor [who] was fantastic and he told me to ask for him by name.” Connor felt positive about this second encounter and admitted, “Having someone who is willing to walk you through kind of like a child without [being] condescending to you is fantastic.” Connor’s admission may suggest there are situations where advisors were not supportive. Yet, implying or talking about poor behavior from advisors and other support services personnel was mostly missing from student narratives. Overall, these examples show how some students continued seeking guidance from student support services until finding someone they considered helpful. Afterwards, whenever seeking guidance, the specific staff member was asked for by name.

After becoming involved in a support program at the college, Kay’s confusion that resulted from seeking assistance from advising personnel was resolved. In describing her experience with general advising prior to help from a program specific advisor, Kay expressed,

Before I got my [program] advisor I was kind of confused about what classes I needed to take and how many credits I need to get before I graduated and how the whole transfer process worked, because I was not use to dealing with the advisors and even getting to see an advisor, sometimes was hard, like, trying to schedule an appointment.

This passage reveals multiple issues for Kay, including how to work with an academic advisor. Prior to having access to the program specific advisor, Kay struggled with
course related decisions, confusing information, and a lack of information about – and difficulty accessing – student support services personnel. By qualifying for the support program, Kay did not have to opt-out, proceed alone, or use trial and error to inform her micro-decisions. Yet, not all students qualify for this type of special program.

Interactions with student support services personnel whom students found helpful led to students returning repeatedly to seek out that specific person by name. In the second year of the interviews, a new student support services center became operational. Located all in one building, the new student support services center housed many of the departments necessary to carry out most college-required processes, such as advising, financial aid, and enrollment. At the new center, rather than waiting in line, students can leave and return after being sent a text message indicating they are next to be served.

Students perceived this ‘one-stop shop’ in a manner similar to finding a helpful student services staff member. Although some students experienced continued long waiting periods and daylong processes, students from the second year’s interview group did not acknowledge the same type of constraining impact as students from the first year’s interview group, who repetitively queued in separate buildings. Nor did they express the same level of dissatisfaction. Even students experiencing both processes thought the new building offered better service.

Tatiana illustrated the perception of greater satisfaction with assistance from student services staff members in the new student support services building. Interviewed twice, one year apart, she reported, “It is all in one spot now so you go from one station to the next and you are done. All in one day.” Tatiana did not recognize the impact on
her time or the continued inefficiency of the processes carried out by student support services.

In another example, Julio described his experience of being sent from place to place on campus the year prior in comparison to his experience at the new student support services building. He explained,

The first time I tried to register, I had to go where the bookstore is now and I had to wait there. Then I had to go get testing. I was all over campus. I didn’t even know where everything was. They told me to go to testing, I was like, “Where’s testing at?” But now everything’s in one building. It’s streamlined. It’s easy to find.

Sharing a similar experience, Paulina pointed out,

It’s actually really good. Before, you had to go to this place and this place, this building and this building. It was all split up. It was horrible, such a long wait.

Now, you still have to wait long, but you don’t have to stay there.

Seemingly, the proximity of stations for repetitive queuing, along with being able to leave the building to do other things until they received a text message to return, increased students’ perceptions that the student support services process was better.

In summary, this section presented experiences of students who found helpful information from a student support services staff member. In this pattern, repetitively queuing resulted in positive experiences for students. Ironically, student support services departments housed all in one building resulted in students reporting those personnel as helpful, despite instances of continued long waits and repetitive queuing.
Pattern four: Assertiveness required for interacting with student support services. “If you have never been in a system that requires you to be self-motivated it’s shocking.” Maria made this statement. Another pattern related to interacting with student support services personnel is the need to be assertive (pattern 4). Six of the original group of 32 students who sought assistance from student support services departments described experiences similar to Maria about needing to be self-motivated, assertive, or ask the right questions to obtain assistance, hereafter collectively referred to as assertive (Figure 9). Similar to the sample population, there were slightly more females than males in this pattern, slightly more non-traditional than traditional aged students, and the majority were from an ethnic minority background. Almost all of the students who reported needing to be assertive also experienced repetitively queuing.

As an example of needing to be assertive, when initially enrolling into college Maria acknowledged, “it is very much a self-motivating thing and you have to allow the
Further explaining her enrollment experience, Maria shared about a time she went to the advising department at 2:00pm, after reading in a brochure the hours of operation, which were listed as 8:00am until 6:00pm. Upon arriving, she conveyed, “[I was told] we’ve got no more spots we’ve closed off our entries because we’ve got a huge amount of people so could you come back tomorrow? And I went, but you say ‘til 6, you don’t [say] that there’s a cut off time in any other literature.” Continuing, Maria admitted, “That was almost the crux between coming and attending and not attending.”

Maintaining her decision to enroll, Maria returned early the next morning. She described a time-consuming process of enrolling, seeing multiple college personnel for assistance, and how “it literally was a whole day, a whole day and I was going from place to place.” She declared, “It is very much you need to take charge from the start of whatever you plan” and then reiterated, “it was very much self-driven.” Maria acknowledged the service discrepancy. However, the bureaucratic nature of the college’s procedural structures forced her to work within it, resulting in her repeatedly reporting about the need to be self-motivated.

Maria had no choice other than to engage in the student services system created by the college intended to assist and support. Nonetheless, during Maria’s interview the following year, she continued describing her role in the college organizational structure as requiring self-motivation as she described searching for information about available scholarships. For Paulina, self-motivation was expressed more forcefully when she reported, “You actually have to keep going and going and pounding them for help.”

Similar to self-motivation, many students described the need to be assertive. In one particular example, Ross described his experiences with course enrollment before
and after a change in college procedures. He said, “the enrollment process was simple, but before we had this one stop center, it was go here, go there, go, and if you didn’t know and weren’t assertive enough to ask questions…[it]…wasn’t so good.” Despite his self-professed need to be assertive, Ross described the campus culture as “students first” and grouped faculty and staff together stating, “I’ve never run into anybody who wasn’t willing to help you, again, it’s up to the student to be assertive enough to ask for it.” Repeatedly, students described assertiveness and motivation as required personal qualities for obtaining college-going assistance or information from student support services personnel.

Gerardo was able to figure out course scheduling on his own through “work[ing] around” and “hoping” along with “asking the right questions.” Similar to previous examples, Gerardo accepted the fact that college personnel did not assist him or provide clear directions for him to more simply schedule his courses. There were other students who thought as Gerardo; that in order to get the sought after assistance you needed to know the right questions, which translated into a type of motivation or assertiveness to continue asking until satisfactorily assisted. Overall, as these students interacted with student support services personnel to implement decisions, they recognized the need for self-motivation, assertiveness, and knowing the right questions to ask. Perhaps students who were not assertive had similar challenges obtaining assistance and, as a result, chose or felt compelled to no longer enroll.

In an example of contradictory information from student support services personnel, repetitive queuing, and opting-out, I revisit Beth. Recall that college organizational practices limited Beth’s available choices for course enrollment to the
point where it ultimately led to making a poor decision (taking an online math course), which at the time seemed rational. In this scenario, Beth shared her experience with the financial aid service. Beth explained, “I get in there [financial aid office] and it’s the wrong form...But also I’ve gone in there with forms and they’re like no we don’t need this stuff and turn around and all of a sudden they do need that stuff.” She continued by stating she waited in line for “three hours.” Beth admitted it took “a lot of determination…I sat in those lines. I figured out the best way to do it, you get there at 7:30 in the morning.” Even though Beth was in the presence of and interacting with financial aid staff members for assistance, she described still having to be “determined” and figure out on her own the best way to accomplish a college-required procedure.

In summary, to obtain assistance from student support services personnel, students described needing to be self-motivated, assertive, and ask the right questions. These students realized they were part of a college process that favors certain personal qualities. Favoring students who act in a certain manner, which may be contrary to their personality, could limit a student’s ability to interact successfully with student support services personnel.

**Pattern five: Recognizing inefficient student support services.** “The system itself you had to beat.” Ruben made this statement. Some of the sample population, similar to Ruben, fit into pattern five by recognizing that the community college itself had a responsibility to assist students and provide helpful information. Only four of the original 32 students who sought assistance from student support services personnel verbalized inefficiencies regarding the college’s student services procedures (Figure 10). Three of these students were male. Surprisingly, the majority were from an ethnic
minority group and traditional aged, first generation college students. All of the students who verbalized that the community college itself had a responsibility to assist students and provide useful information sought assistance at least once from a student support services staff member.

Figure 10. Pattern Five: Recognize inefficient service.

Recognizing inconsistent information from the community college, Christopher declared, “If you want to know what to do, you kind of have to ask another [student] in order to find out what resources are available. The departments themselves may not know what another department offers.” Acknowledging inadequate college support, Julio exclaimed, “I think advisors really should advise kids” and “let it be known” which classes help students achieve their goal quickly. Speaking about attempting to enroll in a class requiring a prerequisite Ruben had not taken, he shared that the “teacher herself was more than happy to sign off on it, but that was a bit of a problem going back and forth [with administration].” After getting into the class, he acknowledged, “I think it was more just the system.”

In an example about contradictory information from the community college, Maria expressed her dissatisfaction about the difference between the college’s published material and actual practice. She wrote a complaint to the advising department’s
manager about the information discrepancy and unfair practice of being turned away
during the advertised hours of operation. Maria’s situation resulted from too many
students already waiting to see an academic advisor. Ironically, Beth recognized,
“there’s not enough people to take care of the number of students.”

The pattern of students acknowledging and speaking about college processes and
personnel being at fault for inadequately assisting them was rare in the sample
population. However, the sample was limited to students currently attending community
college. Those students still attending college mostly reclassified their interactions with
college support services personnel into ones in which they accepted inadequate
assistance. Paulina sums up those experiences by explaining, “They’re helpful, but
they’re helpful to an extent.” Perhaps students who became upset with the college, and
did not accept its inadequacies, were no longer enrolled.

**Pattern six: Self-blame.** “I think…it was my fault.” Lilian made this statement.

Finally, pattern six emerged from the findings of the present study and described
students’ emotional response of self-blame. Working within the college’s procedural
environment, students described their feelings associated with attempts to implement
micro-decisions. A student’s self-blame may result from interactions with student
support services personnel or from the student’s personal perception of making a course-
related error.

Self-blame surfaced as a common emotional response for eleven of the 60
students in the entire sample population, because they perceived a less than optimal
outcome (Figure 11). Whether navigating the college alone after initial enrollment or
with the assistance of student support services, students similar to Lilian shared feelings about self-blame. The majority of the students who reported feelings of self-blame were ethnic minority female, low income, and non-traditional age students. This suggests that self-blame may be raced, classed, and gendered to affect those who typically have less power. After internalizing the situation as a personal error or downplaying the consequences of their action, some students viewed these situations as good learning experiences.

Of the eleven students who felt self-blame, three of them opted-out from the beginning and worked alone to navigate the community college. Consider Betty for example, who did not know how online classes worked before enrolling in one. Had she known that online courses were not ideal for subjects needing “hands on involvement” before enrolling, she admitted, “I probably would have saved a lot of time and a lot of money.” However, she acknowledged the flexibility of an online course, and thought, “it was a good starting point.” So, despite not really liking the online learning environment
and acknowledging the potential for saving money had she known previously, Betty internalized the scenario and accepted it as a good place to start rather than externalizing the lack of information from the community college about online learning environments.

In another example, Barbi Jo blamed herself for taking an unnecessary class, stating, “[I] should have talked to an advisor; got more familiar with my major map first.” Similarly accepting blame for taking an unnecessary class was LaDonna, who felt the student services personnel were very encouraging. Even so, after talking with them, LaDonna learned she had taken an unnecessary class the previous semester. Instead of being upset or acknowledging the wasted time, effort, and financial aid money, LaDonna declared, “they allowed it and told me what [I] can do…so I’m not actually falling behind.” This accounting major could have been one math class ahead of where she was currently. Instead, she accepted responsibility for taking the wrong class, rather than acknowledging loose college procedures playing a part in her course-taking error. In LaDonna’s case, the institution played its role of cooling out by telling her they “allowed” the mistaken class, and decreasing or hiding any institutional blame by implying it was her fault and the institution was doing her a favor by allowing the course. Thus, LaDonna was not upset at the situation or the subsequent implications on her college enrollment.

After attempting to obtain assistance from student support services, other students expressed self-blame for not getting all of the help they sought. One quarter of the original 32 students who sought assistance from student support services personnel expressed self-blame. For example, Arturo blamed himself for an erratic course schedule, but framed it as a learning opportunity. Instead of Arturo pointing to college
personnel for ineffectively assisting him, he accepted and redefined the situation as a sense of pride stemming from his ability to figure out how to schedule the next semester’s courses in a short, consecutive window of time.

Lilian is another example of self-blame after seeking the assistance of student support services personnel. Lilian participated in a program designed to help ease transition from high school to college. Focused on her high school graduation, she withdrew from one of the college level courses, because she “was working, going to school and dealing with other situations” and “they [student services personnel] said that was fine, they understood the situation.” However, when re-enrolling as solely a college student, she learned she was placed on academic suspension, for which Lilian blamed herself, proclaiming, “It was my fault.” Lilian admitted, “It was a really discouraging process.” Elaborating, she said, “No one really explained anything. I think in terms, it was my fault because I didn’t really reach out to the [transition] program to assist me at that point, however they weren’t extending their hand either.” As a result, Lilian had to pay her own tuition, despite being qualified for financial aid.

Lilian’s situation highlights how her personal choice to focus on high school graduation influenced college course withdrawal, with an understanding that it was acceptable and “fine” according to college personnel. However, with misinformation from college personnel, Lilian’s rational choice resulted in complicating her subsequent enrollment. Despite acknowledging a lack of assistance from college personnel, she accepted the blame. Unfortunately, the lack of clear information from college personnel continued, adding even more financial pressure on Lilian. She outlined, “they didn’t explain some of the things, I took 12 credit[s total], but technically I only had to take 9.”
The initial misinformation Lilian received from student services personnel occurred repeatedly, straining her college-going.

When students accepted the lack of assistance from student support services personnel, they would “reclassify” (Clark, 1960a) the interaction. Such reclassification lowered expectations about the level of assistance provided by student support services. Repeatedly, students accepted that a service designed to support them in their college-going activities did not consistently do so. Accepting poor support from the college may be due to no other available option for completing procedural requirements. Self-blame and a lack of anger toward the institution are elements of cooling out that seem to remain today. The institutions’ role in persuading students not to be upset about its inadequacies appears to be working.

The examples presented illustrate how these students blamed themselves for their own errors resulting from a lack of information. Meanwhile, other students blamed themselves when student support services personnel did not adequately assist them. Since the sample population included only currently enrolled students, perhaps many other students who have already left the college are also blaming themselves for their errors. Most of the interviewed students did not blame nor express anger about college procedures or personnel hindering their attempts to implement decisions. Instead, they internalized the situation and then some students ultimately blamed themselves. These student perspectives are similar to a feature found in cooling out, which is when students accepted an outcome less than they desired and did not become upset with the college for any role it may have played. In the present study, some students experienced course-taking related errors for which they took personal responsibility. None of the students
feeling self-blame explicitly mentioned recognizing that the college may not be adequately assisting them or providing necessary information for them to make good choices.

The Case of Carol

“They just kind of threw me out there into the ocean and I needed to navigate myself and figure out what I was going to do” Carol said. Let us revisit Carol in her college-going experience. Her complete description about attempting to re-enroll in another English course provides an example about how the complex lives of students intersect with complex college procedures, which are seemingly then passed along to the student. Carol’s experience shows how internal and family contexts limited her available choices. In addition, the school context created procedural barriers, further limiting Carol’s choices while attempting to implement her micro-decisions. Carol’s experience also illustrates the procedural nature of cooling out, possibly present currently in the community college.

The last time I introduced Carol, she withdrew from an English course because she did not have money to buy the books, the teaching pace was fast, and she had an ill family member of whom she was concerned. Wanting to take another English course that same semester, Carol found a class starting later in which to enroll, except it was full. Not knowing how to enroll into a full course, Carol sought the assistance of the student services department. In her attempt to obtain information, Carol explained, “trying to, I guess, navigate around the school, and find out what I’m supposed to do is really hard, especially when you go to someone who works here and they’re not helpful with you.” Elaborating, she explained that after standing in line and receiving a form, she was sent to
another person who subsequently sent her to the English department. At this point, Carol blamed herself for not knowing the location of the English department and not getting directions from the second student services staff member. She admitted,

I guess I wasn’t straight forward enough for them to realize that I had no idea where I was going, I was completely lost. And they just kind of threw me out there into the ocean and I needed to navigate myself and figure out what I was going to do.

That day, Carol was unable to implement her decision to enroll into another English class. Instead, she spent the next few days with her sick family member in the hospital. As Carol’s complex life intersected with the complexity of obtaining information from the college, it created a barrier to her timely re-enrollment. She tried to make a rational decision, yet the constraining influence of the colleges’ procedure requiring her to take a form to another department for a signature (school context) hindered her.

Upon returning to the college, Carol again began the process of re-enrolling in an English course by standing in line (repetitive queuing) at the student services department with the same result of receiving no useful assistance. However, when she went to the student union, she found the help she needed from a peer and proceeded to the English department to get her form signed by the professor teaching the English course that was already filled to capacity with students. Carol explained her experience with the English department,

I took my paper in there and the first thing they told me was this was the wrong paper [I] needed a different form and that [the teacher] wasn’t there, and they
would try to get her authorization over the phone or fax it, and I told them, you know, I needed to have - It was a Thursday and I couldn’t wait, I needed to have this done before Friday because that’s when they started awarding the grants and I wasn’t sure if my grant was going to cover this additional class. So the next day, I got a call from them saying they had the paper signed, but at the same time got an email that they had already awarded my grant and so I didn’t end up taking the class.

Because she paid for college using a grant, Carol could not add the approved English class since the grant funds were applied to her current tuition, which did not include the additional course. The approval Carol sought came too late to meet the grant deadline.

Carol’s situation provides insight into the complicated college procedures, repetitive queuing, and concurrent contextual influences shaping her reality, constraining her decisions, and ultimately hindering her timely access to education (Figure 12). Specifically, Carol’s educational goal provided personal desire to sign-up for another English course. Lack of money for books and an ill family member constrained her choices. Having an ill family member also exerted influence on her as it intersected with the school context, resulting in an inability for Carol to complete the time-consuming process of procuring permission to enroll in a full course.

Additionally, the school context negatively influenced Carol’s situation in six ways. The first was (1) a fast-paced course, which she was unable to keep up with (again due to family and internal contexts, of an ill family member and no books, respectively). The next four ways emanated from the college’s (2) complex procedures; (3) time-
consuming processes; (4) confusing procedural information; and (5) contradictory information (for enrolling into an already full course). Lastly, (6) college deadlines for

Figure 12. The Case of Carol.

financial aid disbursement procedures limited the amount of time Carol had available to navigate the complicated and implicit college procedures for re-enrolling. Ultimately, Carol was unable to take another English course that same semester due to multiple, concurrent contextual influences and ineffective college procedures adding unnecessary complexity to an already complex student situation.
Remaining Unrecognized: The Community College’s Role in Continuing Cooling Out

Cooling out, as described by Clark (1960b) was a systematic process carried out by the community college to lower university transfer students’ aspirations. In doing so, the junior/community college fulfilled its role within higher education to limit the number of students who gained entry into four-year colleges and universities. The process of cooling out identified by Clark (1960a, 1960b) included students receiving poor grades resulting in academic probation, a mandatory orientation class designed to steer students toward an occupational degree, and counseling throughout this process where students, seemingly on their own determined that their academic aspirations were unfeasible. This active process was designed to gradually “let down hopes gently and unexplosively” (Clark, 1960a, p. 574) meaning that students would accept lowering their academic goal and not blame the college. As a result, students then redefined their educational expectations, accepted their circumstances, and selected non-transferable courses in occupational degree tracks. These active processes leading to cooling out described by Clark (1960a, 1960b) were not identified in the present study.

Whereas Clark (1960a, 1960b) described cooling out from an institutional perspective, the present study viewed the community college through students’ perspectives. As such, the ways students perceived and responded to their interactions with college personnel and procedural requirements suggest how cooling out may look today. Similar to prior features of cooling out, there is evidence of community college procedures serving to lead gradually students to redefine their expectations. In addition, three other features consistent with cooling out seem to remain in today’s community
college, the illusion of self-directed decision-making, self-blame, and lack of institutional blame. To begin, I describe how the potential current form of cooling out is dissimilar from Clark’s (1960a, 1960b) description. Then, the ways it may be similar are presented.

**Cooling out today.** Poor grades emerged as a reason for course withdrawal when aspiring to university transfer in the present study, but not as a reason to change academic goals as Clark (1960b) described. Additionally, poor grades resulted in the temporary loss of financial aid or scholarship monies in the present study. Even so, students receiving financial aid or scholarships generally described needing to remain enrolled in a certain minimum number of credits. Therefore, course withdrawal became a complicated situation. In addition, due to fear of earning lower grades, one student reported not taking honors classes even though he was qualified. Students described neither academic probation nor systematic counseling as an element of their community college enrollment outside of its implications for financial aid/scholarship monies.

Students rarely reported about a mandatory orientation. The few students mentioning an orientation class described it as being helpful for learning about college resources and study tips. Taking non-transferable courses, typical for students earning a certificate, was not spoken about as a limiting activity or as pressure to alter their academic goal. Currently, certificates are a means for being competitive in the job market and increasing earnings potential. With the heightened attention on community colleges to produce “completers” (those who earn some type of degree) certificates are celebrated as an accomplishment. Thus, terminal and occupational community college degrees do not indicate failure on the students’ part today as they once did.
Contrary to systematic counseling described by Clark (1960b), 23 of the 60 students in the present study reported college personnel were not involved in their college-going micro-decisions. From initial enrollment to continued college-going micro-decisions, students reported difficulty in finding college-created information or college personnel who could adequately assist them. Nonetheless, some students attempted to obtain assistance from student support services personnel. When including students who relied on themselves after initially visiting student support services, the amount of students who reported college personnel were not involved in their college-going micro-decisions increased to just over half of the entire sample. Thus, the element of systematic counseling as a method for cooling out was not found in the present study.

Finally, with the exception of Carol, who learned she could not manage the hand-eye coordination necessary to operate a certain machine required for her major, none of the students in the sample indicated that they could not achieve their educational goals or needed to lower their aspirations. On the contrary, when asked about progress toward their educational goals, the majority of students reported they were taking courses necessary for their degree. Similarly, an overwhelming majority of the students in the present sample stated that they had not seriously considered ending their college enrollment. Overall, students’ narratives lacked descriptions of considering lowering their educational aspirations.

Therefore, the traditional methods of cooling out described by Clark (1960b) were not revealed in the present study. Those methods included academic probation due to poor grades, a mandatory orientation course, systematic counseling, taking non-transferable courses, and students lowering their aspirations from a university transfer
degree to accept an occupational degree through the above methods (Clark, 1960b). The aforementioned was an active process carried out by community college personnel. As such, they also actively consoled students when necessary to help them accept their lowered aspirations and degree track, which contributed to students not blaming the community college for their own inability to achieve their initial goal (Clark, 1960a, 1960b). Similarly, the lack of institutional blame appeared as one of three aspects of cooling out, described next, potentially remaining today.

The aspects of cooling out perhaps remaining in community colleges include students retaining the illusion of self-directed decision-making, self-blame, and lack of blame directed toward the institution. Traditional cooling out decisions involved students themselves choosing non-transferable courses, lowering academic aspirations, and then selecting an occupational degree in response to gradual and systematic guidance from faculty and counselors (Clark, 1960b). Community college students from the present study similarly retained self-directed decision-making, but they were not lowering their academic aspirations. Often in response to internal and family contexts intersecting with a complex school context, students made decisions affecting their college-going experience. Some of those decisions resulted in delayed course enrollment, lengthened overall college enrollment, and increased the costs of college. Ultimately, those decisions may hinder students from attaining their goal. However, students in the present study did not always realize the influence community college procedures, or experiences with student services personnel, had on constraining choices.

The active and intentional process of cooling out students directly through counseling was not revealed in the present study. However, the community college’s
implicit processes and procedural ineffectiveness, along with inconsistent practices of student support services departments, perhaps serve the same ends today. Repetitive queuing and excessively confusing, often contradictory, and time-consuming processes may serve to “gradually disengage” the student and provide opportunities for them to “redefine expectations” (Clark, 1960a, p. 575) about the amount or type of assistance they should expect from the college’s student support services. This could be considered a type of “drawn out denial” (Clark, 1960a, p. 574) by gently decreasing a student’s expectations about assistance from college personnel to complete college procedural requirements. It may also help to ease the workload of student services personnel by redirecting students to use alternative resources, such as the student herself, published information, or other people.

Finally, some students expressed self-blame. Historically, self-blame stemmed from deciding to lower degree aspirations (Clark, 1960b). Findings from the present study revealed how some students blamed themselves for not knowing the right questions, not being assertive enough, or not understanding published or verbal college information. After speaking to student support services personnel, some students perceived it as their fault for not getting the sought after information or assistance. A portion of the sample believed they were to blame, rather than the student services staff members or college processes. For example, Rosaria repeatedly said, “it’s me” when talking about not knowing the resources or scholarships available to her as a student.

When students blamed themselves rather than the college institution, cooling out worked according to Clark (1960a). Essentially, the student accepted a lesser outcome without directing anger toward the responsible institution. Similar to the students in
Clark’s (1960b) study who did not become upset with the college for their lowered degree choice and inability to transfer to a university, students in the present study were not necessarily upset with the college for inadequately assisting them. Thus, the possible features of cooling out still existing today include retaining the illusion of self-directed decision-making, self-blame, and lack of institutional blame.

**Procedural cooling out.** There may be a new form of cooling out which requires a definition appropriate for current realities. The present study asked students about their experiences navigating the community college toward their educational goal. Along with questions about procedural experiences, students were asked about their experiences with teachers they perceived as ‘good’ and as ‘bad.’ Despite direct questioning, students’ narratives lacked complaints about faculty. Instead, student narratives more prevalently expressed frustrations and challenges about procedural navigation and interactions with student support services staff members. To capture the students’ perspectives about how navigating college procedures can affect their college-going experiences, I suggest updating the definition and terminology of cooling out to relate to current student and college cultural realities. I propose the term *procedural cooling out* and succinctly define it as the process of hindering a community college student’s ability to access and proceed through timely education due to college procedures. Findings from the present study provided evidence of procedural circumstances hindering students’ ability to access and proceed through a timely education. Based on the aforementioned continued aspects of cooling out, I suggest identifying that cooling out likely results from procedural processes, rather than being academically driven, and redefining how it occurs based on findings from the present study. I propose: procedural cooling out is the process of
hindering a community college student’s ability to access and proceed through timely education without blaming the institution for (a) unclear/complicated college procedures; (b) confusing, inconsistent, or lack of information (from student support services personnel or published college materials); (c) repetitive queuing to carry out a decision or college-required procedure; or (d) time-consuming college processes. These four conditions, either singularly or concomitantly, may influence delayed enrollment in courses or college, as well as contribute to course withdrawal or opting-out from formal college support systems.

Findings from the present study revealed that cooling out likely results from procedural diversion. Viewing college-going through students’ point of view, through their micro-decisions, provided insight into how they experienced community college procedures and personnel. It is from the student perspective that inefficiencies in the services designed to support and assist them, may actually provide additional barriers to their college enrollment. The community college may serve a cooling out function, not through historical methods but through procedural process of long wait-times, repeated visits to complete a single procedure, and incomplete assistance.

Students typically come to community college with existing obligations in their lives, such as work and family, limiting their college-going choices. College procedures and implicit processes further constrain college-going decisions. Perhaps without realizing, colleges create an environment where a student’s only choice is to opt-out or accept the procedures in place as a sort of ‘rite of passage’ into the community college culture. The manner of which community colleges enact policies and respond to regulatory pressure, may serve a cooling out function.
Recall Carol, who was unable to complete the re-enrollment process for another English class due to the complicated nature of needing multiple visits to student services personnel at multiple locations on campus to obtain a signature, combined with limited available time due to ill family and financial aid deadlines. Her situation was complicated additionally by a fast-paced course and lack of funds to purchase the required textbook. These multiple contexts overwhelmingly influenced Carol’s initial course withdrawal. Subsequently, when her circumstances intersected with the college environment, that environment created multiple additional constraining procedural requirements, resulting in an inability to re-enroll in a class starting later in the same semester. Carol attempted to be rational and responsible by replacing the withdrawn course, but college procedures obstructed her ability to make that happen.

When students invoked the services in place to assist them at the community college, they often encountered inefficiencies, time-consuming processes, and minimal assistance. Additionally, those students described contradictory information from the college personnel tasked with assisting them. Therefore, students experienced at least two interactions with student support services personnel to conclude the information received did not coincide. Well over half of the sample population who reported visiting student support services for assistance did so more than once. The repetitive queuing to see a student support services staff member, as well as other time-consuming processes, may provide an opportunity for students to redefine (essentially lowering) their expectations about the quality of assistance they should receive. It may also slowly disengage the student from continuing to seek assistance. In this manner, students came to accept the inadequate bureaucratic college processes. In these scenarios, a student may
opt-out of the queue and ultimately the structured student support services provided by the college.

From an institutional perspective, students who opt-out could ease community colleges’ high student-to-staff ratios. Because there is a service in place and professional staff specifically trained to assist students, colleges provide an opportunity for students to obtain the information and assistance they seek. The “opportunity” and “bureaucratic procedures appeal to universal criteria and reduce the influence of personal ties” in a process termed “objective denial” (Clark, 1960a, p. 575). This allows student support services personnel the ability not to take personal responsibility for the inadequate student support services processes. For example, since there are usually many course offerings for student support services personnel to direct students to enroll in, it is objectively possible for them to deny it is the college’s, or their own fault for the student not being able to fit one of those courses into their schedule. Similarly, the same denial exists when a student cannot spend the required time queuing for a service offered for their benefit.

A similar institutional perspective may spill over to infect the student’s perception as well. The fact that services exist to assist them, and are staffed with professionally trained individuals, it may seem as though the college itself cannot be to blame when the student has difficulty implementing micro-decisions. Thus, students may come to feel it is their fault (self-blame) for not being able to obtain the information they sought. Rather than calling attention to the fact that the students themselves were not helped by the service created to assist them, these students accepted the outcome in order to potentially hide their own inability or shortcomings.
In summary, the cooling out function of the community college seems to occur because of its procedures. The students’ point of view revealed how they experienced the bureaucratic college institution, its procedures, policies, and personnel. College procedures may gradually disengage students or provide an opportunity for them to lower their expectations of college created support services. Due to redefining expectations, most students accepted less assistance without blaming the community college. If students opted-out of college-created services designed to support them, they often proceeded alone to implement micro-decisions and complete college procedural requirements. Unable to obtain assistance, these students often relied on trial and error, which oftentimes contributed to course-taking mistakes and/or a potentially lengthened enrollment.

**Summary Discussion**

The present study first identified many of the micro-decisions students encountered during their college-going experiences. Then, those micro-decisions provided a lens from which to view the ways students experienced the community college. Students’ descriptions of their decision-making processes revealed an overwhelming presence of contextual influences, such as work and family obligations, limiting their choices. In addition to internal and family contexts, the school context additionally limited students as they attempted to implement their micro-decisions. The combined micro-decision and contextual influences limiting the students’ choices created situational understanding. Based on their situational understanding, students selected a rational action informed, and limited, by contextual influences. Delaying timely access to education may occur from the rational action, such as a decision to withdraw from a
course, regardless of the reason. Alternatively, students may encounter subsequent decisions about how to carry out their initially selected course of action.

After making a college-going micro-decision, students often sought information about how to implement it. This is when they encountered yet another micro-decision; whether or not to seek assistance from college created services and personnel in place to assist them. Frequently, students reported receiving inconsistent, confusing, or non-helpful information from student support services personnel, which created another micro-decision; whether to continue seeking assistance. Students had the choice to either return to the queue or opt-out of this service altogether.

When choosing to opt-out, students typically relied on themselves for information about how to implement their decision. Unexpectedly, student narratives lacked content about whom or where they went for assistance with college procedural requirements. Thus, students were alone in their attempts to implement micro-decisions. As a result, they relied on trial and error to accomplish necessary course-taking procedural requirements. Potentially delaying timely education, trial and error often resulted in course-taking mistakes or misinformed actions.

Students experienced varied quality of assistance from student support services departments and personnel. Even the students who reported being helped had to choose whether to continue seeking assistance. Thus, repetitive queuing resulted from multiple attempts to seek assistance from student support services personnel or from one staff member redirecting students to another department. Even though some students repeatedly participated in this structured college service, at any time they may decide to opt-out.
Irrespective of choosing to opt-out of assistance from student support services or repetitively queue, student narratives rarely expressed anger at the institution. Instead, accepting institutional inefficiencies, some students blamed themselves for not receiving the expected type of assistance they sought from student support services personnel or published college information when navigating alone. Through time-consuming and ineffective processes, the college created scenarios that led students to redefine their expectations. Rather than lowering expectations of themselves, students lowered their expectations for assistance and information from the college. This gentle letdown similarly resulted in students accepting those circumstances and not blaming the college. Instead, some students blamed themselves.

With each decision about whether to utilize student support services or repetitively queue, students experienced the limiting influence of multiple obligations (situated contexts). The contexts constrained the amount of time available to devote to college processes relative to student goals and competing responsibilities. Opting-out from the structured system of support, at any point in the process, meant students continued alone, and relied often on trial and error to find their way through college-going processes. Therefore, the nature of assistance from student support services processes and personnel provided limits on available choices.

According to Goldthorpe, (1989) rational action theory assumes individuals act rationally based on their goals, beliefs, and available information in any given situation. This triad creates situational understanding from which individuals base their ultimate decision. Focused on the “conditions under which actors come to act-systematically” (Goldthorpe, 1998, p. 186), findings from the present study revealed the ways community
college procedural requirements and prescribed systems of support influenced student decision-making, sometimes adversely. Students who experienced college support processes or personnel as unhelpful made a seemingly rational decision to opt-out of college-created assistance for their on-going college-going needs.

Additionally, Goldthorpe suggested analyzing rationality by looking at the “situation of action” (1998, p. 186). Results from the present study demonstrated multiple situations of action contributing to situational understanding. Students described several, rather than singular, situations (contexts) influencing their decisions, exerting inextricable pressure under which students were forced to constrain their decisions. Moreover, these multiple situations collided with the school context, which further constrained decisions. In this sense, rational action theory could benefit from a perspective of concurrent contextual influences on situational understanding and rational actions.

The model of student success (Perna & Thomas, 2006) provided a means for categorizing the situations influencing decision-making. Perna and Thomas described the layered nature of situated contexts to depict multiple influences and “the possibility of interactions between layers” (2006, p. 10). Results from the present study validate the multiple influencing contexts and supports the supposition about potential interactions between layers. When the already complex personal and family obligations of students intersected with the complex procedural environment of the community college, students encountered an additional barrier to success. Rather than just another layer of influence as the model suggests, the school context interacted with both the internal and family
layers while students attempted to implement their on-going college-going micro-decisions in pursuit of their educational goal.

Perhaps another way to view the layered contexts of the model, to reflect the findings of the present study, is to imagine each layer pushing in on the student who is located at the center of the diagram (Figure 3). As the student experiences each contextual layer of influence, it adds constraining pressure on decision-making. A student brings their internal and family context wherever they go. When entering the school environment, an additional influence is activated. The school, in this case a community college, has its own set of irremovable contexts, namely its policies and procedures, created in response to its function as an educational institution. In essence, as the student attempts to navigate a complex college institution while simultaneously navigating their own life, contextual barriers multiply when the student and college intersect.

Another consideration for Perna and Thomas’ model includes the addition of student support services personnel, or college staff in general, as an explicitly stated factor contributing “success at the college level” (2006, p. 17). Some students’ interpretation of their interactions with support services personnel and the subsequent outcome from seeking their assistance influenced their decision-making. Ultimately, those interactions may lead to behaviors contributing to a modern form of cooling out, rather than student success, as described by the model.

In summary, modern cooling out may occur in multiple ways. One simple way is through the micro-decision course withdrawal, which lengthens time to degree completion because the student will need to repeat the course or replace it with another
course later. Course withdrawal can be a rational decision when considering how students’ personal obligations and constraining college procedures limit available choices for college-going.

In another way, cooling out may occur for students from patterns one or two, who opt-out of student support services. Opting-out can occur prior to or after visiting student support services. In either case, students opt-out of the very services designed to assist with college-going processes. From opting-out, the student often proceeds alone. Delayed enrollment and course-taking errors may result from students, alone, trying to understand and work through complex and implicit college procedures using trial and error. When students proceeded alone, the cyclical semester system of the community college allowed repetition to inform recurring decisions. Trial and error did not always yield positive first attempt results, sometimes delaying enrollment or causing course-taking errors.

Finally, the pattern of students feeling self-blame (pattern 6) plays directly into the process of cooling out. When combined with the majority of the sample who did not recognize the role of the college institution on constraining their available choices or for its inefficiencies, many students consequently accepted the lack of assistance from community college processes. Even some students in pattern three who found a helpful student support services staff member, had to spend unnecessary time repetitively queuing.

Overall, most students did not blame the institution for inadequate assistance nor the inability to implement their micro-decision in a timely manner. Instead, students appeared to lower their expectations about the quality of assistance they received from
student support services and/or published college information. This suggests cooling out may still exist in today’s community colleges as complex procedures divert a portion of its students away from structured support services.
CHAPTER 5

CONCLUSION AND IMPLICATIONS

This section will provide an overview of the present study, methodology, and major findings. Then, contributions to existing theory are presented. Finally, this section ends with recommendations for practice, policy, and future research.

Overview of the Problem

It is unclear how community college students’ complex lives intersect with the college’s procedural environment to affect their college-going experiences. Data exist about the outside obligations of many community college students, which can complicate their college-going effort. In particular, nearly half of community college student’s work compared to less than one-third of four-year college students (AACC, 2014). In addition, students attending community college who have dependent children is more than double the rate of students with dependent children attending a four-year college (AACC, 2014). Despite knowing these obligations exist in concert with college-going, little is known about the ways in which those obligations influence on-going college-related choices.

The present study begins to fill that gap.

Choices about college-going do not end at college entrance. Despite this, research has predominantly focused on college choice with minimal attention given to on-going choices during college attendance. Research-based models about integration and persistence typically focus on discrete decisions at key points of enrollment, such as semester-to-semester re-enrollment in first-year retention studies (Fike & Fike, 2008). The present study begins filling that gap by viewing college-going through the lens of student micro-decisions.
Identifying the micro-decisions of community college students as they interacted with college personnel and navigated college processes provided insight into how community college students experience the institution. Including the community college and its personnel in the study of how students experience the institution helped to provide insight into how college procedures may either hinder or assist college-going or identify practices potentially leading to cooling out. As one of the possible contexts influencing decision-making, the school environment was important to consider as colleges work toward retaining more students until their academic goal completion. Similarly, it is important to understand the ways other contexts, such as internal, family, or policy influence student decision-making while proceeding through community college. From whom or where students receive information about college-going may either assist or hinder goal achievement. Finally, the ways information, contexts, and the college itself affect students provide a useful perspective for policy-makers at college, state, and federal levels about how to best create or modify systems in place, and direct scarce resources, to improve student support.

**Summary of Purposes**

The present study focused on three purposes. First, to identify the micro-decisions of currently enrolled community college students as they encountered the institution during their on-going college-going experiences. Beyond the decision itself, students’ feelings and opinions about the decision-making situation are understood through Goldthorpe’s (1989) rational action theory. The second purpose was to identify what or who informs students and how this affected their micro-decisions. Next, using the conceptual model of student success (Perna & Thomas, 2006) as a tool to label
contextual influences, the third purpose was to determine the situations influencing decision-making. From these multiple purposes, students’ perspectives about how they experienced the community college institution and the outcome of their interactions with student support services personnel provided a vantage point to view how current realities contribute to cooling out today.

**Review of Methods**

The present study employed a qualitative methodological approach to capture individual perspectives and meanings about student experiences at an urban community college in the southwestern United States. Data came from a larger research project funded by The Bill and Melinda Gates Foundation in collaboration with the League for Innovation in the Community College (Deil-Amen, 2014). The examined data consisted of verbatim transcriptions from face-to-face interviews using pre-set open-ended questions. Analysis of the data proceeded using pre-determined and emergent codes. Based on frequency and relationships to one another, codes were subsequently themed and patterned.

**Review of Conceptual Framework**

A combination of two theories and one model created the conceptual framework for the present study. The model of student success (Perna & Thomas, 2006) provided a foundation for categorizing contextual influences of student micro-decisions. According to the model, students are influenced by four layered contexts, which exert increasing pressure the closer the layer to the student. In order of closest to furthest, the layers of context include internal, family, school, and policy.
Next, components from Goldthorpe’s (1998) rational action theory provided a framework for viewing students’ perceptions about decision-making. One of its components is ‘situational understanding’ where students pursue goals within the situations occurring in their lives. The other component is ‘subjective rationality,’ which results when students act on their understanding of the situation. Additionally, the analytical perspective taken in the present study corresponded with Goldthorpe’s assumption that people act as rationally as possible based upon their beliefs, goals, and understanding of the situation.

Finally, the theory about community colleges performing a cooling out function in higher education completed the conceptual framework. Through students’ narratives about their experiences and interactions with student support services, the present study analyzed micro-decisions, contextual influences, and individual perceptions to identify the presence and nature of cooling out in the 21st century. Traditionally, college personnel systematically and gradually guided transfer-oriented students toward an occupational/non-transferable degree through such mechanisms as mandatory orientation, counseling, and academic probation due to low grades (Clark, 1960b). Those features of cooling out were successful when a student would “ease himself out of the competition to transfer,” and not fault the community college for his own inability to earn a transfer degree, and he subsequently lowered his degree aspirations (Clark, 1960a, p. 574). Currently, the lens of student micro-decisions, influence of situated contexts, and experiences with college-going processes, provided clues about the continued cooling out function of community colleges.
Major Findings Summary

The present study found that college choices are on-going and recurring throughout the college-going process. Born from business and economics, micro-decisions are process related, individual, frequent, and recurring (Aurum & Wohlin, 2003; Davenport, 2009). Prior research neglected these micro-decisions and the relevance of the community college structure on student decision-making. Findings from the present study revealed how the recurring nature of micro-decisions assisted students to better plan, navigate, and participate in subsequent college semesters. The proposed definition of micro-decisions in the present study corresponded with the experiences reported by students. Individually, students encountered frequent, recurring, process related decisions. The micro-decision most relevant to on-going enrollment is course-taking related, such as course withdrawal, delivery method, and number of credits.

Findings also identified how the contexts influencing students’ decisions limited their ability to choose. Concurrent situated contexts, typically internal (work/finances/fear), family (primary caregiver), and school (college procedures) seemed to exert an increasingly constraining influence on decision-making. Many students in the present study had obligations outside of college-going, which is typical of community college student populations (AACC, 2014). With the exception of fear influencing academic decision-making, it often proved difficult, if not impossible, to extract situations from one another to determine which one most limited available choices. In particular, being a wage earner or caregiver for their family limited students’ ability to choose from the available course offerings or spend time on campus to complete required college procedures. Work and family contextual influences limited students’ available
college-going choices with community college operational practices imposing further limits.

The college (school context) seemed to create unnecessary complexity for decision-making, further constraining choices for students with already complex college-going lives (work and family obligations). After students made any particular decision, the next step often involved determining how to implement it. Some students proceeded alone, while others went to a student support services department for assistance. Seeking assistance from student support services personnel, some students reported needing to be assertive to get what they sought. Oftentimes, seeking assistance required repetitive queuing due to unhelpful or inconsistent information, or instructions to go elsewhere to finish the procedure. Repetitive queuing frequently resulted in finding useful information. However, sometimes just completing college-required procedures took an entire day. For students with available time to spend completing college required procedures, these processes are a minor nuisance. However, for those students who do not have the time to spend waiting, these procedures become a major obstacle. Thus, some college procedures required for navigating both courses and college enrollment, structurally hinder college-going for students from lower socio-economic status’ whose time is limited due to work obligations. If students were unable, or did not want, to wait for assistance they may attempt to complete their navigational task alone.

Some of the students who proceeded alone to accomplish their college-related task reportedly guessed at the best course of action. At times, working alone resulted in course-taking related errors/challenges, such as an erratic class schedule straining an already busy life or enrolling in incorrect classes. This ‘trial and error’ process improved
each subsequent semester, supporting the repetitive nature of on-going college decision-making. Although this repetition may benefit students, it has the potential of lengthening enrollment due to course-taking errors or an inability to understand the processes when working alone to navigate implicit institutional procedures. When access to a timely education is delayed, as in the aforementioned ways, a more modern, procedural form of cooling out may occur.

Some students expressed self-blame when interactions with student support services personnel did not yield the sought after information. Even students who did not see a student services staff member admitted to feeling self-blame when they made an error related to course-taking. This self-blame parallels the cooling out process where the victim (student) is not aware of what is happening (Clark, 1960b). Therefore, they blame themselves not the system (Clark, 1960b). Even though a few students did express frustration about repetitive queuing or other obstacles for seeing a student services member, most students did not make the same acknowledgement. Overwhelmingly, students in the present study did not blame the community college’s procedures for limiting their choices, access, or course-taking related errors. This is similar to the lack of institutional blame in historical cooling out (Clark, 1960b).

Modern cooling out, as I posited previously, may include students’ attitudes and behaviors, external demands, college procedures, lack of access to advisors, delayed coursework, or a combination thereof. Students’ external demands created limitations on available choices, which then compounded when considering available course offerings at the community college and options for completing navigational procedures. Instead of the traditional definition of cooling out, which is to decrease community college student
aspirations from a transfer to a terminal degree, while getting him to accept it without becoming angry with the college (Clark, 1960b), I propose the following updated definition relevant for the current political and structural community college climate: procedural cooling out is the process of hindering a community college student’s ability to access and proceed through timely education without blaming the institution for (a) unclear/complicated college procedures; (b) confusing, inconsistent, or lack of information (from college staff or published materials); (c) repetitive queuing to carry out a decision or college-required procedure; or (d) time-consuming college processes.

Based on findings from the present study, one or more of the aforementioned conditions may delay students’ progress as they attempt to navigate the community college to achieve their academic goal, as well as potentially contribute to course withdrawal and opting-out of college-created student support services.

Student experiences navigating the community college reveal the presence of a modern form of cooling out. From analyzing community college students’ micro-decisions and their interactions with student support services personnel, student narratives provided an insight indicating that some features relevant to cooling out may actually still exist. When compared to four-year college students, there is a pattern of disparate effects on the student population type typically attending community colleges, which are often first-generation, ethnic minority, low income students (NCES, 2015). Disproportionately, community colleges enroll students who have complicated college-going lives. Community college processes systematically disadvantage students, including those who have external obligations, such as work and family, who are overwhelmingly present in community colleges compared to four-year colleges (NCES,
The student perspective is important to consider, since Clark (1960b) solely interviewed employees and reviewed community college documents. Students experience the institution differently from faculty or staff; as such, their perceptions and experiences reveal the ways in which college processes influence their decisions, some of which indicate the presence of cooling out.

**Contributions of the Study**

Findings from the present study contribute to current understandings about higher education in several ways. First, rather than an isolated event to choose to enroll in college and where, decisions for college students continue through their enrollment. Often, these micro-decisions recur semester after semester. The recurrences of micro-decisions provide a learning opportunity for students, who then apply that learning to subsequent semesters. Conversely, multiple, recurring micro-decisions may also present additional complexity when considering the contextual influences within students’ lives, limiting their options for rational decision-making.

Second, similar to the conceptual model of student success (Perna & Thomas, 2006), the present study validates the layered effect of contextual influences on decision-making. Even more so, each layer seemed to function increasingly to limit students’ choices. Moreover, the school context often became a constraining influence due to its complex procedures, time-consuming processes, and confusing or incomplete information. This created a barrier for some students as they attempted to navigate the community college to implement a micro-decision. Figure 3 presented an alternative view of the model of student success, highlighting the constraining pressure of each layer.
on the student and the barrier created by the school layer as students navigated toward their objective.

An important aspect of contextual influence within the school layer the student support services staff members represented by advisors, financial aid personnel, and registration staff in the present study. Rather than just programs at colleges, the interaction between students and college personnel is important to consider as a factor in student success. The manner in which student services personnel implement college procedures while assisting students has the potential to either support or hinder students. The information students received from advisors, financial aid personnel, and registration staff often required multiple visits and lacked clarity and depth, which was similar to the findings presented by Iloh and Teirney (2013). Therefore, the model of student success (Perna & Thomas, 2006) would benefit from adding a human component into layer 3 (school context) since the institution is neither faceless nor robotic.

Third, similar to my suggestions about adding student services personnel explicitly to the school context, student interactions with advisors, financial aid staff, and registration staff should also be considered in community college integration models. The present study found both positive and negative interpretations and outcomes from students’ interactions with these college personnel to complete procedural requirements as students attempted to implement their micro-decisions. Such interactions are missing from Deil-Amen’s conception of socio-academic integrative moments (2011), which emphasizes the fused social and academic nature of interactions that happen between students and faculty and among student peers in and around the community college classroom.
Findings from the present study suggest students’ interactions with student support services staff to complete procedural requirements can be troublesome and lead to cooling out. Deil-Amen (2011) described socio-academic integrative moments as influencing persistence. Since both student-faculty interactions and student-staff interactions can influence persistence, both types of interactions should be considered together in the same model. Therefore, socio-academic integrative moments (Deil-Amen, 2011) should include what I will call “procedural integrative moments.” This addition would more fully capture student experiences with integration and persistence at the community college.

Moreover, procedural integration may potentially need to happen before socio-academic integrative moments can contribute to community college students’ persistence. Without procedural integration, students may opt-out prior to achieving their academic goal or, even more significantly, prior to initial course enrollment. Since students in the present study described how navigating community colleges’ procedures affected them, it is appropriate to include interactions with college personnel in integration models; specifically, adding a procedural component to socio-academic integrative moments.

Fourth, the present study supports the importance of the considering context of a situation in decision-making. Contexts, typically work, family, and school for the present findings, along with individual goals and beliefs create situational understanding (Goldthorpe, 1998). From all of the contextual information, an individual selects a seemingly appropriate course of action, creating what Goldthorpe termed “subjective rationality.” Relevant to the current findings, rational action theory could benefit from considering multiple contexts, rather than a singular context, in situational understanding.
Perhaps it may also be beneficial to include the fluid nature of situations, since students seemed to face recurring contextual pressures with every micro-decision and every attempt to implement it. Overall, situational understanding should include considering multiple contexts of influence on decision-making.

Finally, the theory of cooling out needs revision to make it more applicable to the 21st century. Different from the time of Clark’s (1960b) study, is a move towards a digital environment. Currently, the use of computers and the internet are prevalent. Schools, teachers, and students often rely on internet access for information, communication, and coursework. Depending on one’s perspective, the move toward an online environment either creates greater access to information and communication, or creates a barrier. The difference of perspective relates to the availability of a computer and high-speed internet access, which requires money. Socio-economic status influences the ability to purchase technology for personal use or the available time to visit the library during regular business hours to access necessary technology. Since the typical community college student population has work and family obligations diverting their time, attention, and income, digital access can create a barrier to college-going.

Another difference about the 21st century compared to the late 1950s when Clark (1960b) researched cooling out, are the students themselves. Today, community college students overwhelmingly have full lives, including work and parenting responsibilities (AACC, 2014). This is different from the student population of Clark’s time, where most students were entering directly out of high school and a dependent of their parents (Clark, 1960b). In addition, today’s students are becoming more racially and ethnically diverse, including first-generation college students or those from low income backgrounds.
Today’s community colleges are quite different from 65 years ago making it necessary to update the process of cooling out.

I have already suggested an updated definition of cooling out. The proposed updated definition highlights the procedural aspect of the college on cooling out and identifies new ways it may currently occur. My suggestions result from student interviews, which is an approach fundamentally different from the way Clark (1960b) first identified cooling out. A new definition based on student experiences meeting today’s political, cultural, and digital realities may be more fathomable than continuing to foster a theory born nearly the same time comprehensive community colleges first began their development and expansion.

**Implications for Action**

This section presents recommendations for practice, policy, and future research. Succinctly stated, I recommend community colleges simplify, governments subsidize, and researchers expand on this study. Lastly, I offer concluding remarks.

**Simplify: Recommendations for practice.** My findings are consistent with Rosenbaum, Deil-Amen, and Person (2006), who find that community colleges present a complex bureaucratic organization that students find difficult to navigate, and structured guidance is absent. Community college students would likely benefit from simpler and less time-consuming college processes to navigate. Thus, practice recommendations begin with simplifying community college procedures, as the federal government is doing with financial aid application procedures (Dynarski & Wiederspan, 2012; Executive office of the President, 2009), so they do not add another layer of contextual constraint, limiting college-going decision-making for students with already complex lives.
Simplification examples include (1) decreasing the number of steps and the time it takes to complete a task; (2) making information and assistance easier to find and understand; (3) eliminating repetitive queuing; (4) simplifying processes by creating “one-stop” student services centers (all in one location) so students do not have to navigate an unfamiliar campus.

To implement suggestions one and two, a focus group with similar demographics as the community college student population, should attempt to (1) complete a procedural task; (2) search for specific information similar to how a new or returning student might search. This will provide a fresh perspective and help identify areas for improvement.

Next, to implement suggestion three, once an enrolled student leaves a student services queue or after speaking to a student services staff member, a quick survey should ask (1) what brought them to seek assistance; (2) if they were helped satisfactorily; (3) if they were going to return for assistance and why; (4) reason they left the queue. Answers to these questions will help policy makers at the institution create or modify procedures to assist students better.

Finally, to implement suggestion four in this fiscally limited era, perhaps an existing area in a building can be easily re-organized to create a “one-stop” student support center so services can be located closer together. If not, simply providing explicit directions, using maps and verbal instructions, will help students to find their way to a subsequent campus location. This last recommendation is not new to community colleges. Creating “one-stop” centers is a trend that began over a decade ago (Walters, 2003). Ideally, “one-stop” means students would only need to see one student support services staff member, rather than multiple staff members. However, cross-training has
its own set of challenges in a fiscally limited era. Additionally, these centers would still have the same capacity challenges of high student-to-staff ratios. However, it would increase student satisfaction with the service provided, as seen in the findings from the present study.

Other recommendations include finding ways to empower students as they attempt to navigate through the community college. Students should not blame themselves for not receiving the assistance they sought from student support services personnel. College personnel should ‘ask the next question’ to assist students who may not be as assertive as others may or aware of exactly what they may need. For example, the next question might be “do you know where that is located?” or “do you know what to do next?” and then end with “is there anything else I can help you with?” These practices may promote positive self-perceptions among students served by college support services staff, rather than promote negative self-perceptions, such as self-blame.

However, for students whose self-blame resulted from attempts to seek assistance from support services personnel, students who were minimally engaged or were motivated by fear may choose to opt-out of college altogether instead of just from student support services. Perhaps the interactions between students and the college’s student support services personnel are not beneficial for students. An extreme suggestion is for community colleges to avoid having processes where students must actively seek assistance from college personnel to complete procedural requirements. Perhaps those requirements could be embedded in other processes or completed without student involvement. Doing so may remove the time-consuming processes that disadvantage
students who have work or family obligations already limiting their available time to spend on campus.

Student support services personnel work within a larger organization with its own set of policies and procedures. The types of college personnel most interacting with students in the present study worked in advising, financial aid, and registration departments. Although some students reported experiences seeking assistance from these types of college personnel as time-consuming or contradictory, there could be larger bureaucratic challenges and processes contributing to how they do their job. In the current environment of hyper-accountability, efficiency, and cost-cutting, perhaps these employees are evaluated based on how many students they see or how quickly they can clear the queue. If so, students would be sent away with just enough information to answer their question, but not provide additional assistance such as providing directions, as some students in the present study reported. This type of organizational practice would also contribute to repetitive queuing seen in the findings. Perhaps the information college personnel give students is contradictory between staff members because policy changes have not been adequately shared with all employees. Macro-level college or district procedures for information sharing may be contributing to the contradictory information students receive. Procedural obstacles may affect college personnel and policy makers, not just students.

Community colleges could also create a readily available, simple information sharing system (online or print) about how to complete common, routine, and recurring procedural tasks. Another option for information sharing might include college navigation as a tutoring station where students could walk-in and ask a question or get
general information. The present study found that just one semester of college-going experience improved navigational knowledge and decision-making. Student peers should provide the tutoring to level the help-seeking interaction and remove the implicit power dynamic present between students and college personnel. Therefore, students who are fearful or not assertive enough to be truly open about their needs to an advisor, financial aid staff member, or registrar may be more likely to freely interact with a peer. Peer tutoring for academic subjects and peer advising is not a new idea (Hensen & Shelley, 2003; Kuh, Cruce, Shoup, Kinzie, Gonyea, 2008; Topping, 1996), yet perhaps it should become a routine practice for colleges to assist with retention (Kuh, et al., 2008; Wild & Ebbers, 2002).

Finally, community colleges may benefit from adopting a practice from healthcare. For some patients with significant illness, complicated treatment plans and multiple appointments can be overwhelming. To alleviate the stress of managing their own care and provide insightful information about procedures and treatment options, experienced healthcare providers work as patient navigators (Natale-Pereira, Enard, Nevarez, & Jones, 2011). This practice may similarly benefit community college students who already have complex lives, limited college-going knowledge, and limited available time for required college procedural activities. Since navigating the community college’s procedural requirements can be time-consuming and confusing for students, it may benefit them to have a “college-student navigator.” As suggested previously, it may be beneficial for a student peer to staff this position. A college-student navigator may also benefit the community college by potentially eliminating the need for repetitive queuing, thus alleviating the already high student-to-staff ratio.
This recommendation is similar to the decision-making advocate leading to persistence in four-year college students (Deil-Amen & Goldrick-Rab, 2009). However, whereas a student decision-making advocate could be anyone helping to support a students’ degree completion at the four-year institution, I envision the college-student navigator as a formal role within the community college. Since evidence exists about these advocates contributing to persistence at four-year colleges (Deil-Amen & Goldrick-Rab, 2009), the related college-student navigator could have a similar impact on persistence at the community college.

**Subsidize: Recommendations for policy.** Recently, changes at the state and federal levels have influenced higher education practices. At the state level, institutions of higher education face decreased government subsidies. Specifically, significant funding cuts happened in the state where the present study occurred. Funding cuts mean colleges must conserve revenue and use existing personnel for additional duties rather than hiring more employees. Then, at the federal level, oversight agencies have been increasing higher education compliance regulations. Together, the funding cuts and increased regulatory compliance pressures mean existing personnel must take on additional duties, which may divert them away from directly supporting students. Therefore, clearly, I recommend restoring state subsidies so community colleges can serve their students rather than being compelled to find ways to increase revenue. Likewise, federal agencies responsible for higher education oversight should determine whether compliance standards passed along to colleges are truly warranted for the purpose intended.
Scholarship: Recommendations for further research. To understand the long-term consequences of student interactions with advisors, financial aid personnel, and registration staff a longitudinal study following students from admission to final disposition (completion or departure) is recommended. It would be important to include how students’ self-blame evolves over the length of college admission and how it may influence decision-making. Some other research considerations to extend the present study include (1) the threshold for repetitive queuing; (2) what, if anything, do students miss from navigating alone; (3) what specifically causes opting-out; and (4) how some students learned to seek assistance from student support services personnel while others did not. A longitudinal study of students will also lend additional insight into the continued applicability of the newly identified procedural methods of cooling out. Any future study should include a qualitative component, since the student perspective is important for capturing feelings and experiences relevant to cooling out.

Another opportunity exists to study student-staff interactions from both perspectives to determine how each views the same scenario, in particular focusing on staff from the advising, financial aid, and registration departments. Such perspective will provide necessary insight into staff perceptions about the level of service they provide to students, the impact of college policies on how they serve students, and determine the extent to which varied job responsibilities divert them from assisting students. In this fiscally challenging time for colleges and the heightened regulatory oversight, some of these staff members may be doing the work of fund-raising, partnerships, or compliance responsibilities. Perhaps the growth of managerial professionals (Desrochers & Kirshstein, 2014) is only in certain categories of professional staff, such as business
processes, human resources, and computing specialists, rather than in student support
services positions such as advising, financial aid, and registration leaving a continued
capacity issue of high student-to-staff ratios. Additionally, studying student-staff
interactions from each individual’s perspective will contribute to further understanding
about the origins and implementation of college processes leading to procedural cooling
out.

Finally, I recommend future research focus on students who are no longer
enrolled. The present study focused on students still attending the community college.
Their experiences indicated the need to be assertive when working with staff in advising,
financial aid, and registration departments. Perhaps students who have already left the
community college similarly recognized the need for assertiveness, did not possess that
quality, and were subsequently unable to interact successfully with student support
services staff to navigate the complex and implicit procedures. Student experiences also
indicated the negative impact of repetitive queuing to see an advisor, registrar, or other
staff-member on students who persisted. Therefore, those negative effects were likely
even more problematic for students who have not persisted.

The present study identified micro-decisions and patterns suitable for guiding
continued research. Applying this framework can provide insight into how students who
left the community college were affected differently than those who persisted. Also of
interest is how self-blame and recognizing inefficient student support services contributed
to students leaving. Self-blame could overwhelm already timid students or those who
believed their college goal was unfeasible. For those who recognized inefficient student
support services, perhaps they too had already left to find a college environment with
effective student support services. Additionally, students’ external demands matter. The present study illustrated how those demands/obligations limited students’ available college-going choices, but not how those impediments led to students leaving. Since the present study focused on enrolled community college students, future research should focus on students who have left using the micro-decisions and patterns presented in the present study.

**Concluding Remarks**

Recurring decisions and the contexts influencing them throughout college are important to understand. The present study provides evidence about the complicated decision-making scenarios community colleges create for students, who typically already have work and family obligations limiting their choices. Through tedious, time-consuming processes and inconsistent, incomplete, or confusing information, students faced complex scenarios for rational decision-making. The intersection of the student with college procedures can result in experiences leading to cooling out in a patterned and systematic way. Some of those cooling out experiences result from students’ attempts to complete procedural requirements through interactions with personnel from advising, financial aid, and registration department staff.

Evidence from the present study can help policy makers and leaders to understand how students experience the institution, its procedures, and its personnel. From the narratives presented, college leaders can create or modify existing procedures to ease the burden it, perhaps unknowingly, places on students. Removing existing barriers for students to obtain helpful information and limiting the amount of time it takes students to complete a procedural task may improve retention and completion rates as students spend
less time navigating implicit college processes and more time on activities competing for their available time. This is particularly important for students with already limited time available to spend on campus due to work and/or family obligations. By focusing on fully assisting students with college-required tasks, advisors, financial aid staff, and registration personnel could become a more consistent source of support and positively impact continued student enrollment. Higher-level policies and procedures diverting college student support services personnel from a primary focus on assisting students should be reconsidered in light of the present study’s findings about how students may be adversely affected by the manner in which procedures are implemented.
APPENDIX A – INTERVIEW QUESTIONS

Interview questions used in this research study:

1. Can you begin by telling me when you first enrolled at [name of] College and how and why you made the decision to come to this college in particular?
2. Can you describe your background, specifically where you grew up, your neighborhood, your family?
   2.1. What was school like for you before college? In other colleges you attended?
   2.2. What support or encouragement did you get then and now?
   2.3. What obstacles or discouragement have you faced then and now? (Any financial obstacles?)
3. What kind of student do you feel you were in the past? What kind of student do you feel you are now?
4. Describe your educational and life goals? Where do you feel you are now in relation to these goals?
5. Do you have a job currently? [if yes] What is it? [if no] What have been your past jobs?
6. Can you explain what your idea of what your ideal job would be?
7. Can you describe more about your career goals?
   7.1. How do your career goals fit in with your experiences here at this college?
   7.2. How have you been able to talk to or connect with anyone about your major or career, if at all?
8. What has your experience been with navigating college procedures and policies?
9. Are you receiving financial aid? What kinds of aid are you receiving (grants, loans, scholarships)?
10. How do you usually stay connected to this college? (Get information about the college, contact teachers, staff, other students, learn about events, etc.)
11. What strategies do you feel have helped you (or could help you) be more successful in college?
12. What type of services or support do you think are most important to help you succeed in college?
13. Can you talk about any mistakes you have made?
14. Is there anything you sometimes still feel confused about? Can you explain more about this?
15. What things (in college or outside of college) prevent you from succeeding in college?
16. Can you tell me about any times that you considered dropping out of college?
17. Can you tell me what you would do differently with regard to college if you could do it over again?
18. Can you describe how you use social media in your life and why?
19. In what ways are you involved in the college?
20. What makes you feel most engaged at this college? (feel motivated to participate in & out of class, be actively involved, stay committed to your schoolwork, feel like you belong, like you are a real part of this college)
21. What do you think strengthens your goals and helps you stay committed to them?
22. What do you think weakens, threatens, or jeopardizes your goals?
23. Is there anything else that makes you feel like you belong here at this college? Feel like you don’t belong?
24. Are there any particular people that have made you feel like you belong? Made you feel more engaged?
25. Any experiences that made you feel like being more involved in college socially? Feel more engaged in your classes intellectually or academically?
26. How would you define “community” for yourself – what do you consider your community or communities?
27. Is there anything that makes you feel like you might want to leave college and end your enrollment (either temporarily or permanently)?
28. Can you compare the approaches or styles of different instructors that you feel you benefitted from vs. those who were less effective?
29. Finally, is there anything you know now that you wish you had known earlier?
## APPENDIX B – THE GATES TEAM CODEBOOK

The Gates Team Complete Codebook

<table>
<thead>
<tr>
<th>INTERVIEW CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>When Enrolled</td>
<td>when first enrolled, first began at the college or college generally</td>
</tr>
<tr>
<td>Why This College</td>
<td>why chose this college. why has the student decided to go to college at all</td>
</tr>
<tr>
<td>Social Background and Family</td>
<td>social background, family, neighborhood, community</td>
</tr>
<tr>
<td>Encouragement</td>
<td>college-going encouragement or support received</td>
</tr>
<tr>
<td>Discouragement</td>
<td>college-going discouragement or obstacles student faced</td>
</tr>
<tr>
<td>Prior College</td>
<td>experiences at other colleges student attended</td>
</tr>
<tr>
<td>Kind of Student PAST</td>
<td>former schooling experiences. the kind of student they were IN THE PAST</td>
</tr>
<tr>
<td>Kind of Student NOW</td>
<td>the kind of student they are NOW</td>
</tr>
<tr>
<td>Goals</td>
<td>educational or career goals; current and past jobs</td>
</tr>
<tr>
<td>Career Connections</td>
<td>any connections student has developed with people or info related to their</td>
</tr>
<tr>
<td></td>
<td>major or career</td>
</tr>
<tr>
<td>Ideal Job</td>
<td>how does the student describe as their ideal job, dream job</td>
</tr>
<tr>
<td>Procedural Navigation and Support</td>
<td>navigating college procedures and policies, getting information, guidance,</td>
</tr>
<tr>
<td></td>
<td>help, support for enrolling in classes, financial aid issues</td>
</tr>
<tr>
<td>Success Strategies</td>
<td>what helps them succeed in college; strategies and support to be successful</td>
</tr>
<tr>
<td>Mistakes, Confusion, Didn't Know</td>
<td>mistakes made; anything still confused about; what would do differently if</td>
</tr>
<tr>
<td></td>
<td>student could do it over again; what student wishes they had known earlier</td>
</tr>
<tr>
<td>Prevent Success</td>
<td>what does the student identify as preventing them from succeeding in college;</td>
</tr>
<tr>
<td></td>
<td>obstacles to success</td>
</tr>
<tr>
<td>Engagement, Involvement, Belonging</td>
<td>what or who makes student feel engaged, a sense of belonging; actual</td>
</tr>
<tr>
<td></td>
<td>involvements (include questions student ask about word &quot;engagement&quot;)</td>
</tr>
<tr>
<td>Strengthens Goals</td>
<td>what strengthens goals and/or commitment</td>
</tr>
<tr>
<td>Weakens Goals</td>
<td>what weakens goals and/or commitment</td>
</tr>
<tr>
<td>Dropout</td>
<td>what would provoke dropping out, ending enrollment</td>
</tr>
<tr>
<td>Instructors Effective</td>
<td>instructor approaches student finds effective</td>
</tr>
<tr>
<td>Instructors Ineffective</td>
<td>instructor approaches student finds ineffective</td>
</tr>
<tr>
<td>^ LIFE AND COLLEGE EXPERIENCES ^</td>
<td></td>
</tr>
<tr>
<td>FINANCIAL AID</td>
<td>any other discussion of financial aid (applying, not applying, receipt, non-</td>
</tr>
<tr>
<td></td>
<td>receipt, feelings and thoughts about, etc.)</td>
</tr>
<tr>
<td>Aid Eligibility-Avoid Loans</td>
<td>any text about attending community colleges to avoid loans</td>
</tr>
<tr>
<td>Aid Eligibility-Don’t Receive Aid</td>
<td>include text on why they didn’t apply and other sources of financial</td>
</tr>
<tr>
<td></td>
<td>support for college, i.e., work, parents, other family, spouse or partner</td>
</tr>
<tr>
<td>Communication Means of College-FA Staff</td>
<td>Means used by college/staff to provide FA information and guidance to students: orientation, website, Facebook app, email, phone [include any text about how efficient or (not)helpful each is for students]</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Confusing-Misleading FA Information</td>
<td>Confusing/misleading information regarding the complete FA process: applying, how to fill out the application, deadline dates.</td>
</tr>
<tr>
<td>Distribution Money Deadlines</td>
<td>Inconsistency on deadlines for distributing FA money: Delay in the distribution of money, but also sometimes money can arrive a little bit earlier than the date said by FA staff</td>
</tr>
<tr>
<td>Don’t Qualify for FA</td>
<td>because of having an associate’s degree, grades, credits, transfer process, place of born, get FA in the past in other school, to have a large saving account</td>
</tr>
<tr>
<td>Inefficiency in FA Office</td>
<td>difficult to reach FA staff, long lines to talk face to face with FA staff, not easy answer phone calls, not always efficient in getting information</td>
</tr>
<tr>
<td>Positive FA Experiences</td>
<td>with Financial Aid staff, process, benefit of getting aid, etc.</td>
</tr>
<tr>
<td>Relevance of Academics</td>
<td>any connection between academics and financial aid qualification, receipt, loss, etc.</td>
</tr>
<tr>
<td>Sources of Aid</td>
<td>state aid, loans, Pell, EOPS, fee waiver, work, family, 9/11 GI Bill</td>
</tr>
<tr>
<td>Sources of Financial Aid Information</td>
<td>Where students get info on Financial Aid, other students, FA staff, website, family members, Veterans office, community resources</td>
</tr>
<tr>
<td>FINANCIAL AID USE</td>
<td>how student uses financial aid, what they spend it on (books, rent, computer, gas) including supporting life and family</td>
</tr>
<tr>
<td>Academic Support</td>
<td>tuition/enrollment payment, purchase of books and supplies, including computer technology, related fees</td>
</tr>
<tr>
<td>Family Support and Personal Expenses</td>
<td>includes college relevant -- gas, parking, transportation; and other - mobile phones, clothing, savings, payment of old loans, children and family support, rent, mortgage, paying off debt, parking and transportation, child-care, home maintenance and other household expenses</td>
</tr>
<tr>
<td>Get-the-Check Leavers</td>
<td>any discussion of students who get the FA check and dropout of classes</td>
</tr>
<tr>
<td>^ FINANCIAL AID ^</td>
<td></td>
</tr>
<tr>
<td>Staying Connected to College</td>
<td>how student stays connected to the college (get information about the college, contact teachers, staff, other students, learn about events, etc.)</td>
</tr>
<tr>
<td>General Social Media Use</td>
<td>how student uses social media generally in life, what social media they use and don't use, feelings about social media</td>
</tr>
<tr>
<td>College Social Media Use</td>
<td>social media student uses specifically related to the college</td>
</tr>
<tr>
<td>Reaction To and Use of App</td>
<td>initial reaction to The Schools App in particular, student's description of their use or non-use of it, their feelings about it</td>
</tr>
<tr>
<td>Schools App Benefits</td>
<td>benefits of <em>The Schools App</em> (socially or academically), effectiveness</td>
</tr>
<tr>
<td>Cannot Categorize</td>
<td>app text that seems important but does not fit any other code</td>
</tr>
<tr>
<td>^ TECHNOLOGY AND SOCIAL MEDIA USE ^</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C – PRESENT STUDY CODEBOOK ONLY

Present Study Codebook Only

<table>
<thead>
<tr>
<th>Decision</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent node: any discussion of a decision the student reports making. Decisions can be anything related to school</td>
<td></td>
</tr>
<tr>
<td>Transfer Decision</td>
<td>Any discussion about plans to, or thoughts about, transfer to a baccalaureate granting institution</td>
</tr>
<tr>
<td>This College</td>
<td>Any discussion about experience enrolling</td>
</tr>
<tr>
<td>Course Decision</td>
<td>Any reported decision about course-taking: semester, time of day, online vs. face-to-face, which class, etc.</td>
</tr>
<tr>
<td>Major Decision</td>
<td>Any discussion about the students major</td>
</tr>
<tr>
<td>Participate in Learning †</td>
<td>Any discussion about deciding to participate or not in learning activities (ex: study groups, homework, classroom participation, etc.)</td>
</tr>
<tr>
<td>Family Obligation †</td>
<td>Any discussion about family being the basis of a school related decision</td>
</tr>
<tr>
<td>Continued Enrollment †</td>
<td>Any discussion about a decision about continuing college enrollment and impacting factors</td>
</tr>
<tr>
<td>Active in College †</td>
<td>Any discussion about deciding to be involved with campus activities, clubs, etc.</td>
</tr>
<tr>
<td>Pay for College (2013 data only) †</td>
<td>Any discussion about impact of paying for college and decisions related to expenses and/or how student pays for college.</td>
</tr>
<tr>
<td>Withdrawal – Grade ‡</td>
<td>Sub-node to course decision: Any discussion about withdrawing from class due to grade concerns</td>
</tr>
<tr>
<td>Withdrawal – Time ‡</td>
<td>Sub-node to course decision: Any discussion about withdrawing from class due to inability to attend class due to when it is scheduled or conflict with work, family, or other reasons</td>
</tr>
<tr>
<td>Withdrawal – Finances ‡</td>
<td>Sub-node to course decision: Any discussion about withdrawing from class due to financial reasons</td>
</tr>
<tr>
<td>Timing ‡</td>
<td>Sub-node to course decision: Time of day influencing course-taking behavior decisions</td>
</tr>
<tr>
<td>Selection ‡</td>
<td>Sub-node to course decision: Any discussion about how decided to select the courses to enroll in</td>
</tr>
<tr>
<td>Delivery ‡</td>
<td>Sub-node to course decision: Online, face-to-face, hybrid; decision related to course delivery method</td>
</tr>
<tr>
<td>Credits ‡</td>
<td>Sub-node to course decision: Number of credits for the course influencing enrollment</td>
</tr>
<tr>
<td>Informant</td>
<td>Parent node for where the student reports receiving information to inform a decision</td>
</tr>
<tr>
<td>Sibling Informant</td>
<td>Sibling provided information that informed a student reported decision</td>
</tr>
<tr>
<td>Self as Informant</td>
<td>The student relied on him/herself to inform the reported decision</td>
</tr>
<tr>
<td>Peer Informant</td>
<td>Peer provided information that informed a student reported decision</td>
</tr>
<tr>
<td>Parent Informant</td>
<td>Parent provided information that informed a student reported decision</td>
</tr>
<tr>
<td>College Agent</td>
<td>College personnel provided information that informed a student reported decision</td>
</tr>
<tr>
<td>Other Informant †</td>
<td>Non-family, non-school person, non-peer such as an adult from high school, etc.</td>
</tr>
<tr>
<td>Family †</td>
<td>Someone other than a parent or sibling providing college related information</td>
</tr>
</tbody>
</table>

† Emerged during coding
‡ Emerged from analysis of coding
## APPENDIX D – MICRO-DECISIONS

Table 2. Micro-Decisions Identified in the Present Study

<table>
<thead>
<tr>
<th>Micro-decision</th>
<th>Description</th>
<th>Influencing Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>Changing major after entering the community college</td>
<td>▪ Enter without predetermined major</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ New interest emerged from course-taking</td>
</tr>
<tr>
<td>Transfer</td>
<td>Stated goal of transferring to a four-year college/university</td>
<td>▪ Personal goal, rarely reconsidered</td>
</tr>
<tr>
<td>Participate in learning</td>
<td>Study groups, time for homework, textbook reading, and other activities</td>
<td>▪ Available time (job, family, workload from courses)</td>
</tr>
<tr>
<td></td>
<td>related to taking a course</td>
<td>▪ Ability to purchase required course materials</td>
</tr>
<tr>
<td>Active in college</td>
<td>Participating in college clubs and/or events, working/volunteering at the</td>
<td>▪ Available time (job, family)</td>
</tr>
<tr>
<td></td>
<td>college</td>
<td></td>
</tr>
</tbody>
</table>
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