

Decoding Motivating Factors Influencing Cyber Education

Kaelin Anderson

Marywood University

November 4, 2022

Abstract

This paper aims to answer the question “What are the motivating factors that influence teachers and students to work or learn in the cyber charter school setting?” With opportunities for online teaching and instruction on the rise, understanding the motivations behind teacher and student engagement is important for tracking trends in our educational system as a whole. The complex question is further broken down into defining types of motivation to help the reader understand how these may influence teachers and students to change careers and or educational environments for a cyber educational setting. Reference to the COVID-19 pandemic was considered based on the severe change in online learning and instruction. The findings of the literature review were analyzed through cognitive, technological, and functional perspectives with a deeper analysis based on the theories of expectancy-value, attribution, social-cognitive, achievement, and self-determination.

Keywords: Cyber Education, Motivation Theory, Online Learning, Technology

Contents

Introduction.....4
Literature Review.....5
Analysis.....16
Ethical Implications.....22
Policy Recommendations.....25
Summary.....27
References.....31

Introduction

Motivation may be considered the largest factor in whether or not humans complete tasks. It would then be presumptuous to say that the significance of motivation in the workplace and within educational institutions is of the utmost importance. Cook has defined motivation as a process that fosters goal-directed activities from a place of initiation and sustainability (Cook & Artino Jr, 2016, 997).

We live in a time where education is everywhere but the vehicles we use to access education are drastically different. Most notably due to the COVID-19 pandemic, the number of K-12 students enrolled in free statewide online full-time education skyrocketed from approximately 375,000 in the '19-'20 school year to 656,000 in the '20-'21 school year (National School Choice Awareness Foundation, Inc., 2022). There are no shortcomings with respect to knowledge that can be acquired through various educational institutions. At the turn of the century, the National Center for Education Statistics reported that there were only 17,500 public charter school teachers across the United States. Fast forward to the 2017-2018 school year and these teachers are up 1,076%, accounting for approximately 188,300 public charter school teaching positions (US Department of Education, 2020). The motivations behind accessing education have shifted.

There are countless theories that aim to explain contemporary motivation. It would be remiss not to review such theories as they all play a part in helping to shape the significance of the educational shift that can be seen across the country with regard to teaching and learning within the cyber environment. The times of strict class or work schedules have moved and brought about changes that make alternative working environments more sustainable. Students

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

are accessing education at a much younger age through cyber schooling platforms. Educators are making career shifts to teaching for cyber institutions. At the epicenter of the COVID-19 pandemic, an immediate change swept across the nation, forcing all education to be conducted virtually. Teachers, students, and families who may have had little to no training or choice in education through a virtual learning environment were now forced to work this way.

Cyber education poses an alternative learning environment to traditional brick-and-mortar schools. Take a deeper dive into what motivates students and families to choose cyber education over the brick-and-mortar alternative. Why are teachers leaving their classrooms after decades of dedication? Why are families switching to full-time cyber instruction after testing the waters within their brick-and-mortar districts during the COVID-19 pandemic? Has the world's view of cyber learning changed? What aspects of motivation theory can explain the shift we are seeing in education today?

While there is research on motivation theory and cyber education trends, a distinct gap in the literature forms when establishing the connection between what motivates teachers and students to choose a career or to learn in the online environment. Therefore, this paper will identify motivating factors that influence the choice to work or learn in the online environment through three distinct lenses; cognitive, technological, and functional. The intention is to explore the question further "What are the motivating factors that influence teachers and students to work or learn in the cyber charter school setting?"

Literature Review

To better understand the motivations behind teachers, students, and their families flocking to cyber education we must understand what motivations look like and how they contribute to the decisions made by this population that we are addressing. It's important to

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

understand that many theories and ideologies behind motivation have similar or overlapping explanations and for this reason will need to be broken down to better facilitate understanding of the cyber education movement (Cook & Artino Jr, 2016, 998). From the work of Steers, Mowday, and Shapiro (2004), multiple definitions of motivation pinpoint three common attributes. Motivation can be defined as the events or facets that “energize, channel, and sustain human behavior over time” (Steers et al., 2004, 379). The earliest of behavioral scientists sought out empirically based models from theorists such as McDougall. McDougall argued that behavior resulted from instinct and could be defined as

“an inherited or innate psychological predisposition which determined its possessor to perceive, or pay attention to, objects of a certain classroom to experience an emotional excitement of a particular quality upon perceiving such an object, and to act in regard to it in a particular manner” (McDougall, 1908, 4).

As time went on, the limits of these instinct theories were apparent and soon replaced with models that were founded in reinforcement. It was drive theorists like Woodworth, Hull, and Thorndike, that introduced the idea that learning is done through motivated behaviors. They formulated that the outcome of present and future behaviors can be greatly understood when looking at past behaviors consequences and rewards (Steers et al., 2004, 380). By the 1950s and 60s we saw the works of Skinner (1953), Maslow (1954), and McGregor (1960) emerge.

Skinner introduced his principals of operant conditioning that could be referred to as a reinforcement theory, and gained traction as learned relationships between consequences and actions that guide future behavior (Steers et al., 2004, 380). Maslow’s Hierarchy of Needs theory proposed that there is hierarchy of needs that must be satisfied in a certain order as the individual matures. This hierarchy begins with physiological, safety and security, belongingness, esteem,

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

and ends with self-actualization. It's important to understand that the first three levels must be fulfilled for a person to master a "healthy personality" (Steers et al., 2004, 381). The final two needs in the hierarchy are a picture of growth needs that relate to the achievement of the individual and developing potential as a human being (Steers et al., 2004, 381).

McGregor adapted the works of Mayo's (1933) and Roethlisberger and Dickson's (1939) when he wrote *The Human Side of Enterprise*. Looking deeper into human relationships led to an understanding of the necessity to treat workers fairly or else there would be cause for disinterest, shoddy craftsmanship, low morale, and confusion (Steers et al., 2004, 381).

Before diving into various motivation theories and the perspectives that will critically analyze motivations among students and teachers in the cyber environment, we need to understand what cyber charter schools are and what distance education is defined as. The Commonwealth Foundation provided an article on Cyber School Basics that explains "Cyber charter schools are charter schools that deliver instruction over the internet, allowing students to attend classes from home (Hroncich, 2020)." In Pennsylvania specifically, 87% of school districts do not have brick-and-mortar charter school options, therefore the only tuition-free option for families is cyber charter schools. (Hroncich, 2020) According to the National Center for Education Statistics, "Distance education (DE) is education that uses one or more types of technology to deliver instruction to students who are separated from the instructor and to support regular and substantive interaction between the students and the instructor synchronously or asynchronously (Institute of Education Sciences, n.d.)."

Remote or virtual learning is also not to be confused with full-time cyber charter schooling. Students who attend a full-time cyber charter school do participate in remote, distance, or virtual learning however, a brick-and-mortar school district could offer these same

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

options as well but they could mean totally different things. A cyber school is equipped with the technology, systems, and supports to maintain full operations of day-to-day online schooling within a secure and paid platform. A brick-and-mortar school may offer virtual class options or resources provided online but that does not make them an online school. During the COVID-19 pandemic, it was apparent that many brick-and-mortar schools were doing the best that they could to strategically build online learning systems for their students who were unable to attend school in person. Cyber charter schools theoretically didn't miss a beat. No social distancing was needed, computer systems and technology equipment were already in place for all students, internet stipends were already in place, and educators were already used to teaching in the paid platform that they had always used. (Hroncich, 2020)

Understanding the differences between synchronous and asynchronous class formats are important as well. As cyber education continues to rise and studies are done to understand these trends and motivations, we must understand all aspects of what makes this learning opportunity unique. As with its counterparts in brick-and-mortar education, this research will allow us to grasp the full effect of what this learning model means for our educators and students.

Synchronous learning is a model that traditional brick-and-mortar education does well. It means that the student and teacher are together for that lesson and interaction can happen within that moment such that questions can be answered and the teacher can pick up on cues that the students are either mastering the content or struggling and may need to be retaught. This same concept is true of cyber education at a cyber charter school as well. The students meet with the educator in an online environment where the lesson is held and questions are answered. There are multiple forms of engagement in the framework of specialized technology tools that may or may not be paid for through the school and all lessons are recorded for students to review again

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

should they need. These recordings also provide the perfect asynchronous opportunity.

(Hroncich, 2020)

Asynchronous learning occurs when the student learns through a recorded lesson format at a time or location that works best for the family and student. Asynchronous learning does not take place in brick-and-mortar educational settings. Asynchronous learning is available in the cyber learning environment and can be motivating for students and families for a variety of reasons. Students who may have barriers to their education for a variety of reasons can benefit from asynchronous learning. A student may experience a learning disability that makes lesson completion take longer. Other students may participate in sports that have them traveling the country as gifted athletes who need to train during the day and do school work at night.

Educationally gifted students may excel in the academic material and need to move more quickly through the content therefore the asynchronous learning model helps to propel them forward instead of holding them back with their peers in a traditional classroom setting. (Hroncich, 2020)

Long before the time of the COVID-19 pandemic and the abrupt trends in cyber education, various studies were conducted to test the relationship achievement has on intrinsic and extrinsic motivation. Lemos and Veríssimo (2014) study conducted that intrinsic and extrinsic motivators are not contradictory but intrinsic motivation did associate with better overall achievement. In this case, students' extrinsic motivations did produce a negative relationship with respect to their achievement by the end of the students' elementary school careers (Lemos & Veríssimo, 2014, 936). Balancing these motivations is the secret to success as far as Lemos and Veríssimo are concerned. They noted, "Pursuing interesting and enjoyable activities and also attending to extrinsic constraints and incentives is most certainly a

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

requirement of adaptive functioning when students face the complex and multidimensional classroom demands” (Lemos & Veríssimo, 2014, 936).

In 2009, Patrick & Powell published research for the *International Association for K-12 Online Learning* that aimed to identify the effectiveness of online learning for grades K-12. Their summary included research from the U.S. Department of Education as well as many online learning and research studies. This meta-analysis found students typically performed better in a cyber learning environment than those students in face-to face environments. One important aspect to note concluded, “Online learning can be enhanced by giving learners control of their interactions with media and prompting learner reflection” (Patrick & Powell, 2009, 6). The online learning environment is unique in that it gives the learner many opportunities to engage in authentic learning experiences while learning valuable technology skills. Students from a very young age can become computer literate and have the ability to utilize technology in ways that can benefit them in their future educational endeavors and career choices.

Another point of interest is that students continued to show the most growth when enrolled in a blended learning approach comprised of online and face-to face instruction. Students in online courses learned valuable technology skills while, teachers’ developed new pedagogical strategies and instructional practices that transformed how they used technology and taught online (Patrick & Powell, 2009, 7). Patrick & Powell went forward to note that the 2008 National Survey of Student Engagement found online learners were able to experience integrative thinking, reflective learning, and the use of higher order thinking more so than their classroom-based counterparts (Patrick & Powell, 2009, 7).

In times of such great educational adversity, it is important to understand what the research is saying about intrinsic motivation to help better understand where our teachers and

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

students are shifting in regard to teaching and learning. In 1991, Deci, Vallerand, Pelletier, and Ryan formulated that “students who are intrinsically motivated for doing schoolwork and who have developed more autonomous regulatory styles are more likely to stay in school, to achieve, to evidence conceptual understanding, and to be well adjusted than are students with less self-determined types of motivation” (Deci et al., 1991, 332). The research further suggests when students display a higher level of intrinsic motivation as well as identified regulation, they were able to produce more excitement for their academics, a higher level of satisfaction with school, and overall positive emotions within the classroom setting (Deci et al., 1991, 332).

In regards to teaching throughout the COVID-19 pandemic and what the consequences look like for burnout in educators it’s important to understand that “in addition to processing their own stress, they are also supporting students through theirs, usually without specialized, trauma-related training” (Müller & Goldenberg, 2020, 29). Teachers are more likely to experience higher levels of posttraumatic stress disorder after a crisis than the overall population and this psychological stress plays an important role in their emotional exhaustion (Weißenfels et al., 2022, 3).

Effects of the COVID-19 pandemic left many educators experiencing socio-contextual burnout. According to Răducu & Stănculescu (2022), socio-contextual burnout is characterized by “exhaustion characterized by a lack of emotional energy and a feeling of being overwhelmed and tired at work, inadequacy in teacher-pupil interactions that affect teachers’ health and emotional well-being and cynicism represented by detachment from the job in general as well as from the teaching community” (Răducu & Stănculescu, 2022, 1). Educators in fully brick-and-mortar educational settings had the most dramatic shift in their roles as teachers when they had to

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

seemingly overnight move all of their instructional practices to an online environment without any training or support.

Districts of all different economic standards were forced to educate students online when their teachers and students may not have even had appropriate technology to access the content. Inadequate technology can be equally as paralyzing to educational success as limited access to technology training. Having technology is only as good as the skills acquired to use it successfully. Students in grades K-12 specifically, could have never used a tablet or laptop until the COVID-19 pandemic forced students to work remotely. Some of the greatest barriers to educational change are when it comes to the vehicle being used to institute that change. Without appropriate training and technology, educator and student confidence and moral plummeted. In reality, educators in the brick-and-mortar settings were responsible for two careers when schools began to open back up and educators were forced to not only teach students in face to face settings but also live stream for those students who could not attend (McQuirter, 2020, 48). Many teachers felt isolated and frustrated as they attempted to navigate all of the complex challenges presented by transitions from synchronous to asynchronous instruction.

The only populations that were truly unaffected by the COVID-19 pandemic were the established cyber charter schools. These educators were already trained in online instruction, their content was already accredited and established, and their students were already computer literate with the appropriate technology available to them. Even with the surges in cyber charter school enrollment, students who transferred to cyber charter schools found themselves with brand new computers, internet assistance for those who qualified financially, tech teams to help navigate technology issues, teachers who were already literate in online instruction, and new classmates to help make the transition to online learning more manageable.

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

There is no doubt that the COVID-19 pandemic has changed educational policy makers, administrators, and teachers, students, and families perceptions on educational instruction in the online environment. Whether face-to-face, blended, or fully online, the acceptance and understanding of fully online instruction has drastically changed within the last two years since the onset of the COVID-19 pandemic. Now more than ever, there is a necessity for being familiar and accepting online learning. Teachers, students, and families have all been encouraged in different capacities to demonstrate proficiency for virtual learning. Online infrastructure from cyber charter schools to programs and individual online course offerings are at the forefront of major developments in education (Darling-Aduana et al., 2022, 1). It's important to note that many families have continued to show increased interest in alternative forms of education, specifically cyber charter schools, even after COVID-19 precautions began to lighten. A majority of students and families preferred the benefits of having personalized formative feedback, ability to access their courses and curriculum from anywhere on their electronic device, and a much more self-directed pacing when it came to lesson completion (Darling-Aduana et al., 2022, 2).

A holistic look into the teaching and learning profession suggests just how important employee retention is when it comes to having qualified and motivated staff to support the educational needs of students. Just as motivation is important to the learner for educational growth and development, motivation as a teacher is important when considering the relationship between employee retention and motivation (García et al., 2019, 149). Understanding the motivating factors for educators to retain them as positive employees can save schools massive amounts of money and time when it comes to the direct and indirect costs associated with employee turnover. There is a multitude of intellectuals that note a correlation between employee motivation and satisfying needs. Pain is associated with the failure to meet a particular need

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

(Alderfer, 1969; Argyris, 1959; Kanfer & Ackerman, 2000; Maslow, 1943; Gannon & Boguszak, 1966). Educators are most notably defined by their intentions to help students achieve their educational goals. Students must have intrinsic motivation to be successful in their school work. Though external factors may have an effect on the choices that educators and students make in their perspective roles in the educational environment, the majority of decisions made are based on intrinsic motivation and the goals and values that a human has for oneself.

Needs and values then are directly related based on a need being unable to satisfy a goal without having values that can be cognitively represented. The choices that people make are a direct correlation to values that they exude (García et al., 2019, 152). In correlation with the working environment, such as a cyber charter school, a teacher could take a specific position based on a personal need that is fulfilled that correlates with their values (Ariza-montes & Han, 2017, 78). Organizations that are continuously interested in motivation levels of their employees need to be aware of how to effectively identify what their employee's value. By understanding these values, employers can create the appropriate blueprint for reducing employee turnover and improving their welfare in the workplace (Ertas, 2015, 401). Creating a community culture that values educators and gives them the autonomy to conduct their classes to the best of their ability greatly increases workplace moral and motivation. When educators feel empowered and supported they will always do more for their school and their students. The work-life balance that is ultimately created by cyber charter school teachers restores that moral as educators can focus more on their lessons and interactions with their students than the day to day routines of traditional brick-and-mortar building duties.

Understanding that the motives behind why humans do what they do are important, we now must ask the question "What motivates these teachers and students to work and learn in the

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

online environment?” Rutten & Badiali (2020) published research expressing that of the many teachers they surveyed, the greatest pattern of common motivations for entering the teaching profession included the desire to make a difference. They also noted an abundance of positive perceptions that related to the profession of being an educator. Within this research, very few participants noted motivating factors that would be characteristic of extrinsic motivators for entering the profession (Rutten & Badiali, 2020, 12). These intrinsic motivators make sense as to why educators became extremely burnt out during the height of the COVID-19 pandemic and many made the switch to available positions within the cyber charter school setting. Ultimately, educators want to be able to help their students learn. If major barriers are affecting their ability to do that than their intrinsic motivation for doing their job and doing it well is in danger.

Students and families may have multiple reasons for attending virtual cyber charter schools. Like the motivations of educators, students and families may have found different practices that they deemed more effective and convenient for their educational and home life needs. Ngan (2022), explains that many of these factors for successful online learning could include “access to resources, technology experience, learning preferences, study habits and abilities, objectives or reasons, lifestyle variables, and personal qualities and characteristics” (Ngan, 2022, 502). Students and families can exercise more flexibility when it comes to online learning in that they can take their technology and school work with them anywhere. Their education is not limited to a physical location and set class schedule. Students in the online learning environment must be self-starters and motivated intrinsically to complete their work in this format as there isn’t a teacher physically in front of them to keep them on task. Families serve as learning coaches as they monitor their students lesson completion, attendance, and gradebook.

Analysis- Cognitive Perspective

When looking at motivation theory and its effects on teachers and students transition to full time cyber education, the work of Jean Piaget comes to mind. Piaget's work on the Theory of Cognitive Development examines 4 stages of cognitive functioning that range based on approximate age bands. The four stages of cognitive development include sensorimotor, preoperational, concrete operational, and formal operational (McLeod, 2022). Though all are important and follow the prospective age bands, the final three are most important in terms of school age children and adult educators. The preoperational stage is marked by symbolic thought. At this stage students would be anywhere from kindergarten to second grade. Students think about things from a symbolic perspective and can associate one concept to another. This stage is important as the youngest learners are able to navigate online instruction and make connections to objectives they are learning even from a young age.

The concrete operational stage carries us through a portion of the middle school years and emerges as logical thinking associated with concrete ideas (McLeod, 2022). This stage is very important for students in the cyber school environment as they are beginning to take their learning into their own hands and work independently on their assignments. The formal operational stage carries through adulthood. This stage is marked by thinking abstractly with an ability to conduct higher-order reasoning. Students are able to make decisions for themselves about their interests and educational opportunities. Teachers are able to perform multiple tasks in the online environment and help students reach their full potential. Piaget's never believed intelligence to be a concrete trait. He believed that a combination of interaction with one's environment and biological maturation were responsible for creating the cognitive development of the individual (McLeod, 2022).

Technological Perspective

Addressing a technological perspective is extremely important when answering the question “What are the motivating factors that influence teachers and students to work or learn in the cyber charter school setting?” The importance of technology-based learning experiences being integrated into teacher preparation programs was a main component of a study from Susan Cydis in 2015 (Cydis, 2015, 68). Little did technology education advocates know that the world would soon rely solely on technology to educate its students when the COVID-19 pandemic surfaced. Understanding that technology is not only a vehicle for teaching and learning but also a major influence in our global economy and many career fields should be all of the justification that is needed for providing more online learning opportunities to train highly qualified teachers and educate intrinsically motivated students. When the focus lies on mastering student competencies based on their relationship to technology, recognition for public cyber charter education and cyber school teachers will grow and policies will change.

By integrating technology as part of teacher’s pedagogical practice, authentic opportunities create competencies for becoming technology literate (Cydis, 2015, 69). Without technology there would have been no way to continue educational instruction throughout the most severe moments of the COVID-19 pandemic. Having educators willing to use the technology and students with available technology enabled instruction in many forms to continue. Some cyber charter schools were able to service their students more fluidly than those brick-and-mortar schools who at the time didn’t have one to one technology device programs but ultimately the concept of continuing forward with education was possible through a technological lens.

Functional Perspective

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

For all of the reasons that teachers, students, and their families choose online learning for their work or education needs, there are still challenges that can arise and must be addressed. When educators first think of online learning they may think of teaching from the comfort of their homes but they may not understand the challenges they will face in finding creative ways and best practices for engaging their online learners. Students and families may think that online learning opens new doors in terms of taking their learning anywhere as their materials and assignments are housed within a piece of technology that can easily be packed in a bag and taken on the road. While these sentiments all have their validity, there are other aspects of functionality that need to be considered when teaching or learning in a cyber education setting. For educators another major factor is connectivity. Without proper internet connectivity the quality of instruction and engagement within the lessons will quickly deteriorate.

The same is true for the student perspective when focusing on attending scheduled online classes and being able to complete assignments. Gillett-Swan (2017) noted that using technology to teach is not a standard approach and varies greatly by the types of technology that are used as well as the content that is being taught (Gillett-Swan, 2017, 21). Understanding the functional components of online teaching and learning are just as important as understanding the motivations for how teachers and students gravitate towards the cyber school environment.

Expectancy-value theory

This theory of motivation relies on the level an individual determines he or she will succeed if they attempt a task as well as the amount of importance they place on the task. Expectancy of success is important because it measures whether or not the individual perceives that they will be successful. The individual is more likely to begin a new task should he or she believe they are likely to complete it successfully. (Cook & Artino Jr, 2016, 1000) This idea of

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

expectancy and value correlates with teachers motivations to change positions and move into full time cyber charter teaching. If a teacher feels like he or she has tried everything and that teaching online wouldn't be as difficult and he or she could be more successful in helping students then the expectancy-value is high and they will be more likely to make that career change. For students and families, an online or blended learning approach may have been forced during the COVID-19 pandemic but now the student is doing very well with online instruction and the family might realize it is the better option for the student's educational needs. This expectancy-value could persuade a family to sign their child up for full time cyber education through a certified public cyber charter school. (Wigfield & Eccles, 2000, 68)

Attribution theory

The human perception of an initial outcome can be explained by the attribution theory. Human reactions to these outcomes vary based on personal abilities, the amount of effort given to the task, help or guidance from others, and whether or not the individual considers luck to affect their choices. Though these characteristics may present themselves subconsciously, it is important to understand the severity of the influence that they have on future behavior. (Cook & Artino Jr, 2016, 1004) Attribution theory can account for teachers and students decisions to change their teaching and learning styles to work and learn in the cyber charter environment. If a teacher feels that he or she has given all of their effort possible to their brick-and-mortar educational institution but they receive little to no support, educational resources, or commensurate salary, then he or she may be more likely to start over and try a career change in online education. The same principal holds true for students and families who feel like their students are not receiving the supports they need or are dealing with environmental factors that are not favorable to the child's educational and emotional development. Weiner's work on

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

attribution theory explains how the first step to solving a problem is finding the cause. From there, the problem can be managed and a plan of action can be formulated to help solve that problem (Weiner, 1985, 548). This idea can be applied to teachers and students changing their working and learning environments to the cyber educational setting. Once it is realized that the traditional setting is no longer working it is important to pivot and find a path that could potentially solve the problem.

Social-cognitive theory

The Social-cognitive theory aims to explain that humans are not involuntary respondents to their environment but perform actions based on their personal factors, behavioral factors, and environmental factors (Cook & Artino Jr, 2016, 1005). Albert Bandura is the father of social-cognitive theory. His work clearly explains that if a person believes that their actions can construct the needed results, then they have a greater incentive to perform those actions. (Bandura, 1997) His self-efficacy definition includes “people’s judgment of their capabilities to organize and execute courses of action required to attain designated types of performances” (Bandura, 1977, 191). In his (2001) *Social Cognitive Theory: An Agentic Perspective*, he describes people as proactive, self-regulating, self-reflecting, and self-organizing (Bandura, 2001). Bandura’s social-cognitive theory provides a blueprint for teachers' self-efficacy when it comes to the profession of education.

In (2022) a study by Weißenfels, Klopp and Perels explained changes in teacher burnout in relation to self-efficacy during the COVID-19 Pandemic. The research further suggests that a teacher with high self-efficacy will produce a greater enthusiasm toward instructional quality, teaching performance, and teaching in general (Weißenfels et al., 2022, 3). When a humans social and cognitive environments are not being fulfilled there is reason through these scholars to

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

believe that they will find a way to fulfill them. From the aspect of cyber education, a burnt out traditional school teacher may make the switch to teaching in the online environment. For students and families that were not having their personal and environmental factors met in their initial institution it might mean giving full-time online instruction a chance.

Achievement theory

Achievement goal or goal orientation theories have different meanings than the other theories present. This style of theory focuses on goals that are usually subconscious such as performance goals and mastery goals. When learners focus on performance or mastery goals they may actually end up with a disadvantage in learning because they are more worried about correctness in front of their peers or magnifying their shortcomings when understanding new material or concepts (Cook & Artino Jr, 2016, 1006-1007). The online learning environment can be a positive environment when it relates to achievement theory as there is much less ability for students to compare themselves to others. In a physical room where test grades may be read aloud or student work is graded by peers, students may find themselves succumbing to achievement theory. The online environment does not give those old school techniques and principals a place to permeate student esteem. Students focus more on their personal gradebooks and submission of assignments in timeframes that are flexible and in a personal location that works for them then working about other students or outside factors that do not have an impact on their overall education.

Self-determination theory

The makeup of self-determination theory lies in the fact that humans are more likely to be creative and produce their most productive accomplishments when they are derived from intrinsic motivation. As external pressures from society grow, children that develop into young

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

adults, tend to be influenced by external motivations. These may be much less intrinsically fulfilling but are pressured to the forefront of human minds in the form of rewards, career accomplishments, societal pressures, and negative consequences like penalties (Cook & Artino Jr, 2016, 1009).

Ryan and Deci explain that one's experience and performance when it comes to a life event or task may be drastically different depending upon whether or not the individual was acting from a place of intrinsic or extrinsic motivation (Ryan & Deci, 2000, 55).

From the perspective of self-determination theory with a concentration on education, motivations are inscribed by a human's sense of self, while their actions can be linked to some form of compliance when stemming from a place of regulatory processes being controlled (Deci et al., 1991, 326-327). It's important to understand within the lens of the self-determination theory as it relates to the cyber education environment and its impacts on teachers and students, social contexts that are unable to satisfy human's three basic psychological needs of autonomy, relatedness, and competence, do damage the development process naturally, decrease motivation, and lastly lead to isolation and low-quality performance (Deci et al., 1991, 333). These processes ring true when it comes to not only students understanding and mastering content whether in person or through an online platform but also when it comes to the needs and motivations of the educators serving the students.

Ethical Implications

Careful ethical and moral reasoning must be considered when attempting to answer the question, "What are the motivating factors that influence teachers and students to work or learn in the cyber charter school setting?" The main focus on the ethical implications of this topic should be a deeper dive into both the teacher and student perspectives. Understanding healthy

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

workplace motivating factors for teachers as employees, as well as, students receiving their rights to an appropriate education as detailed in the U.S. Department of Education's mission statement (US Department of Education, 1980).

Educators are held to moral and professional standards when conferring their degrees and are expected to ensure that students “receive a fair, honest, and uncompromising education” (Professional Governmental Underwriters, LLC, 2020). Teachers must model certain behaviors and characteristics that uphold the best ideals for students such as honesty, fairness, unity, patience, and respect to name a few. Teachers maintain confidentiality and understand when to get appropriate assistance for specific student situations as needed to maintain the welfare of all students in their charge. No matter the means of educational setting, educators must exemplify “impartiality, integrity, and ethical behavior in the classroom” (Professional Governmental Underwriters, LLC, 2020).

It's important to understand that all of these codes, traits, and standards can be overwhelming and pressing in today's economic times, especially after the wake of a global pandemic. We must consider teacher burnout as a real threat to our educational system and look into the possibilities of a transition to cyber charter education as a way for educators to get their work-life balance back. Focusing on teaching core content with inventive technology for students who choose to come to class and learn can provide a moral boost to educators' motivations to teach and help them exceed student expectations in the online classroom environment.

Another ethical implication of cyber charter school education is the autonomy of the student to succeed. There are many studies on how students do better in an online environment, especially with qualified instructors who make the learning engaging and personalized.

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

However, is there enough proof to show that the student is actually mastering the content to the same extent which is expected in a brick-and-mortar school? Another aspect of this would be: Are the methods of traditional classroom instruction and assessment representative of the skills that students need to thrive in our current global economy? Should assessments be allowed for submission in various formats over multiple platforms until the student shows mastery of the content; as is the case with many cyber charter schools today?

There are various controversies on the concept of assessments whether they are distributed within a brick-and-mortar institution or through cyber charter schools. When it comes to assessments, I believe that whatever format illustrates the mastery of the completed content should be accepted no matter how many times it takes to complete within a given quarter or semester period. In life, there are not many first-try successes. Usually, our greatest achievements come after our hardest struggles. There is no success without failure. Grading a student on a single test or based on when it is given does not prove that the student is smart. There could be many barriers to success that a paper and pencil test will not display.

Besides teacher burnout and student assessment completion, we must look at the cyber charter school setting as a means of being a successful learning environment for the student as a whole. Does the student get enough socialization outside of the school setting that working from home online each day will not hinder his or her peer socialization? Does the student have medical needs that put him or her in danger if he or she were to physically attend class in a brick-and-mortar institution? This question is especially important as we are recovering from the wake of the COVID-19 pandemic.

Does the student attend rigorous sporting events and practices that would inhibit them from maintaining a traditional school day schedule in a brick-and-mortar environment? This in

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

many cases, is where a great population of students fall when choosing to make the switch to online learning. Old-school attendance policies force face-to-face instructional institutions to count attendance as a mandatory component of the student's overall ability to pass or fail the school year. In cyber charter schools, attendance is counted in not only a student's ability to attend certain online classes but also in the lessons themselves that the student turns in.

Therefore, the student could travel for sports or medical appointments and never miss a beat when it comes to attendance, participation, or lesson completion.

Policy Recommendations

Learning what motivates our teachers and students to dive into online teaching and learning is an important factor in the way that our educational system is shifting. The more research that can be conducted on student learning outcomes and performance, the more likely states will continue to see a need for online instruction and thus more opportunities will be available to learners. According to the National School Choice Week Team, only 35 of the 50 states in the U.S. offer completely online tuition-free public school. This does not mean that other states do not offer online options but it does mean that they may come at a cost to families and therefore barriers are created between access to online education and a family's financial health (National School Choice Awareness Foundation, Inc., 2022). The same holds true for educators in this space. Where there are families that demand school choice, there must be qualified teachers available to educate them. Quality education begins with highly qualified staff that understand the technology and can produce quality instruction that aligns with state standards and provides the learners with the ability to reach their full potential.

Education is not a one size fits all model and for teachers and students alike, many need an alternative opportunity to work and learn. Just as many students and families feel they are

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

struggling and burnt out after long school days, so are teachers who don't feel as though they are being able to provide effective instruction when their job duties are drastically more than delivering instruction. Though online teaching and learning will most likely not take the place of brick-and-mortar educational institutions, it does offer a phenomenal opportunity for educators and students who work and learn best in that type of structural environment. If a global pandemic has taught education policymakers anything it is the need to have special programs and schools of choice in place to allow students and staff to continue learning and growing in an ever-changing global economy.

Further research should be conducted on schools across the United States. Important trends to identify and seek out would be how they have grown or implemented online learning platforms. States should be surveyed on the status of the school choice policies and how many cyber charter schools exist. What rates are cyber charter schools able to retain and graduate students as well as their state testing requirements and scores? A cross-sectional approach from all states may be difficult as different states have different testing requirements and scores that students must follow and standards that they must master. Overall, continued research on trends in teachers becoming fully online instructors as well as students moving into online learning can give us an idea of where education may be growing or lacking and what that looks like for our education system as a whole.

Could implementing a policy that requires school districts to offer online learning help or hinder the education of students and the workload of teachers? Should brick-and-mortar institutions leave online learning and instruction to certified cyber charter schools that only serve students academically in the online learning environment? Would a blended learning approach

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

be a better alternative to both or will the needs continue to shift with some teachers and families simply staying in the cyber charter environment because it is better for their work-life balance?

A further policy recommendation may be that school officials be required to understand the research on work motivation and motivation theory as it relates to employee motivation and student learning. Having dedicated employees and students who are willing to learn in the educational setting could be an even more effective working and learning environment. Understanding technological best practices and knowing that using technology is a necessary tool could help policymakers change school choice laws and provide more than adequate funding, resources, and training for teachers and students that enable them to be successful in the online learning environment.

Summary

Understanding how and to what extent a person is motivated to learn is a tremendous asset in relation to teacher retention and student achievement. It's important to familiarize oneself with motivational theories as they all share a common factor of satisfying a need (García et al., 2019, 153). With cyber charter school enrollment on the rise and over 1,000% more cyber charter teaching positions filled in 2018 than at the turn of the century, it is no surprise that understanding what the motivations of these teachers, students, and families are is important to the future of our education system in context of online learning (US Department of Education, 2020). Even though the statistics for enrollment and cyber charter teaching positions are extremely high, they were skyrocketed to astronomical levels with the onset of the COVID-19 pandemic.

Many students and their families chose to make the switch to full time cyber charter education when their home districts online learning programs fell short at the wake of the

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

pandemic. Families determined that a full time online public school might be the better option for their student than a makeshift version of virtual learning from a brick-and-mortar institution. Teachers in brick-and-mortar schools found themselves burning the candle at both ends when they were instructed to take their curriculum online with minimal technology training and in some districts inadequate technology resources and equipment. Less affluent districts did not even have one to one technology devices in place for their students which caused some children to slip through the cracks if they did not have their own way to access the online platform that their local district was attempting to make available.

Public cyber charter schools were the best equipped to handle the pandemic as their standard of education is to provide free technology equipment, standardized and accredited curriculum, and internet stipends should the family qualify. The COVID-19 pandemic single-handedly changed the way the world viewed working and learning online and from distant locations. The importance of intrinsic motivation was highlighted throughout as a means of fostering authentic learning experiences (Deci et al., 1991, 332). It was also important to recognize that almost all motivations for teachers come from intrinsic values and goals that they have to help students be successful in the educational environment (Rutten & Badiali, 2020, 12).

Students and families may be motivated to attend cyber charter schools for a variety of reasons. Most notably would be the ability to take your school work with you anywhere that you go. Though this may sound like a perfect learning style, it's important to understand how intrinsically motivated that student has to be to find success in the cyber charter school environment. Without the support of a classroom teacher peering over your shoulder to make sure that your work is getting done there is a substantial amount of freedom that students must manage and navigate to get assignments completed successfully and on time. Students could also

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

find themselves missing social interactions with peers should they not be involved with extracurricular activities that allow them to still spend time with their friends.

Cognitive, technological, and functional perspectives can attempt to answer the question “What are the motivating factors that influence teachers and students to work or learn in the cyber charter school setting?” Understanding how the brain works and what motivates students and teachers is one aspect of this paper that is worth further exploration. Technological resources, training, equipment, and all of the troubleshooting that comes with it is another important aspect of this research. Being able to teach or learn in the online environment means knowing how to use your technology and having stable connectivity to actively participate in online instruction round out the functional perspective. Along with distinct perspectives there are many motivation theories that can contribute effectively to the discussion on cyber learning and teaching. Expectancy-value, attribution, social-cognitive, achievement, and self-determination are all worth further consideration as possible motivation theories to explain why teachers and students switch to the online learning environment.

Ethical considerations would encourage teachers to hold students to the same standards that they would in a brick-and-mortar classroom as well as a cyber educational environment. It is also wise to consider if the students is truly mastering the concepts within the online learning environment as their learning is ultimately of the utmost importance when it comes to education as a whole. Policy recommendations could include further research on whether or not cyber charter schools should be solely run and offered independently of traditional brick-and-mortar districts or if these districts need to provide better opportunities within their programs to help their students be more successful and their teachers feel more supported.

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

Further research studies should be conducted by state and by individual districts to understand how they served students and their teaching staff during the toughest educational period of our lifetime. Having further research on what methods and approaches worked well could help identify the ways in which our educational system will continue to shift.

Understanding what percentage of our teachers and students have permanently shifted to public cyber charter educational institutions would also be very helpful to note. What aspects further motivated them to stay in the online environment that they didn't initially think of when they made the switch? The more data that is collected the better chance of seeing policy changes in regards to education and schools of choice across the United States. The amount of supports for teachers in preparedness programs with technology focuses would also expand and improve which is equally important for our student success and global economy.

About the Author

Kaelin Anderson was born and raised in Honesdale, PA. She is a proud military wife to Ethan and energetic mother to Charlotte and soon to be Owen Anderson. Kaelin earned both her Bachelor's and Master's degrees from Wilkes University in Education and Instructional Technology. She continues to explore her love of research within the field of Administration and Leadership through Marywood University's Ph.D. program where she anticipates to graduate in the fall of 2023. Kaelin is a full-time Instructional Coach for a Pennsylvania public cyber charter school and also owns and operates two small businesses within her local community that involve real estate and special event catering. Kaelin's passions include traveling, spending time with family, and helping others reach their full potential. Kaelin aspires to continue her administrative and leadership interests at the collegiate level in the future.

References

- Alderfer, C. (1969). An empirical test of a new theory of human needs. *Organizational Behavior and Human Performance*, 4(2), 142-175. ScienceDirect.
[https://doi.org/10.1016/0030-5073\(69\)90004-X](https://doi.org/10.1016/0030-5073(69)90004-X)
- Argyris, C. (1959). The Individual and Organization: An Empirical Test. *Administrative Science Quarterly*, 4(2), 145-167. JSTOR. <https://doi.org/10.2307/2390675>
- Ariza-montes, A., & Han, H. (2017). Employee responsibility and basic human values in the hospitality sector. *International Journal of Hospitality Management*, 62, 78-87. ScienceDirect. <https://doi.org/10.1016/j.ijhm.2016.12.001>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215.
<https://psycnet.apa.org/doiLanding?doi=10.1037%2F0033-295X.84.2.191>
- Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. W.H. Freeman.
- Bandura, A. (2001). Social Cognitive Theory: An Agentic Perspective. *Annual Review of Psychology*, 52(1), 1-26.
<https://www.annualreviews.org/doi/pdf/10.1146/annurev.psych.52.1.1>
- Cook, D. A., & Artino Jr, A. R. (2016). Motivation to learn: an overview of contemporary theories. *Medical education*, 50(10), 997-1014.
<https://doi.org/10.1111/medu.13074>
- Cydis, S. (2015). Authentic instruction and technology literacy. *Journal of Learning Design*, 8(1), 68-78. <https://files.eric.ed.gov/fulltext/EJ1060125.pdf>
- Darling-Aduana, J., Woodyard, H., Sass, T., & Barry, S. (2022). Learning-Mode Choice, Student Engagement, and Achievement Growth during the COVID-19 Pandemic.

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

AERA Open, 8(1), 1-18.

<https://journals.sagepub.com/doi/epub/10.1177/23328584221128035>

Deci, E., Vallerand, R., Pelletier, L., & Ryan, R. (1991). Motivation and Education: The Self-Determination Perspective. *Educational Psychologist*, 26(3-4), 325-346.

https://selfdeterminationtheory.org/SDT/documents/1991_DeciVallerandPelletierRyan_EP.pdf

Ertas, N. (2015). Turnover intentions and work motivations of millennial employees in federal service. *Public Personnel Management*, 44(3), 401-423. SAGE journals.

<https://doi.org/10.1177/0091026015588193>

Gannon, D., & Boguszak, A. (1966). Douglas McGregor's Theory X and Theory Y. *The Human Side of Enterprise*, 358-374.

<https://doi.org/10.1093/acref/9780199298761.013.1285>

García, I., Ramón, S., & Herrera, A. (2019). The Role of Work Motivation Based on Values in Employee's Retention in the 21st Century. *Management Studies*, 7(2),

149-156. 10.17265/2328-2185/2019.02.007

Gillett-Swan, J. (2017). The Challenges of Online Learning Supporting and Engaging the Isolated Learner. *Journal of Learning Design*, 10(1), 20-30.

<https://eprints.qut.edu.au/102750/1/293-749-1-PB.pdf>

Hroncich, C. (2020, July 31). *Cyber School Basics*. Commonwealth Foundation.

<https://www.commonwealthfoundation.org/commentary/2020/07/31/cyber-school-basics/>

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

- Institute of Education Sciences. (n.d.). *Distance Education in IPEDS*. National Center for Education Statistics. <https://nces.ed.gov/ipeds/use-the-data/distance-education-in-ipeds>
- Kanfer, R., & Ackerman, P. (2000). Individual differences in work motivation: Further explorations of a trait framework. *Applied Psychology, 49*(3), 470-482.
- International Association of Applied Psychology. <https://doi.org/10.1111/1464-0597.00026>
- Lemos, M. S., & Veríssimo, L. (2014). The Relationships between Intrinsic Motivation, Extrinsic Motivation, and Achievement, Along Elementary School. *Procedia-Social and Behavioral Sciences, 112*, 930-938. ScienceDirect.
- <https://doi.org/10.1016/j.sbspro.2014.01.1251>
- Maslow, A. (1943). A theory of human motivation. *Psychological Review, 50*(4), 370-396. APA PsycNet. <https://doi.org/10.1037/h0054346>
- McDougall, W. (1908). *An Introduction to Social Psychology*. Methuen & Co.
- <https://doi.org/10.1037/12261-000>
- McLeod, S. (2022, August 18). *Jean Piaget's Theory and Stages of Cognitive Development*. Simply Psychology. <https://www.simplypsychology.org/piaget.html>
- McQuirter, R. (2020). Lessons on Change: Shifting to Online Learning during COVID-19. *Brock Education Journal, 29*(2), 47-51.
- <https://files.eric.ed.gov/fulltext/EJ1267300.pdf>
- Müller, L., & Goldenberg, G. (2020). Education in Times of Crisis: The Potential Implications of School Closures for Teachers and Students: A Review of Research Evidence on School Closures and International Approaches to

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

- Education during the COVID-19 Pandemic. *London: Chartered College of Teaching*, 1-62. https://my.chartered.college/wp-content/uploads/2020/05/CCTReport070520_FINAL.pdf
- National School Choice Awareness Foundation, Inc. (2022, September 19). *The Ultimate Guide to Online School – How Does Online School Work?* National School Choice Week. <https://schoolchoiceweek.com/guide-to-online-school/>
- Ngan, T. (2022). Online Education and Students Achievement during the COVID 19 Time. *Technology and Society Studies*, 502-505.
- Patrick, S., & Powell, A. (2009). A Summary of Research on the Effectiveness of K-12 Online Learning. *International Association for K-12 Online Learning*, 11. ERIC. <https://files.eric.ed.gov/fulltext/ED509626.pdf>
- Professional Governmental Underwriters, LLC. (2020, July 27). *The Code of Ethics for Educators - Professional Governmental Underwriters (PGU) Professional Governmental Underwriters (PGU)*. Professional Governmental Underwriters, Inc. <https://pgui.com/the-code-of-ethics-for-educators/>
- Răducu, C., & Stănculescu, E. (2022). Personality and socio-demographic variables in teacher burnout during the COVID-19 pandemic: a latent profile analysis. *Scientific Reports*, 12(14272), 1-12. <https://www.nature.com/articles/s41598-022-18581-2#citeas>
- Rutten, L., & Badiali, B. (2020). Why They Teach: Professional Development School Teacher Candidates' Initiating Motivations to Become Teachers. *School-University Partnerships*, 13(1), 12-21. <https://files.eric.ed.gov/fulltext/EJ1249340.pdf>

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25(1), 54-67. ScienceDirect. <https://doi.org/10.1006/ceps.1999.1020>
- Steers, R., Mowday, R., & Shapiro, D. (2004). The Future of Work Motivation Theory. *Academy of Management Review*, 29(3), 379-387. Academia. https://www.academia.edu/27388541/The_Future_of_Work_Motivation_Theory?email_work_card=title
- US Department of Education. (1980). *Overview and Mission Statement / U.S. Department of Education*. <https://www2.ed.gov/about/landing.jhtml>
- US Department of Education. (2020). *Fast Facts: Teacher characteristics and trends* (28). National Center for Education Statistics. <https://nces.ed.gov/fastfacts/display.asp?id=28>
- Weiner, B. (1985). An Attributional Theory of Achievement Motivation and Emotion. *Psychological Review*, 92(4), 548-573. https://www.researchgate.net/publication/19257755_An_Attributional_Theory_of_Achievement_Motivation_and_Emotion/link/59c927f10f7e9bd2c01a59f1/download
- Weißenfels, M., Klopp, E., & Perels, F. (2022). Changes in Teacher Burnout and Self-Efficacy During the COVID-19 Pandemic: Interrelations and e-Learning Variables Related to Change. *Frontiers in Education*, 6, 1-9. <https://psyarxiv.com/54wub/>

DECODING MOTIVATING FACTORS INFLUENCING CYBER EDUCATION

Wigfield, A., & Eccles, J. S. (2000). Expectancy-Value Theory of Achievement Motivation. *Contemporary Educational Psychology*, 25(1), 68-81. ScienceDirect.
<https://doi.org/10.1006/ceps.1999.1015>