

Lesley University

DigitalCommons@Lesley

Mindfulness Studies Theses

Graduate School of Arts and Social Sciences
(GSASS)

Spring 5-16-2020

Mindfulness and Retention: A Potential Solution to the Lack of Persistence of Community College Students

Sandra Parsons
sparson3@lesley.edu

Follow this and additional works at: https://digitalcommons.lesley.edu/mindfulness_theses



Part of the [Educational Assessment, Evaluation, and Research Commons](#), [Other Education Commons](#), [Social and Behavioral Sciences Commons](#), and the [Social and Philosophical Foundations of Education Commons](#)

Recommended Citation

Parsons, Sandra, "Mindfulness and Retention: A Potential Solution to the Lack of Persistence of Community College Students" (2020). *Mindfulness Studies Theses*. 30.
https://digitalcommons.lesley.edu/mindfulness_theses/30

This Thesis is brought to you for free and open access by the Graduate School of Arts and Social Sciences (GSASS) at DigitalCommons@Lesley. It has been accepted for inclusion in Mindfulness Studies Theses by an authorized administrator of DigitalCommons@Lesley. For more information, please contact digitalcommons@lesley.edu, cvrattos@lesley.edu.

MINDFULNESS & RETENTION

Mindfulness and Retention: A Potential Solution to the Lack of Persistence of Community
College Students

Sandra Parsons

May 3, 2020

Dr. Melissa Jean

Dr. Andrew Olendzki

MINDFULNESS & RETENTION

MINDFULNESS & RETENTION

Abstract

Retention of community college students has many obstacles and unknowns. Students leave school and abandon their dreams of a college education for various reasons, such as lack of financial support, family support, and campus support. Efforts to research and develop retention practices and theories have been pursued for more than fifty years. Researchers and higher education institutions believe that incorporating such practices as first-year programs, learning communities, and tutoring will help in their retention efforts. While some of these practices have improved college student persistence, their efficacy has not been demonstrated for all students, specifically for those who attend community college. Simultaneously, research and practices are being developed around the topic and theory of mindfulness meditation. Mindfulness meditation practices have found their way onto college campuses but not with the specific focus of improved student retention. This paper explores the research and discoveries about retention theories and practices as well as what recent findings are discovering about the applications of mindfulness meditation in various settings. This paper contends that by applying mindfulness meditation practice, higher education institutions (and specifically community colleges) could see an increase in student retention and persistence to graduation and degree completion.

Keywords: mindfulness meditation, retention, community college, persistence, benefits

MINDFULNESS & RETENTION

Table of Contents

	Page
Abstract	ii
Table of Contents	iii-iv
Introduction	1
Literature Review	3
Retention	4
Theories, Models, and Background	5
Applications and Interventions	7
Factors that influence retention	10
Lack of self-efficacy	10
Lack of social support	11
Distractions and growth mindset	13
Other factors	14
Mindfulness	14
Applications and Interventions	15
Benefits	18
Increase in self-acceptance	18
Increase in compassion	19
Ability to be present and regulate emotions	20
Improved social well-being and overall health	21
Reduction in stress levels	22
Discussion	26

MINDFULNESS & RETENTION

Arguments	27
Argument 1: Students could develop self-acceptance	28
Argument 2: Students could learn how to exemplify compassion	32
Argument 3: Students could learn to be present and regulate their emotions	35
Argument 4: Students could learn to improve their overall health and wellness	37
Argument 5: Students could see a reduction in their stress levels	40
Conclusion	46
References	49

MINDFULNESS & RETENTION

Mindfulness and Retention: A Potential Solution to the Lack of Persistence of Community College Students

The study of student retention is not new to institutions of higher education. Private, public, 2-year, 4-year, for-profit, non-profit; all types of colleges and universities are interested in recruiting and retaining students. Over the past 50 years, the study of retention has gained much attention, and institutions have begun to look at their attrition, persistence, and graduation rates. During the process of applying to colleges, prospective students may conduct research about how many students enroll, graduate, and accomplish their educational goals. Within the institution, these numbers and statistics are not only a matter of pride but come with financial incentives. Schools are often funded by the number of students in classes. Therefore, the more students who can be retained from semester to semester, the more money will be made available for the school.

Colleges and universities have employed and experimented with many forms of retention measures and continue to implement and study various methods to improve student retention. These methods have been the focus of studies for the past half a century, yet no consistent and measurable solution has been found. While some researchers suggest that learning communities for first year students are the key to success, others suggest that high school GPA and family support are more indicative of whether or not a student will persist to graduation.

The study of mindfulness in the college setting is still in its infancy, and a limited number of studies exist. However, there are numerous studies discussing the application and benefits of this ancient practice outside of higher education. Mindfulness has been defined as “being fully aware of what’s happening both inside themselves and outside themselves in a non-judgmental way, manifesting acceptance, curiosity, and openness” (Crowley & Munk, 2017). First practiced by Buddhist and other ancient spiritual practitioners, mindfulness has found its way into modern

MINDFULNESS & RETENTION

society and is now being contemplated as a potential solution to common ailments such as Post Traumatic Stress Disorder (Smith et al., 2011), Attention Deficit and Hyperactivity Disorder (Cairncross & Miller, 2020), and Obsessive-Compulsive Disorder (Hale, Strauss & Taylor, 2013). Mindfulness is being taught to CEOs (Desrosiers, 2019), elementary school teachers (Jennings et al., 2017), and inmates in correctional facilities (Samuelson et al., 2007).

Mindfulness has even found its way onto college and university campuses as a way to help music students overcome performance anxiety (Diaz, 2018) and nursing students cope with the pressures of becoming a nurse (Fontaine, 2014).

It is the intention of this paper to discuss how mindfulness, when applied holistically to a college campus, may improve retention and ultimately the graduation rate of community college students. Specifically, this paper will look at five benefits of mindfulness meditation, and how they could help to support students and counteract common reasons they do not persist to graduation or program completion. Having found its way into modern society, this ancient practice could be used to help students learn self-acceptance and compassion, regulate their emotions by being more present, improve their overall health and well-being, and reduce their stress levels both in and outside the classroom. Mindfulness meditation has been found to improve all of the above areas in various settings but has not yet been directly studied for its effects on student retention, specifically in a community college setting.

The challenges and demographics of community college students may differ from those of traditional college students. Mindfulness practices and applications are as varied as these students, and their benefits are as diverse as the reasons students at community colleges do not complete their education. This population of students may experience circumstances and barriers that are not as commonly found in traditional college students. Mindfulness could also be an

MINDFULNESS & RETENTION

important retention tool for traditional college students at 4-year institutions, but this paper will focus on the unique benefits of the practice for shorter-term community college students.

Before exploring the potential benefits of mindfulness meditation when it comes to retention, this paper will first delve into a review of the literature in regard to retention practices and theories. More specifically, this paper will look at retention theories and models, and how they are being applied in community colleges and other higher-level educational institutions. After introducing the existing literature on retention studies, this paper will then look at factors that affect retention such as lack of self-efficacy, lack of social support, distractions, and growth mindset, and will end with a look at other factors that influence retention.

In the next section, it will explore the topic of mindfulness and how it is currently being applied in various populations and environments. It will also look at the specific benefits of mindfulness, which include increases in self-acceptance, compassion for self and others, the ability to be present and regulate emotions, and well-being and overall health, and a reduction in stress levels.

Literature Review

The college years of an individual's life are filled stress stemming from exams, professors, classmates, and homework. On top of that, some students also have to contend with family responsibilities and financial issues, while others may also need to find time for work and other challenges that will take time away from their studies. Meanwhile, higher education institutions have their challenges, too—specifically, acquiring the funding needed to employ staff and faculty, recruiting and enrolling new students, and tending to those graduating students who complete the course requirements of their degree or certificate.

MINDFULNESS & RETENTION

Unfortunately, sometimes these two parties do not take each other's needs into account. In meeting its own needs, the institution may fail to address the needs of the college student, and the student is likely not concerned with the financial struggles or enrollment issues of the institution. Ultimately, these two parties have the same goal for students—graduation and completion of program requirements—but their method of attaining it can differ greatly. Higher education institutions have been trying to breach this great divide and determine ways to ensure student retention and persistence. Various theories and models have been introduced over the years with varying degrees of success. It is possible that one solution to student retention may not lie in the application of these retention models and theories but actually in a practice that has been in use for more than 2,600 years. Mindfulness and meditation practices appear to have gained in popularity and social awareness since the early 2010s. These practices emphasize self-awareness, present moment awareness, and advanced emotional intelligence. Introducing college students and campuses to this ancient practice and its modern applications may help both students and institutions to achieve their mutual goals.

Retention

All types of higher education institutions are concerned with student retention and persistence. From small community colleges in the suburbs of Los Angeles to large universities in the heart of Texas, and from exclusive private schools in Cambridge to historic black colleges in Georgia, they all are working to recruit and retain their students from enrollment to graduation. The topic of retention has been a concern for all higher education institutions since their inception, but it in the 1970s the practice of developing focused retention theories and models became a specific focus. Schools discovered that keeping students enrolled through graduation was beneficial both to their own reputations and their students' success. Since most, if

MINDFULNESS & RETENTION

not all, schools are funded based on the number of students enrolled, retaining students has become essential for an institution's survival.

Theories, Models, and Background

Since the 1970s, many different theorists have put forward theories related to student retention. While each of these theories shares a similar target outcome—helping students to persist to graduation—the how and why vary greatly. Some theorists believe that the factors affecting retention arise within the educational institution itself, while others believe that the likelihood of student persistence lies more with the individual student.

One of the most famous and cited retention models is that of Vincent Tinto. Tinto, a sociology professor and retention theorist, first introduced his retention model in 1993. This model is believed to be partially the result of Van Gennep's study of the rites of passage and travel societies from the field of social anthropology. Tinto used his concepts to "explain the longitudinal process of student persistence in college" (Aljohani, 2016). Tinto believed that a student's "departure from an institution arises out of a longitudinal process of interactions between an individual with given attributes, skills, financial resources, prior educational experiences, dispositions, and integrations with other members of the academic and social systems of the institutions" (Connolly, 2016). This means that a student's decision to quit college is not just one dimensional. There will be many factors at play, some of which might include "family background, skills, abilities, and prior schooling" (Connolly, 2016). It is these pre-entry attributes that will determine how a student will "ultimately respond to their educational environment and persist," in addition to the persons' "personality, motivation and disposition" (Connolly, 2016).

MINDFULNESS & RETENTION

In his theory, Tinto highlights the importance of student motivation. Tinto believed that “both intrinsic and extrinsic factors need to be analyzed as well as the initial motivation of the students as these do not vary between students who subsequently stay and students who leave” (Connolly, 2016). It is a student’s sense of purpose that drives their desire to stay in school, meaning that high student motivation can lead to better retention and achievement.

While a student’s educational intention is important when it comes to persistence, so are their external commitments. In fact, “external commitments to others and entities outside of the institution such as family, friends, and work obligations can have an ongoing effect throughout their time spent in college” (Connolly, 2016). These external factors can either encourage a student to pursue a higher level of education, or compete for their attention, or even force them to drop out.

In addition to the above factors, Tinto’s model also suggests that “a number of student characteristics are having a large impact on at-risk minority student persistence” (Connolly, 2016). This can include such factors as their “academic preparedness, quality of their high school, GPA ranking in their class, and their standardized test scores” (Connolly, 2016). These factors, in addition to the student’s “commitment to their educational goals, one’s perception of progress toward those goals, reasons for pursuing a college degree, self-confidence, and willingness to seek academic assistance” will all affect their ability to adapt to the college environment (Connolly, 2016). Tinto also believed that a student’s formal and informal institutional experiences, including “institutional quality and opportunities for students,” combined with their interactions with both academic and non-academic staff, would affect their likelihood of persistence (Connolly, 2016).

MINDFULNESS & RETENTION

The paper addresses criticisms of Tinto's model as well, discussing how the model "is static, depicting the main variable, and in many respects is non-dynamic and one dimensional" (Connolly, 2016). Others agree that Tinto's model is valid but found that "factors external to the institution play a greater role in student dropout than the model suggests," and is not as effective "in predicting persistence in community college students or commuter colleges" (Connolly, 2016). This is most likely because students who attend these types of schools "do not have as many opportunities to become involved or integrated (on-campus) affecting their decision to withdraw or persist differently" (Connolly, 2016). All in all, the biggest criticism of the model is that reasons for the lack of persistence of students can vary greatly from one individual to another, and so no single model can encompass or explain why a student would drop out of college.

While Tinto's model is still the most respected and applied, other theorists have suggested reasons for and methods to address student retention. William Spady and John Bean are two other recognized and valued theorists in the field. Like all other retention theories, they recognize that "the quality of the student's institutional experience and the level of his or her integration into the academic and social system of the academic institution will affect the student's attrition" (Aljohani, 2016). And like Tinto's model, each of these other theories has their shortcomings, which include that the focus of student retention theoretical models "was not on the specific reason that the students withdraw from their studies because these factors are not necessarily the actual causes of the withdrawal" (Aljohani, 2016). All of these theories recognize that the reason to withdraw or drop out of college is an individual one and one that must be looked at on an individual level.

Applications and Interventions

MINDFULNESS & RETENTION

Over the past forty years, higher education institutions have researched, studied, and applied many different interventions in the hopes of retaining students. While students “do not act to be retained...they act to persist” (Tinto, 2016), institutions are still attempting to retain their students and move them toward goal attainment, which is generally graduation. While these applications and interventions can vary from institution to institution, some common methods are being used across the country in the hopes of keeping students in the classroom.

Common retention interventions include orientation, learning communities, academic planning, counseling, tutoring, and mentoring. One study, which looked at the effects of retention interventions for nursing students, discussed the use of seven applications, including stipends, learning communities, comprehensive orientation, individualized academic planning, counseling, peer tutoring, and community nurse mentoring (Fontaine, 2014). In this study, retention was defined as “the number of students to complete the program within one hundred and fifty percent of the stated program length” (Fontaine, 2014). The study acknowledges that factors outside of the school could affect students’ persistence, but their results indicate that “an intensive, comprehensive, and mandatory program can improve retention” (Fontaine, 2014). And while the “program produced statistically significant improvement in retention...no specific intervention or mixture of interventions were significantly correlated with retention” (Fontaine, 2014).

Another study, which looked at various applications of college student success programs, discussed the effects of high impact practices, also known as HIPs. These practices included such interventions as “first-year seminars, student skills course, college access strategy courses, [and] extended opportunity programs” (Hatch, 2016). This study focused on a broader range of community college students, rather than being limited to nursing students. One high impact

MINDFULNESS & RETENTION

practice that was mentioned was the “first-year experience.” This program is “deliberately designed to attempt to provide a rite of passage in which the students are supported, welcomed, celebrated, and ultimately assimilated” within the campus community (Hatch, 2016). And while programs and activities such as these are advantageous, the study also indicates that “college-wide campus reform” (Hatch, 2016) is the most effective practice for community college institutions.

Other institutions, in the hopes of creating a system that retains students, have created and implemented a general education curriculum to “ensure college survival” (Lei & Lei, 2019). These courses can vary in format and content, but they typically focus on academic success, college career success, or diversity/multi-cultural education. They are meant to “develop the same set of tools including analytical and writing skills but with a basic understanding of modern society at a global level” (Lei & Lei, 2019). According to the authors, these courses are also proving to play a vital role in student success, satisfaction, retention, and graduation. Topics covered help set students up for success, including “setting realistic goals, employing appropriate notetaking and test-taking strategies, self-testing, managing time and stress, along with selecting appropriate study habits and environments” (Lei & Lei, 2019). Other courses help to prepare students for the workplace as well, by teaching students “how to appropriately deal with conflict, motivation, business negotiation, teamwork, team leadership, and accountability in a fair and ethical manner” (Lei & Lei, 2019). Students face other opportunities on campus that can help them learn how to deal with both social and cultural issues; for example, the “differences between students, staff, faculty, and administrators within a college campus” are similar to “differences between coworkers, supervisors, managers, and owners within a workplace” (Lei & Lei, 2019). Unfortunately, not all students see the value in these courses, and the authors found

MINDFULNESS & RETENTION

that the “structure and sequence of courses seems to be important to motivate students to study” (Lei & Lei, 2019). The study goes on to say that if students are bored or unmotivated because the “courses are extremely similar in content” then the students can become dissatisfied and the retention numbers drop (Lei & Lei, 2019).

Factors that influence retention

Lack of self-efficacy

If an institution wants its students to persist to graduation, they must determine what factors affect their rate of retention. Over the years there have been numerous studies looking at exactly this, and the resulting theories vary. One theory, suggested by retention theorist Vincent Tinto, suggests that there are “three experiences that are within the capacity of the institution” to motivate students: self-efficacy, the student’s sense of belonging, and the student’s perceived value of the curriculum (Tinto, 2016). Tinto believes that self-efficacy is created by past experiences of the student, and how those experiences have shaped the individual’s perception. It is through these past experiences that a person will learn to “believe in their ability to succeed in a particular task in a specific institution” (Tinto, 2016). This means that the individual would have some degree of control over their environment and therefore assist them with goal attainment. Tinto states that self-efficacy is “learned, not inherited, and is therefore malleable” (Tinto, 2016). An institution can assist their students to build their self-efficacy by helping them to feel as if they belong on the campus, and by providing them with a curriculum that they see as valuable. And while most college students “begin college confident in their abilities to succeed,” the challenges they subsequently face “serve to weaken their sense of self-efficacy” as they adjust to the heightened academic and social demands of college (Tinto, 2016). These early

MINDFULNESS & RETENTION

experiences can affect students' motivation and the likelihood of their persistence to goal attainment.

According to Nakajima, Dembo, and Mossler, "goals and self-efficacy are considered to be important predictors of student persistence" (Nakajima, Dembo & Mossler, 2012).

Researchers have indicated that "one of the strongest predictors of either academic achievement or failure is the aspiration for success" (Nakajima, Dembo & Mossler, 2012). Consequently, students who have defined goals "are more likely to experience a sense of self-efficacy when attaining those goals, and they are more likely to engage in activities that will help them attain those goals" (Nakajima, Dembo & Mossler, 2012). Ultimately, students who had educational objectives were more likely to persist, while those who "lacked academic and career goals were more likely to drop out of community college" (Nakajima, Dembo & Mossler, 2012). Academic goals lead students to higher levels of self-efficacy, which make them more likely to persist due to their associated academic self-confidence. Self-motivation and belief in oneself made it more likely that a student would persist to completion.

Lack of social support

A second way in which institutions can retain their students is to help them see themselves as a member of the college campus community, to make them feel valued by faculty, staff, and their peers through their engagement on the campus. It is the "student's perceptions of those engagements and the meaning they derived from them that leads to their feelings of belonging" (Tinto, 2016). Engagement can come in many forms. This can include students' daily interactions with their campus as well as any messages they receive from this community. For a student to become engaged, they "must see the institution as welcoming and supportive," and the college culture must be one of inclusion (Tinto, 2016). Students must find themselves engaged in

MINDFULNESS & RETENTION

shared academic and social experiences and a classroom with “pedagogies like cooperative and problem-based learning that require students to learn together as equal partners” (Tinto, 2016). Outside of the classroom, the institution must “provide for a diversity of social groups” that allow students to “find at least one smaller community of students with whom they share a common bond” (Tinto, 2016). This common bond and sense of belonging needs to begin as early as orientation to help build students’ self-efficacy.

An important aspect of acclimating to a school environment for any student is a feeling of belonging and social support. In fact, “social support is related to psychological maturity, as well as other adaptive factors such as resilience and psychological well-being” (Barclay et al., 2018). While different students will engage with students and the campus in different ways, social support and connection are key for a student to succeed. In a study on student persistence and success, Barclay et al. posited that “social interactions and supports are even better determinants for a sense of belonging, which is an important part of university settings” (Barclay et al., 2018). They went on to state that students “had better coping strategies when they had higher levels of interactions with other students” (Barclay et al., 2018).

Similarly, Nakajima, Dembo & Mossler, in their look at student persistence, found that “environmental factors [which] included student-faculty interaction, student-student interaction, extracurricular activities, involvement in student organizations, and student services” all seemed to have a “major influence on student retention” (Nakajima, Dembo & Mossler, 2012). These findings confirm the idea that the social support and emotional connection that a student experiences on their campus can influence their persistence.

Distractions & growth mindset

MINDFULNESS & RETENTION

Community colleges, otherwise known as commuter schools, have a very different student population than traditional four-year institutions. While the majority of students who attend universities are full-time students, possibly with a part-time job, students who attend community college are more likely to be part-time students who work either full or part-time as well. Students who attend community colleges are often considered non-traditional as many of them have careers and families as well as being students. Balancing these priorities can cause community college students to be pulled in many different directions. This means that for these students, staying present and emotionally invested in their studies can be challenging.

When looking at predictors of college success, Barclay et al. found that students who were confronted with environmental factors such as work hours and family responsibilities were more likely to drop out of school (Barclay et al., 2018). The increased levels of stress created by pursuing an education as a non-traditional student could lead to “identity problems...correlated with both personal-emotional adjustment and stress” (Barclay et al., 2018). These students do not just identify as a student, employee, or parent, but potentially as all three. This conflict can take a toll not only on the student’s morale but also their ability to persist. Nakajima, Dembo & Mossler, in their study of student persistence in community colleges, found that the “conflict with work was the predominant reason why community college students withdrew from their schools” (Nakajima, Dembo & Mossler, 2012).

Retention research is also exploring the connections between psychological variables and growth mindset. While retention is affected by “socioeconomic status, high school GPA, college assessment entry scores...academic goals, social support, and academic self-confidence,” new studies are finding that students who possess a growth mindset can “increase their learning and achievements, even in the face of difficult events or transitions” (Barclay et al., 2018). In fact,

MINDFULNESS & RETENTION

“in each socioeconomic status, students with a growth mindset had significantly higher achievement than their peers” (Barclay et al., 2018). Unfortunately, this same study also found that students from lower socioeconomic statuses “were more likely to have fixed mindsets and suffered greater negative effects from them” (Barclay et al., 2018).

Other Factors

Another qualitative study, conducted by Pamela S. Pruett and Beverly Absher, looked at ten variables that could affect student retention. These factors included grade point average, engagement, type of remedial or developmental courses, time spent preparing for class, parents’ educational level, student’s income level, frequency of use of academic advising and planning services, and peer or other tutoring services. Pruett and Absher first outlined the difference between student retention and student persistence. They define persistence as “the student’s purposeful resolve to goal attainment” while retention is defined as “re-enrollment or persistence to the attainment of the student’s educational goal” (Pruett & Absher, 2015). The study found that after grade point average, “academic engagement had the highest impact on student retention” (Pruett & Absher, 2015). Other factors that were found to be statistically significant were the number of hours spent weekly preparing for class, the number of hours spent weekly in college-sponsored activities, and parent education level. Meanwhile, academic advising and planning and peer or tutoring services were not found to be statistically significant (Pruett & Absher, 2015). These findings highlight some of the factors that college campuses should consider when addressing issues around student retention.

Mindfulness

Mindfulness programs have been used to help promote health and wellness in various environments and with multiple populations. Mindfulness has been shown, as demonstrated by

MINDFULNESS & RETENTION

some the studies presented in this body of work, to improve life satisfaction, decrease stress, and increase an individual's feelings of overall health. One group of individuals in which research has found the positive effects of mindfulness is college students. Studies, many of which will be discussed in this paper, have been conducted to determine if mindfulness is an effective tool to help students develop emotional intelligence, stress management, and overall self-acceptance.

Applications and Interventions

Jon Kabat-Zinn initially created and introduced Mindfulness-Based Stress Reduction (MBSR) as a way to help patients deal with chronic pain. However, over the years, this practice has grown in popularity and been introduced to various groups and individuals as a means of bringing mindfulness into their daily lives. MBSR has been found to “support psychological health, reduce stress, decrease problematic substance use, enhance adjustment to college, reduce physiological stress, and prevent the development of psychopathology” (Felver, Morton & Clawson, 2018). Because of its versatility and widely recognized benefits, educators and researchers are exploring its application to college students in coping with their high levels of stress and anxiety. In a study conducted by Felver, Morton, and Clawson, the researchers attempted to “replicate the existing research demonstrating the benefits of MBSR for postsecondary students experiencing psychological distress” (Felver, Morton & Clawson, 2018). In the study, the researchers offered MBSR at a counseling center of a private university for nine years, in which the class was “advertised across campus...as a stress-reduction class to support mental health” (Felver, Morton & Clawson, 2018). The students enrolled in a standard 8-week MBSR course with a weekly 2-hour meeting and a half-day retreat in place of the full-day practice typically required in an MBSR course. The authors of the study believe that “the results of this study contribute to the literature base suggesting the utility and benefit of MBSR for

MINDFULNESS & RETENTION

postsecondary students...[as] these practices offer novel and effective solutions to meet the needs of students and should receive continued attention from practitioners and intervention scientists” (Felver, Morton & Clawson, 2018).

Koru, a mindfulness training program for college students, was developed by Holly Rogers and Margaret Maytan. While there are other mindfulness training programs, such as MBSR, Koru is the only one specifically created with college students in mind, taking their different needs and constraints into consideration. Rogers and Maytan reported that amongst college students, “50% of students report significant levels of anxiety and psychopathology,” and that students with “mental health challenges have difficulties with campus engagement, personal relationships, and graduation rates” (Greeson et al., 2014). Due to this, Koru was created to “improve well-being in diverse populations” with the hopes to “reduce stress and improve mood and academic performance in both college and graduate students” (Greeson et al., 2014).

Koru, a term meaning “balanced growth” in the Maori language, differs from other mindfulness training programs in several ways. Firstly, it trains students in mind-body skills which helps them in “reducing distress, which in turn builds their motivation to continue practicing stress management and self-care in daily life” (Greeson et al., 2014). Secondly, Koru’s training quite short in comparison to other mindfulness training programs—only four 75-minute sessions and 10 minutes of required daily meditation practice. Thirdly, Koru uses a small group format, and the method for teaching is “very active, addressing skepticism and building motivation quickly” (Greeson et al., 2014). Lastly, Koru embraces language and metaphors that are age-appropriate and encourage the students to focus on self-compassion and gratitude. The study by Roger and Maytan found that Koru “was effective at reducing symptoms of stress, enhancing psychological well-being, and promoting sleep,” making it a “viable intervention for

MINDFULNESS & RETENTION

student counseling centers and other agencies that seek to provide cost-effective, low stigma interventions for students suffering from unmanageable levels of stress” (Greeson et al., 2014).

Another mindfulness training program created with school-age individuals in mind is “Learning to BREATHE.” This mindfulness-based prevention program was “designed to be integrated into educational settings and be compatible with school curricula” (Broderick & Frank, 2014). The needs and abilities of school-age children are different than those who are typically trained in MBSR, and so Learning to BREATHE was created to “enhance emotion regulation, strengthen attention and support academic performance, reduce stress, teach stress management, and help students integrate mindfulness into everyday life” (Broderick & Frank, 2014). The program is adaptable depending on the student group and time constraints. The curriculum can be presented in six, twelve or eighteen sessions, with each lesson including “a short introduction to the topic, a choice of activities for group participation and discussion to engage students in the lesson, and an opportunity for in-class mindfulness practice” (Broderick & Frank, 2014). In essence, the Learning to BREATHE program duplicates the core practices of MBSR, including “body scan, awareness of thoughts and feelings, mindful movement, and loving-kindness practice,” but is altered to meet the needs and interests of a younger audience (Broderick & Frank, 2014).

Benefits

Increase in self-acceptance

A potential benefit of mindfulness practice that could prove to be helpful specifically for community college students is unconditional self-acceptance. A study conducted by Shelley H. Carson and Ellen J. Langer of Harvard University indicates that self-acceptance is crucial to mental health, and that “the absence of the ability to unconditionally accept oneself can lead to a

MINDFULNESS & RETENTION

variety of emotional difficulties, including uncontrolled anger and depression” (Carson & Langer, 2006). The reason that mindfulness is so beneficial in developing unconditional self-acceptance is that it creates a “flexible cognitive state that results from drawing novel distinctions about the situation and the environment” (Carson & Langer, 2006). Therefore, when a person is being mindful, they “are actively engaged in the present and sensitive to both context and perspective... [meaning that] they can view both objects and situations from multiple perspectives and have the ability to shift perspectives depending upon context” (Carson & Langer, 2006).

The opposite of mindfulness, mindlessness, “adheres to a single perspective and therefore acts automatically” (Carson & Langer, 2006). This automatic response or thinking “pigeonholes experiences, behaviors, objects, and other people into rigid categories,” and does the same thing to the self (Carson & Langer, 2006). Mindlessness is at the root of bias, racism, and stereotypes, and is “learned information learned through authority figures and presented in absolute language” (Carson & Langer, 2006). Authority figures could include members of one’s church, family, school, or government. Individuals’ concept of themselves can also be developed through mindless acceptance and categorization. If a person can be more mindful of their perception of themselves, they can also learn to be more mindful of their perception of others.

The study suggests that one can only learn self-acceptance by allowing others to see one’s true self. By being mindful, an individual is in the moment, and therefore “not worried about how he or she is coming across to others and when someone is being truly authentic” (Carson & Langer, 2006). This in turn allows the individual to be “fully engaged with the environment” rather than trying to win “the approval of others or...bolstering fragile self-esteem” (Carson & Langer, 2006). By being authentic, and demonstrating self-acceptance, an

MINDFULNESS & RETENTION

individual is not tempted to behave the way others do or the way they think that others expect them to. They can be present instead of watching others and worrying about being judged. When an individual is insecure they are more likely to “use deceptive pretense to avoid criticism and...increase positive self-esteem” (Carson & Langer, 2006). The study found that individuals who pretended to be something or someone other than who they were had “an actual reduction in self-esteem which caused the conclusion of deceptive self-presentation” which led the individual to be unable to accept praise (Carson & Langer, 2006).

Increase in compassion (for self and others)

A study by Moira Martin found that one of the biggest obstacles for students to overcome in terms of their college success is their perception of themselves. This study found that “students are self-critical and their internal comparisons with others impede their educational experience” (Martin, 2018). Because of this, the author suggested that mindfulness meditation may be a way to bring students “more in touch with their internal processes, which in turn allows them greater availability to others in the classroom and this creates more transformational learning experiences” (Martin, 2018). The study defines mindfulness as “paying attention to one’s present moment experience as it is happening and relating to that experience with a curious, open, accepting stance” (Martin, 2018). By embracing mindfulness and applying it in the classroom, students will be able to be less competitive and individualistic and be more open and interested in their fellow students.

This study also found that compassion, both for the self as well as for others, allowed the learners to “be present, interested, and enthusiastic about learning” and strengthened the bonds between them (Martin, 2018). Because of this self-compassion, students were less likely to be self-critical and see their value in the classroom. This allowed them to be less judgmental and

MINDFULNESS & RETENTION

more inclusive. Therefore, it was noted, that mindfulness taught the students “to be aware of their own experiences and dis-identify with their thoughts” (Martin, 2018).

Ability to be present & regulate emotions

A study looking at how to improve students’ sense of well-being and mindfulness was conducted by Crowley and Munk by offering a fifteen-week meditation course to college students. This study found that most of the students’ anxiety was due to their future-orientated thoughts and their attachment to specific future outcomes. When the students contemplated not attaining their desired outcome or losing it once it was obtained, this led to anxiety. Even for those students who did achieve their desired outcomes, there was “a continuous cycle of expectations” which caused their anxiety to remain (Crowley & Munk, 2017). The study discussed the benefits of mindfulness as it would allow students to focus their attention on the present experience and live life on a moment-to-moment basis. This change in focus would help to eliminate the anxiety created by the attachment to future outcomes. Mindfulness was also theorized to help students avoid dwelling in the past or worrying about the future by becoming more reflective of their present moment and experiences. In fact, by the end of the study, “86% of students reported an increase in reflective thinking as a result of the meditation class” (Crowley & Munk, 2017).

In addition to an increase in reflection, students were also found to “better regulate their emotional reactions and cultivate positive psychological states and emotional balance” (Crowley & Munk, 2017). The study defines psychological well-being as “a reduction in stress, depression, and anxiety” (Crowley & Munk, 2017). After fifteen weeks of meditation, “86% of students reported an increase in feeling calm and peaceful or a decrease in their stress levels” (Crowley &

MINDFULNESS & RETENTION

Munk, 2017). The students were able to develop a positive reappraisal of stressful events as either “beneficial, meaningful, or benign” (Crowley & Munk, 2017).

The study found that mindfulness meditation also developed gratitude and compassion. In their course, the students learned about having compassion, not only for others but also for themselves. As one of the students stated, “Everyone is connected, and everyone has their own suffering” (Crowley & Munk, 2017). The students also reported that they felt “more interconnected, forgiving, and empathetic to the lives of others around them” (Crowley & Munk, 2017). The concept that self-compassion is key to whole-person development was also introduced and embraced by the students.

Improved well-being and overall health

Researchers Dvorakova et al. conducted a study with first-year college students and evaluated the “effectiveness and feasibility of mindfulness training aiming to promote...college student’s health and well-being” (Dvorakova et al., 2017). It is widely accepted and acknowledged that entering college is a major life event, one that comes with stress and new challenges, as it involves a “radical shift in personal responsibilities...and change in social environments” (Dvorakova et al., 2017). Because of this, students need to “make healthier choices, develop healthy relationships, and be resilient to face challenges” (Dvorakova et al., 2017). However, what students need to accomplish this can vary from student to student. One tool that is suggested that could potentially help students with this transition process in mindfulness.

While the study proved to increase student life satisfaction, reduce stress, and decrease depression and anxiety, it was also speculated that mindfulness might also improve “emotion regulation skills and self-perceived sense of well-being” (Dvorakova et al., 2017). Students were

MINDFULNESS & RETENTION

also able to demonstrate different developmental tasks during the transition to college including “learning stress management skills, building the capacity for emotional regulation, strength and the ability to focus and deliver quality performance, and establishing meaningful social relationships” (Dvorakova et al., 2017). While improvement was seen in many areas, indicators of “intrapersonal awareness and interpersonal awareness” were not significantly different (Dvorakova et al., 2017).

It is noted that college may be one of the last institutions and “educational windows of opportunity to change young people’s life courses” (Dvorakova et al., 2017). Because of this, educational institutions need to embrace their role and consider it their responsibility to help students learn more about their overall well-being. It should be an “essential part of universities’ public agendas” to help students lead a healthier life (Dvorakova et al., 2017). Because of this, there is a need for institutions to integrate mindfulness training into the academic college material and not just into a course or program for first-year students.

Reduction in stress levels

A study conducted by O’Discoll et al. looked at the effects of mindfulness-based interventions for the health and social care of undergraduate students. This literature review looked deeply at the effects of persistent stress, often found in the lives of college students due to their high workload and pressure to perform, and how it often led to depression and burn out (O’Discoll et al., 2017). The study found that gender and personality both emerged as factors that could affect methods of intervention and their results, but still witnessed a significant reduction in stress in the intervention group. However, these results were not maintained after six months.

For female students, mindfulness-based interventions demonstrated significant improvement in depression scores. A significant decrease in mental distress was demonstrated

MINDFULNESS & RETENTION

after the intervention, but again, it was not maintained after six months. Women scored higher for neuroticism overall at baseline, but there was an inverse relationship between mindfulness and neuroticism at baseline as well.

Overall benefits reported included effects on the participants' "stress, mood, and mindfulness levels, as well as anxiety, well-being, self-compassion, and coping abilities" (O'Discoli et al., 2017). While significant results were achieved, the number of class hours did not appear to affect the effects, and without continued practice, there was no sustained effect after six months. This could mean that continued practice would be necessary to maintain positive effects.

The effects of mindfulness on stress reduction have been noted in various studies, including one by Michelle Tollefson, Bobbie Kite, Emily Matuszewicz, Amy Dore, and Cindy Hess, in which undergraduate students led their stress reduction activities. In this study, students in 14 classes learned and presented mindfulness-based stress reduction practices and methods to help their classmates cope with the stresses of college and life. It has been found that "undergraduate students experience higher levels of stress than the general population" and the "prevalence of stress is increasing in higher education and impacting many facets of student life" (Tollefson et al., 2018). All of these stresses can have a "detrimental impact on mental and physical health, especially when the stressors are chronic" (Tollefson et al., 2018). When a review of 40 qualitative studies on college stressors was conducted, eight primary areas of stressors were identified, including "relationships, lack of resources, expectations, academics, environment, diversity, transitions and other stressors" (Tollefson et al., 2018).

Because of the potential negative effects of stress, "73% of higher education students want their academic institutions to provide them information on stress reduction" (Tollefson et

MINDFULNESS & RETENTION

al., 2018). The study indicates that stress management could be incorporated in online classes as well as through mobile apps, which could be more accessible for college students. Various stress reduction modalities, including “mindfulness-based stress reduction, meditation, progressive muscle relaxation, physical activity, cognitive-behavioral strategies, interaction with animals, and mindfulness” have been successful in reducing stress in students as well as “increasing student engagement in the classroom environment” (Tollefson et al., 2018). These techniques were introduced into 14 classes by 10 faculty members who were teaching courses including “health information systems, medical terminology, healthcare research methods, dynamics of health, and ethics in healthcare,” all of which fell in the department of health professions (Tollefson et al., 2018). In each class, instructors asked students to research and present a stress-reduction tool. The presentation was to be under five minutes in length and include both an educational and experiential component. The students who were assigned this task varied in their methods and applications, which included “yoga, tai chi, stretching, physical exercise, breathing exercises, progressive muscle relaxation, mindfulness, guided visualizations, self-massage, affirmation, gratitude, mantras, grounding, journaling, coloring, music therapy, humor, pet therapy, aromatherapy, and acupuncture” (Tollefson et al., 2018).

The results of the study were conclusive. In the end, 92% of the faculty members who incorporated the assignment into their class recommended that another faculty do the same (Tollefson et al., 2018). In terms of the students, 78% of those students who participated felt that the assignment had a positive impact on their stress reduction. The students believed that “stress reduction modalities have a positive impact in the university setting” (Tollefson et al., 2018). In particular, mindfulness-based stress reduction, meditation, and progressive muscle relaxation are “among the stress reduction modalities that have been successful in reducing student stress,

MINDFULNESS & RETENTION

increasing engagement and meaningfulness in the classroom,” and “42% of higher education institutions that have animal-based stress reduction programs have received positive feedback” (Tollefson et al., 2018). These programs include visits from therapy dogs before college exams.

In the end, 90% of the surveyed students indicated that they would like to know more about stress reduction techniques, and 90% also stated that they would recommend other faculty members incorporate a similar assignment in their classes (Tollefson et al., 2018). The majority of the students stated that they had decreased their stress levels not only inside the classroom but also in their daily lives. The students indicated that they had been taught “healthy forms of stress management that will assist them in dealing with life stressors both inside and outside of the classroom” (Tollefson et al., 2018). These students, who were aware of some forms of stress reduction, were introduced to less well-known activities such as mantras, qi gong, and acupuncture. Also, learning from their peers created a “communal experience of learning” that allowed them to cope with the “stressors of academic life in a group setting” (Tollefson et al., 2018).

While it is possible that some faculty won’t see a direct connection with stress reduction in their classroom learning objectives, “stress reduction indirectly helps students achieve any learning objective by fostering healthier students who are more receptive to learning environments” (Tollefson et al., 2018). The study indicates that “taking a few minutes to include stress reduction activities makes students more engaged and receptive...allowing the students to learn more material during the class time, even when part of it is used for stress reduction” (Tollefson et al., 2018). The authors believe that the assignment used in this study could be “easily adapted to any faculty member’s circumstances” and that “students can gain lifelong

MINDFULNESS & RETENTION

skills to improve their overall health and well-being through healthy stress management” (Tollefson et al., 2018).

Discussion

Retention theories and models, when put into practice, can improve students’ likelihood of persisting to degree attainment and/or graduation. However, even after almost fifty years of application, these models are still coming up short for many students, causing countless numbers of students dropping out of college each year. The reasons for their lack of success vary from student to student, which is why these retention models cannot address the struggles of all college students. There is no one-size-fits-all method or theory when it comes to college students. Some models, such as Tinto’s Theory, have been able to determine how to overcome some of the struggles of college students. Learning communities, peer tutoring, student engagement, and classroom pedagogy have all been developed to support college students in their pursuits of higher education and have been helpful for many. But there are still students who continue to struggle, and no current model or theory is helping them reach their academic goals.

Mindfulness may be an ancient practice and philosophy, but it is relatively new in its application to education. All over the world, mindfulness practices are being introduced into all levels of schooling, including higher education. Uncovering the obstacles for students to persist to complete their educational goals may not be something that can be accomplished solely by the institution or by the student. It needs to be a joint effort. Through the incorporation of mindfulness practices on the campus, the institution may be able to help the students uncover what is getting in their way. By developing compassion for self and others, self-awareness, social awareness, and emotional intelligence, students could be better able to cope with the struggles of

MINDFULNESS & RETENTION

college life as well as their life off the campus. The practices first introduced by the Buddha more than 2,600 years ago could be the answer to an educational dilemma. While mindfulness practices have been used to address student issues of stress, student engagement, and building compassion, they have not been applied and studied at an institutional level. Perhaps by changing the campus culture to be one of present moment awareness and compassion for all, colleges may be able to attain their goal of helping all students who enroll to graduate. Perhaps if faculty and staff embraced and practiced mindfulness in the classroom, in the quad, and their daily interactions, students could learn strategies to stay positive and focused and attain their goals. And perhaps, they might even learn some life skills that they will carry with them once they leave and proceed into the rest of their lives.

Arguments

Having reviewed the literature and research that has been done in both retention theories and practices and mindfulness meditation theories and practices, it is possible to see how these two domains might come together. Retention researchers have been searching for methods to bring students together, providing support and a sense of community. They have been trying to give them the knowledge and ability to advocate for themselves and ask for what they need. They have been attempting to bridge the gaps between what can be taught in the classroom and what students are expected to arrive with. However, while all of these are worthwhile and important pursuits, the fact that many students still aren't able to achieve their educational goals suggests that something is still missing. Perhaps it is time to explore and implement other ideas and methods.

Mindfulness meditation has been practiced and taught for thousands of years and demonstrated a vast number of benefits for its practitioners. While it hasn't been directly tied to

MINDFULNESS & RETENTION

student retention, and the persistence of students on a college campus, there may be benefits of incorporating this ancient practice into not only college classrooms but into the college campus culture as a whole. This next section will explore some of the potential advantages of implementing mindfulness meditation practices and theories on the community college campus, and how the results of recent studies may indicate the level of success these attempts might attain. More specifically, we will explore how mindfulness meditation may help students develop self-acceptance, learn to exemplify compassion, learn to be present and regulate their emotions, improve their overall health and wellness, and even see a reduction in their stress levels.

Argument #1: Students could develop self-acceptance

Self-love or self-acceptance is not a lesson taught in most schools. Nor is it often taught at home, through the media, or within our society in general. In fact, many people are taught to value the needs and importance of others over their own. Admitting to loving or valuing oneself may even be considered selfish and shameful. However, it is because of this mindless societal belief that individuals are not able to overcome the “anger and depression... [caused by] self-evaluation” (Carson & Langer, 2006). This conditioning causes individuals to pigeonhole their “experiences, behaviors...and other people into rigid categories” which are governed by “rules, routines, and previously constructed categories” (Carson & Langer, 2006). Once these categories or rules have been created, most people try to fit within one category to “win the approval of others” and to “avoid criticism and loss of self-esteem to win praise and increase positive self-esteem” (Carson & Langer, 2006). This means that many will “behave the way others think that they should or the way they think others think they should” (Carson & Langer, 2006).

One way to overcome this is through the practice of mindfulness, in which an individual is able to develop the ability and willingness to “let others see one’s true self,” stop worrying

MINDFULNESS & RETENTION

about “how he or she is coming across to others,” and be truly authentic (Carson & Langer, 2006). Moving away from basing one’s self-worth on comparisons to peers, including “attractiveness, intelligence, wealth, and personality,” allows individuals to realize that their self-evaluation, whether positive or negative, is a choice. (Carson & Langer, 2006). When an individual is practicing mindfulness, they are living in the present. This means that they have let go of past mistakes and the self-judgment that typically comes along with them. Instead of ruminating on what they could have done better or differently, they embrace the value and benefits of those mistakes. By learning to be present, mindful individuals are able to focus on who they are now without the judgments of who they should or could be.

For community college students, mindfulness could be a way to stop doubting their abilities and reprimanding themselves for mistakes such as a failed test or a missed assignment. Test anxiety might be linked to self-doubt, which is fed by a low self-worth. Through mindfulness students can learn unconditional self-acceptance, which would allow them to let go of their individualistic and competitive natures and be less self-critical. One step in this might in fact need to be letting go of the self altogether. In fact, “through enhanced meta-awareness, mindfulness meditation is thought to facilitate a detachment from identification with the self as a static entity and a tendency to identify with the phenomenon of experiencing itself is said to emerge” (Tang, Holzel & Posner, 2015). This means that each student could potentially stop focusing on who they are but instead focus on how they are experiencing life, both on-campus and off. Not only this, “early studies reported mindfulness training to be associated with more positive self-representation, higher self-esteem, higher acceptance of oneself and styles of self-concept that are typically associated with less-severe pathological symptoms” (Tang, Holzel & Posner, 2015). Self-acceptance will allow a student to be forgiving of their failings and truly

MINDFULNESS & RETENTION

learn to embrace who they are. When viewed holistically, “these studies have been taken to suggest that mindfulness meditation might alter the self-referential mode so that a previous narrative, evaluative form of self-referential processing is replaced by greater awareness” (Tang, Holzel & Posner, 2015).

The Buddha, who lived in ancient India in the fifth century BCE, and who founded the modern practice of Buddhism, is believed to have stated that “You can search throughout the entire universe for someone who is more deserving of your love and affection than you are yourself, and that person is not to be found anywhere. You yourself, as much as anybody in the entire universe, deserve your love and affection” (Salzberg, 1995). This sentiment is not often shared or encouraged in modern western society. Individuals are not taught how to love and value themselves, and therefore “we look to others to find out if we ourselves are lovable” (Salzberg, 1995). But it is only through truly learning to love oneself, and accept themselves for who and what they are, will they learn to love and accept others. For “what unites as all as human beings is an urge for happiness” and “true happiness depends upon a revolution of ourselves...it is a radical change of view that liberates us so that we know who we are most deeply and can acknowledge our enormous ability to love” (Salzberg, 1995). The problem, however, is that “when we are alone we have one image of ourselves; when we are with other people we have another image” (Salzberg, 1995). Through the practice of mindfulness meditation, it is possible for an individual to unite these two images and come to a consensus of who they are. And once an individual can truly see and accept themselves, they will be able to see and accept others, bringing love and happiness to all. For when “we feel fragmented and estranged from ourselves, so our gestures of friendship to others are often born out of loneliness

MINDFULNESS & RETENTION

and fear” (Salzberg, 1995). Correct the perception of the self, and true friendships and community will be possible with the practice of compassion.

It is through this self-acceptance, and ultimately the acceptance of others, that students may be able to fully immerse themselves in their education without the lingering self-doubt and questioning of whether they are capable and smart enough to succeed. Learning to love and accept oneself could help to break down the barrier between a student’s potential and their ability to accomplish greatness. And greatness doesn’t need to be something extraordinary. It simply means being able to accomplish their goal of completing their education without the constant barrage of negativity that can often get in the way, which most often originates in the individual’s own mind. By incorporating mindfulness training in their coursework, colleges can help students learn to love, value, and accept themselves, and thereby increase their rate of retention.

Argument #2: Students could learn how to exemplify compassion

Community college is meant to be just that: a place of community, to serve the community. Students are from various ethnic and economic backgrounds, and they may be attending for a variety of reasons. Community college is a popular choice for graduating high school seniors, who use it as a steppingstone to the bigger and more expensive 4-year institutions. They are also still popular for working students who are looking for a certificate or associates degree to improve their knowledge, salary, and/or likelihood of receiving a promotion. From being viewed as a place to take a photography class or perhaps some remedial English and math classes to assist in completing the GED requirements, community colleges have now become much more. And with more uses comes more people. And with more people comes more variety of purpose, background, and life experience. These differences can put students at a

MINDFULNESS & RETENTION

disadvantage. Sitting in a classroom with someone half your age, with very different life experiences, from a different religious and cultural background, can be not only uncomfortable but also discouraging. While some may view these dissimilarities as concerning or off-putting, they could also be viewed as stimulating. By applying the principles and practices of mindfulness, these classroom exchanges and campus interactions could prove to be an environment for compassion, empathy, and in its truest sense, community. In times of disaster, it has been found that “social support is the most powerful protection against becoming overwhelmed by stress and trauma” (van der Kolk, 2014). Social support and a sense of community will help students combat the stresses and difficulties of college life. Critically, “social support is not the same as merely being in the presence of others,” but is actually an act of reciprocity in that the students are “being truly heard and seen by the people around... [creating a] feeling that we are held in someone else’s mind and heart” (van der Kolk, 2014). Community colleges must work hard to create a feeling and system to ensure that their community feels connected, seen, and engaged.

College students “often feel alienated and disconnected from others due to their backgrounds, ages, life histories, and experiences” (Martin, 2018). These students “walk in from their respective lives, not sure how to relate to others” in what is described as a “multi-generational and multicultural” classroom (Martin, 2018). However, the practice of mindfulness may help these students feel more connected and be able to find their similarities rather than their differences. With the continued practice of mindfulness, students can develop a “positive feeling toward another” (Martin, 2018) as well as develop compassion for themselves. Developing compassion will strengthen the bonds between students, and even allow them to “see the value of their own experiences with perhaps less judgment and more inclusion” (Martin, 2018). These

MINDFULNESS & RETENTION

feelings of “befriending, compassion, and awareness...can support transformational learning experiences” (Martin, 2018).

One of the practices taught in mindfulness to develop compassion is Metta meditation. Metta, a Pali word most often translated as love or loving kindness, is the first of the brahmviharas, or “heavenly abodes,” and is the practice of developing compassion for all beings, including close friends, worst enemies, and even compassion for the practitioner themselves (Salzberg, 1995). In this ancient practice, first introduced by the Buddha as an antidote to fear (Salzberg, 1995), an individual will sit in quiet meditation and recite a series of phrases. These phrases, which are at the discretion of the individual, can include sentiments such as happiness, good health, feelings of peace, and feelings of safety. It is through this practice that the meditator “cultivates a feeling of benevolence directed to other people, whether friend or enemy” (Ricard, Lutz & Davidson, 2014). It is through this act of compassion that the meditator can begin to alter their brain, for during this practice, the “brain regions that fire up when putting oneself in the place of another – the temporoparietal junction, for instance – show an increase in activity” (Ricard, Lutz & Davidson, 2014). The simple yet powerful practice of mindfulness meditation, and more specifically Metta, not only alters the perceptions and feelings of the individual who practices, but it also alters their brain. In fact, “the evidence amassed...has begun to show that meditation can rewire brain circuits to produce salutary effects not just on the mind and the brain but on the entire body” (Ricard, Lutz & Davidson, 2014).

While Metta is often translated as love, typically when we talk about love we are referring to either passion or sentimentality. Sentimentality is an ally of delusion, while passion, according to Sharon Salzberg, a leader in the mindfulness movement in the United States and the author of *Lovingkindness*, “is enmeshed with feelings of desire, of wanting or of owning and

MINDFULNESS & RETENTION

possessing” (Salzberg, 1995). In fact, passion is all about wanting things, and expecting them to look, feel, and happen in a certain way. Metta, however, is unconditional. Metta is the “ability to embrace all parts of ourselves, as well as all parts of the world” and is often “likened to a gentle rain that falls upon the earth...it simply falls without discrimination” (Salzberg, 1995).

The first step in the development of this practice is for the individual to recite the phrases with love and compassion in their heart and to direct the phrases to themselves. After practicing this for several weeks, and once the individual feels a strong sense of loving kindness toward themselves, then they can expand the practice to include others. First, the phrases are typically directed toward a benefactor, someone who is close to the person and for whom they have great love, admiration, or appreciation. Then the phrases are directed toward someone who is an acquaintance, followed by someone whom the individual does not have a close relationship with, but their paths cross from time to time. Once this practice is comfortable, the individual will broaden their wishes and thoughts of loving kindness to include all people in their community and/or country, or even the entire world. Finally, the individual will then direct the phrases to someone whom they have strong negative feelings toward, or someone whom they might say is their enemy. It is this step that will allow the individual's heart to truly open and embrace all individuals with compassion and love.

Through this practice, students could learn to embrace and love not only themselves, but everyone they encounter on their college campus, from students to professors. While they may not share similar life experiences, world views, or educational ideals, they can still learn to appreciate, care about, and express compassion toward those individuals around them. A classroom filled with compassionate students would be a place of not only learning but growing. Each person could become more open minded and willing to hear and even potentially

MINDFULNESS & RETENTION

understand the perspectives and experiences of those around them. This understanding and willingness to truly hear and see their classmates has the power to ultimately transform the community college campus into a place of learning, love, and true education. And with the growth of love and compassion, colleges may also see a growth in their student retention and graduation numbers.

Argument #3: Students could learn to be present and regulate their emotions

Any college student can attest to the struggles and stresses of attending school. There are exams and study groups, essays, and class presentations. Students must also contend with finding parking and locating a seat in their packed classroom once navigating the campus has allowed them to find their classroom. There are late night study sessions, conversations with expectant and demanding professors, and daily interactions with fellow students and college staff. All of these while also looking for methods to pay for books, supplies and the classes themselves. Many students are under intense pressure to not only attend class, but to receive high grades, especially if they want to transfer, graduate, or get the best job. When you add the pressures put on students by parents and families to do well, it's clear that college is a time of stress and emotions, with constant battles for students' time, attention, and commitment.

Students who attend community college might have a job and/or family responsibility outside of their school life. These additional responsibilities and worries not only distract the student from learning and connecting with their classmates but can also cause them not to be entirely present for their educational journey. In their research, Tang, Holzel & Posner found that there are "various positive effects of mindfulness meditation on emotional processing, such as reduction in emotional interference by unpleasant stimuli, decreased physiological reactivity and facilitated return to emotional baseline after response to a stressor film, and decrease self-

MINDFULNESS & RETENTION

reported difficulties in emotion regulation” (Tang, Holzel & Posner, 2015). The practice of mindfulness meditation may allow college students to be less influenced by the negative events and people around them, and consequently be present and potentially excel in their college classes. By being more in control of their emotions, and their emotional responses to their peers and daily situations, these students would more likely be able to focus on the material that was being presented without interference.

According to Tang and her team, “mindful emotion regulation works by strengthening prefrontal cognitive control mechanisms and thus downregulates activity in regions relevant to affecting processing, such as the amygdala” (Tang, Holzel & Posner, 2015). With the amygdala, the fear and anxiety center of the brain, under better control, a student would be able to focus on the information being presented in their classes rather than dealing with their emotional responses to it. Through the use of mindfulness meditation, an individual can learn to “overcome habitual ways of internally reacting to one’s emotions and might therefore show greater prefrontal activation” (Tang, Holzel & Posner, 2015). By allowing the prefrontal cortex, the rational part of the brain, to be in control, an individual can learn to actively regulate their cognitive function. In fact, “given its known role in awareness, it is conceivable that enhanced insula activity in meditators might represent the amplified awareness of present-moment experience” (Tang, Holzel & Posner, 2015). This shift in awareness to the present moment is “one of the major active mechanisms of the beneficial effects of mindfulness meditation” (Tang, Holzel & Posner, 2015).

Students who are capable of being fully present, of living in each moment of their college journey, may be more interested in continuing their pursuit until its end. Due to the distractions in each student’s life, classroom, and mind, students attending community college may find it

MINDFULNESS & RETENTION

difficult to fully commit and engage in their studies and their classroom experience. But through mindfulness meditation, they may be able to gain the ability to not only control their own emotional responses to what is happening around them, but to teach others to become less reactive and more responsive to the world around them. The learning that students acquire in the classroom may be expanded to the world off-campus, which could allow students to share what they are learning with their families, friends, co-workers, and community. This new understanding of emotional responses, and increased knowledge about how the brain and body respond to distress, may allow students to better cope with other stressful situations in their lives.

Argument #4: Students could improve their overall health and wellness

In discussions about health and wellness, the focus is often on physical traits and characteristics, such as weight, strength, diet, and possibility even immunity. Discussions about mental wellbeing are less common. There is still a stigma associated with discussions about mental health and overall emotional wellbeing. But while the need to exercise, eat well, and get enough sleep are important parts of living a healthy, happy life, so is mental wellbeing. Unfortunately, the skills needed to develop mental wellbeing are rarely taught, and almost never discussed openly and compassionately. Each person is left to work through their struggles on their own or with the help and support of family and friends. Some individuals may have the courage and resources to reach out and seek professional help, such as a psychologist or psychiatrist, but this is still a taboo topic in today's society—even though “eighty percent of mental illnesses begin in childhood and approximately 15% of Canadian children and youth live with a mental health disorder” (Vohra et al, 2019). In fact, “mental illness is one of the five most common causes of morbidity, mortality, and disability in childhood” (Vohra et al., 2019). When it comes to college retention, “childhood mental illnesses have been associated with and are

MINDFULNESS & RETENTION

predictive of increased risk for academic failure, school dropout, general health problems, problems with family and peer relationships, and engaging in delinquent activities” (Vohra et al., 2019).

In the past, children and their parents were given few options for treatment. “Medication is often a treatment choice for childhood mental health disorders” (Vohra et al., 2019) as opposed to getting to the root of the issue that is causing the disorders to present in the first place. Children and youth are not taught how to cope with these disorders, but simply given medications to make the symptoms go away. Nowadays, however, “parents and providers alike are interested in identifying nonpharmacological approaches as adjunctive therapy, particularly as concerns increase about potential side effects of long-term pediatric use of psychoactive medications” (Vohra et al., 2019). One new and highly sought-after method of treatment that is being explored by parents, providers and children is mindfulness-based stress reduction, or MBSR. MBSR has been used for years to treat “pain, psychological distress, and mood disturbances among chronic pain patients” and has also been found to show “improvement in anxiety and depression among heterogeneous clinical populations” (Vohra et al., 2019). Perhaps when applied to students in a college setting this effective and accessible program might be useful in addressing and combating the mental health concerns that “emerge in childhood...and persist and are resistant to change” even in adult life (Vohra et al., 2019).

When looking at mental health and wellness, and assessing the overall wellbeing of an individual, words like joy, happiness, and hope are common. As it turns out, individuals who participate in mindfulness meditation have been found to exhibit “significantly higher hope and lower stress” than those who don’t. And since “hope is positively associated with greater coping strategies, task performance, and achievement... [as well as] increased life satisfaction,

MINDFULNESS & RETENTION

perceptions of self-worth, and perceptions of the meaningfulness of life,” it appears that hope is a potential measure of an individual’s overall wellbeing. In fact, “hope is being increasingly recognized as an important therapeutic target of mental health interventions” (Munoz et al., 2018).

So, what is hope? According to Paolo Freire, (“a seminal figure in the literature on empowerment and social justice”), hope is “a central psychological state needed for those striving to overcome” (Munoz et al., 2018). Freire believed that hope was “about imagining the possible, the ‘untested feasible’” (Munoz et al., 2018). But according to Munoz et al., hope is more than that; it is “about thinking of one’s self as an agent able to effect some change in one’s life, having goals that not only have promise but also pathways to their accomplishment – pathways that may be short or long, full of ruts or smooth, well-lit or darkened” (Munoz et al., 2018). They further break the concept of hope down and state that it is “the presence of positive goal-directed expectations occurring across two cognitive dimensions: agency and pathway” (Munoz et al., 2018). Hope agency is explained as “an appraisal of one’s capability and determination to achieve a goal,” whereas hope pathways are a way of thinking that “consists of cognitive mapping, which is the mental process of identifying viable routes to goals” (Munoz et al., 2018). These two elements together create total hope.

With all of this in mind and acknowledging the “importance of hope to overall well-being” it would be significant to determine which interventions and practices can increase hope in individuals. One example is meditation, which has been found to “reduce stress which calms one’s mind enough to allow for increases in hope” (Munoz et al., 2018). There is something “in the process of becoming quiet and clearing the mind of other thoughts” in which the “person shuts off the draining process associated with attending to various daily stressors” and is able to

MINDFULNESS & RETENTION

“gain refreshment from focusing on some simple and familiar thoughts” (Munoz et al., 2018). It is this reduction of stress through the practice of meditation that “can serve as an important antecedent of hope because of the importance of mental focus to hopeful thinking” (Munoz et al., 2018). This hopeful thinking also allows the individual to stop being so tied up in themselves and look at the bigger picture. The meditation practitioner, “instead of beginning to worry and ruminate about themselves” is able to “concentrate on the situation at hand” and therefore “develop the skills necessary to focus attention toward developing pathways to one’s goals” (Munoz et al., 2018). The practice of mindfulness meditation, and consequent stress reduction, increase “hope, mindfulness, positive affect, and endorsements of mental health-related quality of life,” suggesting that “mindfulness and hope are linked” (Munoz et al., 2018).

A college campus with students who are not distracted from their studies by their mental health concerns and struggles could possibly be a campus that doesn’t have to focus as much time, effort, and money on retention. Individuals with improved mental health may be able to better cope with the stress and pressures of classroom dynamics and learning. Plus, students who are working toward a goal, who are on a pathway of hope, may be more likely to persevere through the hours of study and worry of exams than those who don’t. Mindfulness meditation has been found to increase both mental well-being and feelings of hope. Perhaps a mentally healthy and hopeful campus will be a campus with fewer retention issues.

Argument #5: Students could see a reduction in their stress levels

It will come as no surprise to those who have attended college that college has been found to be a “time of immense stress” (Shearer et al., 2016). In fact, “anxiety and stress are the leading mental health concerns for college students, and 31.8% of college students reported that stress had affected their academic performance in the past year” (Strait et al., 2020). In addition

MINDFULNESS & RETENTION

to academic performance, stress and anxiety have also been linked to “poorer retention... [as they] hinder self-regulation skills” (Strait et al., 2020). While the pressures of the classroom can contribute to these feelings of stress and anxiety, these are not the only culprits. Shearer, Hunt, Chowdhury & Nicol found that “academic pressure coupled with the perception of inadequate time for study, leisure activities, and rest are significant stressors that contribute substantially to subjective stress and strain, such as psychological symptoms of anxiety and depression among college students” (Shearer et al., 2016). Unfortunately, most students are not taught how to cope with these new and powerful feelings of stress and anxiety brought about by the college experience. Due to this, over time, “poorly managed stress leads to poor adjustment during college and contributes to poor physical and psychological health” (Shearer et al., 2016).

Luckily there is a potential solution that is gaining popularity and is readily accessible to all college students. Mindfulness meditation “has been shown to be an effective stress management technique” (Shearer et al., 2016) and specifically has been found to show “promising positive effects on stress and self-regulation across varied populations including college students” (Strait et al., 2020). In the past, mindfulness meditation may have been overlooked or dismissed as an accessible and plausible tool for teaching students to cope with stress as not enough was known about its effects, both short and long term, and it might have been difficult to administer on a college campus as it would require experienced professionals and extensive time commitment by students and college staff. But some evidence suggests that “nonclinical interventions that offer brief training and encouragement for participants to practice at home may provide beneficial effects without the resources required for more intensive interventions” (Strait et al., 2020). This new evidence is promising and exciting for classroom instructors, as “brief classroom mindfulness interventions may represent an efficient strategy for

MINDFULNESS & RETENTION

classroom instructors to improve students' stress and self-regulation" and could even be easily "integrated into most psychology courses" (Strait et al., 2020). In fact, Strait et al. found that even "a single classroom mindfulness education session... [had effects] on college students' mindfulness frequency and self-reported stress, anxiety, and self-regulation. A single session of mindfulness meditation instruction could prove to have positive results on the course participants for the remainder of the semester, and potentially longer.

In their study, Strait et al. found that "participants in the intervention group reported a small increase in meditation frequency and marginally significant decrease in perceived stress two weeks later... [which is] consistent with previous studies that have shown decreased stress following meditation interventions" (Strait et al., 2020). While a small increase in meditation frequency may not seem important, it is actually very important, according to Strait et al., as "previous research has shown small but significant associations between home practice and positive participant outcomes" (Strait et al., 2020). Even after only one short introduction to meditation, participants were more likely to attempt it again at home. These results potentially suggest that "presenting brief education about mindfulness meditation may be a strategy worth trying in the classroom... [as it] took less than a full class period, required no special training, and used only free materials" (Strait et al., 2020). This could help to eliminate any objections to the practice, for in fact, the "content would be relevant in many psychology courses" that are offered on a college campus (Strait et al., 2020). Therefore, it was concluded by this team that "the brevity, accessibility, and content relevance of classroom mindfulness education makes these types of programs an exciting possibility for impacting students' emotional well-being and self-regulation skills" (Strait et al., 2020).

MINDFULNESS & RETENTION

One common form of mindfulness meditation training that has been attempted on the college campus is Mindfulness-Based Stress Reduction (MBSR). First introduced by Jon Kabat-Zinn as a means to help individuals suffering with chronic pain, MBSR has evolved and developed into a method of introducing mindfulness meditation to a wide variety of individuals including college students. In their study on the effects of MBSR on college student stress, Shearer, Hunt, Chowdhury & Nicol found MBSR to be “an adaptive coping strategy” (Shearer et al., 2016). While individuals with lower levels of mindfulness exhibit “rumination, neuroticism, depression, anxiety, severity of psychological symptoms, difficulties in emotion regulation, avoidance, self-consciousness, social anxiety, negative affect, and absent-mindedness, to name a few,” those who possess mindfulness were found to possess more positive traits, such as “openness to experience, emotional intelligence, self-esteem, optimism, positive affect, life satisfaction, self-compassion, vitality, self-actualization, autonomy, competence, and relatedness fulfillment” (Shearer et al., 2016). When MBSR is taught to college students it is found to reduce “stress in nonclinical college populations” and “increased forgiveness among college students” (Shearer et al., 2016).

To explore the effects of MBSR, Shearer’s team decided to match the program against a therapy dog program. It is common practice on college campuses to have “programs in which students may interact with a dog (or dogs) at libraries...during stressful exam periods...as a way to reduce stress for students” (Shearer et al., 2016). This type of therapy dog program “decreases agitation and loneliness and increases the initiation of social interaction in the elderly, enhances self-efficacy and coping abilities among individuals with psychiatric diagnoses, and reduces anxiety in psychiatric patients awaiting electroconvulsive shock therapy” (Shearer et al., 2016). This is because “animals provide unconditional positive regard” (Shearer et al., 2016).

MINDFULNESS & RETENTION

Unfortunately, this type of program does “not produce long-term benefits” for the participants (Shearer et al., 2016). While both dog therapy and MBSR “resulted in identical short-term reductions in dysphoric affect,” the mindfulness practitioners “showed significantly higher heart rate variability” (Shearer et al., 2016).

Heart rate variability, or HRV, is “the degree of fluctuation in the length of intervals between heartbeats” and it reflects the “relative ratio of parasympathetic and sympathetic nervous system (PNS and SNS) activity” (Shearer et al., 2016). This means that HRV, which is “linked to both cardiovascular and mental health” may be “a better index of enduring psychological change” and measure of emotion regulation (Shearer, Hunt, Chowdhury & Nicol, 2016). Basically, what this means is that “HRV is a physiological marker of the persons’ ability to regulate the stress response” (Shearer et al., 2016). So, an individual who has good stress management skills is able to “bring their heart rate back down quickly, resulting in great HRV” (Shearer et al., 2016).

Through their study, Shearer and team discovered that HRV is a strong measure of an individual’s mindfulness. In fact, they found that “mindfulness meditation training has...shown to positively impact HRV” and that a person’s “ability to mindfully regulate one’s attention is associated with higher HRV” (Shearer et al., 2016). This means that an individual who practices mindfulness meditation will demonstrate “reduced stress and distress and/or better stress management and coping” (Shearer et al., 2016). This is good news for college students, who consistently exhibit high levels of stress. Not only is mindfulness meditation improving their focus and compassion, it is also helping them to develop a higher HRV and therefore manage their stress in a healthier and more consistent way. To further demonstrate this finding, the team of Shearer, Hunt, Chowdhury & Nicol presented all students in the study with a cognitive

MINDFULNESS & RETENTION

challenge and measured their stress response, or more specifically, their HRV. What they found was that “HRV is a physiological marker of a person’s ability to regulate the stress response and given that the cognitive challenge was specifically designed to mimic the stressors frequently encountered by students at rigorous schools...this finding suggests that mindfulness intervention may help college students cope with academic stressors” (Shearer et al., 2016).

The most exciting element of this study, which differs from others that have been used on college campuses to date, is that the MBSR program that was used was altered from its original method of delivery. MBSR traditionally includes 26 hours of structured classes, which include “breathing exercises, basic yoga including light stretching and balancing exercises, short meditation sessions, and education about the physiology of the stress response” (Shearer et al., 2016). Throughout the session, emphasis is put on “adopting a nonjudgmental attitude, particularly toward one’s beliefs, feelings or thought” (Shearer et al., 2016). For this new study, the MBSR program was shortened to four brief 1-hour long group sessions on mindfulness meditation, after which participants were asked to complete a brief mood questionnaire. Then two weeks later a follow up group session was required as well as an hour-long post group assessment. What the researchers found was that “despite the reduced number of class hours compared with standard MBSR programs... [participants were] still [able to] reap significant benefits from mindfulness practice without devoting exorbitant amounts of time and energy to it” (Shearer et al., 2016). The team was able to conclude that “a short mindfulness training program can be a powerful yet simple way to help college student cope with stress and anxiety” and “shorter programs may be just as effective and more realistic” (Shearer et al., 2016). Therefore, because mindfulness meditation “is a skill that can be done anytime, anywhere, in a group or alone, and is not burdened by a lengthy wait list like those potentially encountered at student

MINDFULNESS & RETENTION

mental health centers” it appears as though “mindfulness meditation could be a simple, cost-effective stress-management technique” that could “help students better regulate their stress response when confronted with cognitive challenges” like those that they face daily in a college environment (Shearer et al., 2016). Even though it is “hard to remain present in the face of a seemingly endless stream of impending deadlines and upcoming exams...perhaps learning how to do so could be the key to successfully navigating such obstacles” and successfully completing the goal of college graduation (Shearer et al., 2016).

The college years can be filled with stress and uncertainty. Students need to find ways to combat the stresses of learning and applications, while also navigating the stress of making new friends, managing relationships with professors, and determining their path after college, with the assistance of college staff. Unfortunately, many schools and households are not giving individuals the skills and knowledge they need to cope with these stresses, affecting retention and graduation rates across the board. By incorporating mindfulness meditation into the culture of the college campus, institutions may see an increase in their retention rates and student persistence. With the skills that they would develop through meditating in class and being instructed on how to be mindful of their emotions and body’s reaction to stressful stimulants, students could prove to be more resilient and committed to their own success. Mindfulness meditation may allow students to not only push through the stresses of college life, but to actually embrace them as ways to grow and develop as individuals.

Conclusion

The challenges of being a student in community college are unlikely to change. Students will continue to need to work to support themselves and their families. They will need to navigate the difficult path of working with classmates and professors who will often be from

MINDFULNESS & RETENTION

different cultural and social backgrounds. They will also need to continue to battle against the voices in their own heads which are holding them to unrealistically high standards and which tell them that they aren't going to succeed, and they aren't smart enough to obtain a college degree. All of these challenges will affect a student's likelihood of completion and affect the college's ability to retain the student until graduation. While some these challenges may be difficult to change, how the student views, approaches, and overcomes these challenges is possible. With proper education and peer support, students can learn new and beneficial ways to survive their college years and come out on the other side with not only a degree but also a better understanding of who they are and how they fit into the world around them.

Over the years, a variety of retention theories and practices have been developed and implemented on college campuses with varying degrees of success. Some ideas may address the challenges of some groups but not each individual on a personal level. New and more inclusive methods need to be implemented to ensure that all students who wish to obtain a college degree are able to do so. Mindfulness meditation may be just what is needed. The practices and theories of mindfulness meditation may allow students to not necessarily overcome the struggles of college, but at least to cope with them in healthy and constructive ways. By incorporating mindfulness onto the community college campus, administrators may be able to help students learn to accept and love themselves, as well as those around them, and to exhibit compassion and forgiveness. They may also develop healthier life practices, such as recognizing their emotions and learning to work with them rather than against them. They could possibly learn to live in the present moment, which would allow them to better cope with the stresses and challenges of college life. Mindfulness, when applied to the entire college campus, and college experience, may allow students to look past the experiences and overcome the obstacles that would otherwise

MINDFULNESS & RETENTION

have caused them to withdraw against their will. Mindfulness meditation, while not simple, could prove to be an easy, cheap, and effective tool for community colleges and other higher education institutions alike. When combined with the other retention theories and practices already in use, mindfulness meditation may be the final and all-encompassing means to retain students and allow them to persist to completion.

References

- Aljohani, O.A. (2016). A comprehensive review of the major studies and theoretical models of student retention in higher education. *Higher Education Studies*, 6(2).
- Barclay, T. H., Barclay, R. D., Mims, A., Sargent, Z., & Robertson, K. (2018). Academic retention: Predictors of college success. *Education*, 139(2), 59–70.
- Bonet, G., & Walters, B. R. (2016). High impact practices: Student engagement and retention. *College Student Journal*, 50(2), 224–235.
- Broderick, P. C., & Frank, J. L. (2014). Learning to BREATHE: an intervention to foster mindfulness in adolescence. *New directions for youth development*, 2014(142), 31-44.
- Cairncross, M., & Miller, C. J. (2020). The effectiveness of mindfulness-based therapies for ADHD: A meta-analytic review. *Journal of Attention Disorders*, 24(5), 627–643.
- Carson, S.H., & Langer, E.J. (2006). Mindfulness and self-acceptance. *Journal of Rational Emotive and Cognitive-Behavior Therapy*, 24, 29-43.
- Chavan, S., Deshmukh, J., & Singh, B. (2017). Role of mindfulness, belief in personal control, gratitude on happiness among college students. *Indian Journal of Health & Wellbeing*, 8(10), 1184–1186.
- Chen P.D., Ingram T.N., & Davis L.K. (2014). Bridging student engagement and satisfaction: A comparison between historically black colleges and universities and predominantly white institutions. *The Journal of Negro Education*, 83(4), 565-579.
- Clotfelter, C., Ladd, H., Muschkin, C., & Vigdor, J. (2013). Success in community college: Do institutions differ? *Research in Higher Education*, 54(7), 805-824.
- Connolly, C. (2016, September 20). Student Retention Literature – Tinto's Model. <https://corneliathinks.wordpress.com/2016/09/20/tintos-model/>.

MINDFULNESS & RETENTION

- Cotler, J. L., DiTursi, D., Goldstein, I., Yates, J., & DelBelso, D. (2017). A mindful approach to teaching emotional intelligence to undergraduate students online and in person. *Information Systems Education Journal*, 15(1), 12–25.
- Crowley, C., & Munk, D. (2017). An examination of the impact of a college-level meditation course on college student well-being. *College Student Journal*, 51(1), 91–98.
- D'Amico, M., Dika, S., Elling, T., Algozzine, B., & Ginn, D. (2014). Early integration and other outcomes for community college transfer students. *Research in Higher Education*, 55(4), 370-399.
- Desrosiers, K. D. (2019, March 29). The power of the mindful CEO.
<https://www.ceotodaymagazine.com/2019/03/the-power-of-the-mindful-ceo/>
- Diaz, F. M. (2018). Relationships Among Meditation, Perfectionism, Mindfulness, and Performance Anxiety Among Collegiate Music Students. *Journal of Research in Music Education*, 66(2), 150–167.
- Dvoráková, K., Kishida, M., Li, J., Elavsky, S., Broderick, P., Agrusti, M., Greenberg, M. (2017). Promoting healthy transition to college through mindfulness training with first-year college students: Pilot randomized controlled trial. *Journal of American College Health*, 65(4), 259-267.
- Felver, J. C., Morton, M. L., & Clawson, A. J. (2018). Mindfulness-based stress reduction reduces psychological distress in college students. *College Student Journal*, 52(3), 291–298.
- Fontaine, K. (2014). Effects of a retention intervention program for associate degree nursing students. *Nursing Education Perspectives (National League for Nursing)*, 35(2), 94–99.
- Frazier, P., Meredith, L., Greer, C., Paulsen, J. A., Howard, K., Dietz, L. R., & Qin, K. (2015).

MINDFULNESS & RETENTION

- Randomized controlled trial evaluating the effectiveness of a web-based stress management program among community college students. *Anxiety, Stress & Coping*, 28(5), 576–586.
- Greeson, J. M., Juberg, M. K., Maytan, M., James, K., & Rogers, H. (2014). A randomized controlled trial of Koru: a mindfulness program for college students and other emerging adults. *Journal of American college health: J of ACH*, 62(4), 222–233.
- Gu, J., Strauss, C., Bond, R., & Cavanagh, K. (2015). How do mindfulness-based cognitive therapy and mindfulness-based stress reduction improve mental health and wellbeing? A systematic review and meta-analysis of meditation studies. *Clinical psychology review*, 37, 1-12.
- Hale, L., Strauss, C. & Taylor, B.L. (2013). The effectiveness and acceptability of mindfulness based therapy for obsessive compulsive disorder: A Review of the Literature. *Mindfulness* 4, 375–382.
- Hatch, D.K. (2016). A brief history and a framework for understanding commonalities and differences of community college student success programs. *New Directions for Community Colleges*, 175, 19-31.
- Hölzel, B.K., Carmody, J., Evans, K.C., Hoge, E.A., Dusek, J.A., Morgan, L., Pitman, R.K., Lazar, S.W. (March 2010). Stress reduction correlates with structural changes in the amygdala. *Social Cognitive and Affective Neuroscience* 5(1), 11-7.
- Jennings, P. A., Brown, J. L., Frank, J. L., Doyle, S., Oh, Y., Davis, R., Rasheed, D., DeWeese, A., DeMauro, A. A., Cham, H., & Greenberg, M. T. (2017). Impacts of the CARE for Teachers program on teachers' social and emotional competence and classroom interactions. *Journal of Educational Psychology*, 109 (7), 1010–1028.

MINDFULNESS & RETENTION

- Lei, S. A., & Lei, S. Y. (2019). General education curricula affecting satisfaction and retention of undergraduate students: A Review of Literature. *Education, 139*(4), 197–202.
- Martin, M. (2018). Mindfulness and transformation in a college classroom. *Adult Learning, 29*(1), 5-10.
- Messer, D., Horan, J. J., Turner, W., & Weber, W. (2016). The effects of internet-delivered mindfulness training on stress, coping, and mindfulness in university students. *AERA Open*.
- Munoz, R. T., Hoppes, S., Hellman, C. M., Brunk, K. L., Bragg, J. E., & Cummins, C. (2018). The effects of mindfulness meditation on hope and stress. *Research on Social Work Practice, 28*(6), 696–707.
- Nakajima, M., Dembo, M., & Mossler, R. (2012). Student persistence in community colleges. *Community College Journal of Research and Practice, 36*(8), 591-613.
- O’Driscoll, M., Byrne, S., Mc Gillicuddy, A., Lambert, S., & Sahm, L. J. (2017). The effects of mindfulness-based interventions for health and social care undergraduate students – a systematic review of the literature. *Psychology, Health & Medicine, 22*(7), 851–865.
- Pascoe, M. C., Thompson, D. R., Jenkins, Z. M., & Ski, C. F. (2017). Mindfulness mediates the physiological markers of stress: Systematic review and meta-analysis. *Journal of Psychiatric Research, 95*, 156-178.
- Pellew, R. (2016, January 6). The factors that impact first-generation student retention. https://www.researchgate.net/publication/304589398_Factors_that_Impact_The_Retention_of_First-Generation_College_Students
- Pruett, P. S., & Absher, B. (2015). Factors influencing retention of developmental education students in community colleges. *Delta Kappa Gamma Bulletin, 81*(4), 32–40.

MINDFULNESS & RETENTION

- Ricard, M., Lutz, A., & Davidson, R.J. (2014). Mind of the meditator. *Scientific American*, 311(5), 38-45.
- Salzberg, S. (1995). *Loving-Kindness: The revolutionary art of happiness*. Shambhala.
- Samuelson, M., Carmody, J., Kabat-Zinn, J., & Bratt, M. A. (2007). Mindfulness-based stress reduction in Massachusetts correctional facilities. *The Prison Journal*, 87(2), 254–268.
- Seligman, M. & Tierney, J. (May 19, 2017). We Aren't Built to Live in the Moment. Retrieved from www.nytimes.com/2017/05/19/opinion/sunday/why-the-future-is-always-on-your-mind.html.
- Shearer, A., Hunt, M., Chowdhury, M., & Nicol, L. (2016). Effects of a brief mindfulness meditation intervention on student stress and heart rate variability. *International Journal of Stress Management*, 23(2), 232–254.
- Smith, B. W., Ortiz, J. A., Steffen, L. E., Tooley, E. M., Wiggins, K. T., Yeater, E. A., Montoya, J. D., & Bernard, M. L. (2011). Mindfulness is associated with fewer PTSD symptoms, depressive symptoms, physical symptoms, and alcohol problems in urban firefighters. *Journal of Consulting and Clinical Psychology*, 79(5), 613–617.
- Strait, J. E., Strait, G. G., McClain, M. B., Casillas, L., Streich, K., Harper, K., & Gomez, J. (2020). Classroom Mindfulness Education Effects on Meditation Frequency, Stress, and Self-Regulation. *Teaching of Psychology*, 47(2), 162–168.
- Tang, R., Broderick, P., Bono, T., Dvořáková, K., & Braver, T. S. (2019, September 3). A college freshman mindfulness seminar to enhance psychological well-being and cognitive function.
- Tang, Y., Hölzel, B. & Posner, M. (2015). The neuroscience of mindfulness meditation. *Nature Reviews, Neuroscience* 16, 213–225.

MINDFULNESS & RETENTION

Tinto, V. (2016, September 26). Inside Higher Ed.

<https://www.insidehighered.com/views/2016/09/26/how-improve-student-persistence-and-completion-essay>.

Tollefson, M., Kite, B., Matuszewicz, E., Dore, A., & Heiss, C. (2018). Effectiveness of student led stress reduction activities in the undergraduate classroom on perceived student stress. *College Student Journal*, 52 (4), 505.

van der Kolk, B.A. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. Viking.

Vidic, Z., & Cherup, N. (2019). Mindfulness in the classroom: Effect of a mindfulness-based relaxation class on college students' stress, resilience, self-efficacy, and perfectionism. *College Student Journal*, 53(1), 130–142.

Vohra, S., Punja, S., Sibinga, E., Baydala, L., Wikman, E., Singhal, A., Dolcos, F. and Van Vliet, K.J. (2019), Mindfulness-based stress reduction for mental health in youth: a cluster randomized controlled trial. *Child Adolescent Mental Health*, 24, 29-35.

Wang, X. (2009). Baccalaureate attainment and college persistence of community college transfer students at four-year institutions. *Research in Higher Education*, 50(6), 570-588.