Attracting Entrepreneurs to Community College through Self Determination Theory Informed Educational Practice

by

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Napoli, Brandon E. ***Attracting Entrepreneurs to Community College through Self Determination Theory Informed Educational Practice***

Abstract

This research study examines the attraction of entrepreneurs to community colleges using Self-Determination Theory (SDT) informed educational practices. Community colleges face challenges such as declining enrollment rates, low retention, and budget cuts, necessitating a renewed approach to entrepreneurship, career education and workforce development. With a growing population of mid-career Latino entrepreneurs, Recent slowdowns in entrepreneurship offerings at universities present an opportunity for community colleges, which are better positioned to address the needs of adult learners and cater to a diverse student body. Despite the growth of entrepreneurship education, questions remain regarding its effectiveness in promoting economic development and supporting small businesses. The study explores the motivations and perceptions of aspiring entrepreneurs based on SDT and the satisfaction of psychological needs. Findings reveal strong intrinsic motivation among entrepreneurs, emphasizing autonomy, authentic self-expression, and community connection. Flexible learning options, peer connection and networking opportunities, practical and competency-based education, business advising, and mentorship are recommended to enhance entrepreneurship education. Aligning programs with local labor market needs and fostering collaboration between academic entrepreneurship programs and outreach functions can increase entrepreneurial activity. Creating an entrepreneurial ecosystem and building programs and opportunities for entrepreneurial activity are suggested to support the intentional process and planned behavior of entrepreneurs. Additionally, promoting a sense of community, considering costs and funding options to ensure access, and emphasizing the value of entrepreneurship education are essential.

Acknowledgments

To my brother and guardian angel, Michael Devin, who loved me and gave himself for me. I will see you soon. To my baby girl Iona who breathes eternal life into me every day.
To my wife, Claudette, who preaches the gospel to me and when necessary, uses words. For my dad, who demonstrates the power of a passion to build people and programs towards destiny. To my mother, who demonstrates unconditional love as the true power.

To the following entrepreneurs and advisors:

- "Live in the future and build what's missing" - Paul Graham
- “The best criticism of the bad is the practice of the better. Oppositional energy only creates more of the same.” - Richard Rohr
- “Being an entrepreneur is like eating glass and staring into the abyss of death.” - Elon Musk

To my dissertation committee, Chair Dr. Urs R. Haltinner, Committee Member Dr. Debbie Stanislawski, Committee Member Dr. Julie Furst-Bowe, and the Graduate School, Toni Bixby and Vraj Shah, you made this dissertation go from good to great.

Finally, Crawford (2010) whose perspective on CTE guided my work: "Acquiring practical wisdom, then, entails overcoming the self-absorption of the idiot, but also the tunnel vision of the curious man whose attention is indeed directed outside of himself, but who sees only his own goal. A lot of academic work has this quality of curiosity without circumspection; my Ph.D. dissertation proceeded in a way similar to the Magna oil seal episode. But with the Magna, I had to give an account to the customer," (p.124)

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Chapter 1: Introduction

"The skill set in the modern world is entrepreneurship."

-Reid Hoffman

There has never been a greater need in our community college history for a new entrepreneurship career education and workforce development approach. "California Community Colleges (CCC) are facing a crisis of identity," stated retired Mesa Community College President Dr. Luster (2022) at the Association of Community College Educators Admin 101 training. "We struggle with our brand. Who are we? Why should someone invest their time and treasure in us?" Dr. Tim Morre, President of Indian River State College, echoed this at the 2022 North American Community College Entrepreneurship Conference.

From 2010-2017, community college enrollment declined by 14.4% by more than 1 million students nationally and 10% from 2019 to 2020 (American Association for Community Colleges, n.d). This decline would be 16% higher if dual enrollment is not considered. John Fink, a senior research associate at the Community College Research Center of Teachers College at Columbia University, elaborates, "Because there's been a massive decline in older adult enrollment, the growth of dual enrollment seems to be almost propping up new student growth for community colleges," (Weissman, 2021, para. 6). However, the reliance on boosting numbers through high school enrollment is facing a challenge with a declining population. The declining student enrollment trend, particularly 500,000 over the next ten years among California's K-12 population (Department of Finance, 2022), a low retention rate of 52.4% (National Student Clearinghouse Research Center, 2022), and increased emphasis on student outcomes are resulting in looming budget cuts (Zinshteyn, 2022).

The research organization California Competes (2021), which focuses on higher education and workforce policy, discovered that in California, there are 6.8 million adults between the ages of 25–54 who have completed high school but lack a postsecondary degree. According to their report, these potential graduates are typically around 38 years old, with the majority likely being male and of Latinx descent. Entrepreneurship is a growing segment of the general and Latino populations. The US Census (United States Census Bureau, 2023) indicates that the year 2021 saw the establishment of 5.4 million new businesses. This marks a rise of 23% compared to the previous record set in 2020, and a 35% increase over the figures from 2019. Fairlie et al. (2019) found that Latinos are significantly more likely than other races to be entrepreneurs. Community colleges that differentiate their approach to entrepreneurship education may better serve mid-career Latino entrepreneurs, increasing their student enrollment and the gap in future workforce demands.

Community colleges that use unrevised, content-heavy business management curricula are seen as inadequate in entrepreneurship education (Nielsen & Stovang, 2015). Entrepreneurship is not business management: The difference, as Urban (2015) points out, is analogous to the cook and the chef, where there is an essential nuance even though these terms are often used interchangeably. “The chef is a trailblazer, the person who invents recipes. He knows the raw ingredients and how to combine them. The cook, who reasons by analogy, uses a recipe. He creates something, perhaps with slight variations, that’s already been created” (para 16). Unfettering entrepreneurship from the business department and ubiquitously incorporating it as a subject complementary to all majors have shown promise in driving overall growth in preparing more students for jobs or businesses (Morris et al., 2014). This acknowledgment extends further than mainstream academics to encompass non-credit granting and community

development (Liguori et al., 2018). Non-credit granting courses and close community partnerships provide latitude to local economic planning and training. These non-credit offerings translate to non-degree interactive advising and training that benefit from a community college with close relationships to the local economy (Barnard et al., 2019) and alignment with its accreditation status (Milam, 2005).

The Rise of Entrepreneurship Education

University entrepreneurship programs have increased substantially since 1980 (Heriot & Simpson, 2007). This trend is reflected in community colleges (Latiner & Valeau, 2009 & Solomon, 2007). By 2005, 950 of the 1,460 community colleges had an entrepreneurship course, with 800 offering a non-degree (Carducci et al., 2005). However, lately, 4-year universities have slowed down their entrepreneurship offerings relative to the increasing trends in entrepreneurship, providing an opportunity for community colleges (Neck & Corbett, 2018).

Understanding the diverse stakeholder interests in entrepreneurship programs and goals provided at community colleges helps clarify the possible educational offering. First, community colleges are tasked with meeting the expectations of a younger undergraduate population and learners with more experience (Eisen, 1998) and contributing to workforce development (Van Noy et al., 2008). These adult learners primarily attended community colleges to focus on functional training (Barnard et al., 2019). Second, community colleges do not face pressure from accreditation bodies or ranking institutions to create new peer-reviewed research or develop new initiatives but focus mainly on community-driven teaching (Rosenfeld, 2000). Third, community colleges are tasked with a diverse student body with novel needs and economic development expectations for quicker offerings and delivery (Neck & Corbett, 2018).

Despite the growth in entrepreneurship education in prolificacy and content, questions still need to be answered as to its successful economic development and in helping start small businesses. Driving the debate are pedagogical approaches and the community's needs (Barnard et al., 2019), the underlying assumption of innate attributes vs. training in determining the success of entrepreneurial aspirations (Kassean et al., 2015), and the correlation (weakly associated with startups) of entrepreneurship education to entrepreneurship activity (Dickson et al., 2008). Kuratko (2005) and Katz (2008) saw entrepreneurship education as legitimate but immature. Their findings were in line with Drury (2003, who found that the drivers of community college curricula and offerings had a higher variance than four-year universities. Truit (2017) states with the expansion of entrepreneurship offerings by community colleges, limited communication, sharing of best practices, or cooperative activities inside or outside resulted in a wild west of offerings.

In contrast, Gibson et al. (2011) found that university entrepreneurship students, compared to community college, have a significantly higher degree of a positive attitude about their competency. This variance signals a need for community colleges to reinforce their entrepreneurship education with confidence-building and real-world experiences (Baron & Ensley, 2006). Litzky et al. (2010) study agrees (as cited by Barnard et al., 2019, p. 10), "Successful entrepreneurship programs at any level are driven by student and community engagement." Including the local business community through guest speakers and real-world classes, team exercises may help entrepreneurship education move beyond the traditional teaching format (Solomon, 2007). More process-oriented teaching (Honig, 2004) and action to implement teaching techniques support the problem-solving skills entrepreneurs face (Barnard et

al., 2019). The good news is that community colleges are quicker with curricular changes than universities, as Carducci et al. (2005) study argues.

Entrepreneurship Training and Mental Health

Educators see a growing need for competency in skill development, with soft skills having a more prominent role in their student's marketability and growing mental health crisis (Connor et al., 2019; Heckman & Kautz, 2012). Tony Robbins (2019), a famous life and business strategist, points out that those who have the competency to be autonomous architects of their life experiences and not just managers of their circumstances. However, too many students are ill-equipped to become the architect of their career experiences. Once they leave the imposed school structure, they face the "real world" of endless choices and consequences. Learned helplessness (LH) is experienced when repetitive failures reinforce a belief that an individual's actions will not produce the outcomes they desire, leading to a loss of motivation to seek out solutions resulting in halting constructive efforts and a feeling of a lack of control (Hooker, 1976). Hayes et al. (2021) found that among university students,

> In the beginning stages of overcoming LH in academic environments, the following strategies appear to be especially helpful: helping others, engaging in motivational and purposeful activities (i.e., achievable activities), and healthy living. Only once the cycle of LH is broken will individuals be better able to re-establish their goals and to begin facing the original situation. In doing so, they may still struggle to challenge their feelings of helplessness, but achieving small goals, engaging in motivational and purposeful activities, taking ownership of their lives, and receiving genuine corrective feedback seem helpful in finally overcoming LH. (pp. 357-358)

On the other hand, Zimmerman (1990) states, “Learned hopefulness suggests that empowering experiences—ones that provide opportunities to learn skills and develop a sense of control—can help individuals limit the debilitating effects of problems in living” (p.1). Developing the student’s ability to determine their path through fulfilling basic intrinsic needs of autonomy, competence, and connectedness (grounded in Basic Needs Theory-BNT) are the independent variables of learned hopefulness (Wehmeyer, 1999), sustained behavior and personal wellness (Teixeira et al., 2012). In the same way that sunlight, water, and minerals metaphorically serve as vital nourishment for the healthy growth and flourishing of plants, the three fundamental psychological needs are perceived as critical sustenance for the development, well-being, and health of individuals (Al-Jubari, et al. 2018).

The BNT and SDT share some common principles and have complementary perspectives on human motivation and well-being. While the BNT focuses on fundamental human needs, SDT specifically examines the role of psychological needs in motivation and self-determination. SDT, built on the foundation of BNT, pinpoints autonomy, competence, and relatedness as core psychological needs. It further distinguishes extrinsic motivation types by varying levels of autonomy. SDT, an empirically established theory, examines human motivation and personality within societal environments, differentiating motivations into categories of autonomous and controlled. Particularly, SDT proposes that intrinsic motivation is about finding activities spontaneously satisfying and interesting, while autonomous extrinsic motivation relates to engaging in activities that may not necessarily be interesting, but are seen as personally meaningful, aligned with one's self-directed goals and objectives (Deci & Ryan, 2012).

To better grasp individuals' behaviors and determination, it's critical to predict employee wellness and their performance levels at their workplaces (Gagné & Deci, (2005); Krieger &

Sheldon, (2015); Van den Broeck et al., (2010); Van den Broeck, Vansteenkiste, Lens, & De Witte, (2010). As Ryan & Deci (2000, p. 69) aptly stated, "motivation produces." When observing entrepreneurship, studies like Bird and Jelinek (1988), Krueger et al. (2000), and Krueger and Carsrud (1993) - all referenced in Al-Jubari et al. (2018) - used the SDT to view it as both an intentional act and a predetermined behavior. Within this framework, the foundational psychological needs – autonomy, competence, and relatedness – are directly tied to how students perceive and plan for their entrepreneurial goals. Furthermore, SDT offers insights into student involvement by examining it through the lens of satisfying these intrinsic needs (Xia et al., 2022).

Barnard et al. (2019) point out the limited approach to higher education and entrepreneurial research. “Existing studies tend to be scattered and practitioner-written while academic articles are often theoretical, focused more on entrepreneurial education in four-year universities and at times promote underspecified models of challenges community colleges face” (p. 1-2). This study provides a greater insight into the issue of motivations - as defined by SDT - of aspiring entrepreneurs. The study attempts to illuminate how the basic psychological needs and motivations addressed through SDT could explain the formation of attitudes and perceptions of motivations, thus influencing the intention to act entrepreneurially and seek entrepreneurial education at a community college. In doing so, it lays the foundation for entrepreneurial success by developing a new framework, based upon an SDT-informed education practice, for community college entrepreneurial ecosystem building.

Statement of the Problem

“I don’t want a nation of thinkers, I want a nation of workers.”

— John D. Rockefeller

California Community Colleges (CCC) are facing a crisis of identity (Luster, 2022). An older student demographic (Smith, 2018), increased costs of attending (Maldonado, 2018), cost-effective online options that tie job placement rates to the cost of attendance (Preston, 2020), and alternative education programs with access to the world's top talent have created an ultimatum-adapt or become a higher education bubble (Clynes, 2017). Their value in the higher education marketplace is unclear, particularly in the most significant section of the population: mid to late-stage Latino learners (California Competes, 2021) who are much more likely to be entrepreneurs (Fairlie et al., 2019). According to the US Census (United States Census Bureau, 2021), there were 5.4 million new business applications in 2021 a 23% increase over 2020's record and 35% over 2019. However, compared to four-year universities, community colleges lag in their entrepreneurial outcomes compared to four-year universities (Barnard et al., 2019). The expansion of entrepreneurial programs, limited communication, sharing of best practices, and cooperative activities inside or outside the community college have resulted in a "wild west" of offerings (Truit, 2017).

Barnard et al., (2019) point out the lack of community college studies independent of 4-year institutions and make an argument for contextual examination of entrepreneurship at community colleges. Entrepreneurship is the only higher education pathway for ownership preparation. Focusing on transfer and degrees has neglected this historic, fundamental pillar of economic development, entrepreneurship as a trade (Barnard et al., 2019). "The question remains: Does the opportunity for greater revenue and school prestige begin to outweigh the needs of the original purpose of the community college" (p.14)? Students who transfer for four years have difficulty enrolling in entrepreneurial classes outside their major (Barnard et al., 2019). Even those obtaining four-year degrees in entrepreneurship are saddled with student debt,

decreasing their willingness to start a company (Buchanan, 2015). Community Colleges may be better positioned to address these unique pain points (Barnard et al., 2019).

The problem is that by undeserving the entrepreneurial student, demands in the higher education marketplace are unmet, the community college's economic development mission is neglected, and the critical timing for entrepreneurial ecosystem building is missed. Underlining this problem of undeserving is a lack of understanding of what motivates an individual with entrepreneurial aspirations and their interest in pursuing education at a Community College.

Purpose of the Study

"I absolutely believe in the power of innovative entrepreneurship on every level. That's why I am exploring ways to improve our education system by making it as effective as a private tutor and as engaging as video games."

-Naveen Jain

The purpose statement establishes the aims, intention, or primary concept of a study or proposal. This concept evolves from a necessity (the problem at hand), and subsequently gets honed into specific queries, referred to as the research questions (Creswell & Creswell, 2018). This study provides a greater insight into the issue of motivations - as defined by SDT - of aspiring entrepreneurs. The study attempts to illuminate how the basic psychological needs and motivations addressed through SDT could explain the formation of attitudes and perceptions of motivations of entrepreneurs, thus influencing the intention to act entrepreneurially and seek entrepreneurial education at a community college. Knowing that motivations are crucial in attracting, retaining, and developing student talent, a deeper understanding of how an entrepreneurial ecosystem can be based on the SDT is helpful.

This study aims to lead change in community college programming and policy by illustrating an overlooked entrepreneurial student population, including entrepreneurial community members seeking advice from their local Small Business Development Centers (SBDC). SBDCs serve community members with entrepreneurial aspirations to start and grow a business. These SBDC contacts are seeking practical education with flexible access and quick utilization. Community colleges that address this demand may increase their student enrollment.

Research Questions

"We can not solve our problems with the same level of thinking that created them,"

-Albert Einstein

The following research questions are designed to identify the target population more precisely under investigation, establish the time period, outline the curriculum, and determine the measurements of workforce development. Additionally, these questions shape the hierarchy of issues earmarked for subsequent research. This study will research Cabrillo Community College's Santa Cruz Small Business Development (SBDC) adult contacts and existing Cabrillo Community College adult students currently attending a business class.

The overarching research questions this study seeks to answer are twofold.

1. How do attitudes and perceptions of motivations related to SDT influence the intention to act entrepreneurially?
2. How do the attitudes and perceptions of motivations related to SDT influence the intention to seek entrepreneurial education at a community college?

The hypothesis presented in Cnossen et al., 2019, p. 3-4) are utilized to answer the first research question.

- Hypothesis 1. Entrepreneurs are more intrinsically than extrinsically motivated.

- Hypothesis 2. Entrepreneurs' perceived need for autonomy is positively associated with their intrinsic motivation.
- Hypothesis 3. Entrepreneurs' perceived need for relatedness is positively associated with their intrinsic motivation.
- Hypothesis 4. Entrepreneurs' perceived need for competence is positively associated with their intrinsic motivation.
- Hypothesis 4b. Entrepreneurs' perceived need for competence is positively associated with their extrinsic motivation.
- Hypothesis 4c. Entrepreneurs' perceived need for creative competence is positively associated with their intrinsic motivation.
- Hypothesis 4d. Entrepreneurs' perceived need for entrepreneurial competence is positively associated with their extrinsic motivation.

To answer the second research question, the following hypotheses were created by the researcher.

- Hypothesis 5. Entrepreneurs’ perceived need for increasing entrepreneur competencies is positively associated with access to business advising.
- Hypothesis 5b. Entrepreneurs’ perceived need for increasing entrepreneur competencies is positively associated with the education is offered as a for-credit (paid)
- Hypothesis 5c. Entrepreneurs’ perceived need for increasing entrepreneur competencies is negatively associated with the education is offered as a non-credit (free).

- Hypothesis 5d. Entrepreneurs' perceived need for increasing entrepreneur competencies is positively associated with the length of their education.
- Hypothesis 5e. Entrepreneurs' perceived need for increasing entrepreneur competencies is positively associated with access to funding.
- Hypothesis 6. Entrepreneurs' perceived need for having more autonomy is positively associated with the education that is self-paced.
- Hypothesis 6b. Entrepreneurs' perceived need for having more autonomy is positively associated with on-demand and the time of day the education is offered.
- Hypothesis 7. Entrepreneurs' perceived need for networking with peers in their field is positively associated with classmates with similar backgrounds to theirs.
- Hypothesis 8. Entrepreneurs in business and entrepreneurs not in business will be statistically significantly different.

Assumptions of the Study

Fraenkel (2019) suggests that assumptions typically arise when a researcher presumes the terms are clearly defined, and the selected samples, along with their measurements, are suitable and precise. The assumptions made during this study included:

1. Community Colleges have interested in creating a better transition for entrepreneurs and are looking for solutions such as attraction, retention, and completion.
2. Entrepreneurial students are receptive to a survey and an interview that attempts to define the educational services and resources they perceive to be most valuable to their success.

3. California's economy is experiencing an exodus of businesses and would therefore encourage additional community college graduates who are entrepreneurs to increase the state's economy.
4. Nationally, there is a very large and growing potential pool of future students who are aspiring small business owners; however, they feel that the educational practices at community colleges are not relevant to their entrepreneurial pursuits; however, if these aspiring small business owners were actively recruited and likewise informed of the services and resources available to them, they are more likely to apply, remain enrolled and graduate than non-entrepreneurial students.
5. Participants in the survey and interview understood the rationale of the instrument and answered truthfully and objectively.
6. The data collected was interpreted in a manner that accurately mirrored the intentions of the survey respondents.

Significance of the Study

"As leaders in education, our job is not to control those whom we serve, but to unleash their talent. If innovation is going to be a priority in education, we need to create a culture where trust is the norm."

-George Couros

Through a universal framework, this study provides hope that the existing entrepreneurial ecosystems work better across our communities. It presents entrepreneurship as an adolescent and young adult employability focus, specifically, as core knowledge, skill, and mindset within a one-world integrated economy. This study encourages the next wave of entrepreneurs to start younger, embrace their diversity, and demand the college system provide as much help to them

as it does to traditional job preparation. It encourages entrepreneurial endeavors at any age and socio-economic position to think big and take the next step in their vision.

The importance of this research is in sync with the National Association for Community College Entrepreneurship's mission, aiming to establish California Community Colleges as the leading source in North America for entrepreneurship education, assistance, and inspiration. “Ecosystem building is about connecting, empowering, and collaborating with others to build the whole system of support for entrepreneurs, not just that which resides inside one institution or another…forging consistent and collaborative human engagement to lift up individuals in communities to pursue their dreams” (Corbin & Thomas, 2019).

This study ensures that the program(s) developed are demand-driven through a lens to see entrepreneurship education through the eyes of the entrepreneur. The ever-changing needs of a complex global workplace and the needs of increasingly diverse learners require responsive adaptations. This effort is aligned with the California Community College Chancellor's focus on secondary and post-secondary courses staying relevant and “programs that are intended to build the knowledge, skills, attitudes, and experiences needed to enter and succeed in the world of work are cost-effective” (California State Board of Education et al., 2019, p. 15). Entrepreneurship is a genuine occupation that can be an actual degree/certificate to obtain and create a real job.

A focus on advancing diversity, equity, inclusion & belonging as an accelerator of entrepreneurship, co-creating new entrepreneurial resources for classrooms and communities with members and partners, and working with policymakers to advocate for entrepreneurship education at all levels of government further defines this study’s significance. This study presents an opportunity for California to create an equitable vision for CTE, focusing on the

needs of California Community College students and the demands of the business community. The view that education and career development are culturally influenced and that CTE can connect intergenerational knowledge through on-the-job training strengthens community cohesiveness. It provides an opportunity for intergenerational wealth transfer. As a digitally native generation, youth are uniquely seen as “experts” in new technologies and therefore have a competitive advantage in developing new business models. The belief that culturally informed CTE improves academic learning and reinforces inherent cultural content can strengthen CTE undergirds the study.

Study Delimitations

This study does not cover student attraction strategies, entrepreneurship educational teaching methodologies, or entrepreneurship models for community colleges. This study is limited to the SDT of motivation and its influence on the intention to act entrepreneurially and seek entrepreneurial education at a community college. This study has excluded the following, evaluating existing community colleges' processes, policies, and practices.

Required data, specifically names and email addresses, are largely confidential to the entities possessing this data. Interviews of currently employed people may be censored or anonymous due to repercussions to their careers for sharing their views.

The study does not have the means to create a new community college to test its theories or insights. This dissertation sought recent articles or knowledge to build a point of view. The efforts of this paper reflect that aim; however, seminal works were incorporated that fell outside ten years. These works, of which few exist, have been highly cited or credited with addressing complex issues uncovered in our communities. Their acceptance of community college entrepreneurship as essential to economic development has led to this discovery. Although aged,

they are still considered relevant. While academic research submitted to professional journals is typically reserved for university faculty, literature on entrepreneurship in community college is found in journals written for practitioners or mainstream media. This has encouraged the researcher to investigate alternative outlets. This literature regularly is assumptive or contextual and lacks quantitative or generalizability to other community colleges. The small number of works that address entrepreneurship at community colleges tend to focus on educational practices but fall short of illuminating the forces behind their genesis beyond general economic development missions (Hagan, 2004; Carducci et al., 2005; Mars & Ginter, 2012). With the accelerated development of entrepreneurship education at the community college, there is a clear need for new research (Barnard et al. 2019). Given the lack of scholarly work in community college entrepreneurship, this study strives to address this gap, increase interest, and encourage future research.

One of the weaknesses of meta-analyses is publication bias. Steps have been taken to ensure that the best possible sources other than those within the traditional "literature" support or refute that which is found in the literature review. The value these other sources bring to the final product additional credibility to the results. Sources used outside of peer-reviewed research include blogs, books, and speeches given by highly successful entrepreneurs. These sources check and balance the peer-reviewed research to ensure the study gives an accurate and relevant account to the customer (community colleges, SBDCs, and their end users, students, and clients). Crawford (2010) articulates the intended threading of the above purpose-driven needle.

> Acquiring practical wisdom, then, entails overcoming the self-absorption of the idiot, but also the tunnel vision of the curious man whose attention is indeed directed outside of himself, but who sees only his own goal. A lot of academic work has this quality of

> curiosity without circumspection; my Ph.D. dissertation proceeded in a way similar to the Magna oil seal episode. But with the Magna, I had to give an account to the customer. (p.124)

Definition of Terms

The subsequent terms and abbreviations are present in the study. Defining these is crucial for a comprehensive understanding of their context and relevance within the study.

Autonomous Motivation

Autonomous motivation is a form of motivation encompasses intrinsic motivation and deeply internalized extrinsic motivation. In essence, when an individual is autonomously motivated, they are driven by their interest in an activity (intrinsic motivation) and/or because they've integrated the activity's value and regulation within themselves (integrated extrinsic motivation). Controlled motivation includes external regulation (the only kind of extrinsic motivation considered when research emphasizes the dichotomy between intrinsic and extrinsic motivation) and introjected extrinsic motivation. Hence, one's level of controlled motivation signifies the extent to which they feel manipulated or lured by external contingencies or their introjected equivalents.

Community College

Community colleges are publicly funded, affordable colleges supported by taxpayer money. An associate degree, usually obtainable in about two years for full-time students, is typically the highest degree offered at a community college complete (What is a community college? n.d.).

Economic Development

Economic Development refers to the efforts made to "create conditions for economic growth and improved quality of life by enhancing the capability of individuals, firms, and communities to fully utilize their talents and skills to encourage innovation, reduce transaction costs, and responsibly produce and trade valuable goods and services" (Economic Development Agency, 2017, para. 2).

Ecosystem Builders

Ecosystem builders are individuals who dedicate their work to constructing a support system and resources for entrepreneurs within their communities or industries (Hwang, 2019).

El Pajaro CDC

El Pajaro CDC was established in 1979 by concerned community members in Watsonville, California, the goal was to organize Latino, Spanish-speaking business owners to address perceived injustices and ensure their voices were represented in local government. El Pajaro CDC's mission is to champion equal access to economic opportunities, aiming to transform lives through entrepreneurship.

Entrepreneurial Ecosystem

Entrepreneurial Ecosystem refers to a network of individuals who support entrepreneurs and a culture of trust and collaboration that enables their successful interaction. The velocity at which talent, information, and resources move through the ecosystem can impact entrepreneurs at each stage of their lifecycle (Hwang, 2019).

Entrepreneurs

Entrepreneurs are society's creators, doers, and dreamers. They are those who seize opportunities regardless of the resources currently at their disposal (Hwang, 2019). They can identify opportunities, infuse them with value, and reap the rewards.

The following words and acronyms were found in the study. It is essential to define to understand their incorporation and justification adequately.

In Business

“One that has completed required registration(s), if applicable, with the local, state, and/or Federal Government (e.g., DBA registration, business license, agency-issued tax identifications, etc.) and at least one of the following:

1. Has documented a transaction from the sale of a product or professional or personal service for the purpose of gain or profit.
2. Has contracted for or compensated an employee(s) or independent contractor(s) to perform essential business functions.
3. Has acquired debt or equity capital to pursue business operations (e.g., to purchase inventory, equipment, building, business, etc.); or
4. Has incurred business expenses in the operation of a business” (U.S. Small Business Administration, 2020)

Inclusive Economy

“An economy in which there is expanded opportunity for more broadly shared prosperity, especially for those facing the greatest barriers to advancing their well-being” (Hwang, 2019, para. 6).

National Resource Providers

National Resource Providers (NPRs) are **“**Organizations that provide training, programs, and funding to ecosystem builders across the U.S. and beyond” (Hwang, 2019, para. 7).

Pre-venture Small Business Development Center clients

Pre-venture small business development center (SBDC) clients are individuals that have not started a business yet but have received SBDC advising services.

Small Business

Small businesses are an independent business having fewer than 500 employees ("Frequently asked questions about small business, 2018).

Hispanic

Hispanic relates to Spain or Spanish-speaking countries, especially Latin America. It is used interchangeably with Latino.

Latino

Latino is a person of Latin American origin or descent, especially a man or boy.

Latinx

Latinx is a person of Latin American origin or descent (used as a gender-neutral or nonbinary alternative to Latino or Latina).

National Association for Community College Entrepreneurship

The National Association for Community College Entrepreneurship (NACCE) offers leadership and sustainable, expandable resources to encourage entrepreneurial thought and action within one of North America's largest entrepreneurial ecosystems.

Small Business Development Centers

Small Business Development Centers (SBDCs) supply business-related knowledge and support to help entrepreneurs initiate, operate, and expand their businesses. Leading universities, colleges, state economic development agencies, and private partners host these centers. The U.S. Small Business Administration, in partnership with the United States Congress, partially funds them. Almost 1,000 local centers are available to deliver cost-free business consulting and affordable training to new and existing businesses. Small business owners and budding entrepreneurs can go to their local SBDCs for readily accessible face-to-face business consulting and cost-effective training on a variety of topics (America's SBDC, n.d.).

Santa Cruz Small Business Development Center

This SBDC is situated in Aptos, California. Cabrillo College has been its host since 1984. The Santa Cruz SBDC operates under the guidance of a director who is a Cabrillo College employee and serves the County of Santa Cruz.

SBDC Contacts

SBDC contacts are individuals who are registered with the SBDC as recipients of training or advisory services.

Student-Centered Funding Formula

The Student-Centered Funding Formula (SCFF) is a funding model for community college districts in California, established in the 2018-19 state budget. It focuses on three core areas: access, equity, and success, and aligns with the goals outlined in the Vision for Success.

Vision for Success

In 2017, the California Community Colleges Board of Governors embraced the Vision for Success, establishing distinct objectives for advancement and pledging to enhance outcomes

for students and California as a whole. The Vision for Success is constituted by seven key pledges intended to reshape the organizational and behavioral aspects of colleges, thereby prioritizing the student experience. (California Community Colleges, n.d.).

Workforce Innovation and Opportunity Act

The Workforce Innovation and Opportunity Act (WIOA), enacted into law on July 22, 2014, aims to aid individuals in finding employment, accessing education, availing training, and securing support services to thrive in the job market. Moreover, it endeavors to connect employers with proficient workers, boosting their competitive stance in the global economy. This Act, which received extensive bipartisan support, represents the first significant reform of the public workforce system since the 1998 Workforce Innovation and Opportunity Act. (U.S Department of Labor, n.d.).

Chapter II: Literature Review

This study aims to lead change in community college programming and policy by illustrating an overlooked entrepreneurial student population. The small number of works that address entrepreneurship at community colleges tend to focus on educational practices but fall short of illuminating the forces behind their genesis beyond general economic development missions (Hagan, 2004; Carducci et al., 2005; Mars and Ginter, 2012). With the accelerated development of entrepreneurship education at the community college, there is a clear need for new research (Barnard et al., 2019). Given the lack of scholarly work in community college entrepreneurship, this study strives to address this gap, increase interest, and encourage future research. To fill the void in the literature, this chapter takes a unique approach by providing greater insight into the issue of motivations, as defined by SDT, and how undeserving the entrepreneurial student, especially the growing Latino demographic, results in demands in the higher education marketplace being unmet, the community college's economic development mission being neglected, and the critical timing for entrepreneurial ecosystem building being missed.

Underlining this problem of undeserving is a lack of understanding of what motivates an individual with entrepreneurial aspirations to pursue education at a Community College. The study attempts to illuminate how the basic psychological needs and motivations addressed through SDT could explain the formation of attitudes and perceptions of motivations, thus influencing the intention to act entrepreneurially and seek entrepreneurial education at a community college. Knowing that motivations are crucial in attracting, retaining, and developing student talent, a deeper understanding of how an entrepreneurial ecosystem can be based on the SDT is helpful. The overarching research questions this study seeks to answer are twofold.

1. How do attitudes and perceptions of motivations relate to SDT, and influence the intention to act entrepreneurially?
2. How do the attitudes and perceptions of motivations related to SDT influence the intention to seek entrepreneurial education at a community college?

Theory/Theoretical Framework/Conceptual Framework

I'm convinced that about half of what separates successful entrepreneurs from the non-successful ones is pure perseverance. It is so hard. You pour so much of your life into this thing. There are such rough moments ... that most people give up. I don't blame them. It's really tough.

– Steve Jobs

SDT explains student engagement from a need satisfaction perspective (Xia et al., 2022). SDT is based on basic psychological needs defined in BNT as autonomy, competence, and relatedness with extrinsic motivation differing into types of degree of autonomy (Deci & Ryan., 2012). Ryan and Deci (2008) propose that SDT takes the above needs to be innate and universal in contrast to other theories that see them as motives or desires held in different degrees. Competence is the effusiveness of action, autonomy is integrating a sense of self with activity, and relatedness is the need to feel connected and belong within a group (Ryan & Deci, 2000; Ryan & Deci, 2008). “Self-determination theory is an empirically derived theory of human motivation and personality in social contexts that differentiates motivation in terms of being autonomous and controlled” (Deci & Ryan, 2012, p. 1).

According to Deci et al. (2012) SDT “suggests that intrinsic motivation concerns experiencing activities as interesting and spontaneously satisfying, whereas autonomous extrinsic motivation concerns experiencing activities not as interesting but as personally important for one’s self-selected aims and purposes” (p. 18). In other words, “motivation produces” (Ryan &

Deci, 2000, p. 69). It is essential to understand peoples' actions and perseverance, predict employee well-being and performance at work, employee functioning and outcomes, and of professional success (Gagné & Deci, 2005; Güntert, 2015; Krieger & Sheldon, 2015; Lens & De Witte, 2010; Van den Broeck et al., 2010,).

As substantiated by Deci and Ryan (1985) and Ryan and Deci (2000), SDT proposes that humans are motivated to move towards greater degrees of self-determination and competence. Types of motivation along an autonomous spectrum are said to influence an individual's well-being, behavior, and achievements. Social conditions can add to or detract from these types of motivations. The support for the basic psychological needs for competence, autonomy, and relatedness affects the quality of people's autonomous motivation. A core facet of SDT is to explain that these three needs flow into the undercurrent of cultural values. These values become part of personality through adoption and internalization by satisfying these needs (Ryan & Deci, 2008). Psychological needs are "a nutriment essential for psychological growth, integrity, and wellness" (Ryan & Deci, 2008, p. 657). Ryan and Deci (2008) expressed,

> By assimilating the values of their group, individuals become more connected and related, and more competent and effective. Furthermore, the tendency for individuals to make ambient values their own—that is, to integrate them into their sense of self—allows them to experience enactment of these values as autonomous. (p. 659)

Often, motivation is seen as a particular determinant; however, SDT states that people are encouraged to behave by various extrinsic and intrinsic influences (Ryan & Deci, 2000). Intrinsically motivated behaviors "seek out novelty and challenges, to extend and exercise one's capacities, to explore, and to learn" out of joy and satisfaction (Ryan & Deci, 2000, p. 70). These motivations are a better predictor of interesting and enjoyable behaviors. Extrinsically motivated

behaviors, including identified/integrated regulation, fulfill an external demand or reward, are not for mere enjoyment, and require some discipline and concerted effort (Deci, 1975; Deci & Ryan, 2012). An aspect of themselves is attributed to causing their behavior: “Being autonomously extrinsically motivated requires that people identify with the value of behavior for their self-selected goals. With identified regulation, people feel greater freedom and volition because the behavior is more congruent with their personal goals and identities” (Ryan & Deci, 2000, p. 334-335).

SDT outlines the mechanisms through which extrinsic motivation transforms into autonomous motivation. This happens when individuals engage in activities that may not necessarily be stimulating, but are personally significant, aligning with their self-determined goals and objectives (Deci & Ryan, 2012). The relative autonomy or self-determination levels depend on the degree of internalization of the initial external regulation of the individual's behavior (Ryan & Deci, 2000). Ryan and Deci (2000) state that internalization occurs when values, attitudes, or regulatory structures are internally accepted. External regulation of behavior becomes internal regulation. External contingency is no longer needed. For instance, I perform my duties even when my supervisor is not watching. It is composed of introjection, identification, and integration. When the satisfaction of relatedness and competence are met with behavior, individuals will tend to internalize the value and regulation. However, distinguishing if identification or integration depends on the satisfaction for autonomy. For instance, contingent self-esteem and ego involvement are forms of introjected regulation. People comply to feel worthy (deCharms, 1968; Ryan, 1982; as cited by Deci & Ryan, 2012). In contrast, Ryan & Deci (2000) state that identified and integrated reasons are associated with values, goals, and well-being alignment.

The individual subscales of motivations can either predict outcomes individually, or when combined, form a relative autonomy index, as demonstrated by Gagné and Deci (2005) and Grolnick and Ryan (1987). This concept was further supported by Ryan and Connell's (1989) research where participants' reasons, indicative of intrinsic or extrinsic motivation, were analyzed and rated based on how accurately the motivation resonated with them. This evaluation method (as referenced in Gagné & Deci, 2005) was reproduced in fields like education, sports, and healthcare (Vallerand & Fortier, 1998; Williams & Deci, 1996; Williams et al., 1996). This helped confirm that the types of regulation conform to a quasi-simplex pattern, implying that each subscale correlates more positively with those nearest to it, and less positively or more negatively with those further away. This pattern aligns with the SDT's proposed underlying continuum from control to autonomy. The Self-Determination Continuum provides a visual overview of the motivations, regulatory styles, source of motivation, and what regulates the motivation, as seen in Figure 1.

Figure 1

Self-Determination Continuum

Nonself-Determined						Self-Determined
Motivation	A motivation	Extrinsic Motivation				Intrinsic Movitation
Regulatory Styles	Non-Regulation	External Regulation	Introjected Regulation	Identified Regulation	Integrated Regulation	Intrinsic Regulation
What is the source of the motivation?	Impersonal	External	Somewhat External	Somewhat Internal	Internal	Internal
What regulates the motivation?	Nonintentional, Nonvaluing, Incompetence, Lack of Control	Compliance, External Rewards and Punishments	Self-control, Ego-Involment, Internal Rewards, and Punishments	Personal Importance, Conscious Valuing	Congruence, Awareness, Synthesis with Self	Interest, Enjoymnets, Inherent Satisfaction

Note. Based on Ryan and Deci (2000).

SDT Studies

Three SDT studies are evaluated to illustrate the exiting body of knowledge as it relates to entrepreneurs and education.

Study One

Individual motivation among entrepreneurs in the creative and cultural industries: A self-determination perspective (Cnossen et al., 2019**).** Highlight that the application of SDT research was rare (for an exception, see De Jong, 1999). Their study aimed to understand the motivations driving individual entrepreneurs to work in the creative and cultural industries (CCI). The research found that entrepreneurs in the CCI are more intrinsically than extrinsically motivated, similar to those in other occupations. A significant predictor of motivation within the CCI is the self-perceived need for creative competence or self-efficacy. The study challenges conventional theories on creativity and motivation by highlighting that those with a high degree of creative self-confidence also expect rewards and recognition, suggesting an association between creative competence and extrinsic motivation.

The study also questions the role of autonomy and freedom in work. While these factors are assumed to fuel intrinsic motivation, the study found a negative relationship between someone's need for autonomy and extrinsic motivation, indicating a trade-off between autonomy and commercial viability. Interestingly, the need for relatedness, or a sense of connection and belonging, was not a significant predictor of motivation in this context.

Additionally, the study found that creative entrepreneurs distinguish between creative and entrepreneurial competences and do not see entrepreneurial competences as a motivational factor that could advance their careers. This highlights the need for increased awareness of the importance of entrepreneurial skills in navigating the CCI.

The study suggests that while creative entrepreneurs are driven by both pleasure (opportunity) and necessity (money), they must understand the precarious nature of work in the CCI and the potential competitive disadvantages of self-employment.

The research methods used for the study, including a tailor-made survey and the application of SDT, provide promising tools for future research into the motivations of creative entrepreneurs, but they require further validation. The findings of the study have implications for policymakers, educators, and future research directions.

The need to be commercially viable is a unique challenge entrepreneurs face. Many would-be entrepreneurs may be interested in starting a business (intrinsically motivated) but not motivated by external consequences (lifestyle, pay, etc.) Along the same lines, Koestner et al. (1996) studied political voting and found people become well-informed when intrinsically motivated based on interest but vote when motivated by the issues' importance based on external consequences.

Study Two

A SDT design approach for inclusive and diverse artificial intelligence (AI) education (Xia et al., 2022). Their study explains student engagement from a SDT need satisfaction perspective. This extensive study focused on using an AI program with a needs satisfaction approach to enhance K-12 students' learning of artificial intelligence (AI). The aim was also to determine if this approach would equally benefit (1) girls and boys and (2) high and low achieving students. Key findings of the study were: The AI program's needs support strategies satisfied students' three SDT needs (autonomy, competence, and relatedness) more effectively than conventional teaching methods. This was validated in various learning scenarios, including face-to-face, online, and blended learning environments. Second, the SDT-based program

improved the perceived AI learning of both genders and achievement levels, except in reducing the AI anxiety of high achievers. This supports SDT's principle that fulfilling these needs better engages students in learning AI. Third, the SDT-based program benefited all students equally, irrespective of gender and achievement levels, enhancing their perceived AI learning. In contrast, traditional teaching methods showed more benefits for boys and high achievers over girls and low achievers.

The theoretical contributions include aspects of teacher support and the needs of learners. Their findings contribute to SDT by demonstrating how teacher support fulfills student needs in inclusive and diverse AI education. The study adds to the understanding of learner expertise and motivation, emphasizing the importance of supporting the needs of students with different expertise levels in AI education.

The study suggests providing professional development training to teachers to better understand and support student needs. The curriculum should be tailored to accommodate the diversity of K-12 students' learning competencies. The design of AI laboratories should cater to student needs, providing a variety of AI technologies, instructional videos, and a layout encouraging informal discussions.

Study Three

Entrepreneurial intention among university students in Malaysia: integrating SDT and the theory of planned behavior (Al-Jubari et al., 2018) This study explores the motivational factors influencing entrepreneurial activity. It combines two theories, the Theory of Planned Behavior (TPB) and SDT, to provide a comprehensive understanding of the role of intrinsic and extrinsic motivations in entrepreneurial intention.

The research indicates that both intrinsic (inner-driven) and extrinsic (reward-oriented) motivations can stimulate the intention to engage in entrepreneurship and the subsequent creation of new ventures. However, entrepreneurs with differing motivations may exhibit various characteristics. Intrinsically motivated individuals, driven by their personal satisfaction and fulfillment, show higher persistence, autonomy, and initiative in the entrepreneurial process. They are less likely to abandon their ventures when facing obstacles and tend to exhibit higher performance after starting their venture, which could potentially result in more dynamic and successful entrepreneurs. On the other hand, individuals motivated extrinsically, often driven by external rewards such as profit, may also have a high entrepreneurial intention but are found to be less persistent when facing challenges. Their performance tends to rely more heavily on the external rewards received, which may lead them to abandon their venture if rewards do not meet their expectations. The study also explores the potential role of mental disorders and their connection with need frustration, contributing to the development of entrepreneurial intention.

Despite these insights, the study has limitations. It utilizes a cross-sectional approach with a sample restricted to university students from Malaysia, limiting its broader applicability. To mitigate these limitations, the authors suggest future research should include diverse samples and apply a longitudinal approach to test causality and track the influence of psychological needs over time in the entrepreneurial process. They also encourage the replication of the study in different cultural contexts to evaluate the influence of culture on motivation and entrepreneurial intention.

Higher Education Enrollment Theory

"Business has only two basic functions - marketing and innovation."

- Peter Drucker

How entrepreneurs are motivated may provide an understanding of increasing student enrollment and workforce supply. Enrollment is about creating value throughout the life cycle of the student's entire experience. Failure to provide value denies society its right to self-determination and development (Taylor, 2015). While SDT emphasizes the role of motivation and autonomy in student success, the factors that influence the student's enrollment are presented by several theories. Enrollment theory plays a critical role in shaping the policies and practices of community colleges, informing decisions about recruitment, retention, and student success. This section will provide an overview of the major enrollment theories in community colleges.

Access theory emphasizes the importance of providing access to higher education for all individuals, regardless of socioeconomic status, race, ethnicity, or gender. As noted by McPhail and Schaefer (2018), access theory is particularly relevant for community colleges, given their historical mission to serve as open-access institutions. By removing barriers to entry and providing affordable tuition and flexible schedules, community colleges can help to ensure that individuals from underserved and underrepresented populations have access to higher education.

Demand theory is another important enrollment theory in community colleges. This theory suggests that community colleges should respond to the needs and demands of their communities, particularly in terms of workforce development. According to Hillman and Orians (2013), demand theory reflects the growing importance of community colleges as engines of economic development. By aligning their programs and services with local labor market needs, community colleges can help to prepare students for in-demand careers and support economic growth.

Student choice theory is another relevant enrollment theory in community colleges. This theory emphasizes the importance of meeting the needs and preferences of individual students,

particularly in terms of program flexibility and support services. As noted by Somers et al. (2006), student choice theory recognizes that community college students come from diverse backgrounds and have varied goals and needs. By providing a range of program options and support services, community colleges can help students to achieve their educational goals.

Resource dependence theory is a final enrollment theory relevant to community colleges. This theory emphasizes the importance of building relationships with external stakeholders, such as local businesses, government agencies, and community organizations. As noted by Bakhit (2014), resource dependence theory recognizes that community colleges rely on external resources to support their mission and goals. By collaborating with external partners, community colleges can leverage resources to better serve their students and communities.

Considering the dynamic context of community colleges, characterized by unique enrollment patterns, restricted funding, updated institutional strategies, a competitive environment, changing demographics, economic shifts, and diverse missions, these institutions need to design efficient strategic enrollment planning (SEP) strategies. The development of these strategies should be informed by enrollment theories to successfully navigate the progressively complex enrollment landscape (Kerlin, 2008). Enrollment theory plays a critical role in shaping the policies and practices of community colleges. Access theory emphasizes the importance of providing access to higher education for all individuals, while demand theory focuses on aligning programs and services with local labor market needs. Student choice theory emphasizes meeting the needs and preferences of individual students, and resource dependence theory highlights the importance of building external partnerships to support community college missions. By considering these enrollment theories, community colleges can better serve their students and communities.

Declining Student Enrollment and the Gap in Future Workforce Supply

"When everything seems to be going against you, remember that the airplane takes off against the wind, not with it."

-Henry Ford

There is widespread agreement that California's public education system is substantially behind in meeting future demand for educated workers. By 2030 a gap of 1.1 million bachelor's degrees is anticipated by The Public Policy Institute of California and 3.7 million associate and bachelor's degrees to compete internationally (Johnson et al., 2015; Lumina Foundation, 2019). There are several reasons for these gaps. According to Esch and Supinger (2017), students take 3.8 years on average to complete a 2-year associate degree. Increasingly students served are older (40% age 25 or older) and 15% are working with unique challenges that affect persistence. Across California of working-age adults, about 4.5 million people have dropped out of higher education. Additionally, areas of the adult population with the highest needs are not served equitably. The lowest college attainment of adults overlaps with the lowest median household income and most insufficient CCC enrollment per capita (California Competes, 2013b). The headcount for CCC students, already flat for most of the past decade leading up to the pandemic, dropped 16.8% between the fall of 2019 and 2020 (California Community College Chancellor's Office, 2022).

In 2010, the California Legislature initiated multiple measures to tackle the issue of low student graduation rates in community colleges. In 2010, a law was passed instructing the CCC Board of Governors (BOG) to implement a holistic strategy aimed at enhancing student results. In 2017, the California Community College Chancellor's Office (CCCCO) reported that system-wide California community colleges continued to underperform in student outcomes, including

degree and certificate gap, completion time, and regional equity (Esch & Supinger, 2017). A new way to allocate funding to community college districts based on performance was adopted in the 2018-19 state budget. The Student-Centered Funding Formula (SCFF) rewards access, equity, and success. These performance metrics are measured by the number of students receiving a College Promise Grant, a Pell Grant, covered by AB 540, those who complete nine or more career education units, who have attained regional living wage, or transferred (California Community College Chancellor's Office, 2022). The SCFF's three-pronged focus of access, equity, and success aligns with the goals in the Chancellor's Vision for Success. Esch and Supinger (2017) state, "...it is critical to make headway among underserved groups of students and those living in underserved areas of the state—this is a moral imperative that matches our California ideals of social justice and equality" (p.13). Perhaps no underserved group of students are more important to focus on than the growing population of Latinos.

The Growing Role of Latinos in Higher Education and Entrepreneurship

"There is a reconocimiento to right now of the sheer force and power of the Latino community and what we can contribute to our economic prosperity. Rather than say thank you and feel blessed about it, we should press our advantage. This is the exact time when we need a sense of urgency to collectively adapt, advocate, and achieve."

— Mike Valdes-Fauli

Underlining these issues is a history of discrimination and exclusionary practices exacerbated by unique socio-economic problems experienced by Latinos. Since the beginning of vocational education in America, nonwhite youth and adults have faced unequal access and education quality (Spring, 1990). Wide-spread policies of exclusion (segregation of Chinese and Japanese students in San Francisco, Mexicans in Southern California, Native American boarding

schools, and Blacks in Southern States) was based on the economic exploitation strategy of keeping non-whites in labor-intensive, unskilled jobs and preventing them from becoming economic rivals (Scott & Sarkees-Wircenski, 2014). Political and economic structures reinforced this permanent underclass for centuries. The Civil Rights Bill of 1964's attempt to address the racist policies fell short of solving the workplace's racial inequities. Syndicated columnist William Raspberry describes, "The principal victims of racial disparity today are...the unskilled, uneducated, unambitious, economically crippled underclass whose problems, though they might have had their origin in racism, would not be solved by the end of racism (Parnell, 1985, p. 29)." More than any other racial or ethnic group, Latinos are more likely to work in unskilled occupations and experience high dropout rates (Saenz, 2009). Many Latino children were ESL students who lived in urban areas, which may have limited their enrollment in high-quality CTE programs (Hudson, 1994).

Today, Latino students are considerably more expected to enroll in higher education institutions awarding associate degrees. Four of the top five higher education institutions enrolling Latinos are associate degree-awarding (Projections to 2030: Santiago, 2020). The top five institutions awarding bachelor's degrees to Latinos are California State Universities where Latino students graduate six percentage points higher (57% vs. 51%) than their peers nationally. (Santiago, 2020). Still, gaps nationally in degree attainment and degree completion result in Latino's 47.8% less likely to have a higher education degree compared to their white counterparts 24% vs 46%, respectively, (United States Central Bureau, 2018). Latinos graduate 12% less than whites at four-year institutions (51% and 63%, respectively), and forty-two percent of Latinos at community colleges do not persist three years after starting their degree (Excelencia in Education, 2021). Policies are required to help Latino students get on the path,

stay on the path, and complete the path to completion to close the degree attainment gap (Nuñez, 2013).

Latinos have an essential role to play in the U.S. economy (Bryson et al., 2021). “The Nation’s future prosperity and global leadership across industries is therefore tied to the success of Hispanic and Latino students” (Biden, 2021). The U.S. Bureau of the Census (2012) Survey of Business Owners reported 3.3 million Hispanic-owned businesses. By 2017, there were projected over 4 million (Geoscape & United States Hispanic Chamber of Commerce, 2017). Annually, they contribute over $700 billion to the US economy (United States Hispanic Chamber of Commerce, 2019). Fairlie et al. (2019) report that nearly one in four new businesses are Latino-owned with Latinos 1.7 times more likely to start businesses. With one-quarter of Latino businesses being women owned, this increasing trend in economic mobility will continue to climb as Latinas have experienced twice the rate of starting businesses compared to any other minority population (Stanford Graduate School of Business, 2021). Latina-owned businesses have a yearly growth rate of 4% faster (10% vs 6%) than Latino owned. They are nearly twice as likely to have annual revenues of less than $100,000, resulting in Latino men producing more business profits (In Orozco et al. 2019 study as cited in U.S. Census Bureau, 2015).

Latino entrepreneurs able to scale their businesses revenue increase their personal income level (Wescott & Griffith, 2010). Orozco et al. (2021) found that Latino entrepreneurs who grew their businesses by over $1 million, were disproportionately immigrants in the tech industry who were brought up in lower to lower-middle-income households, suggesting by building a business, poverty experienced as a child can be alleviated (Orozco et al. 2019). However, scaling Latino-owned (both male and female) businesses faces unique challenges. Mills et al. (2018) report that Latino business owners tend to start their businesses on savings and funding from friends and

family. Consequently, they do not leverage institutional capital and build their credit. Despite reporting comparable revenue growth patterns, employment growth, and profitability as white business owners, this lack of financial support leads to difficulties paying operating expenses and credit availability issues. Moon et al. (2014) confirms these barriers to starting and growing a business through their survey of 200 Latino businesses: The most significant barrier was start-up capital, as cited by 42% of business owners and 15% percent named it as the second biggest barrier, along with understanding government regulations and tax information.

With the increasing number of Hispanic students in higher education, they are notably more likely to venture into entrepreneurship. Guo et al. (2022) confirmed that obtaining a college education positively influences the initiation of an incorporated business, with this relationship being particularly pronounced among minorities. This underscores the vital role higher education plays for minority groups. Further, Herndon et al. (2013) offer advice to Community College Extension educators on addressing the substantial obstacles Latino entrepreneur's encounter. These challenges include inadequate business planning, limited access to capital and networking opportunities, difficulty finding suitable suppliers, and challenges with marketing performance analysis. Latino business owners, as a diverse group with varying levels of formal education, require specialized approaches to communication, networking, recruitment, and programming. Identifying successful business advisors, who can conduct a needs and assets assessment and engage with the community and organizational leaders creates culturally adapted programs. They conclude extension education working with policymakers can create financial inclusion through non-asset-based loans and eligibility for undocumented applicants.

Local businesses are central to the health of communities and supporting these businesses leads to the revitalization of the community.

> Growing local businesses will provide additional revenue to local governments for the development of facilities and infrastructure needed to maintain and enhance the viability of these communities. Starting and maintaining a business means job creation, economic vitality and diversity, and expansion of the tax base for local and state governments. Just as important, it also means increased interactions with a wider set of community residents. (Moon et al., 2014, p.70)

The rise of Latino entrepreneurs represents a dynamic shift in many communities. This pool of entrepreneurs, including migrants, women, and other disadvantaged groups, is important to their community and is essential for revitalization. Supporting their efforts by creating an environment that attenuates financial barriers and provides culturally informed training creates opportunities for the development of human capital and societal cohesion (Moon et al., 2014). Supporting these Latino entrepreneurs and small business communities is aligned with the economic development pillar of community colleges.

Economic Development Pillar of Community Colleges

Entrepreneurship education's goal of creating economic development directly addresses the ability to generate real wealth (Solomon, 2007). Economic development initiatives have proven to help overcome underserved small businesses' financial challenges while building wealth in communities (Council, 2013; Edmiston, 2007). The Aspen Institute demonstrated the economic value of supporting entrepreneurship for low-income individuals (Clark et al., 1999). For five years it tracked 405 micro-business owners. Seventy-two percent had gains in household income, 53% had moved out of poverty, and government assistance by 61%. More recently, the 2020 State of Latino Entrepreneurship Research Report by Stanford found that "being connected to organizational or personal networks is related to success (higher revenue growth and positive

funding outcomes), and Latinos are more likely to participate in formal business organizations compared to their White counterparts" (Orozco et al., 2019, p.24). However, according to McCullers & Robinson (2021), entrepreneurship support, as a poverty alleviation strategy, is less utilized than housing and job-creation programs, even though it can be significantly effective under favorable policy environments.

Community colleges have roots in economic development under favorable policy environments to support small businesses (Council, 2013). During the 1930's Depression, they offered job-training programs (Gallagher, 2001). In 1948, the Truman Commission supported the building of a consortium of public community-based colleges to address the needs of the local workforce (Gilbert & Heller, 2013). Amending the Trade Act of 1974, capacity-building and training grants were authorized through the 2009 American Recovery and Reinvestment Act (ARRA). Additionally, funding was provided through The Health Care and Education Reconciliation Act of 2010. In 2011, the U.S. The Department of Labor provided this support to community colleges, solidifying them as the partner of choice for businesses interested in relocating, expanding, or providing workforce training (Nickoli, 2013).

These favorable policy environments supported conventional and non-conventional economic development initiatives by community colleges (Katsinas & Lacey, 1990). Katsinas and Lacey's 1990 study (as cited by Katsinas, 1994, p.1) define "traditional initiatives as the vocational and occupational curriculums designed to produce technicians to support a largely manufacturing-based economy. These programs were terminal and non-transfer-based--the very programs that critics of community colleges have castigated as tracking students from low socioeconomic backgrounds toward lesser careers and futures."

Katsinas and Lacey (1990) found nontraditional initiatives to develop entrepreneurial skills. Their findings included community colleges operating incubators, international trade, and technology transfer support. Corbin and Schulz (2016) discovered that entrepreneurship education programs establish a link between community college resources and local small businesses and startups when economic development is a shared objective of the community and the college. However, in Woodhouse (personal communication, 2017) interview as cited in Barnard et al., (2019), “achieving these goals can pose a difficult challenge as there is often a lack of collaboration between some academic entrepreneurship programs and outreach functions in community colleges” (p. 192).

Community colleges offering economic development through entrepreneurship training and incubation increase the entrepreneurial activity in the surrounding community, leading to increases in economic activity and more significant job development (Badal, 2010). Unlike economic development focused on employee training, entrepreneurship can be the catalyst for identifying new opportunities and diversity in a community's business environment. Diversified economies are more resilient. According to the World Trade Organization (2019), diversified economies help to manage volatility to external shocks and stabilize growth and development. Equitable growth and development that is predictable are linked to the structural transformation from the gains in efficient allocation of resources.

The 2020 pandemic communicated that industries affected by changed consumer behavior or already financially at risk were ubiquitous in the US and needed help to pivot towards resiliency. Even before the pandemic, at the end of 2019, a mere 20% of financially stable companies (and an even smaller percentage of those in weaker financial positions) possessed enough cash reserves to sustain regular operations in the face of a two-month revenue

shortfall. A significant number of these companies would turn to personal savings or accrue debt to navigate through the crisis. (Mills & Battisto, 2020). Within the first months, the 2020 pandemic caused upwards of 41.3% of small businesses to close (temporarily) resulting in 200,000 (permanently) within the first year (Simon, 2021 & Bartik et al., 2020). Lower-income workers, business owners with less formal education, and minority owners were disproportionately vulnerable. Those with a high-school degree or less are more likely to be in less resilient industries. The most affected sectors are a quarter owned by non-white owners. This same disadvantaged group owns 15 percent of the less affected industries (Dua et al., 2020b).

Small businesses have been responsible for 66 percent of employment expansion in the past quarter-century (Wilmoth, 2022). It's crucial to safeguard these small business communities from definitive closure due to their multifaceted roles in the economy as employers, entrepreneurial catalysts, economic accelerators, and community focal points (Dua et al., 2020b). The long-term economic damage and unemployment caused by mass business exits is more severe than that caused by temporary shutdowns, thus understanding which small businesses may close permanently is vital (Dua et al., 2020). Data from the labor market can assist leaders in Career and Technical Education (CTE) in formulating entrepreneurial endeavors that back these businesses, support their ongoing operations, and place them on a path towards greater sustainability and resilience. This, in turn, helps these businesses serve as pillars for their communities by bolstering local economies (Atwell et al., 2022). Solomon and May’s study (2014) suggests the increase in the importance of community college entrepreneurship programs to their communities requires its design needs to address local needs (Katsinas & Lacey, 1990; Solomon & May, 2014). A case study on entrepreneurship addressing local needs is illustrated in the story of Janesville.

Case Study: Janesville, An American Story - The Need for Small Business Resiliency

Tolstoy opens Anna Karenina by observing: "All happy families are alike; each unhappy family is unhappy in its own way." Business is the opposite. All happy companies are different: each one earns a monopoly by solving a unique problem. All failed companies are the same: they failed to escape competition."

- Peter Thiel

Janesville, An American Story, is an intimate account of the devastation caused by a GM plant closure and the community of Janesville, Wisconsin, 's failure to escape the competition from globalization. The story illustrates the consequence of the factory worker mindset being ill-equipped to build new opportunities. It is a microcosm of social and economic issues facing Midwest, middle-class, and manufacturing cities during the Great Recession but the 2020 pandemic that forced business closures broadens its relatability geographically. In the American heartland, a community with a can-do spirit attempts to move on while facing the Great Recession's hollowing out of the American middle class. "Maybe toughness is recognizing what isn't working in your life and fixing it" (Goldstein, 2017, p.137).

By the fifth year without the General Motors plant, "the ways that time and economic misfortune can rend even a resilient community- a community determined not to lie down and give up—are plain to see" (Goldstein, 2017, p.261,). Personal and community issues continue to stretch local resources. Mental health continues to deteriorate. Workers take out-of-state jobs, kids go homeless or join the military, and those fortunate enough to find local employment end up in unfit positions. The rate of suicide increased by 400% from 2008 through 2012. The lack of Federal accountability is contrasted with a "...recognition that best solutions to local problems come from the creativity and ingenuity of communities" (Goldstein, 2017, p.125).

Goldstein (2017) highlights The American Idea as "… a new way of expressing his belief that people who need help in their lives should look, not to the government as the New Deal and the Great Society encouraged, but to generosity and sources within their own communities" (p. 281). Local job training resources offer one of these community resources, while good intention creates terrible expectations. First, it expects the recession to be like the last ones. It finds retraining laid-off factory workers is not easy in an economy that has outsourced most of its manufacturing jobs. As acceptance of the new economic reality sets in, interest in investment in new industries and entrepreneurship begins to grow. Local economic development officials began working to court businesses that could lift and diversify Janesville's recessed economy. However, they find the scientific skill set would require hiring outsiders and span over multiple years.

Risks in starting new business ventures shift to governments investing in untested markets. One of those markets is the University of Wisconsin-Madison's Research Park, and the startups launched there don't come to Janesville. Blackhawk Technical College begins looking to start a new program for future jobs - nuclear technicians, and there is a consensus to change Janesville's brand. Goldstein (2017)

> The city of Janesville, for almost 100 years, produced automobiles… Unfortunately, those days are done, and that stream has dried up. Although we can hope that that plant someday opens its doors again, the reality is that we have to redefine what the city of Janesville is. This is one of those opportunities that can take and define where we are for the next century...And I truly believe that sometimes, when you look at making a decision like this, you have to be bold…We are looking at developing a region for the future. (p. 200)

The Janesville case study teaches the value of thinking of the region's brand, the need to come together as a community, and resiliency through entrepreneurship. What attracts the industry here? What is needed to grow sustainably? What should we be known for? What does taking advantage of COVID-19's disruption of small businesses look like? Like Janesville, those business owners in every community have been taught that even middle-class white people and their families can be humbled. As Tammy Whiteaker stated (Goldstein, 2007, p. 139), "...you never know when one unexpected event will transform you into the person on the other side." In the end, "Many people complained, many people cried, and many people gave up. Some waited for things to go back to the way they were...But a vital few decided to create a new future for themselves and this area. They decided to use the economic obstacles as an economic opportunity" (Goldstein, 2017, p. 116). The story of Janesville encourages all local economies to avoid a similar plight through the resiliency of entrepreneurship, and grit by building an entrepreneurial ecosystem.

Building an Entrepreneurial Ecosystem at Community Colleges

"The Chinese use two brush strokes to write the word 'crisis.' One brush stroke stands for danger; the other for opportunity. In a crisis, be aware of the danger--but recognize the opportunity."

- John F. Kennedy

Entrepreneurs need an ecosystem that supports their intentional process and planned behavior (Al-Jubari et al., 2018). Gross (2015), the founder of a successful business incubator, Idea Labs, researched 200 start-up companies' reasons for success. Forty-two percent were timing, 32% was team/execution, 28% was an idea "truth" outlier, 24% was business model, and

14% was funding. The single biggest reason why startups succeed is timing. Can community colleges increase the attraction of entrepreneurs by providing compelling timing?

Entrepreneurs cannot be singularly responsible for building these ecosystems. In a 2012 election speech, President Obama (Obama, 2012) stated, "Somebody helped to create this unbelievable American system that allowed you [business owner] to thrive. Somebody invested in roads and bridges. If you've got a business, you didn't build that [roads and bridges]". A community culture that embraces, instills, and inspires entrepreneurship creates economic opportunity through an entrepreneurial ecosystem.

Hwang and Horowitt (2012) support the secret to building the next Silicon Valley, explaining "...what is most important are not the ingredients of economic production, but the recipe—how the ingredients are combined together…Human systems become more productive the faster that the key ingredients of innovation—talent, ideas, and capital—are allowed to flow throughout the system" (p. 10-11).

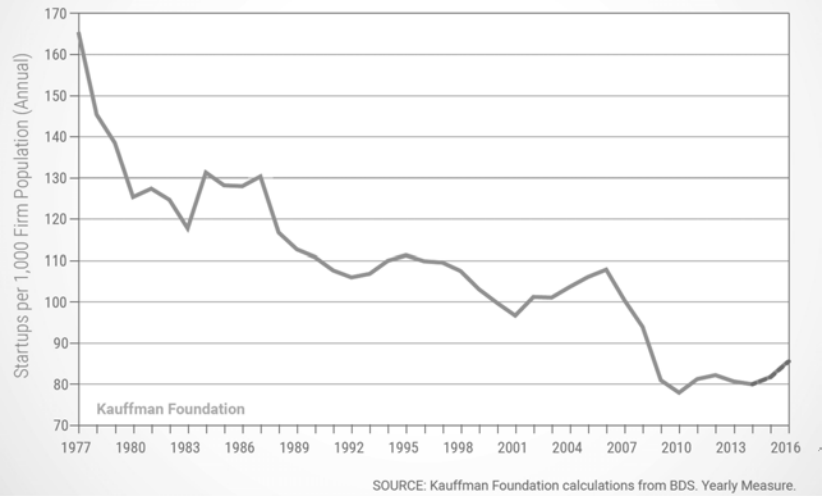
Community colleges can actively establish themselves as preferred partners in cultivating robust and sustainable local and regional economies (Barnard et al.,2019). They can achieve this by securing grants and offering technical support to enhance their capabilities and leadership for economic development (Nickoli, 2013). Partnering more aggressively with local economic development agencies, chambers, coworking spaces, industry leaders, and financers builds a diverse, resilient, and equitable community of stakeholders so that entrepreneurs can thrive. As Boyer and Peltason (1988), argues, "…strengthening connections beyond the college-with schools, industry, business, social agencies, and policy groups-will become a key strategy in the building of community" (p.41). By undertaking such initiatives, community colleges play a role in job creation. They do so by educating entrepreneurs who then build prosperous businesses that

increase their workforce and contribute to the diversification of their business landscapes (Boyer & Peltason, 1988).

Until the pandemic, communities were not diversifying their business environments. Since 1977 small to mid-sized businesses are not as prevalent as they once were. Fewer firms are being built and an increasing number employ 250 people or more. (Fairlie et al., 2017). The situation is further complicated by the fact that around 20 percent of new small businesses do not survive past their first year. As per the Bureau of Labor Statistics data (2022), 30 percent of businesses will have failed by the end of the second year. By the five-year mark, roughly half will have failed, and by the end of ten years, only 34.6 percent of businesses will still be operating...representing a 70 percent failure rate. It is incumbent upon community colleges to help alter this unsustainable trajectory (Winkel, 2019).

Figure 2

Startup Density: 1977 to 2016



Note. A firm represents either one establishment or a combination of establishments. Source: Fairlie et al., (2017).

According to the U.S. Department of Education, federal aid programs cover school expenses (Federal student aid, n.d.). A focus on transfer, degrees and livable wage jobs has neglected to provide financial aid that alleviates financial constraints for would-be entrepreneurs to invest in their businesses (Student-centered funding formula, n.d.). Increased higher education attendance, the rise in student debt, and a reduction in home equity have caused a reduction in business starts by those under 35 (Buchanan, n.d.), creating missing generation of entrepreneurs (Gourio et al., 2014).

The largest percent of the workforce, “millennials face record levels of student debt, and the culprit seems to be the explosive increase in the cost of college education, coupled with a lack of wage growth” (Maldonado, 2018). Communities of color have been disproportionately affected by these adverse effects (Romero, 2015). For many of those would-be entrepreneurs, high-paying tech jobs don’t involve the risks of starting a business or the costs of higher education requirements. They need only new knowledge or skills (Cite).

Nattoo (2019) shares that Shereef Bishay, the founder of Dev Bootcamp, believes that Americans have been “hypnotized by the myth that college and higher education are the same things” and that “there are all kinds of things we can do to get people educated and into the workplace that doesn’t depend on a four-year or a two-year degree” (para. 2). This perspective could steer prospective students away from their local community college and to one of the several emerging alt-education, or for-profit programs.

On average, for-profit colleges allocate only 29 cents towards student instruction for every dollar, in contrast to 84 cents at private colleges and $1.42 at public universities (Hall, 2022). The result is a growing percentage of the $1.7 trillion student debt being delinquent (Board of Governors at the Federal Reserve System, 2022).

The benefits of dropping out - or not attending college at all - to accelerate a business startup or gain access to entrepreneurial skills have created a growing opposition to higher education by business leaders. Peter Theil, motivated by his guilt of not taking responsibility for thinking about his future at a younger age, encourages college students to drop out and pursue creating a business. “Elite students climb confidently until they reach a level of competition sufficiently intense to beat their dreams out of them. Higher education is the place where people who had big plans in high school get stuck in fierce rivalries with equally smart peers over conventional careers like management consulting and investment banking. For the privilege of being turned into conformists, students (or their families) pay hundreds of thousands of dollars in skyrocketing tuition that continues to outpace inflation. Why are we doing this to ourselves?” (Thiel & Masters, 2014, p.36). Thiel's Fellowship helps pay for living and business startup costs. He thinks bumptious youth should not increase their debt which will encourage them to take on “gainful but unrewarding jobs. Instead, they should pursue radical innovation that will benefit society" (Clynes, 2017, para. 3).

Many students appear to agree. Eden Full Goh, who attended Thiel’s Fellowship after dropping out, attests, “I had to fit into a rigid system that wasn't created for people like me. The required courses were slowing me down. I wanted to learn what I needed to develop my ideas and get them out there” (Clynes, 2017, para. 10). These entrepreneurial students, who have made incredible sacrifices to be admitted, realize that the higher education institutions lack any interest in providing the flexibility their minds need and instead are seen as disruptive iconoclasts (Clynes, 2017).

Providing a feeling of belonging means providing flexibility in content selection. Michael Gibson, who co-runs Thiel’s Fellowship, argues this paradigm shift is being demanded from the

students, stating, “Before, universities had it all tied up in one package. Now that there are cheaper and more relevant alternatives for learning, people are breaking out of these super-narrow tracks. You will start to see fewer people willing to play by the old, bureaucratic, arbitrary rules” (Clynes, 2017, para. 76). Govindarajan & Srivastava (2020, para. 5) argue that increased flexibility makes business sense. “By freeing resources from courses that can be commoditized, colleges would have more resources to commit to research-based teaching, personalized problem solving, and mentorship."

It is urgent that community college leaders better understand their local business economy and what motivates entrepreneurs to create economic opportunities for a diverse community (Deggs, 2013). Ray Dalio, the founder of the world’s largest hedge fund, Bridgewater Associates, says productivity drives an economy. Productivity is based on innovators who create new ways of moving forward, and that type of education continues to be more accessible in more affluent communities (Dalio, 2020). Americans are becoming more educated and specialized creating barriers to traditional occupations (Lund et al., 2019). Through building programs and opportunities for entrepreneurial activity, higher-paying jobs are created.

Community colleges’ equitable focus makes them perfect for increasing productivity through innovators in less well-off communities (Corbin & Thomas, 2019). For Americans to be guaranteed to have an opportunity at a living wage in a viable community, community colleges need to become the hub of entrepreneurship education (Corbin, & Thomas, 2019). Embracing a lifelong learner approach will become necessary as 50% of employees will need reskilling with the top skills being … “critical thinking and analysis as well as problem-solving, and skills in self-management such as active learning, resilience, stress tolerance and flexibility. (Zahidi et al.,

2020). Many of these creative skills are driven by a need to differentiate in a macro economy driven by the forces of automation, abundance, and Asia (Pink, 2005).

According to the World Economic Forum (Whiting, 2020), the most sought-after skills by employers by 2025 will be entrepreneurial competencies. Topping this list are critical thinking and problem-solving, with new additions in 2020, including self-management skills such as active learning, resilience, stress tolerance, and flexibility. These key skills for success can be cultivated in classrooms focused on entrepreneurship. Community colleges that structure their curricula and programs around the intersection of entrepreneurship and workforce development arm their students to become valuable and pertinent members of the workforce. Community colleges that provide this education hold the promise of tomorrow to boost local economies through business diversification. Community colleges are not typically seen as hubs of innovators, but they can and need to be (Corbin & Thomas, 2019). By specializing in their market's demands by creating equitable-ecological conditions to start a business, they will cultivate an entrepreneurial mindset, provide scalable resources, strategies, and tools, and build a sense of entrepreneurial community in community colleges (De La Cerda, 2021).

Summary

The declining student enrollment trend, particularly 500,000 over the next ten years among California's K-12 population (Department of Finance, 2022), a low retention rate of 52.4% (National Student Clearinghouse Research Center, 2022), and increased emphasis on student outcomes are resulting in looming budget cuts for California community colleges (Zinshteyn, 2022). Nationally, from 2010-2017, community college enrollment declined by 14.4% by more than 1 million students and 10% from 2019 to 2020 (American Association for Community Colleges, n.d). This decline is 16% higher if dual enrollment is not considered

(Weissman, 2021). On average, potential underserved graduates are 38 years old and are most likely to be male and Latinx (California Competes, 2021). According to the US Census (United States Census Bureau, 2021), there were 5.4 million new business applications in 2021, a 23% increase over 2020's record and 35% over 2019. Fairlie et al. (2019) found Latinos are significantly more likely than other races to be entrepreneurs.

Despite the growth in entrepreneurship education at community colleges in prolificacy and content, questions remain as to its successful economic development and in helping start small businesses. Driving the debate are educational approaches and the community's needs (Barnard et al., 2019). Truit (2017) states with the expansion of entrepreneurship offerings by community colleges, limited communication, sharing of best practices, or cooperative activities inside or outside resulted in a wild west of offering. Community colleges that use unrevised, content-heavy business management curricula are seen as inadequate in entrepreneurship education (Nielsen & Stovang, 2015). Unfettering entrepreneurship from the business department and ubiquitously incorporating it as a subject complementary to all majors have shown promise in driving overall growth in preparing more students for jobs or businesses (Morris et al., 2014).

Gibson et al. (2011) found university entrepreneurship students, compared to community college students, have a significantly higher degree of positive attitude about their competency. This variance signals a need for community colleges to reinforce their entrepreneurship education with confidence-building and real-world experiences (Baron & Ensley, 2006). The need for competency is seen with educators increasingly spotlighting the need for skill development, with soft skills having a more prominent role in their student's marketability and growing mental health crisis (Connor et al., 2019; Heckman & Kautz, 2012).

LH is experienced when repetitive failures reinforce a belief that an individual's actions will not produce the outcomes, they desire leading to a loss of motivation to seek out solutions resulting in halting constructive efforts and a feeling of a lack of control (Hooker, 1976). Hayes et al., (2021) found among university students, “In the beginning, stages of overcoming LH in academic environments, the following strategies appear to be especially helpful: helping others, engaging in motivational and purposeful activities (especially achievable activities), and healthy living. Zimmerman (1990) states, “Learned hopefulness suggests that empowering experiences—ones that provide opportunities to learn skills and develop a sense of control—can help individuals limit the debilitating effects of problems in living” (p.1). Developing the student’s ability to determine their path through fulfilling basic intrinsic needs of autonomy, competence, and connectedness (i.e., grounded in BNT) are the independent variables of learned hopefulness (Wehmeyer, 1999), well-being and behavioral persistence (Teixeira et al., 2012).

The problem is that by undeserving the entrepreneurial student, demands in the higher education marketplace are unmet. There is widespread agreement that California's public education system is substantially behind in meeting future demand for educated workers. By 2030 a gap of 1.1 million bachelor’s degrees is anticipated by The Public Policy Institute of California and 3.7 million associate and bachelor’s degrees to compete internationally. There are several reasons for these gaps. According to Esch and Supinger (2017), students take 3.8 years on average to complete a 2-year associate degree. Increasingly students served are older (40% age 25 or older) and working with unique challenges that affect persistence. Across California, of working-age adults, about 4.5 million people have dropped out of higher education.

The community college’s economic development mission is neglected. Community colleges have roots in economic development under favorable policy environments to support

small businesses (National Research Council, 2013). Corbin and Schulz (2016) discovered that when both the community and college aspire for economic development, entrepreneurship education programs can serve as a bridge connecting community college resources with local small businesses and startups. Nonetheless, according to Woodhouse (personal communication, 2017), realizing these objectives can present a tough challenge due to the frequent absence of collaboration between certain academic entrepreneurship programs and community colleges' outreach functions. Katsinas and Lacey (1990) found nontraditional initiatives develop entrepreneurial skills. Their findings included community colleges operating incubators, international trade, and technology transfer support. Entrepreneurship education's goal of creating economic development directly addresses the ability to generate real wealth (Solomon, 2007). Unlike economic development focused on employee training, entrepreneurship can be the catalyst for identifying new opportunities and diversity in a community's business environment. Diversified economies are more resilient.

The critical timing for entrepreneurial ecosystem building is being missed. A focus on transfer, degrees, and livable wage jobs has neglected to provide financial aid that alleviates financial constraints for would-be entrepreneurs to invest in their businesses (California Community Colleges Chancelor’s Office Fiscal Services Unit, 2023). The rise in student debt, and a reduction in home equity have caused a reduction in business starts by those under 35 (Buchanan, n.d), creating a missing generation of entrepreneurs (Gourio et al., 2014). The benefits of dropping out - or not attending college at all - to accelerate a business startup or gain access to entrepreneurial skills have created a growing opposition to higher education by business leaders. Entrepreneurs need an ecosystem that supports their intentional process and planned behavior (Al-Jubari et al., 2018). Gross (2015), the founder of a successful business

incubator, Idea Labs, researched 200 start-up companies' reasons for success. The single biggest reason why startups succeed is timing. This timing could be provided by a community college. Hwang and Horowitt (2012) state "...what is most important are not the ingredients of economic production, but the recipe—how the ingredients are combined together…Human systems become more productive the faster that the key ingredients of innovation—talent, ideas, and capital—are allowed to flow throughout the system" (p. 10-11). For Americans to be guaranteed to have an opportunity at a living wage in a viable community, community colleges need to become the hub of entrepreneurship education (Corbin & Thomas, 2019). Embracing the entrepreneurial mindset will become necessary as most workers will need to reskill with creative, analytical, and self-management skills (Zahidi et al., 2020).

The crux of the problem in adequately supporting entrepreneurs lies in a limited comprehension of what sparks the entrepreneurial spirit in an individual and drives them to start a business and seek entrepreneurial education at a community college. SDT interprets student engagement through the lens of satisfying essential needs (Xia et al., 2022). SDT frames fundamental psychological needs based on BNT, namely autonomy, competence, and relatedness, while the aspect of extrinsic motivation varies based on the level of autonomy (Deci et al., 2012). More explicitly, SDT posits that intrinsic motivation is about perceiving activities as engaging and inherently rewarding, while autonomous extrinsic motivation pertains to activities deemed not as fascinating but personally vital for one's self-determined goals and objectives (Deci et al., 2012, p. 18). As referenced in Al-Jubari et al. (2018), SDT plays a direct role in shaping students' attitudes and entrepreneurial aspirations as intentional behavior.

Chapter III: Method and Procedures

This study provided a greater insight into the motivations - as defined SDT - of aspiring entrepreneurs and their interest in attending community college. The problem, as described in Chapters One and Two, is by underserving the entrepreneurial student, demands in the higher education marketplace are unmet, the community college's economic development mission is neglected, and the critical timing for entrepreneurial ecosystem building is missed. Underlining this problem of undeserving is a lack of understanding of what motivates an individual with entrepreneurial aspirations to pursue education, specifically at a community college.

Determining how intrinsic motivation versus well-internalized extrinsic motivation predicts entrepreneurial intentions remains unresolved. However, it's a critical aspect regarding SDT as a model of work motivation. SDT, based on basic psychological needs defined in BNT as autonomy, competence, and relatedness, differentiates extrinsic motivation into types that differ in their degree of autonomy (Deci et al., 2012). The theory explains student engagement from a need satisfaction perspective (Xia et al., 2022).

The subsequent research questions aim to illuminate these knowledge gaps. Furthermore, they set the precedence for inquiries to be explored in future research concerning the population under study, the associated time frame, curriculum, and workforce development metrics. The overarching research questions this study seeks to answer are twofold.

1. How do attitudes and perceptions of motivations relate to SDT and influence the intention to act entrepreneurially?
2. How do the attitudes and perceptions of motivations related to SDT influence the intention to seek entrepreneurial education at a community college?

The hypotheses presented in (Cnossen et al., 2019, p. 3-4) are utilized to answer the first research question.

- Hypothesis 1a. Entrepreneurs are more intrinsically than extrinsically motivated.
- Hypothesis 2. Entrepreneurs' perceived need for autonomy is positively associated with their intrinsic motivation.
- Hypothesis 3. Entrepreneurs' perceived need for relatedness is positively associated with their intrinsic motivation.
- Hypothesis 4a. Entrepreneurs' perceived need for competence is positively associated with their intrinsic motivation.
- Hypothesis 4b. Entrepreneurs' perceived need for competence is positively associated with their extrinsic motivation.
- Hypothesis 4c. Entrepreneurs' perceived need for creative competence is positively associated with their intrinsic motivation.
- Hypothesis 4d. Entrepreneurs' perceived need for entrepreneurial competence is positively associated with their extrinsic motivation.

To answer the second research question, the researcher created the following hypothesis.

- Hypothesis 5. Entrepreneurs’ perceived need for increasing entrepreneur competencies is positively associated with access to business advising.
- Hypothesis 5b. Entrepreneurs’ perceived need for increasing entrepreneur competencies is positively associated with the education offered as a for-credit (paid)
- Hypothesis 5c. Entrepreneurs’ perceived need for increasing entrepreneur competencies is negatively associated with the education offered as a non-credit (free).

- Hypothesis 5d. Entrepreneurs' perceived need for increasing entrepreneur competencies is positively associated with the length of their education.
- Hypothesis 5e. Entrepreneurs' perceived need for increasing entrepreneur competencies is positively associated with access to funding.
- Hypothesis 6. Entrepreneurs' perceived need for having more autonomy is positively associated with education that is self-paced.
- Hypothesis 6b. Entrepreneurs' perceived need for having more autonomy is positively associated with on-demand and the time of day the education is offered.
- Hypothesis 7. Entrepreneurs' perceived need for networking with peers in their field is positively associated with classmates with similar backgrounds.
- Hypothesis 8. Entrepreneurs in business and entrepreneurs not in business will be statistically significantly different.

This study researched SBDC contacts and Cabrillo College Business Students. Cabrillo College students include those currently enrolled. Comparisons between the two populations - those in business and those not in business - were made to determine similarities and differences in attitudes and perceptions of motivations related to SDT influence the intention to act entrepreneurially and seek entrepreneurial education at a community college. Additional comparisons were made between SDT needs, intrinsic and extrinsic motivation, the influence of different offerings on the interest to attend a community college to further entrepreneurship ability, and the importance of SDT on interest to attend community college to develop entrepreneurship skills.

This chapter includes the researcher’s position statement, the study’s research methodology, subject selection and description, instrumentation, data collection procedures, data analysis, limitations, and conclusions.

The Researcher's Position Statement

It's important to acknowledge a researcher's biases as they can influence hermeneutics, or the interpretation of 'texts' derived from lived experiences, and semiotics, the process of creating a functional written or linguistic approach to phenomenology and hermeneutics methodologies (Polkinghorne, 2007). The researcher sees CTE as an instrument to improve the quality of life. The researcher’s philosophical approach is an integration of existentialism built upon perennialism. Existentialism is a philosophical approach that underscores the importance of personal liberty, decision-making, and accountability. Existentialism rejects the idea that there is any inherent meaning or purpose in life. Instead, it asserts that individuals must create their meaning and purpose through their actions and choices. This means that individuals are ultimately responsible for their own lives and must take ownership of their decisions and the consequences that follow (Abbagnano, 2023) Crowell, 2020)

Perennialism is the oldest and most conservative educational philosophy and relies upon universal knowledge, cherished values, and traditions. Education is seen as constant, absolute, and universal. The goal of "liberal" education is to train the intellect to think and reason carefully. Perennialism believes specific training is wasteful due to the need for on-the-job training and education's focus on teaching the whole person's work ethics, principles of excellence, and virtues like honesty. One of the key figures associated with perennialism is Mortimer Adler, who argued that the great books of Western civilization contain the essential knowledge and wisdom that every student should study. According to Adler, these books provide

a common cultural heritage that can help to unite a diverse society and provide a foundation for lifelong learning (Mosier, 1951).

Perennialism provides nutrient-rich soil which cultivates an existentialistic mindset. Perennialism prepares the individual for a hero's journey of existentialism. This blend of philosophy is manifested in crafts. Crafts serve as a remedy for feelings of uncertainty, diminished self-determination, and a broken sense of identity, which are particularly intense among professionals and those embarking on their hero's journey (Lears, 1994).

Research Methodology

Barnard et al., (2019) pose a guiding question for this study's proposed methodology: "How can general findings regarding entrepreneurship education in two-year colleges be generalized enough to account for the wide variation in college mission but still be close enough to the schools to be of practical use" (p.15)? A mixed methods research methodology was employed informed by the studies of Cnossen et al. (2019) and Liñán and Chen (2006). Additional questions were created by the researcher to gauge the factors that may influence interest in community college attendance. This study, informed by the above-mentioned entrepreneurial literature research methodologies, increased the statistical validity and reliability.

Quantitative and qualitative methods have disadvantages that the mixed methodology can offset. Therefore, the mixed-methods research approach is built upon these existing quantitative studies. Simoens and Tervaniemi (2013) found that using a self-completed questionnaire to study the motivation and self-efficacy of entrepreneurs was effective and widespread. Steiner & Schneider (2013, p.230) stated that surveys establish "a satisfactory empirical approximation of individual utility…among creative professionals."

The researcher realized that personalized interviews were needed to obtain capta beyond what data can be obtained solely in an online survey. The study concluded with the qualitative research method of eight guided personalized interviews. Patten and Newhart (2018) argue that insights gained through qualitative research (Phase 2 Interviews) can complement quantitative analysis (Phase 1 Survey) by providing insights that may remain hidden from surveys. Lichtman (2013) states a pure statistical structure approach to the study and surveys with interviews produce the richest data with feelings, intentions, meanings, and innate thoughts on a topic.

In qualitative research, adaptability is crucial to align with the research approach and its specific mode of inquiry. The researcher employed a semi-structured interview format, a narrative-based methodology focused on describing and understanding the lived experiences of one or more individuals who have undergone a specific event (See Appendix A). As Lichtman (2013) elaborates, in this method, the researcher 'brackets,' or tries to put aside their preconceptions about the subject, suspends judgment, and concentrates on inductively understanding the significance of the experience from the perspective of those being studied. In these studies, the researcher crafts a thorough, detailed depiction of a central phenomenon.

This study's narrative research, as seen in Riemen (1986), built the essence of experience from participants. As part of uncovering meaning, this phenomenological inquiry presented in an interview articulates "essences." That is, the meaning of an individual's lived experiences when they asserted their authority. A reduction process was then used to move from objective storytelling to subjective learning. Creswell and Creswell (2018) state that,

In qualitative research, each idea, interpretation, and plan are filtered through your eyes, through your mind, and through your point of view. You are not trying to do away with your role, as you would if you were conducting traditional research. You are not trying to be objective. You adopt

the role of constructing and subsequently interpreting the reality of the person being interviewed, but your own lens is critical (p.190).

The researcher utilized a thematic reduction technique, a systematic procedure that ensured fidelity to the participants' insights by breaking down the whole into components to reconstruct a theme that resonates across all narratives. The step-by-step process of this reduction is detailed in **Table 1** titled "*Methodology for Thematic Reduction Analysis*." The researcher, particularly, endeavored to gather capta instead of data by interpreting participants' viewpoints and convictions in relation to events or objects from their perspective. As pointed out by Drucker (2011), capta is actively collected, in contrast to data, which is presumed to be recorded and observed (para. 3).

This study aimed to demonstrate emergent practice and technique in applying a structured thematic reduction resulting in enduring themes defined as the basis of a collective narrative across assigned lessons learned. This practice helped to step into the social science researcher and research subject roles. It had the researcher come to grips with opposing and interdependent research approaches. In the process, it helped the researcher become a social science researcher within a culture of natural science (Lichtman, 2013).

Subject Selection and Description

The population for this study was all Santa Cruz SBDC contacts and current Cabrillo College business students. Instead of sampling these groups, all contacts of the SBDC and all current Cabrillo College business and accounting students were provided with the survey to participate. A total of 7,866 Santa Cruz SBDC contacts were invited over email on March 15th, 21st, and 28th, 2023, to complete the survey, with 5,860 emails successfully reaching the inbox (See Appendix B). One hundred sixty-two started the survey, and 88 completed it, resulting in a

2.7% participation rate and, of those, a 54% completion rate. Additionally, the Follow Up Cover Letter with an anonymous link was provided to Cabrillo College students from Cabrillo College Business Department Secretary on March 24th and April 6th (See Appendix C) to 880 business and accounting students. On April 7th, the Santa Cruz SBDC sent out the Follow Up Cover Letter (See Appendix C) with an anonymous link, originating from two lead advisors to 1779 of their clients. Some of these clients overlapped with the SBDC contacts who received the email mentioned above on March 15th, 21st, and March 28th. However, with the low response rate from those emails from sbdc@cabrillo.edu, it was projected that a new email originating from a trusted relationship would increase the response rate. The response rate from these two email campaigns (SBDC Advisors and Cabrillo Business Department) resulted in 61 responses or a 2.3% response rate. Qualtrics do not provide the completion rate for anonymous link responses. El Pajaro CDC did not send out the survey to their clients. The survey was closed on April 25h, 2023. The justification to limit and focus the research on Santa Cruz SBDC and Cabrillo College is based on accessibility to the researcher. The researcher has been a Director of the Santa Cruz SBDC at Cabrillo College for nearly four years and has worked with the administration and faculty.

The SBDC California chapter comprises four Regional Offices that overlook 66 local Centers. Local Centers are typically organized by county. Each Regional Center could be considered a cluster in which a survey could be administered through its local Centers for future research. Each Center sees hundreds, if not thousands, of contacts - those that have received advising or training from the SBDC. Regional Offices are classified by their geographic range. Using cluster sampling decreases the control of administering the survey. Therefore, the researcher only administered the survey at the Santa Cruz SBDC, which they oversaw.

The population list of SBDC contacts was generated from those who have signed up for SBDC services (i.e., advising or training). The assumption is they signed up due to interest in becoming or growing as an entrepreneur. A variable embedded in the population is how they found out about the SBDC and chose to sign up for services. This might distort the findings by favoring individuals with specific social networks, educational backgrounds, and cultures. Without steps to remove bias and error, answers may result in being less representative of a non-white, non-English speaking population, and any recommendations because of these tainted findings will be less deterministic of true motivations and probable intentions. Those who have signed up for services may be inclined to be of specific demographics. Additionally, the researcher, a white male, is inclined to produce a study with which his intuition is familiar.

The Santa Cruz SBDC has 7,866 contacts in its database. However, most of these have not communicated with the Santa Cruz SBDC for several years. Over the last four years, the Santa Cruz SBDC has averaged 500 contacts annually. Therefore, the population most likely to respond would be around 2,000 or those who have been in touch within the last four years. The sample size goal for the research was 200, or 10%. SBDC survey response rates, on average, are at 50%. However, those surveys are sent only to clients - those receiving advice in the last two years, by the advisor who has the relationship and includes mandatory language as part of receiving advising services. Conditions that may create a need for a larger sample size include the lack of responses from a group for statistical comparisons. This includes Latinos and those who are not in business. Compositional biases may be present due to the relationship of the host of the SBDC with the SBDC and the community. Cabrillo College hosts the Santa Cruz SBDC. Respondents may be influenced by their relationship with the said college. Those that have been a student may report a bias towards or against the SBDC depending on their experience at the

college. For this reason, a survey question was included to ask if the respondent has been a student at Cabrillo College.

Cabrillo College is a single community college district. Founded in 1959, it serves approximately 10,000 students and 500 through its business classes. The sample size goal for the research was 25, or 5%. On average, Cabrillo College's business department survey response rates are at 5%.

The list of SBDC contacts had duplicates if the same individual had signed up under several businesses. Therefore, a filter to screen out duplicate individuals was incorporated.

Participants were selected based on those 18 years and over to reduce parental involvement and additional IRB oversight. IRB approval was obtained on 3/1/2023 (Appendix D). Subsequently, participants were protected by two confidential agreements signed by the researcher. UW-Stout IRB Signed Consent Form Survey (See Appendix E) was the first page of the survey and included a consent statement to be agreed to before proceeding with the Qualtrics Survey (See Appendix F). This included an acknowledgement of being 18 years of age or older. Those that stated they were younger than 18 or did not provide consent were not provided the survey. For those that completed the survey, were sent an email to notify them of the opportunity to sign up for an interview to provide additional information (See Appendix G). Those that clicked on the link to sign up for an interview were directed to the UW-Stout IRB Signed Consent Form Interview (See Appendix H). Consent to the IRB form was required before booking an interview time. Both agreements ensured the privacy and security of the participants' data by providing appropriate and limited uses. This includes confidentiality of the respondents' identity to the researcher and dissertation committee and anonymity of all data shared publicly.

A proper use was for aggregating non-identifiable data to benefit the SBDC and community college services.

Examples of demographic strata that were important to identify and control before a line of inquiry included race and age. This is based on the arguments made in Chapters One and Two. Latinos are more likely to be entrepreneurs than any other race, as well as the fastest-growing community college student and prospective student segments. An appropriate representation of the race strata is critical to the research results to demonstrate the opportunity to better serve this population through SDT-informed educational practices in entrepreneurship. Second, community colleges typically serve 18-25-year-olds. However, a growing population of 30-45 years old are seeking to be upskilled and are more likely to start successful businesses. The study proposes that community college administrators and faculty lack an understanding of this population's motivations to be entrepreneurs. This understanding will bring awareness to what may attract this overlooked and underserved prospective student body to enroll at the community college.

Steps have been taken to remove the population's vulnerability to bias or error. Websites are, by default, in English, resulting in a bias towards English speakers. A widget on the websites (santacruzsbdc.org and cabrillo.edu) provided translation in both English and Spanish. Other racial and gender researchers have originated survey questions, and new questions have been vetted for language and cultural bias by native language speakers. The survey, the consent form, and cover letter were distributed in Spanish and English.

Initially, the survey was agreed to be sent out by El Pajaro CDC. However, with the transition of the researcher in their job from being the Santa Cruz SBDC Director, to becoming employed at the South San Diego SBDC, El Pajaro CDC decided not to participate. El Pajaro is in south Santa Cruz County in the city of Watsonville. It was founded in 1979 by Latinos to

protect their rights and obtain equal access to business opportunities from the local government. It provides small business advice and loans. Most of its clients are Latino. Their survey distribution was critical to increase the number of Latino respondents. Due to their withdrawal, the number of Latinos participating in the study was significantly reduced.

Instrumentation

This study's mixed-methods empirical research met the six criteria for mixed-methods as cited by Lee et al. (1997). There are two phases to this mixed methods study. In phase 1 (quantitative) of the study, the researcher created a bi-lingual (English and Spanish) Qualtrics online survey to collect data from the SBDC contacts and Cabrillo College business students (See Appendix F). Qualtrics is the approved and endorsed survey tool by the University of Wisconsin Stout. Subsequentially, in Phase 2 (qualitative), a sample of the contacts and students surveyed mentioned above, who opted-in, were interviewed in a semi-structured format by the researcher for further phenomenological understanding (See Appendix A). This understanding encompassed both research questions but primarily focused on the intention to seek entrepreneurial education at a community college.

The Qualtrics survey (Phase 1) consisted of 20 questions in three categories. The survey was organized into three categories: icebreaker questions, main research questions, and demographics. The researcher incorporated a mix of questions requiring "Yes" and "No" responses and an Ordinal, five to seven-point rating scale ranging from 1 – not agree at all to 5 or 7 – agree entirely. Several questions had sub questions resulting in a total of 52 queries. The survey took approximately 10 minutes to complete.

A series of low-level face validity questions were first. Patten and Newhart (2018) point out that some instruments are deliberately designed with low levels of face validity to disguise

their real purpose due to the delicate nature of the topic being targeted. Adding questions that are tangential to their intentions and motivations yet seem not to be associated with entrepreneurship could reduce the bias. An example of a variable that needed to be presented to the population under examination with a low level of face validity is “What do you enjoy doing as a hobby?” Participants who want to come across as entrepreneurial may answer straightforward questions regarding their entrepreneurial intentions with a higher degree of response. Second, a series of questions based on the analyses, as performed by Cnossen et al., (2019), where three extant scales are used and adjusted: the entrepreneurial self-efficacy scale of Weitzel et al. (2010), a scale measuring the needs for relatedness and autonomy derived from Sheldon and Bettencourt (2002), and the Sports Motivation Scale II adjusted to the entrepreneurial context, developed initially by Pelletier et al. (2013) to form a Qualtrics survey that examines self-perceived (creative and entrepreneurial) competences and needs (for autonomy and relatedness) concerning their motivation to execute creative work. Since this instrument was developed for existing entrepreneurs, whereas this study aims to incorporate *aspiring* and existing, the prefix to several questions was changed to “I seek to, or I do my entrepreneurship activity…”. Third, an additional question set is added to the study to gauge the interest in attending a class at a community college. These questions were derived from the Measures of Core Entrepreneurial Intention Model Elements (Liñán & Chen, 2006). Fourth, a series of demographic questions to create correlations between age, gender, race, industry, and student status to motivations.

Interviews (Phase 2) were started by setting the interviewees at ease with a general salutation, a reminder of the study's rationale, and their voluntary role. The interviewer then asked the following questions in Appendix A. The interviewer structured only the first question, “How do you define entrepreneurial success?” The following questions were probes informed by

Cnossen et al., (2019) and Liñán and Chen (2006). This created a semi-structured interview analogous to taking a joy ride together where both driver (interviewer) and passenger (interviewee) know the general direction but maneuver through turns at the point they cross them. The interview concluded the interview after all questions had been asked, or the interviewee did not have any more time. The interviewer thanked the interviewee for their time, re-informed them of their confidential agreement and how the data would be used and added them to a recipient list for a copy of the study if they expressed an interest. The interviews took approximately 45 minutes.

Patten and Newhart (2018) state a researcher makes a judgment on the appropriateness of the content to determine content validity. Increasing the number of questions may increase reliability; however, validity is based on the quality of the questions and can decrease based on the number of questions due to respondent fatigue. Validity being harder to manage influenced the design to be based upon the existing methodologies, which have refined the questions asked through previous studies. A literature review provided related studies on the motivations of entrepreneurs, instruments utilized, and questions posed in previous studies. These areas informed this study's questions and design, supporting the study's validity.

Data Collection Procedures

Data collection procedures are for an online survey (Phase 1) and telephone interview (Phase 2). Guidelines outline steps taken to ensure data quality, fairness, and a reduction in bias. Phase 1 of the study, a Qualtrics online survey, collected data from the SBDC contacts and current and Cabrillo College business students. Qualtrics is the approved and endorsed survey tool used by the post-secondary educational institution the researcher is attending. In Phase 2, the

researcher interviewed a sample of the clients mentioned above and students surveyed who opted into an interview.

The University of Wisconsin Stout required additional approval by the College's Institutional Review Board (IRB), subsequently given on 3/1/23 (Appendix D). After approval, the researcher was given the list of clients by the Santa Cruz SBDC. The Department Head of Business at Cabrillo College maintained the confidentiality of the students but agreed to distribute the survey. The researcher distributed the survey through the Santa Cruz SBDC's office and later through two advisors. The researcher distributed the survey through the Cabrillo College Business Department's Office. The SBDC contacts and students who received the study were allowed to not participate in the survey, as outlined in the Survey's Cover Letter, through an opt-out link (See Appendix B).

Phase 1: Online survey. On 3/15/23, the Survey Request Letter, which included instructions on how to complete and submit the survey, the Implied Consent Form, and a link to the survey (See Appendix B), was sent to 5,839 Santa Cruz SBDC contacts identified in the study from the Santa Cruz SBDC office email. To increase participation, the Survey Request Letter was sent again to those that had not completed it on 3/21/23 and one final time on 3/28/23 (See Appendix C). Additionally, two advisors of the SBDC agreed to use their email addresses to send out the survey on 4/07/23. On 3/24/23, the Survey Request Letter was sent to 624 Cabrillo College Business and Accounting Students (See Appendix B), and again on 4/06/23 (See Appendix C). Neoserra, the database used by the Santa Cruz SBDC, created an introduction email with a link to the survey. Neoserra can send emails as if they are coming from an advisor. This methodology has increased the open and response rate by previous services due to the relationship between the client and the last SBDC advisor they received assistance from.

A moderate response rate was projected as participants were sent the survey first from the Santa Cruz SBDC's office email (sbdc@cabrillo.edu) and then later, as a personalized request, the last Santa Cruz SBDC advisor they had met. This latter distribution was limited to the two advisors who provided permission to utilize their email. The Cabrillo College students received the email from the Cabrillo College Business Office. Due to the structure of the survey as an anonymous link, the researcher cannot identify the response rate from the two SBDC advisors and Cabrillo College Business Office.

Recipients were informed through a cover letter -in English and Spanish- preceding the survey of the study's rationale, their voluntary participation role, the use of data, a link to the survey, and a link to opt out of any future correspondence (See Appendix B). The first page of the survey contained UW Stout's IRB Signed Consent Form (See Appendix E). The majority of the Affiliation Status of the participants was SBDC at 80, as shown in Figure 1. This was expected as this population was the majority of survey recipients, and they had received a follow-up email from their last advisor. That said, the word "Client" in Santa Cruz Business Development Center Client may have reduced the "Yes" responses. Those affiliated with the SBDC may be "contacts" if they only receive training services. Cabrillo College student affiliation was nine, and El Pajaro CDC was two.

Phase 2: Interviews. The final question on the survey was intended to obtain volunteers for the personal interview over the phone. The respondents could click on the link "Clicking here to schedule your interview," which would then schedule them for an interview using Calendly. The participants could choose a time and date that worked best for them. Interviewees were selected from those who had volunteered on the survey in Phase 1 in the order they had responded to volunteer. A total of eight respondents were individually interviewed from 10 that

were scheduled. Interviews were conducted over the telephone and took place from 3/19/23 to 4/4/23. A minimum of 15 minutes for each was allowed. The shortest interview took 29 minutes, and the longest took 101 minutes. The interview questions were constructed to complement and reinforce the insights gained from the Phase 1 Survey regarding how the attitudes and perceptions of motivations, as they relate to SDT, influence the intention to act entrepreneurially and how the attitudes and perceptions of motivations, as they pertain to SDT, influence the intention to seek entrepreneurial education at a community college? The personal interview questions were based on the survey's Creative Motivation Scale, Creatives Need Scale, Creative Competence Scale, Entrepreneurial Competence Scale, and Community College Education Interest Scale, Measures of Core Entrepreneurial Intention Model Elements (Liñán & Chen, 2006). These scales, which were the foundation of the study, were easier to record through an interview guide format with probing questions (See Appendix A).

After receiving the subject's approval, the researcher recorded the telephone interview. The researcher selected interviews by telephone vs. other mediums based on the interviewer's preference. A transcription service, Otter.ai, converted the audio files to text which became raw data with the interviewer's notes. All interview data underwent a reduction process to distill primary themes, ideas, and findings.

Individual in-depth interviewing is a process, not just a predetermined list of questions. The in-depth interviewing semi-structured (See Appendix A) as a conversation between the interviewer and the individual participant persevered in the participant's words, in their voice, language, and narrative (Kyale & Brinkman, 2009; McCracken, 1988) as cited by Lichtman (2013). "In this way, participants can share what they know and have learned and add a dimension to our understanding of the situation that questionnaire data does not reveal"

(Lichtman, 2006, p. 119). Coding, data analysis, and search for themes begin with writing down a grand tour, a non-directive and neutral question to start the interview, and 2-3 possible probing questions that provide enough of a guide but not too much constraint. A grand tour question asked participants produced a real-world complexity captured in the qualitative research.

Asking participants to narrate their experiences and perspectives throughout the day may produce tension in the research. For instance, if SBDC clients or Cabrillo College students with entrepreneurial aims find a need to leave school or not attend to start their business instead of staying in school or enrolling to start their business. This tension may lie in answers to alleviate this trend of dropping out or not attending and encourage a new educational theory.

Data Analysis

Data analysis was conducted through statistical calculations to demonstrate the most significant variables related to motivation for SBDC contacts and Cabrillo College business students. Similarities and differences were determined and isolated. The resulting database was analyzed using SPSS. Phase 1 - Survey data were analyzed with descriptive and inferential statistics. Phase 2 - Interviews data were analyzed through a four-step process informed by Giorgi (1997), van Manon (1997), and Lanigan (2013), as adopted by Haltinner (2008). The results of the overall analysis addressed the research problem and provided recommendations.

To increase statistical reliability, the researcher incorporated ex-ante measures, answer categories of different types, and ensuring anonymity. This structure diminishes the probability of standard method variance (Chang et al2010). Three existing scales were used: the entrepreneurial self-efficacy scale of Weitzel et al. (2010), a scale measuring the needs for relatedness and autonomy derived from Sheldon and Bettencourt (2002), and the Sports Motivation Scale II adjusted to the creative and cultural industry context, initially developed by

Pelletier et al. (2013). These scales were modified by Cnossen et al., (2019) to combine these existing scales to research the self-determination perspective of individual motivation among entrepreneurs in the creative and cultural industries. Utilizing the current studies above provides face validity. To further understand these data points' relationships to SDT, the researcher created a mixed-methods study that added socio-demographic questions, entrepreneurial activities, and interest in attending community college. The mixed methods study intended to answer the following research questions informed by literature on the formation of attitudes and perceptions of motivations, thus influencing the intention to act entrepreneurially and seek entrepreneurial education at a community college.

Research Question 1

Research question 1 asked, how do attitudes and perceptions of motivations related to SDT influence the intention to act entrepreneurially? This section included an analysis of the first research question, organized by the three areas of the Creatives Motivation Scale, Creative Need Scale, and Creative Competence Scale (Questions 7 through 12 on the Qualtrics Survey) analyzed. A Likert scale was used with the following designations for the Creatives Motivation Scale and Creatives Need Scale: 1= Strongly disagree, 2= Somewhat disagree, 3= Neither agree nor disagree, 4= Somewhat agree, and 5= Strongly agree. A Likert scale was used with the following designations for the Creative Competence Scale and Entrepreneurial Competence Scale: 1= Much worse, 2=Worst, 3= Neither better nor worse, 4= Better, 5= Much better. A mean factor of 4.00 or above determined the respondents' agreement with the statement, and a mean factor of 2.00 or below determined a respondent's disagreement with the statement. A mean factor of 2.01 to 3.99 was interpreted as neither agreeing nor disagreeing with the statement. Inferential statistics included paired independent sample T-test, Pearson correlation

coefficient, OLS regression analysis, and F-test. A paired samples T-test (to compare the means of two groups) for intrinsic versus extrinsic motivation was used to support Hypothesis 1. For hypotheses 2-4, a Pearson correlation coefficient and OLS regression analysis were used. Patten and Newhart (2018) state that the Pearson correlation coefficient (r) indicates the direction and strength of a relationship between two variables expressed on a scale that ranges from –1.00 to +1.00, where 0.00 shows no connection, whereas Ordinary Least Squares (OLS) regression analysis describes the predictive relationships between a set of independent variables and the dependent variable.

Research question 2

Research question two asked, how do the attitudes and perceptions of motivations related to SDT influence the intention to seek entrepreneurial education at a community college? This section (Questions 13 through 15 on the Qualtrics Survey) analyzed the second research question, organized by interest levels, influential factors, and SDT concepts. A Likert scale was used with the following designations for the Community College Education Interest Scale: 1= Extremely unlikely, 2= Somewhat unlikely, 3= Neither likely nor unlikely, 4= Somewhat likely, and 5= Extremely likely. A Likert scale was used with the following designations for the Community College Influence Scale: 1= Not at all, 2= Slightly influential, 3= Neither, 4= Somewhat influential, 5=Very Influential. A Likert scale was used with the following designations for the Community College SDT Concepts Scale: 1= Not at all important, 2= Slightly important, 3= Moderately important, 4= Very important, 5= Extremely important. A mean factor of 4.00 or above determined the respondents' agreement with the statement, and a mean factor of 2.00 or below determined a respondent’s disagreement with the statement. A

mean factor of 2.01 to 3.99 was interpreted as neither agreeing nor disagreeing with the statement.

For hypotheses 5-7, a Pearson correlation coefficient was used to determine the strength and direction of the relationship between independent and dependent variables. For hypothesis 8, an Independent Sample T-test was used to determine whether there was a statistically significant difference between the groups,

The data obtained through the Qualtrics survey were analyzed with descriptive statistics. Charts and tables summarized the data in terms of central tendency (mean), measures of variability, and frequency distribution (standard deviations). These were organized in tables to rank the influential factors on the intention to act entrepreneurially and attend community college by order of the most important, as stated by the respondents. The calculations allow the researcher to rank order the means to determine which of the Creatives' Motivation Scale, Creatives' Need Scale, Creatives' Competences Scale, Community College Interest, Basic Needs, and Entrepreneurship Intention factors are deemed to be perceived as being the most important, as stated by the respondents. Descriptive statistics summarize a large amount of data into several valuable bits. For instance, what is the mean level of intrinsic motivation for a respondent compared to the mean level of extrinsic motivation for a respondent that would result in rejecting or accepting Hypothesis 1?

The assessment of statistical significance was determined using p-values and Cohen's d. The p-value signifies the likelihood of obtaining the observed data under the null hypothesis. If the p-value is less than 0.05, the difference is considered statistically significant at a widely accepted probability level. However, if the p-value is greater than 0.05, the difference is deemed statistically unreliable, and the results should be interpreted as such. As per Patten and Newhart

(2018), Cohen's d is commonly used to denote the effect size of the disparity between two means. For a statistically significant difference, the extent of the disparity will be gauged using a table based on Cohen (1992) suggestions: a d-value of roughly 0.20 (one-fifth of a standard deviation) is considered "small," a value of 0.50 (half a standard deviation) is deemed "medium," and a value of 0.80 (four-fifths of a standard deviation) is classified as "large." These findings can illuminate the influence of SDT and other factors on entrepreneurial intent and community college attendance. Such information could be used to guide educational practices and policies, making them more attractive to entrepreneurs.

The researcher considered conducting inferential statistics to evaluate the results considering possible sampling errors. As Patten and Newhart (2018) posits, inferential statistics are unnecessary if researchers do not sample but rather conduct a census including all the members of a population. Since the researcher would like to validate conclusions on the hypothesis stated above and make predictions based on the data to a larger population of SBDC contacts and community college students than those sampled, the researcher decided to use inferential statistics.

Inferential statistics included paired independent sample T-test, Pearson correlation coefficient, OLS regression analysis, and F-test. An Ordinary Least Squares (OLS) regression analysis described the relationships between a set of independent variables and the dependent variable. This included the socio-demographic variables gender and age and the three needs, with a first model including a general competence variable and a second model (distinguishing between entrepreneurial and creative competence) the split competence variable (with separate variables for entrepreneurial and creative competencies) will validate if any of the independent variables are statistically significant. An F-test was used to compare statistical models fitted to a

data set to identify the model that best fits the population from which the data were sampled. An independent sample T-test was used to determine whether there was a statistically significant difference between the groups, Not in Business vs. In Business.

Results from these statistical calculations demonstrated the most significant variables related to motivation for SBDC contacts and Cabrillo College business students. Data was downloaded from the survey into SPSS to calculate descriptive and inferential statistics. Similarities and differences were determined and isolated. The results of the overall analysis addressed the research problem and provided recommendations for SBDCs, as well as Community Colleges, to serve entrepreneurs better.

Phase 2 - Interviews were conducted in a semi-structured format which referenced the Interview Guide (Appendix A). Table 1 is the list of all questions asked. Answers were analyzed through a four-step thematic reduction analysis informed by Giorgi (1997), van Manon (1997), and Lanigan (2013), as adopted by Haltinner (2008), as seen in Table 2.

Table 1

Sixteen Questions from the Semi-Structured Interviews

Question #	Survey Item Questions
1.	How would you define success as an entrepreneur?
2.	How would you define your entrepreneurial ability?
3.	What motivates you to do your entrepreneurial activity?
4.	How does your entrepreneurial activity provide a feeling of authentic autonomy?
5.	How does your entrepreneurial activity create a feeling of connectedness to others?
6.	What drives your creativity?
7.	Are there any other motivations related to your entrepreneurial aspirations?
8.	What influences your intention to seek entrepreneurial education at a community college?
9.	What barriers reduce your intention to seek entrepreneurial education at a community college?
10.	What changes would you like the community college to make to entrepreneurial education?
11.	Is there anything else you'd like to share that would be helpful regarding a better understanding of entrepreneur motivations and attendance at a community college?
12.	Is there anything related to, again, motivations of why you do this now versus why you did you started as an entrepreneur?
13.	What is your perspective on management as a business owner versus just management when you're another employee? What's the difference or what's similar?
14.	Would you say you pursue education differently now than 10 or 20 years ago? And if so, how?
15.	How would a community college differentiate itself in that space of entrepreneurial support?
16.	You mentioned a difference between an entrepreneur and a business major. Could you describe that in more detail?

Note. The questions themselves have meaning and are presented with the disclaimer that they are shown in no order of significance.

Table 2

Methodology for Thematic Reduction Analysis

Original transcripts	Part 2	Part 3	Part 4
	Raw excerpts and [modify]	Isolation of thematic statements	Determination of essential themes.
	You are refining the conversation by retaining statements with significant meaning and discarding less essential words or phrases	This process uncovers thematic elements in response to the initial prompt and subsequent queries.	These thematic statements reveal the essence of personal experience within a broader context. Finally, these refined insights are translated into a literary form.

In the first step, the researcher was responsible for arranging and preparing the data for examination. This included several tasks such as transcribing interviews, digitizing materials, typing up observational notes, cataloging visual data, and sorting and classifying data according to its origin. The researcher meticulously scrutinized all the data to fully comprehend its content, reflecting on its overarching meaning. The researcher looked for common themes expressed by participants, interpreting the sentiment of these themes, and evaluating the richness, credibility, and potential value of the information. During this entire process, the researcher annotated initial thoughts on the data in the margins of the transcripts or field notes.

Moving on to the second step, the researcher began the coding process. Coding involved the systematic organization of the data by identifying distinct chunks or segments of text or images and assigning them relevant categories. Each category was labeled with a term, often derived from the participants' own language (referred to as an in vivo term). This coding procedure allowed for the segmentation and classification of textual or visual data gathered

during the data collection phase. Once coding was complete, the researcher progressed to step three, where they generated descriptions and themes based on the coded data. These descriptions and themes provided a coherent and comprehensive representation of the data, highlighting key patterns and insights.

In the subsequent step, step four, the researcher represented the generated descriptions and themes in a suitable format, enabling a clear presentation of the findings. Lastly, in step five, the researcher organized the identified themes according to the research questions or specific areas of inquiry, facilitating a structured and systematic overview of the data analysis process (Rossman & Rallis, 2012).

Limitations

The study's limitations included the reluctance of the SBDC contacts and Cabrillo College students to participate in the survey and personalized interview. One hundred sixty-two started the survey, and 88 completed it, resulting in a 2.7% participation rate and, of those, a 54% completion rate. Additionally, the Follow Up Cover Letter with an anonymous link was provided to Cabrillo College students to 880 business and accounting students. On April 7th, the Santa Cruz SBDC sent out the Follow Up Cover Letter (See Appendix C) from two lead advisors to 1779 of their clients. Some of these clients overlapped with the SBDC contacts who received the email mentioned above on March 15th and March 28th. However, with the low response rate from those emails from sbdc@cabrillo.edu, it was projected that a new email originating from a trusted relationship would increase the response rate. The response rate from these two email campaigns (SBDC Advisors and Cabrillo Business Department) resulted in 61 responses. Qualtrics do not provide the completion rate for anonymous link responses. Prior research indicates that there is no significant relationship between nonresponse rates and nonresponse

bias, hence, the presence of nonresponse should not automatically be equated to the existence of bias (Ruel et al., 2015).

Interviewees were selected from those who had volunteered on the survey in Phase 1 in the order they had responded to volunteer. The data collection structure required those eligible to interview first to complete the survey. This limited the number and type of interviewees. Those with less time may have opted into the interview if they could have bypassed the survey. The time available for interviews was limited to the interviewer's work schedule. The timing of the interview availability corresponds with the interviewer starting a new job and having limited control of their schedule.

Entrepreneurs and students can be consumed with their immediate business and educational concerns and have little attention left to give to non-mission critical activities. Many may see the need to remain private about their intentions with their business aspirations, not to provide any competitive advantage or information that may be used to regulate or tax them. For those that intended to start a business and didn't, there may be a feeling of embarrassment or shame for not accomplishing their goal. Respondents may lack diversity of business size. The researcher sought to mitigate these differences and potential reluctance by being known as an SBDC Director and Cabrillo College employee, and therefore have the known reputation for being an advocate for entrepreneurial and student success. Additionally, the researcher communicated in the cover letter and IRB Consent that the participant's involvement would be kept confidential and their data anonymous.

The research questions served as the guiding framework for designing the survey, ensuring that the survey addressed the relevant areas of inquiry. To gauge the reliability of the survey instrument to answer these research questions, the degree to which the tool produces

similar results under consistent conditions needs to be further assessed. A replication of the survey instrument used in this study in future studies would reflect the precision of the tool in capturing the intended information.

The purpose of comparing the results of Phases 1 and 2 was to assess the inter-rater reliability. The goal was to ascertain how consistently different raters or observers were able to estimate the same phenomenon, in this case, the correlation between the motivation to initiate a business and the inclination to undertake education at a community college. By examining the agreement among raters or observers, insights into the reliability and consistency of the measurements were gained. Reliability is high if the raters have the same independent interpretation of, in this case, the rubric scores. Since survey results were anonymous, inter-rater reliability was not an option individually. Parallel reliability was proven, in general, through consistency between the survey results and the interviews (Phase 2).

Confounding variables were factors that may have influenced the needed significance level and overall acceptability of the results for generalizability of the results to other community colleges and SBDC Centers, including the advisors or teachers involved in the survey administration, peers involved in the study, and environmental factors (work/school/family responsibilities). Additionally, potential reliability issues exist simply due to the nature of the examined topic. Not all businesses are the same. Therefore, the amount of intention, motivation, and ability to start different businesses differs. Results from the study also are place and time bound. The location’s level of “Business-friendly” policies, the current economy's strength, and other environmental conditions will influence the reliability. Steps taken as a researcher to mitigate the reliability issues included a large sample size with statistically significant group sizes representing different industries and locations. Large sample size with statistically

significant group sizes representing diverse industries, locations, student status, in-business status, and race helped mitigate the reliability issues, needed significance levels, and overall acceptability of the results for the generalizability to other community colleges and SBDC Centers. The research included demographic questions to filter for these confounding variables to offset their influence.

Greater sample sizes typically lead to more reliable statistical results. When independent researchers conduct studies, it mitigates the impact of both random and systematic errors that could occur with a single researcher, as results are averaged across multiple sources. Patten and Newhart (2018) describe a meta-analysis as a collection of statistical methods used for amalgamating the outcomes of previous studies. The current study could be enhanced by incorporating a meta-analysis of prior research. For instance, previous research includes the work of Cnossen et al. (2019), which had a total sample size of 111.

Conclusions

This study obtained primary data from online surveys and personalized interviews. Secondary data from previous studies informed the methodology that addressed a gap in research illuminating how the basic psychological needs and motivations addressed through SDT could explain the formation of attitudes and perceptions of motivations, thus influencing the intention to act entrepreneurially and seek entrepreneurial education at a community college. As per Lansner (2022, para 2), “California still leads the nation in new business formation, but growth today badly trails the nation when comparing it with pre-pandemic years.” This study encouraged the next wave of entrepreneurs to start younger, embrace their diversity, and inform the college system to provide as much help to them as it does to traditional job preparation. It

encourages entrepreneurial endeavors at any age and socio-economic position to think big and take the next step in their vision.

Learnings obtained through a theme reduction practice were then used to formulate and complement the qualitative results of the survey (Appendix I). These narratives and surveys of entrepreneurs may be used for future research to propose a grounded theory. The researcher believes the grounded theory will emerge through ongoing qualitative data collection across many constituents and perspectives to the point of saturation.

Chapter IV: Presentation of the Findings

"You don't have to be a genius or a visionary or even a college graduate to be successful. You just need a framework and a dream."

- Michael Dell

This study delves deeper into the motivations of entrepreneurs, as informed by SDT, and their inclination toward a community college education. At the heart of this issue is a lack of understanding about what drives an individual with entrepreneurial ambitions to seek education, particularly in a community college setting. s outlined in the first two chapters; the problem lies in the insufficient attention given to entrepreneurial students. This shortfall not only leaves a void in the higher education market but also sidelines the economic development mission of community colleges and overlooks the crucial window for cultivating entrepreneurial ecosystems.

The predictive power of intrinsic motivation versus well-internalized extrinsic motivation in shaping entrepreneurial intentions remains unclear. Still, it is a vital aspect concerning SDT as a work motivation model. SDT, grounded in the BNT, categorizes extrinsic motivation into types that vary in their degree of autonomy. BNT identifies autonomy, competence, and relatedness as fundamental psychological needs. This theory elucidates student engagement through the lens of need satisfaction (Xia et al., 2022), offering a fresh perspective to understand the motivations of aspiring entrepreneurs. The research questions listed below attempt to clarify these gaps in understanding. They also guide the priority of questions reserved for future research on a specific population being studied, the time frame, curriculum, and metrics of workforce development.

The overarching research questions this study seeks to answer are twofold.

1. How do attitudes and perceptions of motivations relate to SDT and influence the intention to act entrepreneurially?
2. How do the attitudes and perceptions of motivations related to SDT influence the intention to seek entrepreneurial education at a community college?

Hypotheses one through four presented in Cnossen et al., (2019) are utilized to answer the first research question. The researcher created hypotheses five through seven to answer the second research question.

- Hypothesis 1a. Entrepreneurs are more intrinsically (Q7) than extrinsically motivated (Q8)
- Hypothesis 2. Entrepreneurs' perceived need for autonomy (Q9) is positively associated with their intrinsic motivation Q7).
- Hypothesis 3. Entrepreneurs' perceived need for relatedness (Q10) is positively associated with their intrinsic motivation (Q7).
- Hypothesis 4a. Entrepreneurs' perceived need for competence (Q11 & Q12) is positively associated with their intrinsic motivation (Q7).
- Hypothesis 4b. Entrepreneurs' perceived need for competence (Q11 & Q12) is positively associated with their extrinsic motivation (Q8).
- Hypothesis 4c. Entrepreneurs' perceived need for creative competence (Q11) is positively associated with their intrinsic motivation (Q7).
- Hypothesis 4d. Entrepreneurs' perceived need for entrepreneurial competence (Q12) is positively associated with their extrinsic motivation (Q8).
- Hypothesis 5. Entrepreneurs’ perceived need for increasing entrepreneur competencies is positively associated with access to business advising.

- Hypothesis 5b. Entrepreneurs' perceived need for increasing entrepreneur competencies (Q15) is positively associated with the education offered as a for-credit (paid) (Q14)
- Hypothesis 5c. Entrepreneurs' perceived need for increasing entrepreneur competencies (Q15) is negatively associated with the education offered as non-credit (free). (Q14)
- Hypothesis 5d. Entrepreneurs' perceived need for increasing entrepreneur competencies (Q15) is positively associated with the length of their education. (Q14)
- Hypothesis 5e. Entrepreneurs' perceived need for increasing entrepreneur competencies (Q15) is positively associated with access to funding. (Q14)
- Hypothesis 6. Entrepreneurs' perceived need for having more autonomy (Q15) is positively associated with education that is self-paced. (Q14)
- Hypothesis 6b. Entrepreneurs' perceived need for more autonomy(Q15) is positively associated with on-demand and the time of day the education is offered. (Q14)
- Hypothesis 7. Entrepreneurs' perceived need for networking with peers in their field (Q15) is positively associated with classmates with similar backgrounds. (Q14)

A mixed-method approach was employed, as recommended by Creswell and Creswell (2018). This approach strengthened the data collection process using quantitative and qualitative methods, resulting in more comprehensive and reliable data. Given the topic's complexity, a mixed-method approach was appropriate for this social science research. The data was collected in a sequential explanatory format, starting with the quantitative data through a survey (Phase 1) and then collecting the qualitative capta through interviews (Phase 2). This is a popular strategy for mixed-method designs, as Creswell and Creswell (2018) described. Additionally, this

approach is straightforward to describe and report. This chapter presents the results of the Qualtrics online survey and personal interviews.

Methodology

Data were analyzed using descriptive and inferential statistics and reported as frequencies and percentages. mean, standard deviation, correlation, and beta. In Phase 1 of the study, the Qualtrics electronic survey tool collected institution affiliation, birth year, race, ethnicity, sex, and industry. This information was collected at the end of the survey to increase the likelihood of the respondent completing the survey questions related to the study's overall research questions. No additional demographic data was collected during Phase 2 of the study.

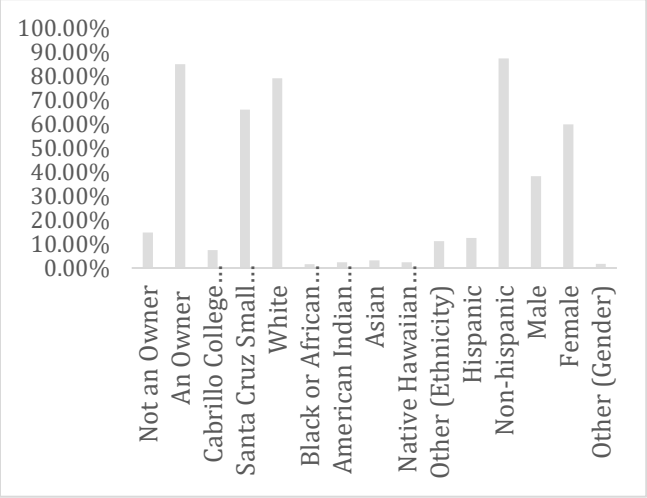
A total of 7,866 Santa Cruz SBDC contacts were invited over email on March 15th, 21st, and 28th, 2023, to complete the survey, with 5,860 emails successfully reaching the inbox. One hundred sixty-two started the survey, and 88 completed it, resulting in a 2.7% participation rate and, of those, a 54% completion rate. Additionally, the Follow Up Cover Letter with an anonymous link was provided to Cabrillo College students from Cabrillo College Business Department Secretary on March 24th and April 6th (See Appendix C) to 880 business and accounting students. On April 7th, the Santa Cruz SBDC sent out the Follow Up Cover Letter (See Appendix C) with an anonymous link, originating from two lead advisors to 1779 of their clients. Some of these clients overlapped with the SBDC contacts who received the email mentioned above on March 15th, 21st, and March 28th. However, with the low response rate from those emails from sbdc@cabrillo.edu, it was projected that a new email originating from a trusted relationship would increase the response rate. The response rate from these two email campaigns (SBDC Advisors and Cabrillo Business Department) resulted in 61 responses or a 2.3% response rate. Qualtrics do not provide the completion rate for anonymous link responses.

El Pajaro CDC did not send out the survey to their clients. The survey was closed on April 25h, 2023. Survey demographics

Out of 123 respondents, 85% stated they were operating their own business, as shown in Figure 3. The majority of the Affiliation Status of the participants was SBDC at 80 (66%). This was expected as this population was most survey recipients, and they had received a follow-up email from their last SBDC advisor. That said, the word “Client” in Santa Cruz Business Development Center Client may have reduced the “Yes” responses. Those affiliated with the SBDC may be “contacts” if they only receive training services. Cabrillo College student affiliation was nine (7.4%). Out of 119 respondents, most self-identified as white, at 80%. “Other” was selected second most at 11%. American Indian or Alaska Native and Native Hawaiian or Pacific Islander were third at 2.4%. Black or African American was selected at 1.6%. Out of 120 respondents, 12.5% are Hispanic, and 87.5% are non-Hispanic. Out of 120 respondents, 38% self-identified as male, 60% as female, and 2% identified as “other.”

Figure 3

Survey Demographics



Out of a total of 108 respondents, the average age of a respondent was 54, with a standard deviation of 14. The majority of respondents were born in the years 1970-1979, as shown in Table 3.

Table 3

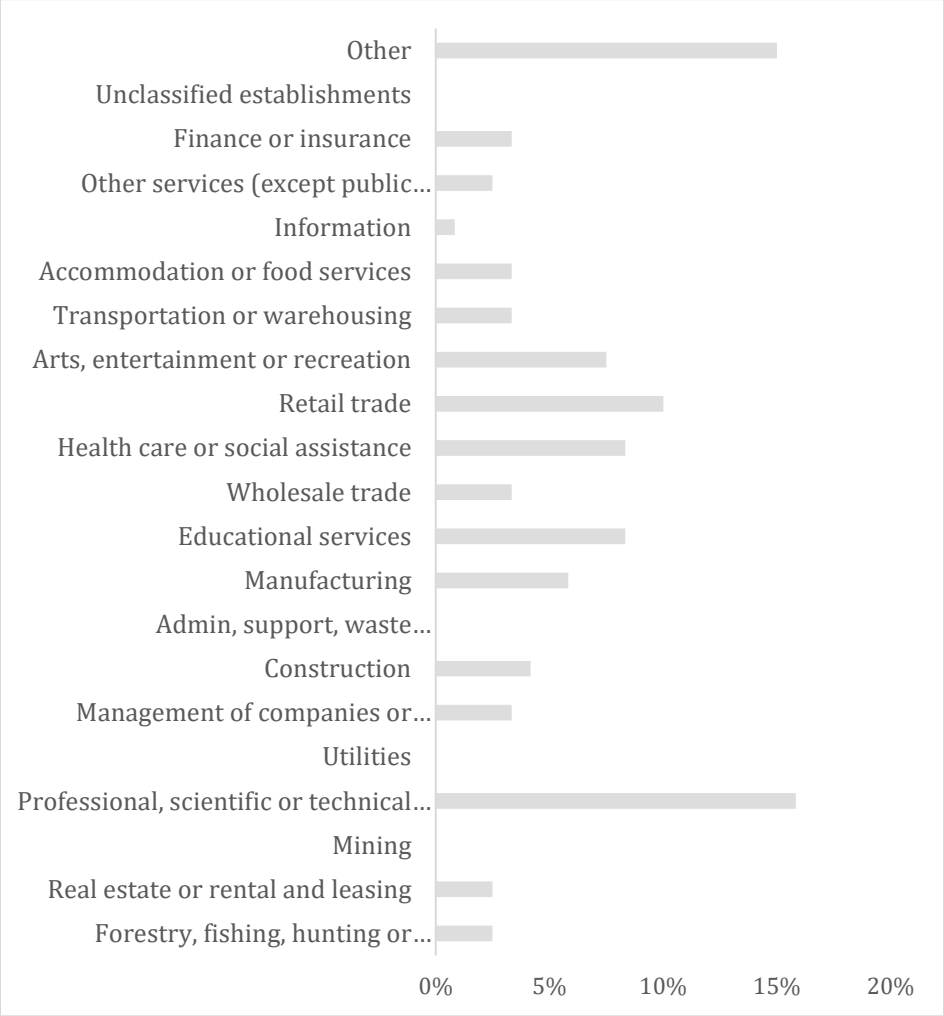
Birth Year

Response	Frequency	Percentage
1930-1939	1	1.33%
1940-1949	6	8.00%
1950-1959	22	29.33%
1960-1969	26	34.67%
1970-1979	27	36.00%
1980-1989	19	25.33%
1990-1999	6	8.00%
2000-2009	3	4.00%

The survey participants were asked which of the following industries most closely matches the one in which you are employed? Out of 120 responses, Professional Services had the highest percentage at 19%, followed by Others at 18% and Retail Trade at 12%. In contrast, Admin, Utilities, and Unclassified Establishment had the lowest response with 0%, as seen in Figure 4.

Figure 4

Industry Employed



Item Analysis of Research Questions

The mixed methods study intended to answer the following research questions informed by literature on the formation of attitudes and perceptions of motivations identified in SDT, thus influencing the intention to act entrepreneurially and seek entrepreneurial education at a community college.

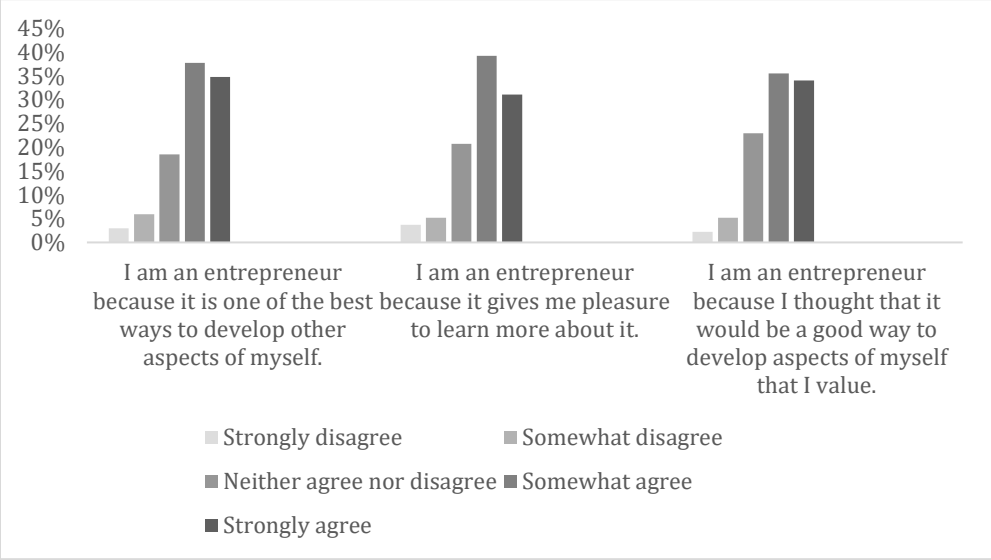
Research question 1

How do attitudes and perceptions of motivations related to SDT influence the intention to act entrepreneurially? This first survey section included an analysis of the first research question, organized by the three areas of the Creatives Motivation Scale, Creative Need Scale, and Creative Competence Scale. A Likert scale was used with the following designations for the Creatives Motivation Scale and Creatives Need Scale: 1= Strongly disagree, 2= Somewhat disagree, 3= Neither agree nor disagree, 4= Somewhat agree, and 5= Strongly agree. A Likert scale was used with the following designations for the Creative Competence Scale and Entrepreneurial Competence Scale: 1= Much worse, 2=Worst, 3= Neither better nor worse, 4= Better, 5= Much better. A mean factor of 4.00 or above determined the respondents' agreement with the statement, and a mean factor of 2.00 or below determined a respondent's disagreement with the statement. A mean factor of 2.01 to 3.99 was interpreted as neither agreeing nor disagreeing with the statement.

Survey participants were asked to rate the degree to which they agree with the following statements to gauge intrinsic motivation, as seen in Figure 5.

Figure 5

Intrinsic Motivation

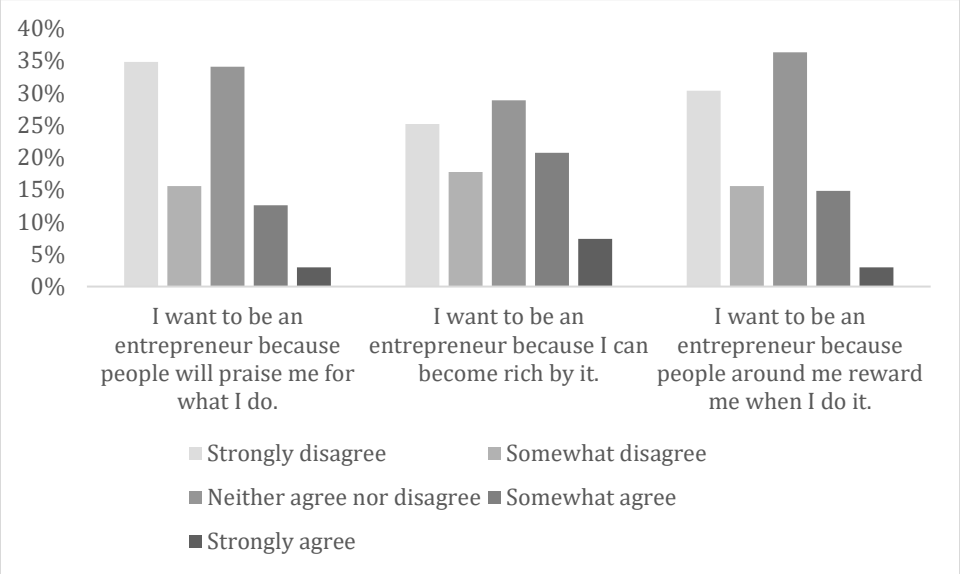


Note. I am an entrepreneur because it is one of the best ways to develop other aspects of myself. (n=135, mean = 3.96, SD=1.02); I am an entrepreneur because it gives me pleasure to learn more about it. (n=135, mean = 3.89, SD=1.02); I am an entrepreneur because I thought it would be a good way to develop aspects of myself that I value. (n=135, mean = 3.94, SD=.97)

Survey participants were asked to rate the degree to which they agree with the following statements to measure extrinsic motivation, as seen in Figure 6.

Figure 6

Extrinsic Motivation

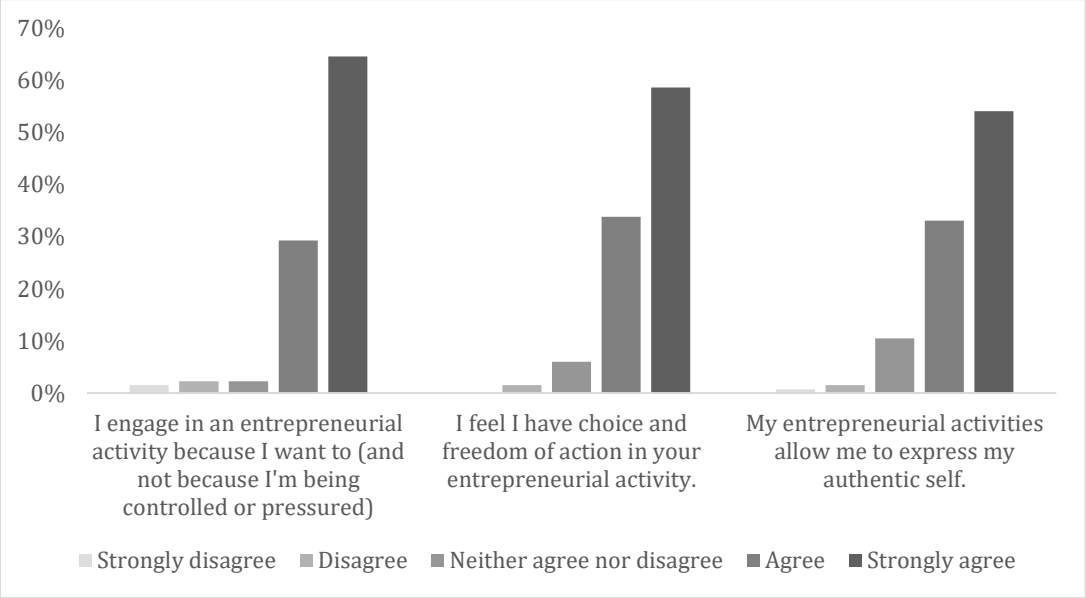


Note. I want to be an entrepreneur because people will praise me for what I do. (n=135, mean = 2.33, SD=1.16); I want to be an entrepreneur because I can become rich by it. (n=135, mean= 2.67, SD=1.26); I want to be an entrepreneur because people around me reward me when I do it. (n=135, mean = 2.44, SD=1.15)

To measure the need for autonomy, survey participants were asked to rate the degree to which they agree with the following statements, as seen in Figure 7.

Figure 7

Need for Autonomy

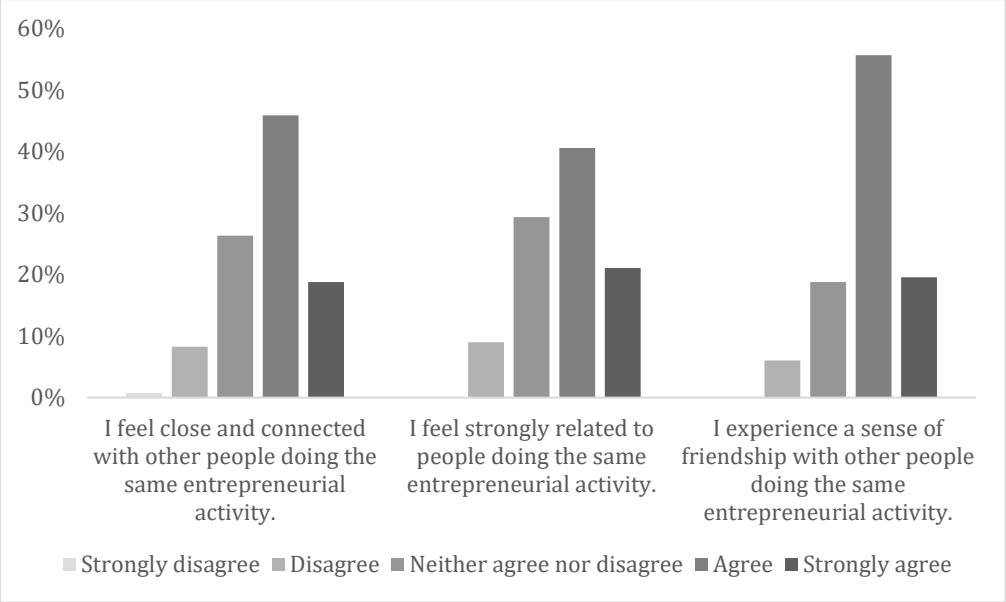


Note. I engage in an entrepreneurial activity because I want to (and not because I'm being controlled or pressured). (n=133, mean= 4.53, SD=.78); I feel I have choice and freedom of action in my entrepreneurial activity. (n=133, mean = 4.50, SD=.68); My entrepreneurial activities allow me to express my authentic self. (n=133, mean= 4.38, SD=.79).

To measure the need for relatedness, survey participants were asked to complete the following questions to the best of their ability, as seen in Figure 8.

Figure 8

Need for Relatedness



Note. I feel close and connected with other people doing the same entrepreneurial activity. (n=133, mean = 3.74, SD=.88); I feel strongly related to people doing the same entrepreneurial activity. (n=133, mean = 3.74, SD=.89); I experience a sense of friendship with other people doing the same entrepreneurial activity. (n=133, mean = 3.89, SD=.78).

To measure the need for creative competency, survey participants were asked to indicate the degree to which they would rate the following statements, as seen in Figure 9.

Figure 9

Need for Creative Competence

Note. When comparing myself to other entrepreneurs in my field, I see my ability to be creative as. (n=131, mean = 3.45, SD=.83); When comparing myself to other entrepreneurs in my field, I see my ability to think creatively as. (n=131, mean = 3.63, SD=.88).

As seen in Figure 10, to measure the need for entrepreneurial competency, survey participants were asked how you compare yourself to people with the same entrepreneurial activity in your ability to

Figure 10

Need for Entrepreneurial Competence

Note. successfully identify new (business) opportunities. (n=131, mean = 3.38, SD=.92); commercialize an idea or new development. (n=131, mean = 3.14, SD=1); raise funds for a new business. (n=131, mean = 3.14, SD=.94); sell a new product or service. (n=131, mean = 3.11, SD=1).

Research question 2

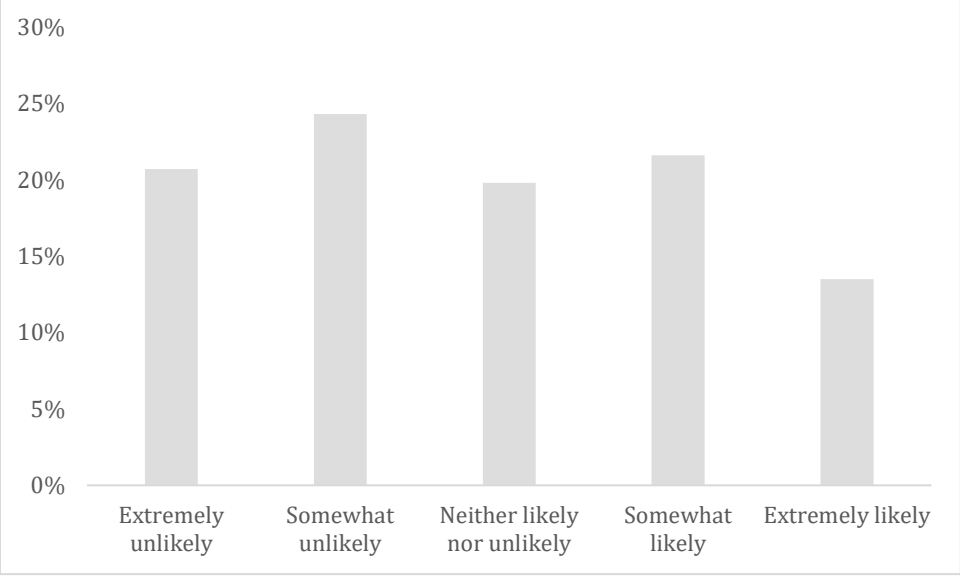
Research question two was, *how do the attitudes and perceptions of motivations related to SDT influence the intention to seek entrepreneurial education at a community college?* This section analyzes the second research question, organized by interest level, influential factors, and SDT concepts. A Likert scale was used with the following designations for the Community College Education Interest Scale: 1= Extremely unlikely, 2= Somewhat unlikely, 3= Neither likely nor unlikely, 4= Somewhat likely, and 5= Extremely likely. A Likert scale was used with the Community College Influence Scale designations: 1= Not at all, 2= Slightly influential, 3=

Neither, 4= Somewhat influential, 5=Very Influential. A Likert scale was used with the following designations for the Community College SDT Concepts Scale: 1= Not at all important, 2= Slightly important, 3= Moderately important, 4= Very important, 5= Extremely important. A mean factor of 4.00 or above determined the respondents' agreement with the statement, and a mean factor of 2.00 or below determined a respondent's disagreement with the statement. A mean factor of 2.01 to 3.99 was interpreted as neither agreeing nor disagreeing with the statement.

As seen in Figure 11, to measure the interest in community college, survey participants were asked, what interest do you have to attend a community college to further your entrepreneurship ability?

Figure 11

Community College Education Interest Scale

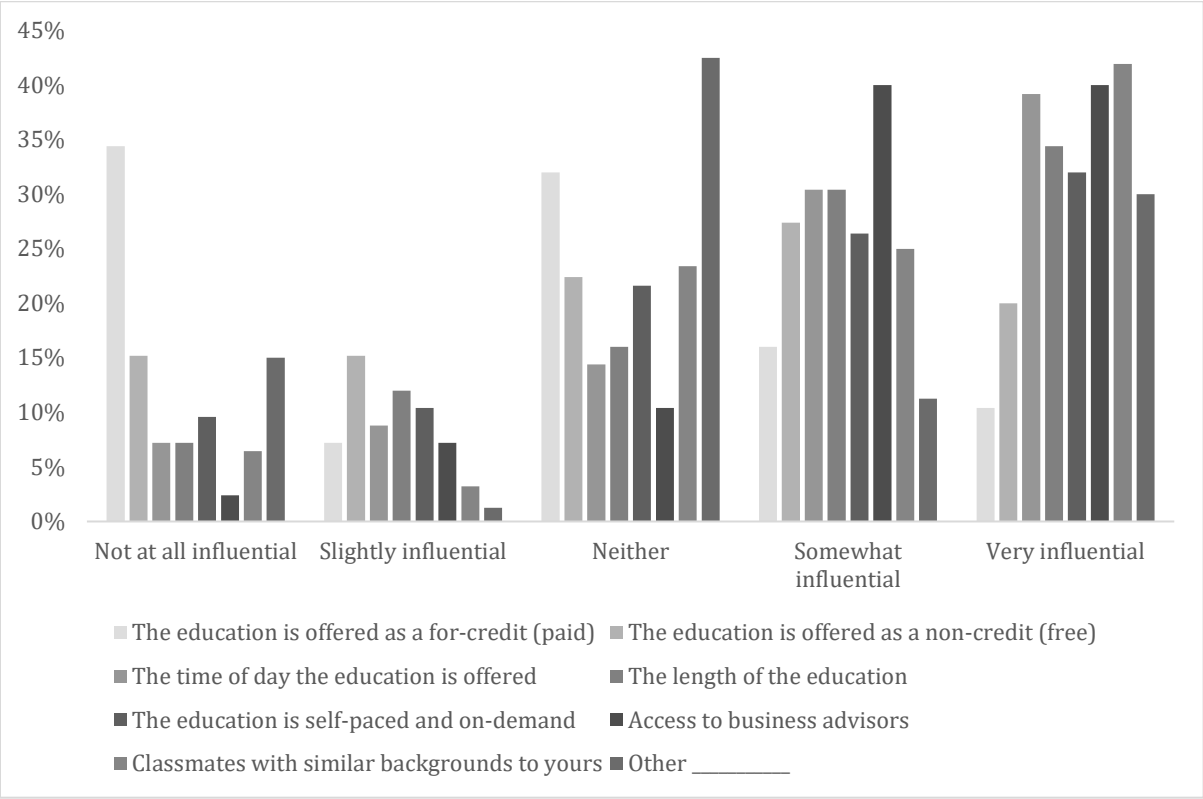


Note. (n=111, mean= 2.83, SD=1.34)

As seen in Figure 12, to measure the influences on attending community college, survey participants were asked, what influence would the following have on your interest to attend a community college to further your entrepreneurship ability?

Figure 12

Community College Education Interest Scale



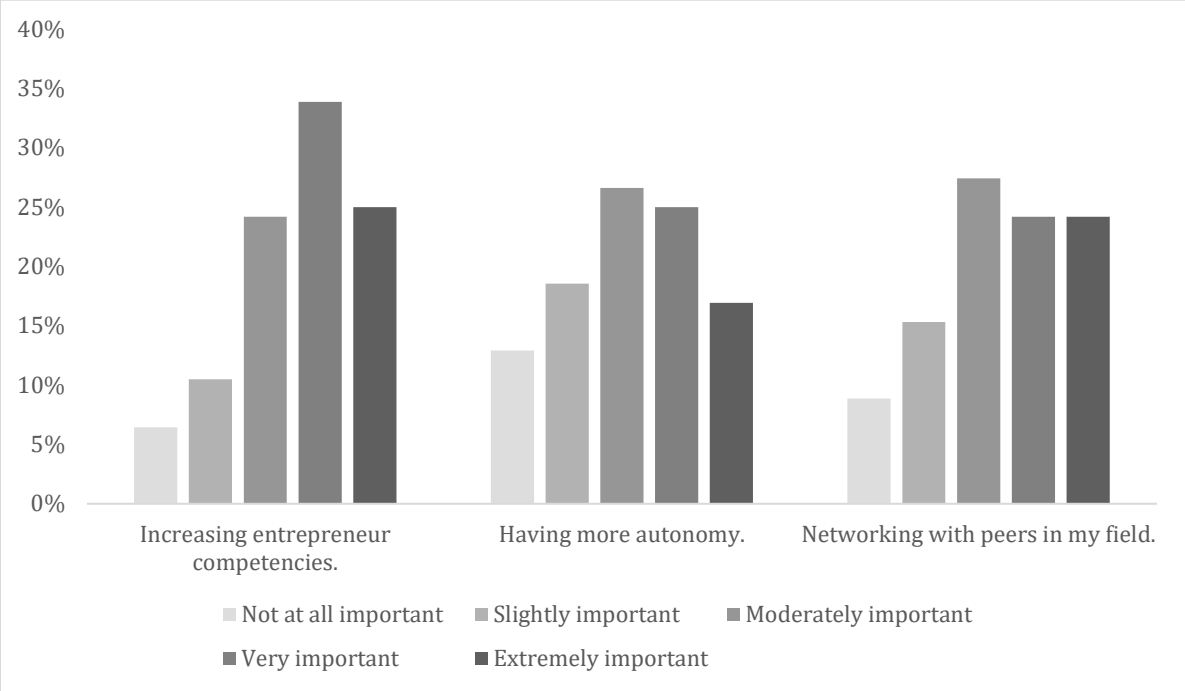
Note. The education is offered as a for-credit (paid) (n=125, mean = 2.61, SD=1.37); The education is offered as a non-credit (free) (n=125, mean= 3.22, SD=1.34); The time of day the education is offered (n=125, mean= 3.86, SD=1.23); The length of the education (n=125, mean = 3.86, SD=1.23); The education is self-paced and on-demand (n=125, mean = 3.61, SD=1.29); Access to business advisors (n=125, mean= 4.08, SD=1); Access to funding (n=124, mean = 3.93, SD=1.17); Classmates with similar backgrounds to yours (n=125, mean= 3.41, SD=1.19); *Other* encompassed (n=80, mean= 3.40, SD=1.33) Peer mentoring, location of the school,

networking and collaboration, beyond the basics, remote learning, practical skill development, quality of instruction, and relevant classes.

As seen in Figure 13, to measure the importance of SDT concepts on the interest to attending community college, survey participants were asked, how important are the following concepts when thinking about your interest to attend a community college to develop your entrepreneurship skills?

Figure 13

Community College SDT Concepts Scale



Note. Increasing entrepreneur competencies. (n=124, mean = 3.60, SD=1.16), Having more autonomy. (n=124, mean = 3.15, SD=1.27), Networking with peers in my field. (n=124, mean= 3.40, SD=1.25).

Statistical Analysis

The statistical analysis demonstrated a relationship with data in the following areas through descriptive and inferential statistics. Table 4 provides Pearson correlation coefficients

that suggest that intrinsic and extrinsic motivation are different constructs. A paired samples t-test for intrinsic versus extrinsic motivation supports Hypothesis 1: the mean of intrinsic motivation (M = 3.93; SD = 1) is significantly greater than the mean of extrinsic motivation (M = 2.48; SD = 1.19); t(125) =13.73, p = 0.000.

In Table 4, the majority of relationships had statistically significant correlations. The strongest correlations, with $p < 0.01$, were found between Need for Competence and its two components, Creative Competency and Entrepreneurial Competence, with correlations of .849 and .837, respectively. However, their correlations are assumed since these two components comprise the Need for Competence. Outside of Need for Competence and its two components, the need for Relatedness and Entrepreneurial Competence had the highest correlation at.421, $p < 0.01$. There was no statistically significant correlation between age and any other factor. The correlation between Intrinsic and Extrinsic motivations was not statistically significant with Entrepreneurial Competence. Except with Entrepreneurial Competence, Extrinsic Motivation tended to have slightly higher positive correlations when compared to intrinsic motivation to other variables. Intrinsic motivation was positively correlated with all variables except for age and Entrepreneurial Competence. Extrinsic Motivation was positively correlated with all variables, except age. Its positive correlation with Entrepreneurial Competence was statistically insignificant. Therefore, hypotheses two, three and four (b, and c) were supported, however four d failed to receive support.

- Hypothesis 2. Entrepreneurs' perceived need for autonomy is positively associated with their intrinsic motivation. *Found support.*
- Hypothesis 3. Entrepreneurs' perceived need for relatedness is positively associated with their intrinsic motivation. *Found support.*

- Hypothesis 4. Entrepreneurs' perceived need for competence is positively associated with their intrinsic motivation. *Found support.*
- Hypothesis 4b. Entrepreneurs' perceived need for competence is positively associated with their extrinsic motivation. *Found support.*
- Hypothesis 4c. Entrepreneurs' perceived need for creative competence is positively associated with their intrinsic motivation. *Found support.*
- Hypothesis 4d. Entrepreneurs' perceived need for entrepreneurial competence is positively associated with their extrinsic motivation. *Failed to receive support.*

Table 4

Summary Statistics and Pearson Correlations for Creatives Motivation Scale, Creative Need Scale, and Creative Competence Scale

Offerings	Summary statistics		Pearson correlation coefficient (R)								
	Mean	SD	1	2	3	4	5	6	7	8	9
1.Gender (male=1)	1.63	0.05	1								
Age	53.55	14.04	0.111	1							
3.Need for autonomy	4.47	0.75	.207*	-0.030	1						
4.Need for relatedness	3.79	0.85	0.148	-0.023	.337**	1					
5. Need for competence	3.38	0.91	-0.064	-0.077	.311**	.311**	1				
6. Creative competence	3.54	0.86	-0.034	-0.050	.337**	.337**	.849**	1			
7. Entrepreneurial competence	3.21	0.97	-0.076	-0.080	.183*	.421**	.837**	.421**	1		
8. Intrinsic motivation	3.93	1	-0.117	-0.119	.213*	.208*	.218*	.208*	0.157	1	
9. Extrinsic motivation	2.48	1.19	-0.104	-0.084	.247**	.262**	.225*	.262**	0.115	0.084	1

Note. n=126 or 127; + p < 0.10, * p < 0.05, ** p < 0.01, and *** p < 0.005.

**Correlation is significant at the 0.01 level (two-tailed).

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

In Table 5, a mean factor of 4.00 or above determined the respondents' agreement with the statement, and a mean factor of 2.00 or below determined a respondent’s disagreement with the statement. A mean factor of 2.01 to 3.99 was interpreted as neither agreeing nor disagreeing with the statement. Therefore, respondents were found to neither agree nor disagree with the majority of the statements. Need for Autonomy (mean of 4.47, SD = .75) showed overall

agreement. Intrinsic motivation (mean=3.92, SD=1) was very close to an agreement with very high agreement among the respondents.

Table 5

Summary Statistics and Pearson correlations of Creatives Motivation Scale, Creative Need Scale, and Creative Competence Scale Ranked by Means

Category	Mean	S.D.
Need for autonomy	4.47	.75
Intrinsic motivation	3.92	1.00
Need for relatedness	3.79	.85
Creative competence	3.54	.855
Need for competence	3.38	.914
Entrepreneurial competence	3.21	.973
Extrinsic motivation	2.48	1.19

Table 6 provides regression estimates to test Hypotheses 2–4. The researcher examined intrinsic (Model 1) and extrinsic motivation (Model 2) functions as outcome variables concerning the predictors using multiple regression. The predictor variables included the socio-demographic variables of gender and age, the three needs, and the split competence variable (with separate variables for entrepreneurial and creative competencies).

In Model 1, the R2 value was .130, and in Model 2, it was .106. The R-squared (R2) value represents the proportion of the variance in the dependent variable that can be explained by the independent variables in a regression model. It ranges from 0 to 1, where 0 indicates that the independent variables have no explanatory power, and one indicates that they can completely explain the variation in the dependent variable. A low to moderate R2 value, such as in Model 1 and Model 2(.130 and .106), suggests that the independent variables in the regression models have a relatively weak or moderate effect in explaining the variability in the dependent variable. This means that only a small or moderate portion of the variation in the dependent variable can

be accounted for by the independent variables included in the models. Regarding the difference in R2 values between Model 1 and Model 2, it suggests that the inclusion of different independent variables or changes in the model specification led to a variation in the explanatory power of the models. Model 1 might have included independent variables that were more strongly related to the dependent variable, resulting in a higher R2 value compared to Model 2.

In Model 1, the researcher observed Need for Autonomy (β=.186, p= 0.058) as very close to significant and the Need for Relatedness (β=.210, p=.049) as statistically significant as predictors of Intrinsic Motivation. The F test of the overall significance for Model 1 does affirm the model's predictive capability (F = 2.797, p = 0.014). In Model 2, the researcher observed Need for Autonomy (β= .020, p = 0.043) as statistically significant as a predictor of Extrinsic Motivation. The F test of the overall significance for Model 2 does affirm the model's predictive capability (F = 2.22, p = 0.046).

Table 6

Regression Results of the Effect of Entrepreneurs' SDT Needs on Intrinsic and Extrinsic Motivation

Dependent variable	Model 1 Intrinsic motivation (β)	Model 2 Extrinsic motivation (β)
Gender	-.125	-.118
Age	-.088	-.055
Need for autonomy	.186+	.020*
Need for relatedness	.210*	.150
Need for competence	.146	.011
Creative competence	.214	.156
Entrepreneurial competence	-.019	.008+
R2	.130	.106
Adjusted R2	.084	.058
F	2.797*	2.221*

Note. + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, and *** $p < 0.005$; (β) refers to all variables and not to R2, Adjusted R2, or F.

Table 7 provides the mean, standard deviation, and correlations from the Community College Influence Scale. The scale measured the influence of different offerings on the interest in attending a community college to further entrepreneurship ability. All correlations were found to be statistically significant except for access to funding with the education is offered as a for-credit (paid), the time of day the education is offered, the length of the education, and the education is self-paced and on-demand. The strongest correlation was between the time of day the education is offered and the length of the education (.851). The second strongest correlation was between the length of the education, and the education is self-paced and on-demand (.681).

Table 7

Influence of Differing Offerings on the Interest to Attend a Community College to Further Entrepreneurship Ability

Offerings	Summary statistics		Pearson correlation coefficient (R)							
	Mean	SD	1	2	3	4	5	6	7	8
1. The education is offered for-credit (paid)	2.61	1.37	1							
2. Education is offered non-credit (free)	3.22	1.34	.532**	1						
3. Time of day education is offered	3.86	1.23	.313**	.486**	1					
4. Length of education	3.73	1.25	.259**	.442**	.851**	1				
5. Education is self-paced and on-demand	3.61	1.29	.372**	.384**	.619**	.681**	1			
6. Access to business advising	4.08	1	.194*	.320**	.488**	.378**	.303**	1		
7. Access to funding	3.93	1.17	0.173	.263**	.215*	0.171	0.117	0.113	1	
8. Classmates with similar backgrounds to yours	3.41	1.19	.192*	.240**	.229*	.188*	.227*	.185*	.276**	1
9. Other	3.4	1.33								

Note. + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, and *** $p < 0.005$; “Other” was not correlated with other variables due to its variance of definition.

As seen in Table 8, a mean factor of 4.00 or above determined the respondents' agreement with the statement, and a mean factor of 2.00 or below determined a respondent’s

disagreement with the statement. A mean factor of 2.01 to 3.99 was interpreted as neither agreeing nor disagreeing with the statement. Only access to business advising with a mean of 4.08 determined the respondents' agreement. All other variables were found to neither agree nor disagree. Access to funding (3,93), the time of day the education is offered (3.86), and the length of the education (3.73) was very close to agreeing with the statement.

Table 8

Influence of Differing Offerings on the Interest to Attend a Community College to Further Entrepreneurship Ability Ranked by Means

Variable	Mean
Access to business advising	4.08
Access to funding	3.93
The time of day the education is offered	3.86
The length of the education	3.76
The education is self-paced and on-demand	3.61
Classmates with similar backgrounds to yours	3.41
The education is offered as a non-credit (free)	3.22
The education is offered as a for-credit (paid)	2.61

Table 9 provides Pearson correlation coefficients for Community College SDT Concepts Scale, which attempts to answer the question, how important are the following concepts when considering your interest to attend a community college to develop your entrepreneurship skills? Having more autonomy and networking with peers in my field had the strongest correlations ($r=.481$, $p<0.01$).

Table 9

Importance of SDT on Interest to Attend Community College to Develop Entrepreneurship Skills

SDT Interest	Summary Statistics		Pearson Correlation Coefficient (r)		
	Mean	SD	1	2	3
Increasing entrepreneur competencies	3.60	1.16	1	.481**	.403**
Having more autonomy	3.15	1.27	.481**	1	.567**
Networking with peers in my field	3.40	1.25	.403**	.567**	1

Note. + p < 0.10, * p < 0.05, ** p < 0.01, and *** p < 0.005

Table 10 Ranks the importance of SDT on interest in attending Community College to develop entrepreneurship skills ranked by means. First is increasing entrepreneur competencies (3.60), second is networking with peers in my field (3.40), and third is having more autonomy (3.15). A mean factor of 4.00 or above determined the respondents' agreement with the statement, and a mean factor of 2.00 or below determined a respondent's disagreement with the statement. A mean factor of 2.01 to 3.99 was interpreted as neither agreeing nor disagreeing with the statement. Therefore, respondents were found to neither agree nor disagree with the statement.

Table 10

Importance of SDT on Interest to Attend Community College to Develop Entrepreneurship Skills Ranked by Means

Skills	Mean
Increasing entrepreneur competencies	3.60
Networking with peers in my field	3.40
Having more autonomy	3.15

Table 11 provides correlation data gathered from the survey questions, “How important are the following concepts when thinking about your interest in attending a community college to develop your entrepreneurship skills? And what influence would the following have on your interest in attending a community college to further your entrepreneurship ability?”

All correlations were statistically significant except for networking with peers in my field. The education is offered as non-credit (free), the length of the education, and the education is self-paced and on-demand. The strongest correlation was between the time of day the education is offered and increasing entrepreneur competencies ($r=.491$. $p<.01$). The second strongest correlation was between the length of the education and growing entrepreneur competencies ($r=.478$, $p<.01$). The results provide support for the following hypothesis.

- Hypothesis 5. Entrepreneurs’ perceived need for increasing entrepreneur competencies is positively associated with access to business advising. *Received support.*
- Hypothesis 5b. Entrepreneurs’ perceived need for increasing entrepreneur competencies is positively associated with the education offered as a for-credit (paid). *Received support.*

- Hypothesis 5c. Entrepreneurs' perceived need for increasing entrepreneur competencies is negatively associated with the education offered as non-credit (free). *Failed to receive support.*
- Hypothesis 5d. Entrepreneurs' perceived need for increasing entrepreneur competencies is positively associated with the length of their education. *Received support.*
- Hypothesis 5e. Entrepreneurs' perceived need for increasing entrepreneur competencies is positively associated with access to funding. *Received support.*
- Hypothesis 6. Entrepreneurs' perceived need for having more autonomy is positively associated with education that is self-paced. *Received support.*
- Hypothesis 6b. Entrepreneurs' perceived need for more autonomy is positively associated with on-demand and the time of day the education is offered. *Received support.*
- Hypothesis 7. Entrepreneurs' perceived need for networking with peers in their field is positively associated with classmates with similar backgrounds. *Received support.*

Table 11

Correlations of Importance of SDT on Community College Offerings

Offerings	Pearson Correlation Coefficient (r)		
	Increasing Entrepreneur Competencies	Having More Autonomy	Networking with Peers in my Field
1. Education is offered as a for-credit (paid)	.295**	.426**	.275**
2. Education is offered as a non-credit (free)	.409**	.426**	.171
3. Time of day the education is offered	.491**	.347**	.252**
4. The length of the education	.478**	.230*	.172
5. Education is self-paced and on-demand	.376**	.288**	.073
6. Access to business advising	.427**	.427**	.406**
7. Access to funding	.278**	.381**	.248**
8. Classmates with similar	.357**	.378**	.428**

Note. + p < 0.10, * p < 0.05, ** p < 0.01, and *** p < 0.005.

Table 12 compares two groups, those Not in Business vs. those in Business. Of 121 respondents, 18 (14.9%) replied Not in Business, and 103 (85.1%) responded In Business. An Independent Sample T-test was used to determine whether there was a statistically significant difference between the groups, as seen in Table 8. None of the results were found to be significant. Therefore, the results do not support the following hypothesis:

- Hypothesis 8. Entrepreneurs in business and entrepreneurs not in business will be statistically significant different. *Failed to receive support***.**

Table 12

Not in Business vs. In Business

SDT concepts	In business	Not in business		
	Mean	Mean	SD	SD
Intrinsic motivation	3.96	3.80	.817	.82
Extrinsic motivation	2.44	2.63	.990	.94
Need for autonomy	4.49	4.43	.51	.57
Need for relatedness	3.78	3.92	.93	.75
Need for competence	3.33	3.11	.76	.67
Creative competence	3.57	3.33	1.37	.76
Entrepreneurial competence	3.08	2.89	.09	.79

Note. N=17 or 18 for Not in Business and 103 for In Business; + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, and *** $p < 0.005$.

Semi-Structured Personal Interviews

The semi-structured personal interviews provided access to insights beyond the survey's constructs. The researcher conducted eight interviews which lasted an average of 45 minutes between March 20th and April 17th, 2023. Four interviews were with females and four with males. All were conducted in English and only one interviewee's first language as Spanish. Seven identified as white, non-Hispanic and one as Hispanic. Seven of the interviewees were in business. Businesses included IT, construction, marketing, personal coaching, sports equipment, and design. Interviews were semi-structured and allowed the interviewer to ask a series of probing questions without the limited time and answers provided by the survey instrument (See Appendix A). The interview was organized into three categories. First, a grand tour question, second, probing questions related to Research Question 1, and third probing questions related to Research Question 2.

Grand tour question: What does entrepreneurship success look/feel like to you?

Probing questions related to Research Question 1:

- How do the attitudes and perceptions of motivations related to SDT influence the intention to seek entrepreneurial education at a community college?
- What motivates you to do your entrepreneurial activity?
- How does your entrepreneurial activity provide a feeling of authentic autonomy?
- How does your entrepreneurial activity create a feeling of connectedness to others?
- What drives your creativity?
- How would you define your entrepreneurial ability?
- Are there any other motivations related to your entrepreneurial aspirations?

Probing questions related to Research Question 2:

- What influences your intention to seek entrepreneurial education at a community college?
- What barriers reduce your intention to seek entrepreneurial education at a community college?
- What changes would you like the community college to make to entrepreneurial education?

Enduring Themes Summary

Personal interviews produced responses that mirrored those found in the survey responses (See Appendix I). This four-step reduction process unearthed both unique and common themes. These themes are conveyed via capta, which offers insight into opinions and beliefs by examining objects or events from a first-person perspective. As Drucker (2011) noted, capta is actively gathered, unlike data, which is assumed to be passively recorded and observed (para. 3).

The recurrent themes are showcased along with the narrative summary to deliver a more vivid depiction of the capta. To form a more robust and targeted description, similar questions were amalgamated.

Interview questions 1

How would you define success as an entrepreneur and 2, How would you define your entrepreneurial ability? resulted in the following enduring themes*:*

- Autonomy
- Competency
- Resilience
- Growth Mindset

Supportive Quotes*:*

- "I would say the impact of an idea and how it transforms people's lives. And how widespread that becomes."
- "So almost all of my business is through a referral."
- "…achieve the goal or the idea of having create it in my mind … take me from where I am today as an employee … to my own business."
- "Having a business that's really set up properly runs itself, and ideally give me the amount of time I need with my clients. And the amount of time I need for myself and the freedom to do what I want to do."
- "I think it's the idea for me that going through this process, coming up with an idea and making it something that is worth value to someone else."

Success as an entrepreneur was defined in several ways. It involves financial autonomy, competency in services, and being connected with the community. Entrepreneurs need to be self-

sufficient in business and time management, which creates freedom of action. Success can mean achieving goals on a spectrum of revenue and positive impact and feeling like you can do what you set out to do. Creating value through an iterative process with others that makes a positive difference is also a hallmark of success. Success also involves turning an idea into a business, with a capacity for risk and failure. An ability to build relationships and be creative, as well as a deep passion and thirst for knowledge, are essential. Enthusiasm, resilience, optimism, and a mindset of removing obstacles and aiming for self-actualization are essential for success as an entrepreneur. Finally, success involves having an optimistic, growth mindset, measured confidence, and being born with and cultivating the qualities necessary to achieve your goals.

Interview questions 3, 7 and 12

What motivates you to do your entrepreneurial activity, are there any other motivations related to your entrepreneurial aspirations, and is there anything related to motivations of why you do this now versus why you started as an entrepreneur? resulted in the following enduring themes:

- Self-Actualization and Autonomy
- Purpose,
- Connectedness
- Competency

The following quotes are in support of the themes:

- "…the idea of independence it's the idea of creating something of value for people."
- "Just the idea of creating things it's been such a wonderful experience, and I'm just going through the mental exercise all the time. It keeps you young. It keeps you excited. It fills my day."

- "...my philosophy is that if people are fully expressed will have a lot better world."
- "…it's the fact that it's the only way that I see these ideas being able to be spread in the world."

Entrepreneurial activity is motivated by several factors, including a need for autonomy, purpose, and connectedness. Pragmatic positive influence, making a better future, providing self-actualization, positively impacting, and reducing suffering are all critical motivators. Financial security, validation, and the freedom to do or create what they love are also essential for entrepreneurs. They aspire to be fully expressed, to be a model of doing one's best and obtaining the highest good, and to have the independence to create value for people, including those they love. Entrepreneurs have a firm conviction of service, self-discovery, self-actualization, and a feeling of duty to keep themselves interested. They want to reach people and communicate to create impact, both in the short and long term. Entrepreneurs also seek a sense of accomplishment and purpose through increasing competency and relatedness and growing in empathy-informed design. Business success requires specialization of product or service and generalization of managing and leading skills. Finally, the tension between pushing the limits and knowing one's limitations is an essential motivation for entrepreneurs.

Interview question 4

How does your entrepreneurial activity provide a feeling of authentic autonomy? resulted in the following enduring themes:

- Authentic autonomy,
- Fulfillment,
- Societal impact.

The following quotes are in support of the themes:

- "…it feels authentic, because I'm able to create exactly what I feel is the message that I want to share with the world…
- "…find a new way to live…to move into my idea."
- "I really just love the freedom of being able to do what I want to do and not have to answer to anybody."
- "I'm expanding and growing and learning and it's why I do what I do because it is the thing that makes me it feels like exactly what I'm supposed to be doing."
- "I always felt like I was forced to do something that I hated to do in order to survive, and it's just a terrible feeling to feel like that. And since I started my handyman business, I didn't really have hardly felt like that sense. So, it's been, it's been huge in giving me that autonomy, which is very meaningful to me."

Entrepreneurial activity provided a feeling of authentic autonomy in several ways. It comes from creating a message of deep purpose and limitless potential, self-agency to create one's idea, and the freedom of action and being one's boss. Authenticity is also essential, with a spiritual connection to the work and the client. Authentic autonomy involves doing what one is supposed to do. Autonomy is significant and provides relief from being dictated. Fulfillment comes from meaningful work that is important to society and the market. Creating long-term change creates more profound satisfaction and a feeling that time is valued. Having no one to control them, and income sources that do not affect their creativity are also essential. Entrepreneurial activity provides sufficient income to sustain families and create jobs. Entrepreneurs feel that their efforts directly affect their success, which adds to the feeling of authentic autonomy.

Interview question 5

How does your entrepreneurial activity create a feeling of connectedness to others? resulted in the following enduring themes:

- Entrepreneurial Interconnectedness
- Purpose-Driven Entrepreneurship.

The following quotes are in support of the themes:

- "The limits come from the constraints of separateness and the lack of understanding that everything I do affects everything you do."
- "…it's changed a lot how I approach it…it matters to me where the money comes from. It matters to me who are partners are. So, it's a really good way of finding people…greatly affects my interactions with people… I would never treat anything less than the kindness I would treat myself."
- "And so, there's certainly an authentic, authentic connection with the people that I work with. Because I truly care and their success is my success... people that I network with, feel like family, it feels like we are all invested in a similar purpose of really being of service to humanity."
- "… it doesn't create a feeling of connectedness to others because entrepreneurs to do like a pretty rare like pursuit…crazy…bit different…"

Entrepreneurial activity creates a feeling of connectedness to others through the limitless potential of interconnectedness, which extends beyond transactional relationships to include value alignment and the integrity of the brand. This connectedness is characterized by identity and promise synergy, with a focus on making a positive difference in the community and empathizing with clients' success. Investing in the purpose of serving humanity also fosters

connectedness. However, due to the rarity of entrepreneurs, connecting with others can be challenging, but people generally support the importance and difficulty of the entrepreneurial role. Unique connections can be made within the industry of operation, and work connections are foundational to entrepreneurial activity. Supportive programs providing challenging feedback and observing other entrepreneurs' unique pursuits can also create connectedness.

Interview question 6

What drives your creativity? resulted in the following. enduring Themes:

- Creativity as Entrepreneurial Drive.
- Deep Engagement with the Creative Process.
- Influence and Inspiration.

The following quotes are in support of the themes:

- "The quiet moments I ask a question and then I wait and see what…to come in… to be a vessel for ideas…"
- "You have to be interested in things. I feel like for my creativity, it just comes from my subconscious."
- "I think it's that idea that I am going to give something out to the world that has value and people want to use it."

As an entrepreneur, creativity is driven by the need to give the world a unique product of value and use. This requires going deep into the creative process, removing the noise to hear the signal, and being in the moment while working with the unknown, purpose, and potential. The creative process involves listening to the muse, being interested in communicating with the subconscious, and being exposed to new things, nature, and ideas. Creativity is essential to entrepreneurship and requires delving deeply into it.

Interview Question 8

What influences your intention to seek entrepreneurial education at a community college? resulted in the following enduring themes**:**

- Quality Entrepreneurial Education.
- Community and Support in Entrepreneurship.
- Access and Affordability in Education.

The following quotes are in support of the themes:

- "One is if I wanted to do something different than what I've been doing, if I wanted to take on other roles,"
- "…somebody who could just help answer the questions. The detail type questions…networking or support that actually benefits the business."
- "…people I would need that are that are kind of in the same boat, and seeing how we can support each other."
- "I think that would be the greatest motivation is finding a community that is building growing, expanding like I am and creating that type of, I guess, networking and support system."
- "That's what I'm thinking someone who could further my quest."

Several factors influence entrepreneurial education at a community college. Competency in needed skills required by clients and developing soft and hard skills necessary to run a business but not taught in business school are essential considerations for community colleges. Additionally, intimacy and excellence in education, target marketing, and the need for trusted advising in functional areas are key factors that entrepreneurs seek. They also prefer quick, customized advice that provides answers and support, ideally in person. Prioritizing education

based on the belief that it will help them and being part of a community of like-minded individuals that provides a network and support system are also important. A sweet spot between trusted credentials and affordability is important, and education should include providing mentors who have impacted society and have an ROI that could further their quest by using their formula for success in the form of workshops—finally, local access to knowledge being offered to those who are unsure of their next steps.

Interview Question 9

What barriers reduce your intention to seek entrepreneurial education at a community college? resulted in the following Enduring Themes:

- Demand for Quality Education.
- Financial and Time Constraints.

The following quotes are in support of the themes:

- "I'm not always available on a regular schedule. So, you know I've got class I'm sorry, I can't be with you today. Stuff like that. doesn't fly. Got it?
- "I value my time…really weigh whether it's worth my investment of time and my energy."
- "…barriers would be probably the draw of the personalities and the teachers."
- "… I would probably be more likely to take workshops than a whole semester class. Because an entrepreneur is at the mercy of, they're building their thing, so I am, you know, occupied most of the days."

Several barriers reduce an entrepreneur's intention to seek entrepreneurial education at a community college. Limited enrollment access through work experience and knowledge, a lack of meeting the needs and preferences of individual students, and scarcity of resources are

important factors. Motivation from the thirst for practical knowledge demands high levels of education quality. The lack of quality personalities and teachers and the fact that the entrepreneur is at the mercy of building their thing are barriers. Time of day with night availability is an important consideration. Cost of living, limited time, and energy increase the threshold for investment. Student loans may not be attractive to entrepreneurs with more risk in repayment abilities.

Interview questions 10 and 11

What changes would you like the community college to make to entrepreneurial education, and is there anything else you'd like to share that would be helpful regarding a better understanding of entrepreneur motivations and attendance at a community college? resulted in the following Enduring Themes:

- Community-Oriented Entrepreneurial Education
- Innovation in Educational Approaches
- Support and Inspiration in Entrepreneurship Education

The following quotes are in support of the themes:

- "A mentorship program…somebody who's done it before would actually be able to kind of walk people through those sorts of things. So if somebody had a course where they put together a lot of those resources and then helps you decide what you may need and here you go, here's the list of places that you can find it."
- "…focus on like people that just have idea and they want to make it a reality and figured out what tools these people might need to figure it out if this is really what they want in that short period that small time."

- "…real life experience is always really useful… connecting students to local successful entrepreneurs for like mentorship or internships to learn what you know actually works in the real world rather than a purely academic setting…participation …startup contest, networking with different entrepreneurs …lenders…venture capitalists to build… a supportive community around entrepreneurship."
- "…I feel like having people available, having even like, workshops with people getting together and a space for people to brainstorm and to work together and work through new problems, because it's easy to go to class and then you just leave and then you know, you're off by yourself. It would be nice to have a place where people are going, like the makers space, you know."

Entrepreneurs have suggestions for changes they want to see in community college entrepreneurial education. These include aligning programs and services with local labor market needs, providing mentor-based teaching, and offering time and location flexibility. Entrepreneurs believe that entrepreneurship is not the same as business management and that investment from the business community is essential. There is a need for greater access to underserved student choices and space with synergy and expediential creativity. Entrepreneurs suggest providing curated resources for entrepreneurs and marketing directly to them, as well as forming partnerships with universities with entrepreneurial alums. Community colleges that excel at inter-generational education that increases empathy, a core skill of an entrepreneur, would be beneficial. Tools to prototype ideas quickly and technical and practical skills are also necessary. Entrepreneurs suggest direct work experience with local entrepreneurs, participation in start-up contests, and networking with lenders build a supportive community. Being in a community with other entrepreneurs who inspire, connect, and give good ideas is also essential. Leadership

development through workshops that provide exposure to impactful business aspects of the community is necessary. Entrepreneurs are different animals and have different needs than business majors. Bringing the community into the classroom and increasing the connection to the community is essential. Offering a local gap year of service with multiple internships to connect the community to the college would be beneficial. Workshops, where entrepreneurs can learn from others through brainstorming in a maker space environment, are necessary. A dedicated maker space-like space to solve common problems, receive feedback, and get inspired by those with similar mindsets on similar journeys would be helpful. Calculating and mitigating risk, understanding the entrepreneurs' "why," and addressing insecurities due to incompetence are needs. Seeing others like them accomplish their ideas inspires entrepreneurs. It is hard to start a business from scratch, and there is a need to create a clear connection between how the program, comprised of academics and networking, will help entrepreneurs reach their goals. Access to experts, high-stakes investments, and consistent problem-solving are essential.

Interview questions 13, 14, 15, and 16

What is your perspective on management as a business owner versus just management when you're another employee……what's the difference or what's similar? Would you say you pursue education differently now than 10 or 20 years ago if so, how? How would a community college differentiate itself in that space of entrepreneurial supported? You mentioned the difference between an entrepreneur and a business major……would you describe that in more detail? resulted in the following Enduring Themes:

- Distinctive Characteristics of Entrepreneurs.
- Evolving Educational Needs of Entrepreneurs.
- Tailored Support for Entrepreneurs in Community Colleges.

The following quotes are in support of the themes:

- "Nobody else to kick it to. You're it."
- "I was never in school at that [earlier] time for the joy and pleasure of learning or the satisfaction of learning a new skill and accomplishing a new trade."
- "So, if a certain community [college] was you know scrappy/resourceful and had the passion to put into it even though they may not have the same budget as the university but were able to offer comparable programs to the university for a much cheaper price I mean that's the differentiator that you can go for."
- "Entrepreneurs are a different animal and a different animal than business major. Entrepreneurs have this you know, most of us are probably college dropouts. Want to prove we can do it on our own…"
- "…entrepreneurs, we are dreamers. We are self-starters. We are optimistic we are enthusiastic, and we are unconventional and that most of us probably do not have degrees from higher education. That we're lifelong learners."
- "…business major they want to, you know, sort of prototype or something, go into a business and figure out how to make it do better. Where an entrepreneur is like, oh my god, this is easier to get if I had my way and I had a magic wand."

Business majors want to optimize the model, while entrepreneurs want to create the model. Entrepreneurs are dreamers, self-starters, optimistic, enthusiastic, and unconventional, and many do not have higher education degrees. Entrepreneurs take risks, are self-motivated, and continuously learn and adapt to new challenges. A business owner has extreme ownership of the process and outcome, and they are chiefly responsible for the success or failure of the business.

Entrepreneurs pursue education differently than they did 10 or 20 years ago. Affordability, availability, and resourcefulness are essential for entrepreneurs pursuing education. Community colleges can differentiate themselves in the space of entrepreneurial support by understanding the unique needs of entrepreneurs and offering resources that cater to those needs.

Presentation of Findings Summary

This study attempted to illuminate how the basic psychological needs and motivations addressed through SDT could explain the formation of attitudes and perceptions of motivations, thus influencing the intention to act entrepreneurially and seek entrepreneurial education at a community college. Most respondents were entrepreneurs, making the sample representative of business owners. The age distribution shows that most respondents were middle-aged, born between 1970-1979. The racial/ethnic distribution was heavily skewed towards white respondents, with a small representation of other ethnic groups. Respondents mainly identified as non-Hispanic. Gender distribution was skewed towards female respondents, who made up a more significant percentage than males. The survey drew heavily from the Professional Services industry, with negligible representation from sectors like Admin, Utilities, and Unclassified Establishments.

The primary objectives of this study are encapsulated in two overarching research questions. These questions aim to delineate the specific demographic under study, establish the timeframe, outline the curriculum, and specify the metrics for workforce development. Additionally, they assist in prioritizing inquiries reserved for future investigations.

1. How do attitudes and perceptions of motivations related to SDT influence the intention to act entrepreneurially?

2. How do the attitudes and perceptions of motivations related to SDT influence the intention to seek entrepreneurial education at a community college?

A mixed-method approach was employed. The data was collected in a sequential explanatory format, starting with the quantitative data through a survey (Phase 1) and then collecting the qualitative capta through interviews (Phase 2).

Summary of Survey Analysis

This first survey section included data collection for the first research question, organized by the three areas of the Creatives Motivation Scale, Creative Need Scale, and Creative Competence Scale, as presented in Figures 5 through 10. The results suggest that intrinsic motivations, autonomy, connectedness, and competence significantly influence the intention to act entrepreneurially.

Intrinsic motivation, driven by personal interest or enjoyment, was shown to be a strong factor in entrepreneurial intentions. Entrepreneurs reported high levels of intrinsic motivation (mean=3.93, SD=1.00), finding pleasure in learning more about entrepreneurship (mean=3.96, SD=1.02) and seeing it as a way to develop valued aspects of themselves (mean=3.89, SD=1.02). This implies that the desire to learn, grow, and self-improve is a strong internal driver for entrepreneurship.

Extrinsic motivation, such as public praise, wealth, and rewards, received lower agreement scores (mean ~2.3 to 2.7). These results suggest that external validation and monetary rewards, while part of the motivation, are not the primary drivers for entrepreneurial action.

When it comes to autonomy, the desire to control one's own actions, respondents strongly agreed (mean ~4.5) that they engage in entrepreneurial activity out of personal choice and not due to external pressure. They also valued the freedom of action and the opportunity to express

their authentic selves in their entrepreneurial activities. This demonstrates a strong correlation between autonomy and the intention to be entrepreneurial.

The need for relatedness showed moderate agreement (mean ~3.7 to 3.9). Respondents feel a sense of connection and friendship with others in the same entrepreneurial activity. This indicates that while connectedness is not as strong a motivator as autonomy, it is still a significant factor in entrepreneurial intentions.

In terms of competency, respondents rated their creative abilities and the capacity to identify new business opportunities, commercialize ideas, raise funds, and sell new products or services moderately (mean =3.8, SD=.914). This suggests that perceived competency varies among respondents and may play a variable role in influencing entrepreneurial intention.

The data suggests that the three primary needs posited by SDT — autonomy, relatedness, and competence — are all significantly interrelated within the context of entrepreneurial intention. These factors play a crucial role in driving entrepreneurial behaviors. However, it's interesting to note that while both intrinsic and extrinsic motivations are significantly correlated with these needs, they do not correlate significantly with each other or with entrepreneurial competence. This could imply that the motivations driving entrepreneurship are complex and not solely based on intrinsic or extrinsic rewards. The lack of correlation between age and any other factor indicates that these motivations and competencies are not age dependent.

In summary, these results imply that intrinsic motivations and the need for autonomy are the most influential factors in the intention to act entrepreneurially. Connectedness and competency are also important but to a lesser degree. Extrinsic motivations appear to be less influential than the other factors.

Second Section of the Survey

The second section of the survey included data collection for the second research question, organized by interest levels, influential factors, and SDT concepts related to community college attendance, as presented in Figures 11 through 13. The data suggests that attitudes and perceptions of motivations related to SDTSDT influence the intention to seek entrepreneurial education at a community college to a moderate extent.

In terms of interest in attending a community college to further entrepreneurship ability, respondents were neither likely nor unlikely (mean = 2.83) on the Community College Education Interest Scale. This suggests a neutral or ambivalent attitude towards community college as a means for developing entrepreneurial skills.

When considering various factors that could influence their interest in community college education (Community College Influence Scale), respondents indicated varying levels of influence. Access to business advisors (mean = 4.08), access to funding (mean = 3.93), and the time of day the education is offered (mean = 3.86) were somewhat to very influential. This suggests that access to expert advice, access to funding, and flexible scheduling are significant factors in their decision to pursue community college education. The length of the education (mean = 3.73), the education being self-paced, and on-demand (mean = 3.61) also scored somewhat influential. These results indicate the importance of a flexible learning environment, financial considerations, and the duration of the program. Less influential but still somewhat important were factors like classmates with similar backgrounds (mean = 3.41) and other factors like peer mentoring, location, networking, practical skill development, quality of instruction, and relevant classes (mean = 3.40). The availability of free non-credit education (mean = 3.22) was

also considered somewhat influential. The least influential factor was for-credit (paid) education (mean = 2.61).

The findings reveal that the timing and duration of the education provided by community colleges significantly impacts the interest in pursuing entrepreneurial skills. The high correlation suggests that potential entrepreneurial students value flexibility in their educational pursuits. The ability to have a self-paced, on-demand education appears to be vital, indicating that students may prefer control over their learning pace, reflecting their entrepreneurial inclination for autonomy.

On the Community College SDT Concepts Scale, respondents indicated that increasing entrepreneurial competencies (mean = 3.60) and networking with peers in their field (mean = 3.40) were somewhat important. However, having more autonomy was rated lower (mean = 3.15), suggesting that while independence is valued, it is not as critical as developing skills and networking when considering community college for entrepreneurial education.

The strong correlation between autonomy and networking opportunities indicates that prospective entrepreneurial students that value the freedom to learn and create also recognize the importance of establishing connections within their field. This suggests that community colleges aiming to attract such students should focus on providing an environment that fosters both autonomy and networking opportunities.

In summary, while there is moderate interest in attending community college for entrepreneurial education, certain factors like flexible scheduling, access to business advisors, the ability to learn at one's own pace, and funding are particularly influential. Increasing competency and networking are also seen as important aspects of community college education from a SDT perspective.

Summary of Interviews Analysis

Self Determination Theory (SDT) has been found to influence the intention to act entrepreneurially and seek entrepreneurial education at a community college through various factors in the personal interviews. The enduring themes were summarized (See Appendix I) in narrative form to provide a richer illustration of the capta and organized below by the two overarching research questions.

Research question 1

Research question one was how do attitudes and perceptions of motivations related to Self Determination Theory influence the intention to act entrepreneurial?

SDT asserts that an individual's inherent growth tendencies and innate psychological needs influence their self-motivation and personality integration. According to the entrepreneurs interviewed, the SDT concepts of autonomy, competency, and relatedness significantly influenced their entrepreneurial intentions and decisions to seek education at a community college.

Influences on Entrepreneurial Intentions: Financial autonomy and community connection emerged as key themes defining entrepreneurial success. Entrepreneurs valued the freedom to manage their businesses and time, enabling them to fulfill personal goals spanning revenue and positive societal impact. They viewed their entrepreneurial competency as the ability to transform ideas into businesses, a process often marked by repeated failure and resilience. They emphasized an optimistic, growth-oriented mindset and a capacity for risk-taking, relationship-building, and creativity. Their motivations were rooted in a desire for autonomy, purpose, and connectedness. They were driven to create value, reduce suffering, and achieve self-actualization while securing financial stability. Entrepreneurs experienced a sense of authentic autonomy

through the creation of meaningful work that had societal and market importance, providing them with a feeling of fulfillment.

Research Question 2

Research question 2 was, *how do the attitudes and perceptions of motivations related to Self Determination Theory influence the intention to seek entrepreneurial education at a community college?*

Influences on Seeking Entrepreneurial Education: Entrepreneurs considered education at a community college a gateway to acquire necessary hard and soft skills not typically provided in conventional business schools. The college could offer a trusted, intimate learning environment with practical advice and mentorship. However, constraints such as limited time, energy, and resources, as well as the quality of teaching, were barriers. Entrepreneurs suggested that colleges could better serve their educational needs by aligning programs with local labor market requirements, offering mentor-based teaching, and fostering a supportive community of entrepreneurs through partnerships and intergenerational education.

Additional Insights: Entrepreneurs differentiated themselves from business majors, characterizing themselves as dreamers, self-starters, optimists, and unconventional lifelong learners. They saw their entrepreneurial journey as one of personal growth, with increasing competency, autonomy, and relatedness over time. Many embraced an extreme ownership mentality, taking full responsibility for their business outcomes. Lastly, their pursuit of education had evolved, driven more by the joy of learning and skill acquisition than the mere intention of starting a business. Their recommendations for community colleges included fostering a stronger connection with the local community and providing hands-on experiences to help bridge the gap between academics and the real-world challenges of entrepreneurship.

Summary of Hypotheses

Hypotheses one through four were analyzed to answer the first research question, and hypotheses five through seven helped to answer the second research question. A list of hypotheses is provided under the “Research Question” section of the study.

Intrinsic Motivation: The first three hypotheses found support, indicating that entrepreneurs are more intrinsically motivated and that their perceived need for autonomy and relatedness is positively associated with this intrinsic motivation. This suggests a trend of self-motivation and the value of interpersonal relationships among entrepreneurs.

Competence and Motivation: A strong correlation was found between the Need for Competence and Creative Competence is positively correlated with both intrinsic and extrinsic motivation. Entrepreneurial Competence was not significantly correlated with either motivation. Although hypotheses 4, 4b, 4c, and 4d were supported with the correlations analysis in Table 4 they were not supported in Table 5 with the multiple regression analysis, indicating that entrepreneurs' perceived need for competence, whether general, creative, or entrepreneurial, is not significantly predictive of their intrinsic or extrinsic motivation. This pattern could suggest that competence is not a primary driving force in entrepreneurs' motivation.

Entrepreneur Competencies and Resources: Hypotheses 5, 5b, 5d, and 5e were supported, indicating a positive association between entrepreneurs' perceived need for increasing competencies and access to business advising, paid education, more comprehensive education, and funding. However, Hypothesis 5c, did not find support, suggesting a negative association with free education, did not find support. This pattern indicates that entrepreneurs see value in resources that require investment (time, money) but don't necessarily devalue free resources.

Autonomy and Flexibility in Education: Hypotheses 6 and 6b found support, suggesting that entrepreneurs who desire more autonomy prefer self-paced and on-demand education, as well as flexibility in the timing of education offerings. This underscores the importance of flexibility and control in learning environments for entrepreneurs.

Networking and Peer Similarity: Hypothesis 7 found support, indicating that entrepreneurs value networking with peers with similar backgrounds. This suggests that entrepreneurs value shared experiences and mutual understanding when building professional networks.

Not in Business vs. In Business: Hypothesis 8 did not find support. No significant difference was found between the two groups across all factors measured, indicating that entrepreneurial motivations and perceptions are similar for those currently in business and those not in business.

Chapter V: Discussion, Conclusion, and Recommendations

"The best entrepreneurs know this: every great business is built around a secret that's hidden from the outside. A great company is a conspiracy to change the world; when you share your secret, the recipient becomes a fellow conspirator."

— Peter Thiel,

The purpose of this chapter is to summarize the findings of this research study, form conclusions, and make recommendations regarding attracting entrepreneurs to the community college through SDT informed educational practice.

The urgency for a revamped entrepreneurship career education and workforce development approach in community colleges has never been higher. California Community Colleges (CCC) face an identity crisis, with declining enrollment rates, low retention, and looming budget cuts posing significant challenges. There is a pressing need to serve mid-career Latino entrepreneurs better, as entrepreneurship is a rapidly growing segment within the general and Latino populations. Shifting away from traditional business management curricula, community colleges can integrate entrepreneurship education across all majors to drive growth and prepare students for jobs or businesses.

The rise of entrepreneurship education in universities since 1980 has been reflected in community colleges, with many offering entrepreneurship courses. However, recent slowdowns in entrepreneurship offerings at 4-year universities present an opportunity for community colleges. Diverse stakeholder interests in entrepreneurship programs and goals at community colleges can help determine the most suitable educational offerings. Community colleges are better positioned to address the needs of adult learners, focus on community-driven teaching, and cater to a diverse student body with unique needs and expectations.

Despite the growth of entrepreneurship education, questions about its success in promoting economic development and helping start small businesses remain unanswered. Studies have found that university entrepreneurship students have a significantly higher degree of positive attitude about their competency than community college students. To improve community college entrepreneurship education, it is crucial to foster student and community engagement, involve local businesses, and adopt more process-oriented teaching methods.

Addressing students' mental health and promoting skill development are also essential aspects of entrepreneurship education. Students must learn to become autonomous architects of their life experiences, overcoming learned helplessness (LH) and embracing learned hopefulness. SDT, based on basic psychological needs, can help explain student engagement from a need’s satisfaction perspective.

This study aims to provide greater insight into the motivations of aspiring entrepreneurs as defined by SDT and understand the role of basic psychological needs in forming attitudes and perceptions of motivations. By developing a new framework for community college entrepreneurial ecosystem building, the foundation for entrepreneurial success can be laid.

In conclusion, community colleges must urgently adopt a new approach to entrepreneurship, career education and workforce development to address the challenges they face. By integrating entrepreneurship education across all majors, fostering student and community engagement, and promoting mental health and skill development, community colleges can better serve their diverse student populations and help drive economic growth.

Summary of Research

This study delved deeper into the motivations of entrepreneurs, as informed by SDT, and their inclination toward a community college education. As outlined in the first two chapters, the

problem lies in the insufficient attention given to entrepreneurial students. This shortfall not only leaves a void in the higher education market but also sidelines the economic development mission of community colleges and overlooks the crucial window for cultivating entrepreneurial ecosystems. At the heart of this issue is a lack of understanding about what drives an individual with entrepreneurial ambitions to seek education, particularly in a community college setting.

The predictive power of intrinsic motivation versus well-internalized extrinsic motivation in shaping entrepreneurial intentions remains unclear. Still, it is a vital aspect concerning SDT as a work motivation model. SDT, grounded in the BNT, categorizes extrinsic motivation into types that vary in their degree of autonomy. BNT identifies autonomy, competence, and relatedness as fundamental psychological needs. This theory elucidates student engagement through the lens of need satisfaction (Xia et al., 2022), offering a fresh perspective to understand the motivations of aspiring entrepreneurs. The primary objectives of this study are encapsulated in two overarching research questions. These questions aim to delineate the specific demographic under study, establish the timeframe, outline the curriculum, and specify the metrics for workforce development. Additionally, they assist in prioritizing inquiries reserved for future investigations. The overarching research questions this study sought to answer are twofold.

1. How do attitudes and perceptions of motivations relate to SDT and influence the intention to act entrepreneurially?
2. How do the attitudes and perceptions of motivations related to SDT influence the intention to seek entrepreneurial education at a community college?

A mixed-method approach was employed, as recommended by Creswell and Creswell (2018). This approach strengthened the data collection process using quantitative and qualitative methods, resulting in more comprehensive and reliable data. Given the topic's complexity, a

mixed-method approach was appropriate for this social science research. The data was collected in a sequential explanatory format, starting with the quantitative data through a survey (Phase 1) and then collecting the qualitative capta through interviews (Phase 2). Data were analyzed using descriptive and inferential statistics. The personal interviews provided access to insights beyond the survey's constructs. Interviews were semi-structured and allowed the interviewer to ask a series of probing questions without the limited time and answers provided by the survey instrument (See Appendix A).

The personal interviews yielded responses like data in survey responses. The interviewer utilized the thematic analysis process informed by Giorgi (1997), van Manon (1997), and Lanigan (2013), as adopted by Haltinner (2008). The four-stage reduction process uncovered themes unique as well as shared. The enduring themes were summarized (See Appendix I) in narrative form to provide a richer illustration of the capta. Similar questions were combined to create a more robust and focused description.

Conclusion and Discussion

The findings of this study have significant implications for understanding the factors that influence entrepreneurial intentions and the pursuit of entrepreneurial education at a community college. By examining the role of basic psychological needs and motivations addressed by SDT, the study provides valuable insights into the intrinsic drivers and external factors that shape entrepreneurial aspirations and decisions.

Research Question One: How do attitudes and perceptions of motivations relate to SDT and influence the intention to act entrepreneurially?

The study found that intrinsic motivations, a key component of SDT, have a significant influence on entrepreneurial intentions. Respondents reported being driven by a deep interest in

entrepreneurship, personal growth, and the opportunity for self-improvement. These aspects, all directly tied to SDT's focus on self-actualization and internal motivation, serve as the fuel igniting their entrepreneurial aspirations. Entrepreneurs' intentions and actions were seen to be primarily driven by this internal gratification and personal fulfillment they derive from their entrepreneurial activities, rather than external factors.

Interestingly, extrinsic motivations, such as the pursuit of financial gain or societal recognition, seemed to have a lesser impact on entrepreneurial intentions. This finding challenges the conventional wisdom that entrepreneurial activities are mainly financially driven. Instead, the significance of intrinsic motivations over extrinsic ones underscores the complexity of entrepreneurial motivations, aligning with the multidimensional perspective proposed by SDT.

Another key factor influencing entrepreneurial intentions that aligns with the principles of SDT is autonomy. Entrepreneurs demonstrated a strong desire for independence in their entrepreneurial activities, which directly impacted their entrepreneurial drive. The freedom to make independent decisions, to control their actions, and to express their unique selves through their work appears to be a powerful driver of entrepreneurial intentions. This suggests that providing potential entrepreneurs with the autonomy to follow their aspirations is essential for sparking and maintaining their entrepreneurial interests.

While the role of connectedness, another pillar of SDT, was found to be moderately influential in entrepreneurial intentions, it still played a significant part. The need for social interaction and a sense of belonging, as well as the importance of supportive networks and communities in the entrepreneurial landscape, came to the fore. Entrepreneurs valued a sense of connection with others involved in similar activities, emphasizing the role of entrepreneurial communities and networks in fostering motivation and intention. Creating opportunities for

entrepreneurs to connect, share experiences, and learn from each other can enhance their motivation and sense of belonging.

Research Question Two: How do the attitudes and perceptions of motivations related to SDT influence the intention to seek entrepreneurial education at a community college?

When examining the intention to seek entrepreneurial education at a community college, the study revealed that practical factors such as flexible scheduling, access to business advisors, self-paced and on-demand education, and the possibility of financial assistance were paramount. These factors resonate with SDT's focus on competence and autonomy, suggesting that potential entrepreneurial students value environments where they have control over their learning and where their abilities can be nurtured and developed.

The role of intrinsic motivation, a core component of SDT, was also clear in the pursuit of entrepreneurial education. Respondents expressed a desire to build their entrepreneurial knowledge and skills to handle real-world challenges more effectively, highlighting the desire for self-improvement and growth. This mirrors SDT's emphasis on intrinsic motivation and the drive to achieve competence.

The importance of connectedness was also apparent in the context of entrepreneurial education. Respondents stressed the value of community colleges fostering stronger links with local communities and providing opportunities for mentor-based teaching. The desire for a sense of belonging and supportive networks aligns well with SDT's emphasis on relatedness. Thus, when designing entrepreneurial education programs, considerations should include opportunities for peer interaction, networking, and community involvement, reinforcing the interconnectedness that SDT identifies as crucial for motivation and engagement.

Furthermore, the interviews provided deeper insights into the motivations and experiences of entrepreneurs. The enduring themes that emerged emphasized the importance of financial autonomy and community connections in entrepreneurial success. Entrepreneurs sought to create value, reduce suffering, and achieve self-actualization while ensuring financial stability. They viewed their entrepreneurial journey as a pathway to personal growth, marked by the development of competencies, risk-taking, and resilience. The pursuit of entrepreneurial education was driven by a desire to acquire necessary skills and bridge the gap between academic knowledge and real-world challenges. Their recommendations for community colleges included fostering stronger connections with the local community, providing hands-on experiences, and offering mentor-based teaching.

Overall, the study contributes to our understanding of the motivations and intentions behind entrepreneurial actions and the pursuit of entrepreneurial education. The findings highlight the significance of intrinsic motivations, autonomy, and connectedness in driving entrepreneurial aspirations. They emphasize the value of flexible learning environments, practical support, and networking opportunities for aspiring entrepreneurs. By considering these insights, educational institutions and support organizations can design programs and initiatives that cater to the unique needs and motivations of entrepreneurs, facilitating their growth, and fostering a thriving entrepreneurial ecosystem.

Comparing and Contrasting Other Studies

This paper aims to critically review and compare the findings of three distinctive studies that have applied the SDT to examine individual motivations in various fields to the findings of this study. Study One, "Individual motivation among entrepreneurs in the creative and cultural industries: A self-determination perspective" by Cnossen et al. (2019) examined the motivations

driving individual entrepreneurs within the creative and cultural industries. Study Two, "A self-determination theory (SDT) design approach for inclusive and diverse artificial intelligence (AI) education" by Xia et al. (2022), employed SDT in the context of K-12 AI education to foster engagement and improve learning outcomes. Study Three, "Entrepreneurial intention among university students in Malaysia: integrating self-determination theory and the theory of planned behavior" by Al-Jubari et al. (2018), integrated SDT with the Theory of Planned Behavior (TPB) to explore the factors impacting entrepreneurial intention among university students. Each of these studies provides unique insights into the role of intrinsic motivations, autonomy, competence, and relatedness in shaping individual intentions and behaviors, adding to our understanding of how the principles of SDT can be applied in various contexts.

All four studies explored different areas of entrepreneurship, education, and motivation using the lens of SDT, a psychological framework that emphasizes intrinsic motivations and the fulfillment of basic psychological needs. SDT posits that human beings are inherently proactive and have a tendency towards growth and development. The theory highlights three basic psychological needs—autonomy, competence, and relatedness—that, when satisfied, foster optimal motivation, performance, and wellbeing. Each of these studies applied SDT in their respective contexts to better understand the motivations driving various behaviors and attitudes.

Comparing this study to the study by Cnossen et al. (2019), both projects applied SDT to the context of entrepreneurship, but with different focuses. Cnossen et al. (2019) sought to understand the motivations driving individual entrepreneurs in the creative and cultural industries (CCI). They found that these entrepreneurs are more intrinsically than extrinsically motivated. This is similar to this study, which also found a higher influence of intrinsic motivations on entrepreneurial intentions.

However, Cnossen et al. (2019) found a negative relationship between the need for autonomy and extrinsic motivation. This contrasts with this study, which found that autonomy is a strong driver of entrepreneurial intentions. Also, unlike this study, where relatedness was found to be moderately influential, Cnossen et al. (2019) found that the need for relatedness was not a significant predictor of motivation in the context of the CCI.

The study by Xia et al. (2022) applied SDT in a different context—K-12 AI education. The researchers designed an AI program that focused on meeting students' needs for autonomy, competence, and relatedness. They found that this needs-supportive approach improved perceived AI learning for students of both genders and various achievement levels, aligning with the SDT principle that fulfilling these basic needs fosters engagement. This approach showed promise for bridging the gap in AI education for girls and low-achieving students.

While this study and Xia et al. (2022) study are different in their focuses—entrepreneurship and AI education—they both underscore the importance of fulfilling the needs of autonomy and relatedness. Xia et al. (2022) also showed that the fulfillment of competence needs (which were a central theme in this study) can enhance learning outcomes in the field of AI education.

Al-Jubari et al. (2018) combined the SDT with the Theory of Planned Behavior (TPB) to investigate the factors affecting entrepreneurial intention among university students in Malaysia. Like this study, Al-Jubari et al. (2018) found that intrinsic motivations can strongly stimulate entrepreneurial intention. However, the two studies diverge in the role of extrinsic motivations. While this study found a lesser impact of extrinsic motivations on entrepreneurial intentions, Al-Jubari et al. (2018) indicated that extrinsically motivated individuals could also have a high entrepreneurial intention, but they are less likely to persist in the face of challenges.

To sum up, all four studies underscore the importance of intrinsic motivations, autonomy, and relatedness in shaping intentions and behaviors in their respective contexts. However, the relative influence of these factors and the role of extrinsic motivations appear to vary across different populations, contexts, and industries. These differences likely reflect the unique characteristics and challenges of the groups being studied, the specific goals they are pursuing, and the broader socio-cultural environments in which they are embedded. Moreover, while this study focused on the entrepreneurial intentions of existing entrepreneurs and their interest in entrepreneurial education, Al-Jubari et al. (2018) investigated entrepreneurial intentions among university students who might be considering entrepreneurship as a future career. The comparison between these studies emphasizes the need to tailor motivational strategies and interventions to the specific needs, goals, and contexts of the target population. Finally, this study and the study by Xia et al. (2022), both used a mixed-methods approach, combining quantitative and qualitative data to provide a more comprehensive understanding of the research topic. This approach allows for a deeper exploration of the complexities and nuances that are often missed when using a single method. This methodological approach could contribute to the richness of the findings in these studies and their potential to provide practical insights for educators, policymakers, and other stakeholders in the respective fields of study.

Recommendations

Recommendations have been made after identifying entrepreneurial community members' perceptions of their education and business aspirations from the research, specifically related to the SDT of motivations. Through a sequential five-stage overview, Figure 14 provides a summary of the recommendations of this study on attracting entrepreneurs to community

college through self-determination informed educational practices. These recommendations are aimed at educators, policymakers, and entrepreneur advocates in the community.

Figure 14

The B.U.I.L.D. Model for Attracting Entrepreneurs to Community College

Bolster Collaboration and Ecosystem building	Underpin Program Alignment and Practicality	Increase Access and Flexibility	Leverage Authenticity and Networking	Disseminate Communication and Promotion
This theme underscores the importance of fostering collaboration between academics and outreach services and creating an entrepreneurial ecosystem. It's about connecting community college resources with local small businesses and startups, and developing a supportive environment for innovation and creativity.	This theme involves aligning programs with local labor market needs and offering practical, competency-based education. It emphasizes the importance of understanding local market demands and providing hands-on, real-world skills.	This theme highlights the need for considering costs and funding options to improve access, and offering flexible learning options. It's about ensuring education is affordable and accessible for all, and that learning options fit with the	This theme emphasizes providing business advising and mentorship, facilitating peer connection and networking, and promoting authentic self-expression and creativity. It suggests that community colleges should leverage local connections for mentorship, promote networking among entrepreneurs, and	This theme underscores the need to promote the value of entrepreneurship education, which involves clearly communicating the benefits and value of entrepreneurship programs to potential students.

Recommendation #1 Bolster Collaboration and Ecosystem Building

Foster Collaboration Between Academics and Outreach Services: Realizing economic development objectives can be challenging due to occasional collaboration gaps between academic entrepreneurship programs and outreach initiatives in community colleges (Woodhouse, personal communication, 2017). Entrepreneurship education programs help bridge community college resources with local small businesses and startups, subsequently promoting entrepreneurial activities within the local community. As such, it is crucial for community colleges to stimulate synergy between these two sectors to augment the efficacy of their entrepreneurship education programs.

Create an Entrepreneurial Ecosystem: Entrepreneurs need an ecosystem that supports their intentional process and planned behavior (Al-Jubari et al., 2018). Community colleges can

attract entrepreneurs by providing a compelling ecosystem that fosters innovation and creativity. Corbin and Schulz (2016) found that when economic development is sought by the community and college, entrepreneurship education programs connect community college resources and local small businesses and startups. This can be achieved through partnering with local economic development agencies, chambers, and coworking spaces (Boyer & Peltason, 1998).

Recommendation #2 Underpin Program Alignment and Practicality

Align Programs with Local Labor Market Needs: Entrepreneurs are interested in education that aligns with the local market's needs (Goldstein, 2017). Community colleges should work closely with local businesses, industries, and community partners to ensure their entrepreneurship programs meet these needs (California State Board of Education et al., 2019). By understanding and addressing the specific demands of the local labor market, community colleges can equip entrepreneurs with the skills and knowledge needed to succeed in their ventures.

Build Programs and Opportunities for Entrepreneurial Activity: Community colleges can become the hub of entrepreneurship education by designing curricula and programming around the nexus of entrepreneurship and workforce development. By creating equitable-ecological conditions to start a business, community colleges will cultivate an entrepreneurial mindset, provide scalable resources, strategies, and tools, and build a sense of entrepreneurial community in community colleges (Corbin & Thomas, 2019).

Offer Practical, Competency-Based Education: Entrepreneurs demand education that provides practical skills necessary for running a business. Community colleges should focus on competency-based education that delivers hands-on, real-world skills (Baron & Ensley, 2006). This could include courses on fundraising, financial management, marketing, and other areas

where entrepreneurs lack competence. Practical education that directly translates into entrepreneurial success will be highly valued.

Recommendation #3 Increase Access and Flexibility

Consider Costs and Funding Options to Emphasize Access: Given the historical mission of community colleges to serve as open-access institutions, community colleges should prioritize providing access to higher education for all individuals, regardless of their socioeconomic status, race, ethnicity, or gender (McPhail & Schaefer, 2018). This is particularly important for underserved and underrepresented populations, such as Latinos, who face unique socio-economic challenges.

While entrepreneurs are willing to invest in their education, the cost remains significant. Community colleges should consider offering a range of pricing options, from free to paid, and explore funding opportunities such as scholarships or grants specifically targeted at entrepreneurs to alleviate the cost burden and encourage enrollment.

Emphasize Autonomy and Flexibility: Entrepreneurs value autonomy and flexibility in their work and education (Cnossen et al., (2019). Community colleges should consider offering flexible learning options such as online, self-paced, and on-demand courses that fit with entrepreneurs' schedules. The timing of classes seems to be a significant factor in their decision to enroll.

Providing a feeling of belonging means providing flexibility in content selection. Community colleges should recognize that students come from diverse backgrounds and have varied goals and needs. By providing a range of program options and support services, community colleges can help students to achieve their educational goals (Somers et al., 2006).

This is particularly important for entrepreneurs, who may require flexibility and tailored support services to balance their business and educational goals.

Recommendation #4 Leverage Authenticity and Networking

Promote Authentic Self-Expression and Creativity: Entrepreneurs highly value the ability to express their authentic selves in their work. Implement project-based learning approaches or entrepreneurship competitions that allow entrepreneurs to express their authentic selves and showcase their creativity. Creating an environment that supports and celebrates entrepreneurial creativity will attract entrepreneurs to community colleges.

Facilitate Peer Connection and Networking: Entrepreneurs feel a strong sense of community and connection with their peers. Hence, community colleges should foster environments that promote networking and collaboration among entrepreneurs. Establish workshops, entrepreneur clubs, or networking events where entrepreneurs can connect, share experiences, and collaborate on projects. These platforms can foster a sense of community and provide valuable networking opportunities.

Provide Business Advising and Mentorship: Entrepreneurs value access to business advising and mentorship. “By freeing resources from courses that can be commoditized, colleges would have more resources to commit to research-based teaching, personalized problem solving, and mentorship" (Govindarajan & Srivastava, 2020, para. 5). Community colleges can leverage their connections with local businesses and alumni to provide entrepreneurs with the guidance they need. This could be through one-on-one advising sessions, guest lectures, or mentorship programs. Access to experienced mentors and advisors can significantly enhance an entrepreneur's chances of success.

Recommendation #5 Disseminate Communication and Promotion

Promote the Value of Entrepreneurship Education: Despite the neutral interest in attending community college for entrepreneurship education, entrepreneurs recognize the importance of increasing their competencies. Community colleges should communicate the benefits and value of their entrepreneurship programs, focusing on how they can help entrepreneurs enhance their skills, network, and succeed in their ventures.

Success Stories and Alumni Achievements: Highlight the success stories and achievements of entrepreneurs who have graduated from community college entrepreneurship programs. Share testimonials from alumni who have successfully launched and grown their businesses with the help of the education and support received from the community college. These stories can serve as powerful examples of the impact and value of entrepreneurship education.

Recommendation for Future Studies

Based on the findings and conclusions of this research study, several recommendations for future studies can be outlined: These recommendations aim to enhance the understanding of entrepreneurial motivations, educational strategies, and the role of community institutions in fostering entrepreneurship. They can provide valuable insights for educators, policymakers, and entrepreneurial support organizations.

1. Understanding Differences in Motivation: Both demographic and context-specific influences on entrepreneurial motivations need further exploration. This could involve studying differences based on age, gender, ethnicity, industry, geographic location, or cultural contexts, providing a more nuanced understanding of the motivational dynamics in entrepreneurship.

2. Exploration of Extrinsic Motivations and External Factors: In addition to examining the impact of extrinsic motivations such as financial gain and societal recognition, studies could also consider the role of external factors such as economic conditions, societal pressures, or family expectations. This could provide insights into how these factors interact with intrinsic motivations and affect entrepreneurial intentions.

3. Longitudinal Study of SDT Motivations: A longitudinal study tracking changes in motivation (both intrinsic and extrinsic), autonomy, relatedness, and competence over time in the entrepreneurial journey could provide insights into how these motivations evolve and influence long-term outcomes, including business success and personal fulfillment.

4. Impact of Mentorship on Entrepreneurial Success: Given the emphasis on the role of mentorship in entrepreneurial education, future research should focus on quantifying its impact. This could include studies on the effectiveness of various types of mentorships (peer-to-peer, expert guidance) and analysis of the most beneficial mentor-mentee relationships.

5. Integration of Entrepreneurship Education across Different Disciplines: Future studies could investigate the effects of integrating entrepreneurship education across all disciplines on student engagement and entrepreneurial outcomes. Research could explore whether this cross-disciplinary approach enhances entrepreneurial intentions and actions.

6. Autonomy, Commercial Success, and Persistence: Building upon the findings around autonomy, future studies could delve deeper into how education can foster a sense of autonomy in budding entrepreneurs, how it interacts with commercial success, and how it influences the ability of entrepreneurs to persist in the face of obstacles.

7. Community Impact on Entrepreneurial Education: More research is needed on how community colleges could foster local entrepreneurial ecosystems. Successful case studies where

colleges have worked closely with local stakeholders could be analyzed to derive effective strategies for enhancing entrepreneurial activity.

8. Evaluation of Entrepreneurship Programs in Community Colleges: Future research should assess the effectiveness of existing entrepreneurship programs in community colleges. This could include exploration of factors such as program structure, curriculum, faculty involvement, student satisfaction, and the success of program graduates.

9. Creative Competence and Flow: Future studies should further explore the role of creative competence and the concept of "flow" in entrepreneurial motivation. They could also look at how to enhance creative competence and cultivate "flow" in entrepreneurship.

10. Intersectionality in Entrepreneurship: More studies should examine how intersectionality (gender, race, social class, etc.) influences entrepreneurial motivations and outcomes. This could offer valuable insights into the unique experiences and challenges faced by diverse entrepreneurs.

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Appendix A

Semi-Structured Interview Guide

The following interview questions were an invitation to advance the understanding of the study further.

Grand tour question: What does entrepreneurship success look/feel like to you?

Probing questions related to Research Question 1:

- How would you define your entrepreneurial ability?
- What motivates you to do your entrepreneurial activity?
- How does your entrepreneurial activity provide a feeling of authentic autonomy?
- How does your entrepreneurial activity create a feeling of connectedness to others?
- What drives your creativity?
- Are there any other motivations related to your entrepreneurial aspirations?

Probing questions related to Research Question 2:

- What influences your intention to seek entrepreneurial education at a community college?
- What barriers reduce your intention to seek entrepreneurial education at a community college?
- What changes would you like the community college to make to entrepreneurial education?

Appendix B

Initial Survey Cover Letter

Subject: 5 Minute Survey to Help Inform Entrepreneurial Support / *Asunto: Encuesta de 5 minutos para ayudar a informar el apoyo empresarial*

Hello,

You are invited to complete a survey to develop a better understanding of entrepreneurial motivation. We value your feedback!

Follow this link to the Survey:

${l://SurveyLink?d=Take the Survey}

Or copy and paste the URL below into your internet browser:

${l://SurveyURL}

This study aims to help increase the understanding of entrepreneurial motivations. Insights gained will inform educational practice and services. The survey should take approximately 5 minutes to complete.

Feel free email me if you have questions.

Brandon Napoli

Santa Cruz Small Business Development Center

sbdc@cabrillo.edu

Hola,

Le invitamos a completar una encuesta para desarrollar un mejor entendimiento de lo que motiva a los empresarios. ¡Valoramos sus comentarios!

Siga este enlace a la Encuesta:

${l://SurveyLink?d=Take the Survey}

O copie y pegue la siguiente URL en su navegador de Internet:

${l://SurveyURL}

Este estudio tiene como objetivo ayudar a aumentar el entendimiento de las motivaciones empresariales. Los conocimientos adquiridos informarán la práctica y los servicios educativos.

La encuesta debe tomar aproximadamente 5 minutos para completar.

No dude en llamarme o enviarme un correo electrónico si tiene preguntas.

Brandon Napoli

Centro de Desarrollo de Pequeñas Empresas de Santa Cruz

sbdc@cabrillo.edu

Siga el enlace para optar por no recibir futuros correos electrónicos:

${l://OptOutLink?d=Click here to unsubscribe}

Appendix C

Follow Up Survey Cover Letter

Subject: 5 Minute Survey to Help Inform Entrepreneurial Support / *Asunto: Encuesta de 5 minutos para ayudar a informar el apoyo empresarial*

Hello,

To finish my doctorate, I am researching entrepreneurial motivation and their interest in attending a community college. I would very much appreciate your support.

You are invited to complete a survey to develop a better understanding of entrepreneurial motivation. We value your feedback!

Follow this link to the Survey:

${l://SurveyLink?d=Take the Survey}

Or copy and paste the URL below into your internet browser:

${l://SurveyURL}

This study aims to help increase the understanding of entrepreneurial motivations. Insights gained will inform educational practice and services. The survey should take approximately 5 minutes to complete.

Feel free to email me if you have questions.

Brandon Napoli

Santa Cruz Small Business Development Center

sbdc@cabrillo.edu

Hola,

Para terminar mi doctorado, estoy investigando la motivación empresarial y su interés en asistir a un colegio comunitario. Agradecería mucho su apoyo.

Le invitamos a completar una encuesta para desarrollar un mejor entendimiento de lo que motiva a los empresarios. ¡Valoramos sus comentarios!

Siga este enlace a la Encuesta:

${l://SurveyLink?d=Take the Survey}

O copie y pegue la siguiente URL en su navegador de Internet:

${l://SurveyURL}

Este estudio tiene como objetivo ayudar a aumentar el entendimiento de las motivaciones empresariales. Los conocimientos adquiridos informarán la práctica y los servicios educativos.

La encuesta debe tomar aproximadamente 5 minutos para completar.

No dude en llamarme o enviarme un correo electrónico si tiene preguntas.

Brandon Napoli

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Siga el enlace para optar por no recibir futuros correos electrónicos:

${l://OptOutLink?d=Click here to unsubscribe}

Appendix D

IRB Approval Letter

Attracting Entrepreneurs to Community College through Self Determination Theory Informed Educational Practice

Dear Brandon Napoli,

In accordance with Federal regulations, your project, *Attracting Entrepreneurs to Community College through Self Determination Theory Informed Educational Practice* , was reviewed by a member of the University of Wisconsin - Stout Institutional Review Board and was determined to be **Exempt** from full review under the below Categories in accordance with Federal Policy for the Protection of Human Subjects (45 CFR 46).

Category: Category 2.(ii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).
Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation.

You project is hereby approved and deemed exempt from further IRB review for 5 years from March 1, 2023. If a renewal of this approval is needed, it is to be submitted at least 10 working days prior to the expiration date.

Responsibilities for Principal Investigators of UW-Stout IRB-approved research:

1. No subjects may be involved in any study procedure prior to the IRB approval date or after the expiration date.
2. All unanticipated or serious adverse events must be reported to the IRB.
3. All protocol modifications must be approved prior to implementation unless they are intended to reduce risk.
4. All protocol deviations must be reported to the IRB.
5. All recruitment materials and methods must be approved by the IRB prior to being used.
6. Research which involves financial compensation to participants must follow appropriate UW-Stout payment procedures.
7. Consent forms must adhere to UW-Stout IRB standards and indicate that the research has been approved by the UW-Stout IRB as required by federal regulations (see UW-Stout IRB consent form templates for more details).
8. Researchers conducting human subjects' research under an approved exempt category are still ethically bound to follow the basic ethical principles of the Belmont Report, as reflected in the practice of obtaining informed consent from participants and adherence to IRB approved methods.
9. Any modifications to the approved study must be submitted for review through Cayuse IRB. All approval letters and study documents are located within the Study Details in Cayuse IRB.

Thank you for your cooperation with the IRB and best wishes with your project. If you have questions, please contact the IRB office at irb@uwstout.edu or by phone 715-232-4042, and your question will be directed to the appropriate person.

Sincerely,

Michael Mensink, Ph.D.; IRB Chair

University of Wisconsin-Stout Institutional Review Board

Appendix E

UW-Stout IRB Signed Consent Form Survey

Study Title:	***Attracting Entrepreneurs to Community College through Self Determination Theory Informed Educational Practice***

Researcher Names	Department	Contact Information
Brandon Napoli	CTE	napolib3970@my.uwstout.edu

Faculty Advisor	Department	Contact Information
Dr. Urs Haltinner	CTE	haltinneru@uwstout.edu

Overview of the Research Study

Participation invitation:	You are being asked to complete the following survey to help inform a better understanding of entrepreneurial motivation. Your response means A LOT! This study aims to help increase the understanding of entrepreneurial motivations. Insights gained will inform educational practice and services, including those at Cabrillo College, El Pajaro CDC, and the Santa Cruz Small Business Development Center. Your response will be kept confidential, and any aggregation of findings will preserve anonymity. The survey should take approximately 10 minutes to complete.
Who can participate in this study:	Santa Cruz Small Business Development Center Clients, El Pajaro CDC Clients, and Cabrillo College students 18 years or older.
What you will be asked to do:	You will be asked to complete an online 10-minute survey consisting primarily of multiple-choice questions to clarify your attitudes and perceptions of your motivations.

Time commitment:	The survey should take you approximately 10 minutes. You may take breaks, save your work and revisit it to complete it later.
Participation risks:	Your participation in this survey is voluntary. If you choose not to participate or stop your participation, you will have no negative consequences. Your decision to participate or not in this study will not change your relationship with the researchers or the University of Wisconsin-Stout. The researcher(s) do not believe this study will cause discomfort or other risks beyond what you usually experience daily.
What will be done to minimize your participation risks:	Your participation is completely voluntary. Participation and answers will be kept confidential; any data publication will protect your anonymity.
Participation benefits:	There is no tangible benefit for participation. No monetary compensation will be provided. You may benefit from your participation through revised educational policy and practice to better serve your entrepreneurial aspirations.

Confidentiality and Data Protection

Who will have access to your data:	Only the researcher, a data analytics specialist at the University of Wisconsin Stout, and the dissertation committee chair will have access to your data.
Data protection and future use:	Your data is protected by a confidential agreement signed by the researcher. The agreement ensures the privacy and security of your data by providing storage security and limited appropriate uses. Data storage will be kept on Qualtrics, an online surveying tool supplied with the University of Wisconsin Stout. The researcher will use only an assigned password-protected work computer by Cabrillo College to access that data. The researcher has a private office with a lock that restricts access to only the researcher. The appropriate use of data for future use will ensure you remain anonymized. A redaction to non-identifiable data (randomly assigned number or non-gender pseudonym) will ensure your participation and data are not named or identified.
Mandated reporting requirements:	The investigators for this study are mandated reporters, and if we suspect a child or vulnerable adult is being abused or neglected, we are required by law to report this information to the appropriate legal authorities. *Include this statement only if required – Researchers must delete this section if not appropriate*

Protection of Human Research Subjects

If you have questions about this study, please contact:	Brandon Napoli Researcher napolib3970@my.uwstout.edu
If you have concerns about this study or your rights as a participant, please contact:	Institutional Review Board Chair University of Wisconsin-Stout Robert S. Swanson Learning Center #207 715-232-4042 irb@uwstout.edu
Your right to withdraw:	Your participation in this study is entirely voluntary. You may choose not to participate or stop the study or survey without any adverse consequences. However, should you choose to participate and later wish to withdraw from the study, there may be no way to identify your data after it has been submitted. If you are participating in an anonymous survey, once you submit your responses, the data cannot be linked to you and cannot be withdrawn.
UW-Stout IRB approval statement:	The University of Wisconsin-Stout's Institutional Review Board (IRB) has reviewed and approved this study. The IRB has determined that this study meets the ethical obligations for human subjects research as required by federal law and UW-Stout policies.

Consent Statement

I am 18 years of age or older and agree to participate in this study. I understand that I may stop my participation or withdraw my consent at any time during active participation.

☐ YES ☐ NO

Implied Consent Statement

By completing the following survey, I am indicating that I agree to participate in this study and understand that I may stop my participation or withdraw my consent at any time during active participation.

Appendix F

Qualtrics Survey

Please complete the following questions to the best of your ability.

Q3. I am 18 years of age or older and agree to participate in this study. I understand that I may stop my participation or withdraw my consent at any time during active participation.

- Q5. What is your current occupation? Fill in the blank

Q6. What do you enjoy doing as a hobby?

- Fill in the blank

Creatives Motivation Scale

Q7. Intrinsic motivation: Entrepreneurial activity interest me (seven-point Likert scale, from totally disagree to totally agree)

- because it is one of the best ways to develop other aspects of myself;
- because it gives me pleasure to learn more about it;
- because I thought that it would be a good way to develop aspects of myself that I value.

Q8. Extrinsic motivation: I am (I aim to be) an entrepreneur (seven-point Likert scale, from totally disagree to totally agree)

- because people will praise me for what I do;
- because I can become rich by it;
- because people around me reward me when I do it.

Creatives Need Scale

Q9. Need for autonomy (five-point Likert scale, from not at all to extremely)

- To what extent do you have the feeling to do your entrepreneurial activity because you want to (and not because you are being controlled or under pressure)?
- To what extent do you feel choices and freedom of action in your entrepreneurial activity?
- To what extent does your entrepreneurial activity allow you to express your authentic self?

Q10. Need for relatedness (five-point Likert scale, from not at all to extremely)

- How close and connected do you feel with other people doing the same entrepreneurial activity?
- How strongly do you feel related to people doing the same entrepreneurial activity?
- To what extent do you experience a sense of friendship with other people doing the same entrepreneurial activity?

Creative Competence Scale

Q11. How do you compare yourself to people with the same entrepreneurial activity in your ability to (seven-point Likert-scale, from much worse to much better)

- be creative;
- think creatively.

Entrepreneurial Competence Scale

Q12. How do you compare yourself to people with the same entrepreneurial activity in your ability to (seven-point Likert-scale, from much worse to much better)

- successfully identify new (business) opportunities;
- commercialize an idea or new development;
- raise funds for a new business;
- sell a new product or service.

Community College Education Interest Scale

1. Q13. What interest do you have to attend a community college to further your entrepreneurship ability (seven-point Likert-scale, from very little to much)
2. Q14. What influence would the following have on your interest to attend a community college to further your entrepreneurship ability (five-point Likert-scale, do not prefer to prefer a great deal)

- The education is offered as a for-credit (paid)
- The education is offered as a non-credit (free)
- The time of day the education is offered
- The length of the education
- The education is self-paced and on-demand
- Access to business advisors
- Access to funding
- Classmates with similar backgrounds to yours
- Other _____

3. Q15. What influence would the following have on your interest to attend a community college to further your entrepreneurship ability (five-point Likert-scale, from not at all important to extremely important)

- By attending your competency will increase
- By attending your autonomy will increase
- By attending your connectedness with others will increase

Demographics

1. Q16. Are you currently?

- A Cabrillo College student?
- Santa Cruz Small Business Development Center Client?

- El Pajaro CDC Client?

2. Q17. Are you currently operating your own business?

- Please use the following definition to define if you are currently in business.

- One that has completed required registration(s), if applicable, with the local, state, and/or Federal Government (e.g., DBA registration, business license, agency-issued tax identifications, etc.) and at least one of the following:

- Has documented a transaction from the sale of a product or professional or personal service for the purpose of gain or profit;
- Has contracted for or compensated an employee(s) or independent contractor(s) to perform essential business functions;
- Has acquired debt or equity capital to pursue business operations (e.g., to purchase inventory, equipment, building, business, etc.); or
- Has incurred business expenses in the operation of a business.

- Yes, I am in business
- No, I am not in business

3. Q1. What is your year of birth? (ex. 1990)
4. Q5. How would you best describe yourself? Check all that apply

a. White
b. Black or African American
c. American Indian or Alaska Native
d. Asian
e. Native Hawaiian or Pacific Islander
f. Other

5. Q23. How would you best describe your ethnicity?
6. Q6. What is your sex?

a. Male
b. Female
c. Other

7. Q18. Which of the following industries most closely matches the one in which you are employed?

a. Forestry, fishing, hunting or agriculture support
b. Real estate or rental and leasing
c. Mining
d. Professional, scientific or technical services
e. Utilities
f. Management of companies or enterprises
g. Construction
h. Admin, support, waste management or remediation services
i. Manufacturing
j. Educational services
k. Wholesale trade
l. Health care or social assistance
m. Retail trade
n. Arts, entertainment or recreation
o. Transportation or warehousing
p. Accommodation or food services

q. Information

r. Other services (except public administration)

s. Finance or insurance

t. Unclassified establishments

u. Other

Thank you for participating in this survey. To further the understanding of motivations and entrepreneurial activities the researcher is inviting you to participate in a one on one telephone interview for 15 minutes. If you are interested, please answer "Yes" below.

- Yes, I would like to participate in the interview. Click here to choose a time to be contacted.
- No, I would not like to participate in the interview.

Thank you for completing the survey. Your responses will be kept confidential and any aggregation of findings will preserve anonymity.

Thank you again for taking the time to complete this survey.

Sincerely,

Brandon Napoli

Appendix G

Cover Letter for Interview

Subject: Thank You for Opting into a Telephone Interview

Dear [CONTACT_FIRST],

You are being asked to participate in the following phone interview to help inform a better understanding of entrepreneurial motivation and interst in attending a community college. Your response means A LOT! The purpose of this study is to help increase the understanding of entrepreneurial motivations. Insights gained will inform educational practice and services including those at Cabrillo College, El Pajaro CDC and the Santa Cruz Small Business Development Center. Your response will be kept confidential and any aggregation of findings will preserve anonymity. The interview should take approximately 15 to 45 minutes to complete.

Please sign up for your interview appointment by clicking on the link here.

Feel free to call or email me if you need help answering any of the questions at 831-479-6136 and sbdc@cabrillo.edu

Best regards,

Brandon Napoli

Santa Cruz Small Business Development Center

www.santacruzsbdc.org

Appendix H

UW-Stout IRB Signed Consent Form Interview

Informed Consent for Research Participation

Study Title:	***Attracting Entrepreneurs to Community College through Self Determination Theory Informed Educational Practice***

Researcher Names	**Department**	**Contact Information**
Brandon Napoli	CTE	napolib3970@my.uwstout.edu

Faculty Advisor	**Department**	**Contact Information**
Dr. Urs Haltinner	CTE	haltinneru@uwstout.edu

Overview of the Research Study

Participation invitation:	You are being asked to participate in the following interview to help inform a better understanding of entrepreneurial motivation. Your response means A LOT! The purpose of this study is to help increase the understanding of entrepreneurial motivations. Insights gained will inform educational practice and services, including those at Cabrillo College, El Pajaro CDC, and the Santa Cruz Small Business Development Center. Your response will be kept confidential, and any

	aggregation of findings will preserve anonymity. The interview should take approximately 15 to 45 minutes to complete.
Who can participate in this study:	Santa Cruz Small Business Development Center Clients, El Pajaro CDC Clients, and Cabrillo College students 18 years or older.
Study Description:	This study aims to understand further the following questions: 1. How do attitudes and perceptions of motivations relate to Self Determination Theory influence the intention to act entrepreneurially? 2. How do the attitudes and perceptions of motivations related to Self Determination Theory influence the intention to seek entrepreneurial education at a community college?
What you will be asked to do:	You will be asked to partake in a 15 to 45-minute telephone interview consisting primarily of open-ended questions to clarify your attitudes and perceptions of your motivations.
Time commitment:	The interview should take approximately 25 minutes.

Participation risks:	Your participation in this interview is voluntary. If you choose not to participate or stop, you will have no negative consequences. Your decision to participate or not in this study will not change your relationship with the researchers or the University of Wisconsin-Stout. The researcher(s) do not believe this study will cause discomfort or other risks beyond what you usually experience daily.
What will be done to minimize your participation risks:	Your participation is completely voluntary. Participation and answers will be kept confidential; any data publication will protect your anonymity.
Participation benefits:	There is no tangible benefit for participation. No monetary compensation will be provided. You may benefit from your participation through revised educational policy and practice to better serve your entrepreneurial aspirations.

Confidentiality and Data Protection

Who will have access to your data:	Only the researcher, a data analytics specialist at the University of Wisconsin Stout, and the dissertation committee chair will have access to your data.
Data protection and future use:	Your data is protected by a confidential agreement signed by the researcher. The agreement ensures the privacy and security of your data by providing storage security and limited appropriate uses. Data storage will be kept on Qualtrics, an

	online surveying tool provided by the University of Wisconsin Stout. The researcher will use only an assigned password-protected, work computer by Cabrillo College to access that data. The researcher has a private office with a lock that restricts access to only the researcher. The appropriate use of data for future use will ensure you remain anonymized. A redaction to non-identifiable data (randomly assigned number or non-gender pseudonym) will ensure your participation and data are not named or identified.
Mandated reporting requirements:	The investigators for this study are mandated reporters. If we suspect a child or vulnerable adult is being abused or neglected, we are required by law to report this information to the appropriate legal authorities. *Include this statement only if required – Researchers must delete this section if not appropriate*

Protection of Human Research Subjects

If you have questions about this study, please contact:	Brandon Napoli Researcher napolib3970@my.uwstout.edu

If you have concerns about this study or your rights as a participant, please contact:	Institutional Review Board Chair University of Wisconsin-Stout Robert S. Swanson Learning Center #207 715-232-4042 irb@uwstout.edu
Your right to withdraw:	Your participation in this study is entirely voluntary. You may choose not to participate or to stop the study or survey without any adverse consequences to you. However, should you choose to participate and later wish to withdraw from the study, there may be no way to identify your data after it has been submitted. If you are participating in an anonymous survey, once you submit your responses, the data cannot be linked to you and cannot be withdrawn.
UW-Stout IRB approval statement:	The University of Wisconsin-Stout's Institutional Review Board (IRB) has reviewed and approved this study. The IRB has determined that this study meets the ethical obligations for human subjects research as required by federal law and UW-Stout policies.

Implied Consent Statement

By completing the following interview, I am indicating that I agree to participate in this study and understand that I may stop my participation or withdraw my consent at any time during active participation.

Appendix I

Thematic Reduction Summary of Declared Themes

Question 1: How would you define success as an entrepreneur?
Themes: 1. Financial autonomy 2. Connected with community 3. Competency of services 4. Business and time management is self-sufficient in creating freedom of action 5. Goals can be on a spectrum of revenue and positive impact. 6. I feel like being able to do what I set out to do. 7. Creating value through an iterative process with others that makes a positive difference.
Question 2: How would you define your entrepreneurial ability?
Themes: 1. Making an idea into a business 2. “Fall six times, get up seven.” It takes a lot of failure to be successful as an entrepreneur.” 3. A capacity for risk and failure. 4. An ability to build relationships and be creative. 5. A deep passion and thirst for knowledge. 6. Enthusiasm, resilience, optimism.

7. Being born with and cultivating a mindset of removing obstacles, aiming for self-actualization.
8. Optimistic, growth mindset, measured confidence.

Question 3: What motivates you to do your entrepreneurial activity?

Themes:

1. A need of autonomy, purpose and connectedness
2. Pragmatic positive influence
3. Making a better future
4. Providing self-actualization
5. Having a positive impact and reducing suffering.
6. Financial security, validation, and the freedom to do/create what I love.
7. To be and help others be fully expressed, a model of doing one's best and obtaining the highest good.
8. Having the independence to create value for people, including those I love.

Question 4: How does your entrepreneurial activity provide a feeling of authentic autonomy?

Themes:

1. Authenticity from creating a message of deep purpose and limitless potential
2. Self agency to create my own idea
3. Autonomy is the freedom of action and being one's own boss
4. Authenticity is having a spiritual connection to the work and the client

5. Authentic autonomy is doing what I am suppose to do
6. Autonomy is very meaninginful and provides relief from being dictated.
7. Fulfillment from meaningful work defined as being important to society and the market.
8. Creating long term change creates deeper fulfillment and feeling time is valued.
9. Having no one control me and income sources that do not effect my creativity.
10. Sufficient income to sustain my family and create jobs.
11. My efforts directly effect my success.

Question 5: How does your entrepreneurial activity create a feeling of connectedness to others?

Themes:

1. Interconnectedness provides limitless potential
2. Connectedness provides value alignment and integrity of brand in business beyond transactional relationship
3. Identity and promise with synergy
4. Having my idea make a positive difference in the community
5. Connectedness from empathizing on the success of clients
6. Connectedness from investing in the purpose of serving humanity
7. Entrepreneurs' rarity makes connecting difficult.
8. People are generally supportive of the importance and difficulty of the role
9. Unique connections are made within the industry you operate.
10. Work connections are foundational to entreprenuerial activity

Question 6: What drives your creativity?
Themes: 1. Removing the noise to hear the signal. 2. Listening to the muse 3. A practice of being in the moment while working with the unknown, a purpose, and potential 4. Being interested, in communication with the subconscious, exposed to new things, nature, and new ideas. 5. Creativity is a need of entrepreneurship and requires going deep into it. 6. Give the world a unique product of value and use.
Question 7: Are there any other motivations related to your entrepreneurial aspirations?
Themes: 1. A strong conviction on service, self-discovery, and humanity 2. Solving a problem that alleviates suffering and hardship. 3. A feeling of duty to keep myself interested. 4. To reach people and communicate to create impact. 5. In the short run, independence to create, do mental exercises that keep me young, excited, and busy. 6. In the long run, creating tremendous value worth a lot of money and gifting a business to my son.
Question 8: What influences your intention to seek entrepreneurial education at a

community college?
Themes: 1. Competency in needed skill required by clients 2. Soft and hard skills are necessary to run a business but not required in business school 3. Intimacy and excellence in education 4. Target marketing 5. The need for trusted advising in practical areas 6. A preference for quick, customized advice 7. Provides answers and support ideally in person 8. Prioritizing based on believing it will help me 9. A community of like-minded individuals that provides a network and support system. 10. Education is important to entrepreneurs. 11. A sweet spot between trusted credentials and affordability. 12. Providing mentors who have made an impact on society and have an ROI that could further my quest by using their formula for success in the form of workshops 13. Local access to knowledge is offered to those who are unsure of their next steps.
Question 9: What barriers reduce your intention to seek entrepreneurial education at a community college?
Themes: 1. Enrollment access through work experience and knowledge 2. Student choice - Meeting the needs and preferences of individual students

3. Scarcity of time
4. Motivation from thirst for knowledge priorities time management
5. High level of education quality demanded
6. Time management and having a clear understanding of what the first steps would be
7. Limited time and energy increase threshold for investment
8. Student loans aren't attractive to entrepreneurs with more risk in repayment abilities.
9. Costs of living and time to study are the barriers.
10. Resource constraints of time and money. Lack of quality of personalities and teachers.
11. Entrepreneur is at the mercy of building their thing.
12. Time of day with night availability.

Question 10: What changes would you like the community college to make to entrepreneurial education?

Themes:

1. Demand theory -aligning programs and services with local labor market needs.
2. Mentor-based teaching
3. Time and location flexibility
4. Partnering with other schools
5. Entrepreneurship is not business management.
6. Investment from the business community
7. Providing greater access for underserved student choice
8. A space with synergy…expediential creativity
9. Provide curated resources for entrepreneurs and market directly to them

10. Form partnerships with universities that have entrepreneur alumni
11. Community colleges that excel at intergenerational education that increases the empathy-a core skill of an entrepreneur
12. Tools to prototype ideas in a short period of time.
13. Technical, practical skills
14. Direct work experience with local entrepreneurs, participation in start-up contests, and networking with lenders to build a supportive community.
15. To be in a community with other entrepreneurs, those that inspire, connect, and give good ideas.
16. Leadership development through workshops that provide exposure to impactful business aspects of the community
17. Entrepreneurs are a different animal and a different animal than business majors.
18. "Entrepreneurs have this you know, most of us are probably college dropouts. Want to prove we can do it on our own and benefit from the community college you know, aim for the scrappiness."
19. Bring the community into the classroom…increase that connection to the community…we get to be entrepreneurs in the community.
20. "…put the community in community college"
21. A local gap year of service with multiple internships to connect the community to the college
22. Having workshops where you can learn from others through brainstorming in a maker space environment.
23. Dedicated maker space-like spaces to solve common problems, receive feedback, and

get inspired from those with similar mindsets on similar journeys. A space that helps to generate ideas, the motivation to iterate forward, and surmount frustrations.

24. A connectedness through a program that provides confidence and excitement through challenging feedback and observation of other entrepreneurs' unique pursuits

Question 11:Is there anything else you'd like to share that would be helpful regarding a better understanding of entrepreneur motivations and attendance at a community college?

Themes:

1. Calculating and mitigating risk is a need
2. Understanding the entrepreneurs' why?
3. Insecurities due to incompetence stop progress
4. Seeing others like me accomplish their ideas inspires me
5. Hard to start a business from scratch
6. Create a clear connection between how the program - comprised of academics and networking- will help entrepreneurs successfully reach their goals.
7. Access to experts, high-stakes investments, and consistent problem-solving.

Question 12: Is there anything related to, again, motivations of why you do this now versus why you started as an entrepreneur?

Themes:

1. A sense of accomplishment.
2. Purpose through increasing competency, and relatedness

3. Increased competency
4. Increased connectedness
5. Increased autonomy
6. Growing in empathy-informed design
7. Business success requires specialization of product or service and generalization of managing and leading skills
8. The tension between pushing the limits and knowing one's limitations

Question 13:What is your perspective on management as a business owner versus just management when you're another employee? What's the difference or what's similar?

Themes:

1. Extreme ownership of the process and outcome.
2. Chiefly responsible

Question 14: Would you say you pursue education differently now than 10 or 20 years ago? And if so, how?

Themes:

1. “I wasn't interested in having my own business... I was never in school at that time the for the joy and pleasure of learning or the satisfaction of learning a new skill and accomplishing a new trade.

Question 15: How would a community college differentiate itself in that space of entrepreneurial support?

Themes: 1. Affordability, availability, and resourcefulness
Question 16: You mentioned there's a difference between an entrepreneur and like a business major, could you describe that more in detail?
1. "...…entrepreneurs, we are dreamers. We are self-starters. We are optimistic we are enthusiastic and we are unconventional, and most of us probably do not have degrees from higher education. That we're lifelong learners." 2. Business majors want to optimize the model. Entrepreneurs want to create the model.