Factors of Motivation in Education: Perspectives of College Students and Their Professors

Caitlin Reash  
*University of Mount Union*, reashca@mountunion.edu

Karen H. Larwin  
*Youngstown State University*, khlarwin@ysu.edu

Follow this and additional works at: [https://digitalcommons.gardner-webb.edu/joel](https://digitalcommons.gardner-webb.edu/joel)

Part of the Adult and Continuing Education Commons, Educational Leadership Commons, Elementary Education Commons, Secondary Education Commons, Social and Philosophical Foundations of Education Commons, and the Teacher Education and Professional Development Commons

**Recommended Citation**

Reash, Caitlin and Larwin, Karen H. ( ) "Factors of Motivation in Education: Perspectives of College Students and Their Professors," *Journal of Organizational & Educational Leadership*: Vol. 7 : Iss. 1 , Article 2.

Available at: [https://digitalcommons.gardner-webb.edu/joel/vol7/iss1/2](https://digitalcommons.gardner-webb.edu/joel/vol7/iss1/2)

This Article is brought to you for free and open access by the College of Education at Digital Commons @ Gardner-Webb University. It has been accepted for inclusion in Journal of Organizational & Educational Leadership by an authorized editor of Digital Commons @ Gardner-Webb University. For more information, please contact digitalcommons@gardner-webb.edu.
Introduction

With motivation recognized as a multidimensional construct, there are numerous factors that influence how it is perceived by individuals. University educators have the immense responsibility of designing instruction that is relevant to students’ academic and professional growth in relation to their future goals. Exploring how motivation varies based on demographic factors, as well as how students’ and educators’ perceptions of motivation correlate, will inform course level and overarching programmatic decision-making. Starting every class with the thought, “how will I know my impact today” (Hattie, 2015, p. 89), Hattie applied his visible learning theory to the university level and determined that educators must use the knowledge of their students’ motivations and prior learning to create meaningful, clear, and aligned paths to learning.

Students’ unique lived experiences impact their perceptions and motivations. Exploring what motivates them to engage in coursework provides valuable information that allows for responsive course design and provides an opportunity for educators to align their values to their outcomes. In the field of education, as educators prepare students, modeling effective instructional techniques and caring practices that represent diverse perspectives is integral to building students’ educational foundation of meaningful and visible learning. Less research has been conducted in higher education regarding the variances in student motivation (Hattie, 2015), as well as how care is perceived from various subgroups, specifically educator preparation programs (Collinson, 2012; Eisenbach, 2016; Garza et al., 2014; Rabin, 2014; Shevalier & McKenzie, 2012; Todd, 2018).
Visible Learning

The influence that teachers’ actions can have in the process of student learning cannot be understated. While students have responsibilities as learners, the teachers must put themselves in the place of their students when designing instruction that motivates them to succeed. Hattie (2009) described visible learning as “teachers seeing learning through the eyes of students, and students seeing teaching as the key to their ongoing learning” (p. 22). This connects with Noddings’ (2010) concept of motivational displacement, which focused on individuals putting the needs and beliefs of the cared-for (p. 392) above their own. Through this practice, teachers provide learning situations that are responsive to the needs of their students and incorporate evaluations to inform future practice (Hattie, 2015).

Hattie (2009) has linked the following six factors of visible learning as integral to strengthening achievement outcomes: the child, the home, the school, the curricula, the teacher and the approaches to teaching (p. 31). How these factors interact impacts the learning outcomes, and the way children engage in their learning is dependent upon their prior knowledge, experiences, beliefs, and self-efficacy. These factors are impacted by the way the teacher creates a structured and collaborative environment, the expectations of the teacher, the balance of curriculum choices, and continuously providing opportunities for feedback (Hattie, 2009).

Educators’ actions impact students’ perceptions, and demotivation can be as impactful as motivation, specifically regarding values and actions (Hattie, 2015). Motivation is also impacted by students’ self-efficacy (Bembenutty, 2011; Bandura & Adams, 1977; Bowles & Hattie, 2013; Grealish et al., 2017; Palos et al., 2019) and self-regulation (Arts et al., 2016; Bembenutty, 2011; Sava et al., 2020; Zimmerman, 2002). Just as motivation can be enhanced through a focus on fostering the theories above, demotivation due to a lack of trust or teacher bias is also influential.
Teachers can aid in students’ development of self-efficacy and self-regulation by placing an emphasis on the intentional use of specific and constructive feedback, which is a focus of visible learning. When educators see themselves as evaluators (Hattie, 2015), the reflective view allows for the refinement of their instruction and their classroom environment. This reciprocal feedback loop creates a cyclical process for students and teachers to engage in dialogue (Arts et al., 2016; Hattie, 2015) regarding what they are learning, the classroom environment, and how they are engaging in their professional growth.

With a focus on instructors in higher education, Hattie (2015) explained the importance of educators viewing themselves as evaluators, so that they can use feedback and data collection to determine the probable impact of their instruction. To do this, Hattie shares that educators should incorporate opportunities for feedback within their instruction, strategically plan for ways to make instruction impactful, allow time for students to share in dialogue to determine if their understanding is in line with the instructional goals, and use data to inform future decision-making. Practices such as these which are related to feedback provide insights into which concepts students are grasping, the effectiveness of the delivery, and allows opportunities for students to voice their thoughts and understandings (Arts et al., 2016; Hattie, 2015). Educators in teacher preparation programs are responsible for modeling these effective and engaging teaching practices, so that their students can replicate them in their own practice (Bembenutty, 2011). These are all aspects that educators need to consider, as they evaluate the impact that they can make each day (Hattie & Yates, 2014).

Student-teacher relationships also play a vital role in visible learning (Hattie, 2009). Much research has linked positive student-teacher relationships with higher motivation, achievement, and perceptions of care (Alder, 2012; Cavanagh et al., 2012; Cramer & Bennet,
Journal of Organizational and Educational Leadership, Vol. 7, Issue 1, Article 2

2015; Falls & Roberts, 2012; Garza et al., 2014; Urdan & Schoefelder, 2006; Warren & Bonilla, 2018), specifically for minority students (Collier et al., 2019) and females (Tumova, 2020; Waltzer & Nottis, 2013). These relationships are built on relational care that creates caring-for partnerships (Noddings, 2010) built on trust (Tschannen-Moran, 2004) and an understanding of the characteristics and needs of individual students. Students are adept at determining the values and expectations that drive their instructors’ decisions, and this can result in either the motivation or demotivation of their learning (Hattie, 2009).

The impact of meaningful relationships on motivation and achievement is immense (Alder, 2012; Cavanagh et al., 2012; Cramer & Bennet, 2015; Falls & Roberts, 2012; Garza et al., 2014; Warren & Bonilla, 2018). Students identified that when their teachers showed an interest in their lived experiences or future aspirations, they felt more valued and developed more influential relationships (Masko, 2018; Parsons, 2005; Warren & Bonilla, 2018). Allen and FitzGerald’s (2017) research revealed that culturally responsive practices resulted in improved effort and positivity, even when presented with challenges. In fact, challenging students to achieve their best has been shown to increase motivation and achievement, as well as lead to reciprocal relationships (Cooper & Miness, 2014; Land et al., 2014; Todd, 2018; Vega et al., 2015). Students’ motivations are impacted by their perceptions of the concepts described above. For educators to utilize the strategies above, they need to start with learning about the factors that influence their students’ motivation. Once determined, they can use this data to foster relationships built on reciprocity through the incorporation of meaningful instruction and a positive learning environment.
Motivational Factors

Jones’s (2018) MUSIC® Model of Motivation explores five factors of motivation, eMpowerment, Usefulness, Success, Interest, and Caring, and helps researchers to determine the factors most impactful to their participants’ motivational needs. Perceptions of students’ motivational factors from the perspective of their teachers can differ from how the students perceive their motivation (Jones, 2009). The perception of these factors is fluid, as they are dependent upon the situation, feedback, and implementation of various strategies (Chittum et al., 2019; Jones, 2018). When students feel that their opinions matter, and they have choice in their own learning, they feel more empowered (Baeten et al., 2012; Grealish et al., 2017; Jones, 2018; Robertson & Padesky, 2019; Trolian & Jach, 2020), as well as cared for (Shevalier & McKenzie, 2012; Ullucci, 2009).

Having students in educator preparation programs reflect on their own values and actions is important in supporting their professional growth. Mindset about what success means is also influential to motivation. Students who have an incremental mindset are more apt to challenge themselves, while students with an entity mindset are focused solely on achievement, rather than growth (Dweck, 2005). The expectations of a course and the environment that is created impact how students perceive success (Jones, 2009). Collinson (2012) and Eisenbach (2016) agreed that educator preparation programs need to evaluate how their practitioners are learning about care and motivation through using metacognition to understand how their perceptions and actions are influenced from their prior knowledge and experiences. Exploring the five factors of Empowerment, Usefulness, Success, Interest, and Care provide educators with opportunities to learn more about their students’ motivations in order to help them grow and succeed as
individuals. Each factor has unique characteristics, but together, they provide a holistic view of motivation.

**Empowerment**

Students feel a sense of autonomy, as well as care, when their voices are heard and their opinions are taken into consideration (Baeten et al., 2012; Grealish et al., 2017; Robertson & Padesky, 2019). Practices that are perceived as caring, such as having open dialogue (Noddings, 2010; Parsons, 2005; Roberts, 2010; Shevalier & McKenzie, 2012; Ullucci, 2009), providing choices (Shevalier & McKenzie, 2012; Ullucci, 2009), and bringing culture into the classroom (Urdan & Bruchmann, 2018) all contribute positively to students’ self-efficacy, which is related to their sense of empowerment (Grealish et al., 2017). Fostering environments that build up students’ beliefs about themselves through valuing their uniqueness, empowers them to be motivated to learn. Supportive student-teacher relationships contribute to empowerment because students feel a greater sense of access to their education and collaboration with others (Grealish et al., 2017; Wu, 2019).

Creating learning environments that positively promote students’ beliefs about themselves through valuing their uniqueness, empowers them to be motivated to learn. Educators’ can increase students’ self-efficacy, and in turn, empowerment, by providing a choice of real-world application of learning through inquiry, problem-based learning (PBL), and case-based learning (CBL) (Baeten et al., 2012; Robertson & Padesky, 2019; Trolian & Jach, 2020). These real-world applications add to the usefulness of the tasks and impact motivation; however, structures must be in place that allow for students to feel confident completing PBL activities (Robertston & Padesky, 2019). Baeten et al. discovered that a progressive shift from lecture-based teaching to inquiry-based applications such as PBL and CBL is most effective, rather than
beginning with them from the onset. This allows for the establishment of scaffolding, feedback, and structure that guides students, while providing clear expectations for the outcome.

While PBL empowers students when utilized effectively, it requires self-regulation on behalf of the students. As students progress to higher education, self-regulation becomes an integral factor in their success. Researchers have noted that when educators take the time to teach strategies for self-regulation, motivation and achievement are positively impacted (Zimmerman, 2002). However, it is noted that self-regulation strategies must often be explicitly taught (Sava et al., 2020). Self-efficacy, goal setting, and purpose are influential to students’ abilities to self-regulate (Bembenutty, 2011). Providing autonomous opportunities where students have choice and more control over their own learning has positive impacts on motivation (Baeten et al., 2012; Grealish et al., 2017; Robertson & Padesky, 2019), but only when structured in a way that allows for feedback and growth (Arts et al., 2016; Hattie, 2015; Sava et al., 2020).

**Usefulness**

Motivation for activities using real-world application is influenced by the instructors’ explanation for why the activity is useful (Jones, 2009). While the usefulness in some areas of study may seem more transparent, educators have the responsibility to ensure that their students see the connections between the coursework and applications. The recognition of usefulness varies from person to person, but when students feel that activities are useful to their personal and professional growth, they are more self-regulated and motivated (Simons et al., 2004). Additionally, when connections are made between the usefulness of a task and future goals, self-efficacy is positively impacted (Hulleman et al., 2017).

Utility of the information provided is one of the subjective task values (SVT) associated with the Eccles’ and Wigfield’s (2020) expectancy-value theory. They explained that the utility
of SVT is most closely related to extrinsic motivation; however, when utility is connected to a specific career path, it can be connected to an individual’s intrinsic motivation. For students in education courses, the majority are working towards a career as an educator, so the assumption would be that usefulness would impact both their extrinsic and intrinsic motivation to succeed. Hulleman et al. (2017) found that when students made connections between the utility of the subject matter and their future goals, they increased their self-efficacy regarding the course and felt that the work was more meaningful. Additionally, Hulleman et al. found that this helped students who were identified as lower-performing feel more able to succeed in the coursework.

**Success**

Students’ perceived belief about whether they can succeed or not in a course is influential to their decision-making and motivation (Palos et al., 2019). Instructional design that is challenging, yet attainable sets students up for success, which motivates them to be engaged in their activities (Jones, 2009). Jones also shares that when work is either too difficult or too easy, motivation is negatively impacted. When course content is responsive to the needs of students, both academically and culturally, students feel cared-for (Noddings, 2010, p. 392) and motivated to work towards success (Garza & Huerta, 2014; Howard, 2001; Masko, 2018; Parsons, 2005; Shevalier & McKenzie, 2012).

Students’ self-efficacy and their mindset drive their actions. Mindsets impact how individuals view situations and what motivates them to succeed. Entity theorists are most concerned with achievement, while incremental theorists are more focused on growth (Dweck, 2005). Failure is viewed as unacceptable by those with an entity mindset and may limit their growth because they are less apt to take on challenges (Dweck, 2005). Arts et al. (2016) found that, at times, learning is overlooked because students are so focused on the grade. A growth
mindset positively impacts both short- and long-term goals through viewing difficult situations and failures as part of the overall learning process (Dweck, 2015). Failure is an opportunity for self-reflection based on the feedback provided (Jones, 2009). The expectations of a course and the environment created impact how students perceive success (Jones, 2009). When students feel that they can be successful, they are more motivated to do the coursework (Banfield, 2020).

**Interest**

Jones (2009) discussed the importance of incorporating instruction that is designed for sustained, rather than temporary interest in a topic, as this leads to greater motivation. Jones (2009) referenced Schunk et al. (2008) when explaining that sustained interest allows more time for students to process information and connect it to previous learning because they do not have to regulate their efforts on something that does not interest them. Reciprocal relationships with teachers can also play an important role in the interest level of students in a course (Urdan & Schoenfelder, 2006; Wu, 2019). While there are factors that teachers cannot control that impact students’ motivation, the ones that they can control can positively impact the motivation of the students in their classroom (Jones, 2009, 2018; Urdan & Schoenfelder, 2006).

McGinley and Jones (2014) found that students’ perceptions of interest as a motivator are positively influenced by a brief activity on the first day of a college course. The dialogue students have about their goals for the course add to their perceptions of the usefulness of the coursework, as well as their interest in it. Dialogue is also shown to be a powerful tool for demonstrating care, which was also noted in McGinley’s and Jones’ study as a motivating factor that was increased through the opening day activity. This is in line with other research and theory that promotes dialogue as a representation of care (Noddings, 2010; Parsons, 2005; Roberts, 2010; Shevalier & McKenzie, 2012; Ullucci, 2009).
Caring

Care is a foundational component of education and is inextricably linked to motivation (Allen & FitzGerald, 2017; Abry et al., 2013), achievement (Froiland & Worrell, 2016; Vega et al., 2015; Wang & Holcombe, 2010), and positive teacher-student relationships (Alder, 2012; Cavanagh et al., 2012; Cramer & Bennet, 2015; Falls & Roberts, 2012; Garza et al., 2014; Warren & Bonilla, 2018). Miller and Mills (2019) discovered that students in college perceived engaging instruction that allows for interaction with the professor as caring. Students value open communication and learning that meets their needs (Masko, 2018; Shevalier & McKenzie, 2012). Noddings (2010) identified dialogue as important to reciprocal care because students appreciate when teachers include their thoughts and opinions, including culture, in the functioning and creation of the classroom environment (Shevalier & McKenzie, 2012). There is a notable lack of current research examining perceptions of care from the perspective of students in college (Miller & Mills, 2019), and specifically, student teachers (Collinson, 2012; Eisenbach, 2016; Garza et al.; Rabin, 2014; Shevalier & McKenzie, 2012; Todd, 2018).

Care Theory. Care theory is grounded in the view that care comes in different forms. Noddings (1984, 1992, 2005, 2010, 2013) discussed the virtue of care versus relational care, as well as ethical versus natural caring. These ideals serve as the foundation for numerous studies that aim to determine what care looks like, how it is perceived, and the strategies that educators can put into practice in order to increase motivation, achievement, and relationships. When thinking of actions that would be categorized as care, teachers must begin to think about how those actions are being perceived by their students, as teachers can feel as though they are demonstrating care for their students, even if their students do not feel the same. From an educational standpoint, care that is reciprocal establishes an understanding between students and
teachers that accounts for individual needs, establishes rapport and relationships built on trust, and contributes to a positive school climate (Allen & FitzGerald, 2017; Parsons, 2005; Shevalier & McKenzie, 2012). Essentially, “Belonging is two-sided” (R. Knight, personal communication, March 5, 2020).

Care theory has also been influenced by the work of Carol Gilligan. While many associate Gilligan with gender, she also theorized about moral injury, specifically trust built by listening: “If we are serious about recognizing and respecting differences, then we need to hear and encourage the full range of voices within and around us by becoming a society of listeners” (Gilligan, 2014, p. 104). Gilligan’s work established the importance of knowing the needs of the individuals and allowing their voices to be heard by respecting the diversity that they bring. For voices to be heard, there must be open lines of communication that allow for dialogue. Noddings (2005, 2010) identified the need for dialogue as a representation of relational care, and numerous current research studies have been conducted that support Noddings’ theory (Alder, 2012; Collinson, 2012; Cramer & Bennett, 2015; Land et al., 2014; Masko, 2018; Parsons, 2005; Shevalier & Mackenzie, 2012; Tosolt, 2009; Velasquez et al., 2013; Wang & Holcombe, 2010). Care that recognizes, acknowledges, and allows for differences to be discussed leads to more chances for meaningful relationships to be developed.

To examine the five factors of motivation described above, the MUSIC® Model of Motivation will be used. The five MUSIC® factors were determined as influential to motivation based on an extensive review of educational and psychological research (Jones, 2018). The foundation of this research design is built on five key principles that represent what instructors should consider when creating their learning environments. To increase motivation, students should:
• feel empowered through having choice and co-creating their learning experiences;
• find the instruction relevant and useful to their current and future learning;
• know that success is attainable through continued effort;
• be interested in the coursework; and
• perceive that they are cared for holistically (Jones, p. 9).

The review of literature focused on Hattie’s (2014) visible learning theory and its relationship to the motivational factors utilized in the survey design. Aspects of care theory are present throughout the discussion with underpinnings in the notion of caring-for (Noddings, 2010, p. 392) and motivational displacement (Noddings). Research shows that motivational factors vary based on individual perceptions. Through incorporating opportunities for feedback, evaluation, and reflection, students’ perspectives can be heard. Reciprocal relationships with students built on trust, respect, and most of all, care, can add to their motivation. This study seeks to determine the most influential factors that contribute to motivation for college students. The goal of the study is to positively impact the preparation of preservice teachers by crafting coursework that is responsive to their motivational needs. Pre- and post-data collections measuring students’ perspectives will be compared, as well as analyzed in relation to the educators’ perspectives of what motivates their students.

**Methodology**

This current investigation explored perceptions of motivational factors from the perspectives of students, as well as how their instructors perceive their motivations. Through pre- and post-data collection methods, results were analyzed in isolation, as well as in aggregate. Comparisons between students’ and instructors’ perceptions were explored, as well as how demographic factors such as gender and year in school correlated with the motivational factors.
The following questions were discussed through this research:

1. Which MUSIC® motivational factors (eMpowerment, Usefulness, Success, Interest, Caring) are identified most frequently by students in the education department courses?
   a. Due to experiences throughout the semester, did the factors of motivation change?

2. What is the relationship between students’ perceptions of motivation in comparison to their faculty perceptions of their motivation?

Participants

For this study, the population from which the sample was chosen includes students enrolled in undergraduate education courses during the Fall 2020 semester at a small private Mid-Western University. To participate in the study, participants must have been enrolled in a course in the education department at a freshman, sophomore, junior, senior, or post baccalaureate level during the Fall 2020 semester. The target population of students enrolled in undergraduate education courses was 315 students. This population included representation from 39 majors with the majority (58.41%) having a declared major or minor in education. Educators from the University’s education department were also part of the study. To participate, the faculty members must have been teaching or supervising students in an education related course during the Fall 2020 semester. The target population of educators included 35 faculty members with varying ranks: four Professors, four Associates, four Assistants, and 25 Adjunct/Lecturers. The educators and candidates included in the target population represent the following education programs: i.e., Adolescent to Young Adult, Art Education, Health Education, Intervention Specialist, Middle Childhood, Music Education, Physical Education, and Primary Education.
Instrumentation

The quantitative data collection utilized the College Student version of the MUSIC® Inventory, as well as the Professor version of the MUSIC® Inventory (see https://www.themusicmodel.com/questionnaires/). Designed to “help instructors in any field understand how to apply current motivation research and theories to instruction” Jones and Skaggs (2016, p. 5) provided the conceptual framework of the MUSIC® model and validity evidence to support its implementation. A reported measure of internal consistency revealed Cronbach’s alpha values of: α = 0.91 for empowerment, α = 0.96 for usefulness, α = 0.93 for success, α = 0.95 for interest, and α = 0.93 for caring (p. 4). Both item analysis, as well as confirmatory factor analysis demonstrated how the five factors represent unidimensional measures, “each loading was statistically significant with none of the items cross loading on any of the other factors” (p. 5). Further investigation using Pearson’s correlation coefficients revealed that the factors were moderately correlated, yet “distinct factors” (p. 6). To provide reliable and valid ratings, Jones (2020) noted that a sum or average of all 26 scales produce inconsistent data, as each factor should be analyzed in isolation. Aggregated data, as well as an analysis of each unidimensional measure provided for more reliable results (K. Larwin, personal communication, October 28, 2020).

Jones (2020) classified the College Student version of the MUSIC® Inventory as a “very good, if not excellent” (p. 9) survey instrument based on the validity and reliability evidence from numerous studies (Chittum et al., 2019; Jones, 2019; Jones & Skaggs, 2016; Pace et al., 2016). Both Chittum et al. and Pace et al. found Cronbach’s alpha values ranging in the α = 0.80 to 0.90 or above. A confirmatory factor analysis in each study also revealed that the factors in each of the studies were distinct, which is a similar finding to Jones’ and Skaggs’. The data were
collected using a six-point Likert-scale survey rather than a seven-point scale because measures indicated that this provides more reliability (Jones, 2009). The scale used in the study is provided below:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Somewhat disagree</td>
<td>Somewhat agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

Following data collection, results for this instrument were scored using the formulas below to determine an overall rating for each scale (Jones, 2020):

Empowerment score = (item 2 + item 8 + item 12 + item 17 + item 26) / 5

Usefulness score = (item 3 + item 5 + item 19 + item 21 + item 23) / 5

Success score = (item 7 + item 10 + item 14 + item 18) / 4

Interest score = (item 1 + item 6 + item 9 + item 11 + item 13 + item 15) / 6

Caring score = (item 4 + item 16 + item 20 + item 22 + item 24 + item 25) / 6. (p. 14)

The Professor version of the MUSIC® Inventory was utilized as a reflective tool to determine if correlations existed between the perspectives of students enrolled in undergraduate education courses and the faculty that educate them. Because the Professor version is still undergoing validity testing (Jones, 2020), the results were used to triangulate the perception data from the students, as well as to inform the reflective follow-up interview questions. The data for the Professor version also utilized the same six-point Likert-scale and scoring formulas represented above. Jones indicated that professors could utilize this data to determine which factors of their instruction are consistent with and can compare their beliefs to those of their students. All of this is intended to inform instructional decisions that provide impactful learning experiences.
Procedures

Prior to collecting data, approval from the Institutional Review Board (IRB) at Youngstown State University (YSU) was granted. The IRB determined that the research would not put participants at risk through using anonymous survey research. Once approved, the researcher worked with the Dean of the College of Applied and Social Sciences, the Chair of the Education Department, and the Licensure Coordinator to generate a data set of students enrolled in undergraduate education courses for the Fall 2020 semester. This data set represented the target population of students for the study. Quantitative measures included the use of a valid and reliable survey instrument for pre- and post-perception data of college students, as well as a reflective comparison survey for professors (Jones, 2020).

Data for college student perceptions were collected during the first half of the Fall 2020 semester, as well as at the end of the semester. This was intended to determine if motivational factors changed over time for participants who participated in both collections, as well as to provide two sets for analysis in isolation. The data set for faculty was collected once at the end of the semester as a tool for comparison and reflection. Data were analyzed in isolation, as well as in aggregate, and factor analysis was used to determine if correlations existed between distinct factors and demographic characteristics such as gender, level in university, and major area of study.

Results

Baseline Data Collection

The baseline investigation, Phase One, sought to examine the factors that impact college students’ perceptions of motivation for courses in the department of education during the first half of their Fall 2020 semester. The sample included $n = 137$ out of a possible 315 in the target
population. Females accounted for 72.3% \( (n = 99) \); males represented 27.0% \( (n = 37) \); and one participant identified as gender neutral, which was 0.7% of the overall sample. Those who identify as female responded to the survey more than those who identify as males or gender neutral. This is representative of the demographics of the target population in the education department where 60.95% of students identify as female. Students indicated that 94.2% \( (n = 129) \) of the responses were from students who identified as White/Caucasian, while 2.2% \( (n = 3) \) of students identified as Black/African American. The remaining students identified as Asian/American, American Indian/Alaska Native or Multiracial. This aligns with the representative of students in the education department where 86.54% of the population identify as White or Caucasian.

As part of the survey, students reported their academic level in college. Post baccalaureate students represented 3.8% \( (n = 7) \), and there was one participant who preferred not to answer. Freshmen accounted for 17.5% \( (n = 24) \) of the overall sample, while sophomores had the same number of participants \( (n = 24) \). Participation from juniors increased slightly and represented 24.8% \( (n = 34) \). Seniors responded more than students at any other level of schooling with 34.3% \( (n = 47) \). This is representative of the target population where seniors make up 37.46% in department of education courses.

Variables for the factors of motivation were computed using the guidelines provided in Jones (2020) (See formulas in Appendices C and E). After the computation of variables, scale reliability estimates were computed using Cronbach’s alpha to determine the internal consistency of the factors as shown in Table 1.
Table 1

Scale Reliability Analysis for Factors of Motivation

<table>
<thead>
<tr>
<th>Factor</th>
<th>N</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empowerment</td>
<td>5</td>
<td>.859</td>
</tr>
<tr>
<td>Usefulness</td>
<td>5</td>
<td>.893</td>
</tr>
<tr>
<td>Success</td>
<td>4</td>
<td>.848</td>
</tr>
<tr>
<td>Interest</td>
<td>6</td>
<td>.877</td>
</tr>
<tr>
<td>Caring</td>
<td>6</td>
<td>.910</td>
</tr>
</tbody>
</table>

Table 1 indicates that scale reliability estimations at the acceptable levels with the factor of caring identified with the highest reliability estimate (Field, 2018). Descriptive statistics were also computed to analyze the mean, standard deviation, skewness, and kurtosis for each of the factors of motivation. The descriptive summary for these variables is indicated on Table 2.

Table 2

Descriptive Data

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empowerment</td>
<td>4.54</td>
<td>0.79</td>
</tr>
<tr>
<td>Usefulness</td>
<td>5.27</td>
<td>0.64</td>
</tr>
<tr>
<td>Success</td>
<td>5.14</td>
<td>0.64</td>
</tr>
<tr>
<td>Interest</td>
<td>4.66</td>
<td>0.71</td>
</tr>
<tr>
<td>Caring</td>
<td>5.41</td>
<td>0.63</td>
</tr>
</tbody>
</table>

As indicated in Table 2, Caring revealed the highest average endorsement, followed by Usefulness.
Second Data Collection

The post data collection reexamined the factors that impact candidates’ perceptions of motivation for courses in the department of education at the conclusion of their Fall 2020 semester. The post collection sample included \( n = 77 \). Females accounted for 72.7% \( (n = 56) \) and males represented 27.3% \( (n = 21) \). While the post collection sample size was less than in the baseline collection, the percentages were within 1% from baseline to post collections. During the post collection 92.2% \( (n = 71) \) of the responses were from students who identified as White/Caucasian, while 5.2% \( (n = 4) \) of students identified as Black/African American. Students identifying as Multiracial account for 2.6% \( (n = 2) \). Like gender, the percentage of respondents who identified as White or Caucasian were within approximately 2% of the baseline data.

In the post collection, students reported their academic level in college. Post baccalaureate students represented 5.2% \( (n = 4) \). Freshmen accounted for 20.8% \( (n = 16) \) of the overall sample, while sophomores represented 22.1% \( (n = 24) \). Participation from juniors accounted for 18.2% \( (n = 14) \) of the sample, and seniors represented 33.8% \( (n = 26) \). The percentage of freshman and sophomore students were greater than in baseline data collection, while the juniors were less; however, in both collections, seniors represented the greatest number of respondents. The percentage represented by seniors was less than half a percent different than the baseline collection.

The sample \( n = 77 \) of a possible 315 students is lower than in the baseline collection; however, the demographic percentages represented in both collection phases were consistent.

After the computation of variables, reliability estimates were computed using Cronbach’s alpha and presented in Table 3.
Table 3

*Scale Reliability Analysis for Factors of Motivation (Post)*

<table>
<thead>
<tr>
<th>Factor</th>
<th>N</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empowerment</td>
<td>5</td>
<td>.917</td>
</tr>
<tr>
<td>Usefulness</td>
<td>5</td>
<td>.888</td>
</tr>
<tr>
<td>Success</td>
<td>4</td>
<td>.873</td>
</tr>
<tr>
<td>Interest</td>
<td>6</td>
<td>.922</td>
</tr>
<tr>
<td>Caring</td>
<td>6</td>
<td>.891</td>
</tr>
</tbody>
</table>

All scale reliability estimates fell within acceptable ranges demonstrating strong internal consistency (Field, 2018).

Descriptive statistics were also computed to analyze the mean, standard deviation, skewness, and kurtosis for each of the factors of motivation. The descriptive summary for these variables is indicated on Table 4.

Table 4

*Descriptive Data (Post)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empowerment</td>
<td>4.86</td>
<td>0.86</td>
</tr>
<tr>
<td>Usefulness</td>
<td>5.28</td>
<td>0.65</td>
</tr>
<tr>
<td>Success</td>
<td>5.29</td>
<td>0.60</td>
</tr>
<tr>
<td>Interest</td>
<td>4.80</td>
<td>0.79</td>
</tr>
<tr>
<td>Caring</td>
<td>5.52</td>
<td>0.58</td>
</tr>
</tbody>
</table>

Additionally, the post collection examined the perceptions of candidates’ motivational factors
through the use of faculty perception data.

The sample of faculty members represents \( n = 30 \) out of 36. Of the faculty participants, females represented 76.7% \((n = 23)\), and males accounted for 23.3% \((n = 7)\). Faculty members who identify as female responded more than those who identify as male. Across all collections of data, the percentages of female to male respondents were within 4% of one another. Faculty participants also identified their position rank. Full Professors represented 6.7% \((n = 2)\) of the overall sample. Associate Professors accounted for 16.7% \((n = 5)\), and Assistant Professors represented 10.0% \((n = 3)\). Adjunct/Lecturer and Supervisor participants each represented 33.3% \((n = 10)\). These breakdowns are representative of the department, as several faculty members are adjunct professors or supervisors, while a small percentage hold a higher rank.

A majority of faculty who responded instruct and/or supervise in Primary Education, while Middle Childhood Education/Adolescent to Young Adult Education represents the next highest percentage. These percentages are representative of the enrollment in each of the licensure areas in the Department of Education. Faculty respondents also indicated years of experience in higher education. Faculty with 0-5 years of experience represented 26.7% \((n = 8)\); faculty with 6-10 years accounted for 30.0% \((n = 9)\); faculty with 11-15 years represented 23.3% \((n = 7)\); faculty with 16-20 years accounted for 10.0% \((n = 3)\); faculty with 21-25 years represented 6.7% \((n = 2)\); one faculty participant indicated having more than 25 years of experience, which is 3.3% of the overall sample. As indicated by the data, 80% of faculty respondents have instructed or supervised in higher education 15 years or less.

After the computation of variables for the faculty responses, reliability estimates were computed using Cronbach’s alpha and presented in Table 5.
Table 5

Scale Reliability Analysis for Factors of Motivation (Faculty)

<table>
<thead>
<tr>
<th>Factor</th>
<th>N</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empowerment</td>
<td>5</td>
<td>.816</td>
</tr>
<tr>
<td>Usefulness</td>
<td>5</td>
<td>.858</td>
</tr>
<tr>
<td>Success</td>
<td>4</td>
<td>.840</td>
</tr>
<tr>
<td>Interest</td>
<td>6</td>
<td>.717</td>
</tr>
<tr>
<td>Caring</td>
<td>6</td>
<td>.826</td>
</tr>
</tbody>
</table>

All scale reliability estimations fell within acceptable to good ranges as represented above.

Descriptive statistics were also computed to analyze the mean, standard deviation, skewness, and kurtosis for each of the factors of motivation. The descriptive summary for these variables is indicated on Table 6.

Table 6

Descriptive Data (Faculty)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empowerment</td>
<td>4.52</td>
<td>0.66</td>
</tr>
<tr>
<td>Usefulness</td>
<td>5.54</td>
<td>0.43</td>
</tr>
<tr>
<td>Success</td>
<td>5.20</td>
<td>0.54</td>
</tr>
<tr>
<td>Interest</td>
<td>4.88</td>
<td>0.41</td>
</tr>
<tr>
<td>Caring</td>
<td>5.72</td>
<td>0.33</td>
</tr>
</tbody>
</table>

Consistent with baseline and post collections from college students, Caring is the factor with the highest average endorsement. The Caring factor was the highest endorsed by both college
students and faculty. This is indicated above in Tables 2, 4, and 6.

To address the first research questions, a matching group consisted of participants who completed both the baseline and post survey. A paired sample \( t \)-test determined the mean and standard deviation of the factors from the baseline to the post-data collection, as shown in Table 7.

**Table 7**

*Paired Samples \( t \) Test Results*

<table>
<thead>
<tr>
<th>Pairs</th>
<th>Factors</th>
<th>( t )</th>
<th>df</th>
<th>Mean</th>
<th>Sig (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>Empowerment (Pre)\n Empowerment (Post)</td>
<td>-0.10</td>
<td>25</td>
<td>0.18</td>
<td>0.330</td>
</tr>
<tr>
<td>Pair 2</td>
<td>Usefulness (Pre)\n Usefulness (Post)</td>
<td>1.04</td>
<td>25</td>
<td>-0.13</td>
<td>0.307</td>
</tr>
<tr>
<td>Pair 3</td>
<td>Success (Pre)\n Success (Post)</td>
<td>-0.22</td>
<td>25</td>
<td>0.03</td>
<td>0.829</td>
</tr>
<tr>
<td>Pair 4</td>
<td>Interest (Pre)\n Interest (Post)</td>
<td>-0.32</td>
<td>25</td>
<td>0.04</td>
<td>0.749</td>
</tr>
<tr>
<td>Pair 5</td>
<td>Caring (Pre)\n Caring (Post)</td>
<td>-0.61</td>
<td>25</td>
<td>0.07</td>
<td>0.547</td>
</tr>
</tbody>
</table>

All the means for the factors increased from the baseline to the post-data collection phases, except for Usefulness. As indicated, there were no significant changes from baseline to post collections for any of the factors.

Research Question Two examined if there is a relationship between students’ perceptions of motivation in comparison to their faculty perceptions of their motivation. A paired sample \( t \)-test was conducted to compare the mean and standard deviation of the factors from the college
student post collection to the faculty collection, as shown in Table 8.

Table 8

*Paired Samples' Statistics*

<table>
<thead>
<tr>
<th>Pairs</th>
<th>Factors</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>Sig (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>Empowerment (Students)</td>
<td>4.87</td>
<td>0.96</td>
<td>1.56</td>
<td>25</td>
<td>0.131</td>
</tr>
<tr>
<td></td>
<td>Empowerment (Faculty)</td>
<td>4.55</td>
<td>0.35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 2</td>
<td>Usefulness (Students)</td>
<td>5.22</td>
<td>0.66</td>
<td>-2.66</td>
<td>25</td>
<td>0.013</td>
</tr>
<tr>
<td></td>
<td>Usefulness (Faculty)</td>
<td>5.55</td>
<td>0.14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 3</td>
<td>Success (Students)</td>
<td>5.31</td>
<td>0.57</td>
<td>1.22</td>
<td>25</td>
<td>0.235</td>
</tr>
<tr>
<td></td>
<td>Success (Faculty)</td>
<td>5.19</td>
<td>0.26</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 4</td>
<td>Interest (Students)</td>
<td>4.83</td>
<td>0.84</td>
<td>-0.42</td>
<td>25</td>
<td>0.679</td>
</tr>
<tr>
<td></td>
<td>Interest (Faculty)</td>
<td>4.89</td>
<td>0.13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 5</td>
<td>Caring (Students)</td>
<td>5.56</td>
<td>0.56</td>
<td>-1.48</td>
<td>25</td>
<td>0.153</td>
</tr>
<tr>
<td></td>
<td>Caring (Faculty)</td>
<td>5.72</td>
<td>0.03</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 8 reveals that college students are evaluating the Empowerment and Success factors higher than faculty. Faculty is evaluating the Caring and Usefulness factors higher than the college students. Results the Usefulness factor is statistically significant with a $p$ value of <.02 suggesting a difference between college student and faculty ratings of the Usefulness endorsement.

**Discussion & Conclusions**

The way individuals perceive motivation can vary based on several factors. This study was designed to determine the factors that contribute to motivation for college students, as well as to gain insight into those factors from the perspectives of both students and faculty in the University’s education department. Further examination into whether students’ perceptions changed throughout the semester, as well as how students’ and faculties' perceptions of
motivation correlate were investigated. The purpose of this research is to positively impact the preparation of preservice teachers by making informed decisions about how to best motivate students through caring for their diverse needs.

The quantitative study was split into two phases of data collection. Phase One began with a baseline data collection of survey data of college students’ perception of the MUSIC® factors of motivation. Phase Two included the post collection of college students’ perceptions, as well as the perceptions of their faculty. Below, there are summaries, interpretations, contexts, and implications for each of the research questions examined above. Additionally, limitations and further research are discussed.

**Research Question One**

Research question one asked: Which MUSIC® motivational factors (eMpowerment, Usefulness, Success, Interest, Caring) are identified most frequently by students in the education department courses? Additionally, due to experiences throughout the semester, did the reported factors of motivation change? Results from the pre- and post-collections of college student data, as well as post collection of faculty data, results suggest that the Caring factor was endorsed consistently as the most identified factor of motivation. Usefulness and Success were the next highest rated factors with means consistently above 5.00 using a six-point Likert-scale survey ranging from 1.00 for “strongly disagree” and 6.00 for “strongly agree.” Interest and Empowerment were rated as the lowest with means consistently below 5.00. While the order of the factors of Usefulness, Success, Interest, and Empowerment fluctuated from baseline to post collections, Caring remained as the most endorsed factor.

Faculty and students rated the Caring factor highest. While the mean increased slightly for college students throughout the semester, the Caring factor remained consistent as the
endorsement with the highest mean. All factors for college students increased from baseline to post data collections, except for the Usefulness endorsement. The mean for Usefulness decreased slightly at post collection, while it was rated as the second highest factor by faculty during the same end-of-semester data collection.

Research on care shows that it is a multidimensional construct and demonstrates that care and motivation are inextricably linked (Allen & FitzGerald, 2017; Abry et al., 2013). The survey results above suggest that care is consistently a factor in how both college students and faculty perceive their motivation. These findings are in line with current research studies that also find the positive impact of care on educational outcomes such as success (Froiland & Worrell, 2016; Vega et al., 2015; Wang & Holcombe, 2010), which was the second highest rated factor on the post data collection for students.

Care is a foundational component of building relationships, and positive relationships are paramount to education, specifically motivation (Abry et al., 2013; Allen & FitGerald, 2017; Froiland & Worrell, 2016; Kimmel et al., 2016; Masko, 2018; Rabin, 2014; Velasquez et al, 2013). The results indicate that care is a consistently endorsed factor in individuals’ perceptions of motivation.

**Research Question Two**

Research question two asked: What is the relationship between students’ perceptions of motivation in comparison to their faculty perceptions of their motivation? Both faculty and college students endorsed the Caring factor most consistently in all quantitative data collections. Comparing post college student survey responses to faculty responses, the Usefulness factor was rated significantly different from the two groups of participants. While college students are evaluating the Empowerment and Success factors higher than faculty, there are no significant
differences noted. Additionally, faculty rated the factors of Care and Usefulness higher than college students; however, the only significant difference was with Usefulness. Comparing the Interest factor, post student responses and faculty responses had the closest means of any factor.

A paired samples’ t-test suggests a statistically significant difference between college student and faculty ratings of the Usefulness endorsement. Faculty rated the Usefulness significantly higher than college students. The mean for Usefulness from baseline to post for students decreased, which was the only factor to do so. While faculty rated this as the second most endorsed factor of motivation behind care, students rated it as the third, which also was a change from pre- to post-collections. The findings suggest that faculty is rating their coursework as more useful than students are perceiving it.

While the coursework is designed to prepare preservice teachers for their future careers, there is a disconnect between faculty and students’ perceptions in terms of this factor. Both faculty and students rated this factor above 5.00, which means that there is a consensus that the coursework is useful. Jones (2009) would suggest that for some coursework, the connections to the real-world are clearer, which one would relate to courses in educator preparation programs. This may account for why, even though there is a significant difference in the ratings of the two groups, both still rate the Usefulness factor in the agree to strongly agree range. Research from Simons et al. (2004), as well as Hulleman et al. (2017) would indicate that activities that are useful to individuals’ professional growth result in more motivation and more meaningful connections.

In a higher education context, Hattie (2015) shared that educators need to use the knowledge of their students’ motivations to create meaningful, clear, and aligned paths to learning, and in the case of preservice teachers, this would relate directly to teacher preparation.
The results for the research question above would suggest that while both faculty and students are rating the Usefulness factor positively, there appears to be a disconnect in the utility of the coursework.

**Limitations**

This study was designed to examine the perceptions of students and faculty within the department of education at a university to provide data regarding the motivational needs of the students in education courses. This study provided relevant information to the faculty in the department; however, there are limitations that do not allow for external validity. This research was conducted at a single institution, in the education department, which limited the number of participants and the diversity of the sample.

The target population had slightly more females and less individuals of color than the undergraduate enrollments overall. More females responded to the survey than males, and more White students responded to the survey than students of color. While there is diversity within the department, less than half of the students of color in the target population responded to the survey. Because of the limited subgroup sample, further analyses into how their perceptions may have varied, based on current research studies, were not computed.

**Future Research Directions**

The current study provided data on the perceptions of motivation within one department of education; however, the possibilities of further research are exciting. There are various avenues for how this study could expand in the future. To provide even more targeted data to inform practices, the department in the study could gather more data on specific assignments, practices, field opportunities, and connections with the community that spark student interest and empower them to use the strategies in their own practice. To expand and increase its
generalizability, the study could be conducted at various institutions in their departments of education to draw comparisons and analyze differences. Extending the research to other departments of education with greater diversity would allow for further analyses of the perception data that could then be connected to other current research. This type of expansion would allow for a cross-institutional analysis of motivational factors that influence students’ perceptions. The possibilities to extend this research beyond educator preparation programs also exists. At the university in the current study, there is more diversity represented in the undergraduate enrollment overall than the target population utilized in the study. By expanding the study across campus, the possibility of analyzing variances due to the participants’ field of study/department and demographic factors such as race could be explored further.

**Conclusion**

This study revealed that while there are several factors that impact motivation, such as usefulness, empowerment, success, and interest, the constant is care. While there were significant differences between college students’ and their faculties’ perceptions of usefulness, in all data collection phases, care overwhelmingly emerged as the highest endorsed motivational factor by college students and their faculty. For institutions and organizations looking to have a sustaining impact, identifying ways to increase the feeling of care among individuals can positively impact the level of motivation, as well as have an impact on retention and the longevity of the relationship. The bottom line is that for all stakeholders in the educational arena, care matters!
References


https://doi.org/10.1080/15348431.2013.821065


Grealish, A., Tai, S., Hunter, A., Emsley, R., Murrells, T., & Morrison, A. P. (2017). Does empowerment mediate the effects of psychological factors on mental health, well-being,


https://doi.org/10.5206/cjsotl-rcacea.2019.3.9471


Noddings, N. (2001). Care and coercion in school reform. *Journal of Educational...


