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DESIGNING A SURVEY INSTRUMENT TO OPERATIONALIZE FACULTY  
PERCEPTIONS OF MILITARY-CONNECTED STUDENT-FACULTY  
INTERACTION AT CIVILIAN COLLEGES AND UNIVERSITIES

A Dissertation Presented

by

Jennifer J. Rousseau

to

The Faculty of the Graduate College

of

The University of Vermont

In Partial Fulfillment of the Requirements  
For the Degree of Doctor of Education  
Specializing in Educational Leadership and Policy Studies

August, 2019

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Dissertation Examination Committee:

Jason C. Garvey, Ph.D., Advisor  
Sarah Heiss, Ph.D., Chairperson  
Kieran M. Killeen, Ph.D.  
Alan S. Tinkler, Ph.D.  
Cynthia J. Forehand, Ph.D., Dean of the Graduate College

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## ABSTRACT

The ways in which faculty navigate the relationship between their personal identity and the identities of their military connected students, especially concerning their approaches to teaching behaviors (Barnard-Brak, Bagby, Jones, & Sulak, 2011) are influenced by normative values that their institution or department supports (Weidman, 1989) as well as by the values that they themselves hold (Barnard-Brak et al., 2011). Given the fraught history of academia and the military (Summerlot, Green, & Parker, 2009; Downs & Murtazashvili, 2012), such variables are especially important to measure as student-faculty interaction impacts student learning outcomes (Cruce, Wolniak, Seifert, & Pascarella, 2006; Ethington, 2000; Kim, 2010; Kim & Sax, 2009, 2011, 2015).

Toward that end, the primary purpose of this study was to create a multi-institutional survey instrument that operationalizes perceptions of teaching behaviors amongst faculty who educate military-connected students (MCS) at civilian colleges and universities. Main objectives included creating and developing items specific to unique teaching behaviors and ensuring validity of this instrument.

I used a variety of analyses to create the instrument and to ensure validity of content within the survey. I followed DeVellis' (2017) model for scale development to create and validate the Military-Connected Student-Faculty Interaction Questionnaire (MCSFI-Q). Eleven field experts participated in cognitive interviews to provide sources of evidence for construct validity (Miller et al., 2014) as well as to uncover and resolve content validity and construct validity issues (Padilla & Benítez, 2014).

Following data collection, I conducted content and construct validity analysis to develop a valid and more parsimonious survey instrument. Results from all analyses led to the conclusion that the MCSFI-Q is comprised of conceptually valid items that operationalize teaching behaviors amongst faculty who educate MCS at civilian colleges and universities and that the MCSFI-Q has the potential to collect accurate data. Research next steps include further empirical testing in order for the MCSFI-Q to be useable in measuring teaching norms amongst faculty who educate MCS at civilian colleges and universities.

## **DEDICATION**

This work is dedicated to my family: past, present, and future. In memory of my late grandfather, Louis I. Morency, who served in WWII with the 10<sup>th</sup> Mountain Division. He instilled within all his children a truly indomitable will. To my mother, Betty, who carried forward Grandpa's determination and taught me to always persist. And lastly, to my son Henri. May you always believe in yourself and know how very much I love you.

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## TABLE OF CONTENTS

DEDICATION.....	ii
ACKNOWLEDGEMENTS.....	iii
LIST OF TABLES.....	vii
CHAPTER 1: INTRODUCTION.....	1
Purpose of Study.....	5
Statement of the Problem.....	7
Classroom Climate and MCS Learning.....	16
Significance of Study.....	18
Outline of the Remainder of Study.....	20
Summary.....	21
CHAPTER 2: LITERATURE REVIEW.....	22
DeVellis' (2017) Model for Scale Development.....	22
Step 1: Determine Clearly What it is You Want to Measure.....	23
The Hidden Curriculum of Particularistic Pedagogy.....	25
Institutional Characteristics.....	41
Academic Discipline and Departmental Characteristics.....	45
Individual Faculty Characteristics.....	47
Summary.....	51
CHAPTER 3: METHODOLOGY.....	53
Context.....	53
Purpose and Research Design.....	56
Step 2: Generate an Item Pool.....	57
Measuring Latent Variables.....	57
Question Item Construction.....	58
Step 3: Determine the Format of Measurement.....	59
Response Options.....	62
Verbal labeling of response items.....	62
Number of points.....	63
Item variability.....	64
Order of response alternatives.....	65
Step 4: Have the Initial Item Pool Reviewed by Experts.....	67
Expert Review Through Cognitive Interviewing.....	70
Summary.....	80



CHAPTER 4: COGNITIVE INTERVIEW FINDINGS.....	81
Introduction .....	81
Discovering Normative Structures.....	83
Cognitive Interview Results .....	85
MCSFI-Q Directions .....	85
MCSFI-Q Response Options .....	89
MCSFI-Q Item Evolution .....	96
Evolution of Preferential Inquiry Item Pool .....	97
Evolution of the Antagonistic Friction Item Pool.....	125
Synthesis .....	151
Classroom Climate and Culture .....	152
Education Philosophy .....	154
Evaluative Verbs.....	156
Frequency.....	157
Inquiry through Dialogue.....	158
Preference of Perspectives .....	159
Include Faculty and Students .....	159
Summary .....	161
 CHAPTER 5: DISCUSSION, FUTURE RESEARCH & LIMITATIONS .....	162
Introduction .....	162
Step 5: Consider Inclusion of Validation Items .....	163
Step 6: Administer Items to a Developmental Sample (Pilot Study).....	163
Step 7: Evaluate the Items.....	166
Step 8: Optimize Scale Length .....	172
Outcomes and Contributions.....	173
Limitations of this Study.....	178
Conclusion .....	179
 REFERENCES .....	180
 APPENDICES .....	197

## LIST OF TABLES

Table 1: Construct Definitions.....	67
Table 2: Cognitive Interview Participant Characteristics .....	75
Table 3: MCSFI-Q Response Options Version One.....	89
Table 4: MCSFI-Q Response Options Final Version .....	96
Table 5: Classroom Climate and Culture Connections.....	152
Table 6: Word Usage .....	157

## **CHAPTER 1: INTRODUCTION**

Since 2001, there has been an increase in the number of military-connected students (MCS) attending institutions of higher education under the Post 9/11 GI Bill. Data from the U.S. Department of Education's National Postsecondary Student Aid Study documents that, in academic year 2007-08, the military-connected student (MCS) population accounted for 4% of the total undergraduate student population in the U.S. (Radford, 2009). Four years later, this population grew to represent 5% (Molina & Morse, 2015).

Recently, the Harry W. Colmery Veterans Educational Assistance Act of 2017 enhanced the provisions of educational benefits through the GI-Bill, ultimately increasing the number of individuals eligible for this funding. This is particularly important to note as findings from recent studies document that GI-Bill related education benefits represent a key motivation in the enlistment decisions of our nation's service members (DiRamio, Ackerman, and Mitchell 2008; Eighmey 2006; Woodruff, Kelty, and Segal 2006; Zinger and Cohen 2010). Given the enhanced eligibility parameters for education benefits through the Forever GI-Bill, the postsecondary aspirations of service members, and the increasing demand for higher education attainment as a prerequisite for social mobility, it naturally follows that many more MCS will pursue a postsecondary degree in the coming years.

Related spending has also grown as taxpayers invested vast amounts of resources in an effort to ensure that military service members could achieve their postsecondary

attainment goals. The U.S. government spent \$8 billion on veterans' education through the Post-9/11 GI Bill in fiscal year 2012 (Emrey-Arras, 2013). By the year 2015, total GI Bill related disbursements reached \$56 billion (Worley, 2015). These figures highlight the growing numbers of MCS on our campuses and the financial investment that the U.S. is making. They also underscore two very compelling reasons why the higher education community should pay attention to the postsecondary education of MCS.

Inclusive higher education is interested in devising strategies and support systems that advance postsecondary access and outcomes for all student subpopulations (Bensimon, 2005), including the subpopulation of students with military-connections (DiRamio, Ackerman, & Mitchell, 2008; Pattillo, 2011). Members of the higher education community have long made it a priority to devise strategies that advance postsecondary access and outcomes for first generation students (Grace-Odeleye & Santiago, 2018). Unfortunately, although many institutions have specialized structures in place for supporting first generation students (Inkelas, Daver, Vogt & Leonard, 2007), similar supports for MCS are not widely available (National Student Affairs Administrators in Higher Education, 2013). It therefore appears that MCS might be an invisible subpopulation of students, in terms of their existence on the radar of those accountable for developing and enhancing supports for students. In light of these factors, this study therefore addresses how educators must continue to adapt, attend to, and provide for members of the U.S. armed forces who are enrolled in our institutions of learning.

MCS navigate a particularly complex collegiate environment in their pursuit of higher education. As documented in the empirical literature, MCS have experienced student-faculty interactions and classroom environments that they dually characterized as damaging and related to faculty views on military-policy (Bauman, 2009; DiRamio et al., 2008; Elliot, Gonzalez, & Larsen, 2011; Osborne, 2014; Persky & Oliver, 2011; Summerlot, Green, & Parker, 2009). Some faculty have reported a reluctance to interact with MCS (Kovach, 2017; Osborne, 2014). Other challenges include interactions with faculty who appeared to discount the academic capabilities of MCS (Osborne, 2014; Phillips, 2014), or faculty whose self-efficacy to teach MCS was contingent upon their views on military-policy (Barnard-Brak, Bagby, Jones, & Sulak, 2011). Many have expressed concerns about related MCS-faculty interactions and voiced that they anticipated student learning to suffer as a result (Bauman, 2009; DiRamio et al., 2008; DiRamio & Jarvis, 2011; Elliot et al., 2011; Gonzalez, 2012; Livingston, Havice, Cawthon, & Flemming, 2011; Moxley, 2011; Osborne, 2014; Perskey & Oliver, 2014; Rumann & Hamrick, 2010). Downs and Murtazashvili (2012) argue that friction between the academy and the military is inherent and an indication that both institutions are being true to their own nature. However, the MCS literature allows that faculty interactions associated with this very same friction could have a negative influence on MCS learning (Kim & Sax, 2009; DiRamio et al. 2008; Radford, 2009; Rumann & Hamrick, 2010).

Considering MCS experiences in higher education, the role of faculty seems to be significant (Vacchi, 2013), and something researchers should examine further, but is

largely overlooked in the literature (Vacchi & Berger, 2014). Contemporary scholars researching MCS have not sufficiently highlighted interaction amongst faculty and MCS, despite there being abundant opportunity for them to do so with their qualitative data. Moreover, within the college impact literature, there currently exists no research on student-faculty interactions amongst faculty who teach MCS (see Kim & Sax, 2017).

This study therefore attempts to redress this gap in the research literature relevant to faculty interactions with MCS, particularly as these exchanges influence undergraduate socialization (Weidman, 1989). Given this circumstance, I examined the available empirical data that touched on student-faculty interaction and used it to inform the development of a new theoretical model, entitled: *Military-Connected Student-Faculty Interactions Model* (MCSFIM) (Appendix A).

Two bodies of empirical literature guided the creation of the model of MCSFIM: relevant literature on undergraduate experiences amongst MCS, and college impact literature on student-faculty interaction. This model conceptually connects to the literature on college impact through Weidman's (1989) theory of socialization, which emphasizes the salience of interpersonal student-faculty processes and faculty teaching norms for the study of college impact. The MCSFIM conceptualizes MCS-faculty interactions as a dynamic interplay between the institution, the academic department, faculty members and a hidden curriculum. It supports the idea that teaching norms are influenced by friction between the academy and the military that is inherent and an indication that both institutions are being true to their own nature.

The MCSFIM has two primary goals: (a) to facilitate positive interactions between faculty and MCS; and (b) to inform student support professionals wishing to enhance MCS learning opportunities. To understand the MCSFIM, it is important to recognize the major construct around which it was conceptualized, entitled: particularistic pedagogy. Particularistic pedagogy is defined as taking nonacademic student characteristics (social/personal) into account in the teaching of military-connected students.

The MCSFIM will be further explained in Chapter 2, where I outline the remaining components of the model: institutional type and characteristics, academic discipline and departmental characteristics, individual faculty characteristics, and two hidden curriculum constructs. In the next paragraphs I define the purpose of this study.

### **Purpose of Study**

This study focuses primarily on developing a valid multi-institutional survey instrument that operationalizes perceptions of teaching behaviors amongst faculty who educate MCS at civilian colleges and universities. There is a void in existing measures of teaching behaviors with an application for MCS. Objectives include a pool of items specific to two dimensions within the MCSFIM. This instrument will be the first to measure a link between faculty behavior unique to Weidman's (1989) hidden curriculum and teaching norms. The instrument measures perceptions of teaching behaviors in order to identify teaching norms amongst faculty who educate MCS. It also measures characteristics concerning civil-military connections unique to the institution, the

academic department, and individual faculty members. By approaching the phenomena of student-faculty interaction in this manner, my study seeks to provide researchers with a tool that they can use to access empirically based data focused on some of the most important sources of normative influence for undergraduate socialization (Weidman, 1989). Specifically, researchers will be able to use this tool to investigate associations between: 1) institutional-level structures; 2) academic department level structures; 3) faculty backgrounds; and 4) teaching norms amongst faculty who educate MCS at civilian colleges and universities. Finally, the instrument will also allow for the MCSFIM (Appendix A) to be empirically tested.

The first part of this chapter outlines some of the key concerns and foundations for this study and is divided into three main areas. In the first subsection of this chapter, the purpose of this study, as well as the rationale for and importance of studying normative teaching behaviors is highlighted. This subsection frames the importance of examining teaching norms amongst faculty who educate MCS at civilian colleges and universities. In as many ways as possible, I will draw from first person accounts published within the empirical literature regarding faculty teaching behaviors as reported by both MCS and the faculty who teach them. Starting the discussion with the ways in which many MCS experienced challenges and setbacks at institutions of higher education that civilian students have not (Ackerman, DiRamio, & Garza Mitchell, 2009; Elliott et al., 2012; Elliot, 2015; Vacchi, 2012a), I will focus on instances when MCS encountered negative faculty teaching behaviors possibly associated with faculty views concerning



military-policy (Bauman, 2009; DiRamio et al., 2008; Elliot et al., 2011; Osborne, 2014; Persky & Oliver, 2011; Summerlot et al., 2009). Following this conversation, I then review instances when MCS interacted with faculty who appeared reluctant to make connections with them (Osborne, 2014) or when faculty expressed apprehension toward interacting with MCS (Kovach, 2017). Throughout these conversations, I highlight the significance of creating and testing measures for those teaching behaviors that MCS have encountered while pursuing their education at civilian colleges and universities. In the second subsection of this chapter, I outline the significance of studying teaching norms amongst faculty who educate MCS at civilian colleges and universities. The third, and final, subsection briefly outlines the remaining chapters of this dissertation.

### **Statement of the Problem**

There is one primary problem to be addressed in this study: Is it possible to create a valid instrument designed to measure teaching norms unique to faculty who educate MCS, as conceptualized by the Model of Military-Connected Student-Faculty Interaction?

**The need to understand teaching norms.** In keeping with major works in the college impact literature (Astin, 1984; Pascarella, 1985; Tinto, 1987, 1993), Weidman's (1989) theory of undergraduate socialization suggests that student interaction with the college environment, especially a students' contact with faculty, is central in shaping student outcomes. Faculty are responsible for cultivating classroom experiences through their implementation of teaching behaviors that influence the extent to which students

become socialized to the college environment (Weidman, 1989). The classroom environments, where students interact with faculty, are both formally and informally structured. Whereas formal structuring involves a system of written rules and procedures, informal structuring is comprised of unwritten rules of academic behavior that guide how individuals within academic contexts behave (Weidman, 1989). These unwritten rules are also described as the hidden curriculum. Particularly important for this study is the analysis of teaching norms unique to the hidden curriculum, which functions as “a powerful source of influence on students” (Weidman, 1989, p. 307). Teaching norms are indicative of the faculty behaviors that impact the academy’s influence on student outcomes (Weidman, 1989), and are therefore essential to any understanding of student-faculty interaction.

Faculty members are responsible for playing several roles as professors and academics, including a responsibility to the teaching role. Faculty teaching role performance norms are guided by the goals that faculty uphold to serve the welfare of their clients, such as their students (Braxton, Eimers, & Bayer, 1999). In the classroom, teaching norms guide the behaviors faculty engage in while interacting with their students. Braxton, Bayer, and Finkelstein (1992) were the first researchers to establish the existence of a normative structure for teaching behaviors.

In 1999, Braxton and colleagues then took that work one step further, and identified seven teaching behaviors that faculty deem unacceptable, which include: condescending negativism, inattentive planning, moral turpitude, particularistic grading,

personal disregard, uncommunicated course details, and uncooperative cynicism. Briefly defined with their regard to student-faculty interaction, condescending negativism occurs when faculty treat students condescendingly or when they publicly demean a student; inattentive planning refers to a faculty members' disregard for appropriate preparation or organization for student learning; moral turpitude occurs when faculty relate to students in an immoral or unprofessional manner; particularistic grading concerns the unfair assessment of students' performance; personal regard involves being regularly unprepared for classroom sessions, coming to class late, and habitually using profanity; uncommunicated course details refers to changes in class time or location that go uncommunicated; and uncooperative cynicism concerns a contemptuous attitude toward teaching and the refusal to engage in teaching-related matters with colleagues.

Braxton et al.'s (1999) seven normative teaching behaviors support student-faculty interaction that is caring, fair, authentic, moral, and well planned. When faculty violate teaching norms, student learning is impacted (Braxton, Bayer, & Noseworthy, 2004). Moreover, faculty behaviors affect the makeup of the classroom climate, which also influences student learning (Cruce, Wolniak, Seifert, & Pascarella, 2006; Ethington, 2000; Kim & Sax, 2014). As such, I next turn to a discussion about classroom climate to substantiate the need for understanding whether normative teaching behaviors, unique to faculty who educate MCS at civilian colleges and universities, exist.

### **Classroom Climate and MCS Learning**

The classroom climate applies to the quality of the learning environment that faculty establish in the classroom. Faculty influence the climate of a classroom by establishing learning environments that value, for example, the love of learning (Hallinan & Smith, 1989), achievement, caring, competition, or collaboration. Faculty also structure the learning environment through the pedagogical choices that they make. They are responsible for establishing expectations for the interaction that occurs between students and themselves. Certain characteristics of a classroom climate can either support or hinder student learning. Some types of classroom environments have differential effects depending upon faculty members' or students' characteristics.

Numerous student-faculty college impact studies provide evidence that a relationship exists between student-faculty interaction – both inside and outside the classroom – and a broad scope of student outcomes (see Kim & Sax, 2017 for an extensive review). For example, MCS learning can be impacted by classroom environments where student-faculty connections are fostered. Research suggests that when faculty create classroom climates that communicate to students that faculty are interested in working with them, students are guided toward academic and professional success (Chemers, Zurbriggen, Syed, Goza, & Bearman, 2011; Eagan, Herrera, Garibay, Hurtado, & Chang, 2011; Landefeld, 2009; Maton & Hrabowski, 2004; Packard, 2004; Perna, Lundy-Wagner, Drezner, Gasman, Yoon, Bose, & Gary, 2009). Gains in student learning are also associated with the perception that faculty are accessible to students

(Kim, 2010; Kim & Sax, 2009, 2011, 2015) as evidenced by faculty valuing their comments or taking students questions seriously in class (Kim & Sax, 2017).

The teaching methods that faculty employ toward structuring their course for peer interaction can also influence the climate of the classroom and learning opportunities for MCS. For example, when faculty encourage their students to challenge their ideas during classroom interaction, they can positively impact the academic self-concept of students (Kim & Sax, 2015). Classroom environments that support cooperation and collaboration between students can also be important for MCS learning outcomes as faculty who foster these conditions enable improvements in students' orientations to learning as well as their cognitive development (Cruce et al., 2006). Moreover, research also shows that when faculty encourage their students to engage in dialogue with their classmates, they support students' perceptions that they are making educational gains (Ethington, 2000).

However, various studies have called attention to conditional effects of student-faculty interaction and classroom environments. Distinctive from studies that explore general college effects, studies of conditional effects expect that the same experience might not lead to the same outcome for all types of students (Pascarella, 2006). For instance, research demonstrates that differences in classroom experiences, concerning the impact of student-faculty interaction on student outcomes, have been conditional by institutional sub-environments including academic disciplines, majors and departments (Kim, Armstrong, & Edwards, 2015; Kim & Sax, 2011, 2014) and student characteristics (see Kim & Sax, 2017 for an extensive list). In addition, classroom environments and

student-faculty interactions have also differed by institutional norms (Kim & Sax, 2014) and by the personal background of faculty members (Barnard-Brak et al., 2011). These findings of conditional student-faculty interaction effects indicate that there is potential for faculty to differentially influence student learning through the type of classroom environment that they encourage, or discourage, through their teaching behaviors. Several teaching behaviors unique to MCS-faculty interactions illuminate the ways that faculty have established classroom climates that were not conducive to MCS learning. In the following section I outline empirical findings concerning the classroom environments MCS have encountered and underscore the importance of exploring teaching norms unique to faculty who educate MCS at civilian colleges and universities.

**Faculty views on military-policy.** Some particularly damaging teaching behaviors appear to be frequently associated with faculty views concerning the non-academic characteristics of students. There are numerous examples in the literature of instances when MCS felt faculty unfairly judged them because of their military identity (Bagby et al., 2015; DiRamio et al., 2008; Elliot et al., 2011; Osborne, 2014; Persky & Oliver, 2011; Phillips, 2014; Summerlot et al., 2009). As Osborne (2014) documented, MCS expressed anxiety over being stereotyped and articulated perceptions that in-class faculty reactions to their military-identity presented a critical barrier to their education.

It would appear that the classroom environments that some MCS encountered did not foster perceptions that faculty were open to wanting to work with students if they gave off “a jarhead appearance” (DiRamio et al., 2008, p. 88). For example, Bagby et al.

(2015) documented, “judgement based on appearance alone was a valid concern” for MCS who did not want to provoke stereotypes when “relating to professors in the classroom” (p. 226). Faculty members have also described the quality of the classroom environments that their colleagues provided MCS as being influenced by faculty views about military-policy. Persky and Oliver (2011) documented that a faculty participant “said that the antimilitary bias of some faculty members [was] clearly manifested in the classroom” (p. 116).

MCS have reported being regularly excluded from classroom discussions solely based on their military identity (Phillips, 2014). Other MCS recounted how they often needed to hide their links to the military as: “concealment ... protect[ed] them from becoming targets of criticism from those on campus who [held] anti-military views. This concealment often extend[ed]to the classroom” (Summerlot et al., 2009, p. 74).

Additional authentic student accounts illustrate disconcerting faculty teaching behaviors that clearly impacted the classroom climate. For example, DiRamio and colleagues (2008) documented a report given by a military-connected student participant, “who suffered a serious and disabling hand injury during active duty” (p. 89). This student described a classroom session when their sociology professor articulated his views regarding military-policy in a particularly degrading, alienating, and unconstructive manner, stating, “[the professor] referred to the American soldier as a terrorist. Those were his own words.” (DiRamio et al., 2008, p. 89). In a 2014 study conducted by Osborne (2014) at a Midwestern university, military-connected student

participants described their classroom experiences with civilian faculty. One student reported, “If the military comes up in my classes, it’s either about how wrong and unjust the war is or how all the returning vets are coming home crazy and violent” (p. 253). In a separate, but related, line of research, Elliot and colleagues (2011) explored the experiences of MCS at a medium-sized public university in the western US. They too found that faculty approached discussions concerning military-policy in an exceptionally destructive manner, as MCS felt faculty had denigrated them in the classroom. Underscoring the destructive nature of the classroom climate for MCS, one student described a professor who referred to service-people as “baby killers” and “torturers” (Elliot et al., 2011, p. 287). Elliot and her colleagues (2011) additionally described how a different military-connected student, feeling excluded and isolated, wished he “was not slandered in the classroom” because of his connection to the military (p. 287).

Considering the abovementioned empirical findings, (Bagby et al., 2015; DiRamio et al., 2008; Elliot et al., 2011; Osborne, 2014; Persky & Oliver, 2011; Phillips, 2014; Summerlot et al., 2009), MCS have often encountered negative classroom environments associated with faculty views concerning non-academic student characteristics and military-policy. These accounts highlight instances when faculty did not establish an environment where it was clear that students could challenge their opinions or where they could debate military-policy cooperatively with their peers. Had these faculty members established a classroom climate where MCS were encouraged to constructively debate with their professor about military-policy, they could have instead



positively impacted military-connected student's academic self-concept (Kim & Sax, 2015). Had they established a classroom environment where students could cooperatively discuss differences in viewpoints concerning military-policy with their classmates, faculty could have facilitated improvements to military-connected student's cognitive development and orientations to learning (Cruce et al., 2006). These findings underscore the need to understand whether teaching norms exist related to the handling of classroom inquiry and debate about military-policy amongst faculty who educate MCS at civilian colleges and universities. In the next section, I discuss how faculty members' readiness to interact with MCS is also a relevant concern, warranting an investigation as to whether related teaching norms exist amongst faculty who educate MCS at civilian institutions of higher education.

**Connection making.** Osborne (2014) documented military-connected student participants believed faculty were reluctant to interact with them due to generalizations that all MCS had post-traumatic stress disorder (PTSD) or other mental-health barriers. Phillips (2014) documented that students encountered faculty who appeared to be reluctant to interact or build connections with MCS. One student believed some faculty did not want to have MCS in their classroom at all, stating, "You could run into the professor that doesn't like the military in their class" (Phillips, 2014, p. 245). In a recently published dissertation study, faculty participants discussed their readiness to interact or connect with MCS. Faculty participants expressed a reluctance to interact with MCS themselves, stating they felt "wary of the potential for issues faced by student

veterans” (Kovach, 2017, p. 63). Discussing the implications of data from his study, Kovach (2017) said:

Given the sensitive and solemn nature of veteran related issues, most notably the epidemic suicide rates often used to call attention to current era veterans, faculty tend to proceed with extreme caution when engaging student veterans. This reluctance may create the appearance of indifference. (p. 81)

Although faculty “had not experienced a negative encounter with a student veteran in the classroom” (Kovach, 2017, p. 80), faculty still reported their disinclination to interact or build connections with MCS. A specific example of this reluctance involved a subset of faculty who “identified the trait ‘violent’ with military training and culture” (Kovach, 2017, p. 63). This particular faculty subset “shared similar perceptions of wariness toward student veterans that included concerns of ‘triggering’ them” (p. 80), and “tended to be more cautious with student veterans” (Kovach, 2017, p. 64). A separate faculty subset reported they had never experienced any interactions with MCS, and despite being uncertain about institutional privacy policies, reported their “concerns of privacy” (p. 83) drove their reluctance to interact with or build connections with MCS (Kovach, 2017). Other faculty participants reported that their reluctance to interact and connect with MCS developed out of concern they might say something undiplomatic about matters they could not comprehend (Kovach, 2017). They too reported they had never experienced any interactions with veterans.

Although the research base is quite limited, considering Kovach's (2017) and Osborne's (2014) empirical findings, it follows that at least some students have interacted with faculty who were reluctant to build connections with them, most likely due to the students' military connections. MCS have reported that this type of faculty behavior represented a barrier to their education and exacerbated negative feelings regarding their sense of belonging on campus (Gonzalez, 2012). It is possible that this type of faculty behavior could also influence MCS college completion rates, as students who perceive receiving less support from faculty, especially psychological support, are less likely to complete their degree (Shelton, 2003). These accounts highlight instances when faculty did not establish an environment where students felt that their professors wanted to build connections with them. Had these faculty members established a classroom climate where MCS felt that their professors were accessible, they could have instead positively influenced student learning (Kim, 2010; Kim & Sax, 2009, 2011, 2015). These instances also raise questions of the readiness of faculty to mentor MCS, dependent upon faculty members' perceptions of MCS. Had faculty otherwise established classroom contexts where students perceived that they were ready and willing to mentor them, they could have helped guide MCS' pathways to academic and professional success (Chemers et al., 2011; Eagan et al., 2011; Landefeld, 2009; Maton & Hrabowski, 2004; Packard, 2004; Perna et al., 2009). These findings underscore the need to understand whether norms specific to faculty building connections with and mentoring MCS exist amongst the faculty who educate them at civilian colleges and universities.

The consideration of faculty teaching norms should prove to be especially meaningful for understanding the ways in which faculty influence college impact amongst MCS at civilian institutions of higher education. Moreover, it is worthwhile to construct measurements of faculty behaviors unique to Weidman's (1989) notion of the hidden curriculum that, as substantiated through the literature, MCS have often encountered. In the next paragraphs I will discuss this study's significance. Chapter 1 ends with an outline of the remaining chapters of this proposal.

### **Significance of Study**

Most of the existing data only tell MCS's side of the story, leaving much to learn about the faculty who interact with MCS. The construction of a survey instrument that operationalizes the hidden curriculum amongst those who teach MCS will be beneficial for various individuals and communities, specifically researchers, administrators, Veteran's Affairs officers, faculty, and students themselves. The manner in which faculty interact with students, especially concerning the ways they organize instruction and approach their teaching behaviors, is influenced by normative values that the institution, department, or individual faculty member supports (Weidman, 1989). These additional variables are particularly important to measure given the fraught history of academia and the military. Researchers could use this instrument to learn about the degree to which an organization, academic department, or individual faculty member cultivates norms that support or hinder specific student-faculty interactions. Data would illuminate the norms that guide how faculty interact with MCS, and uncover the influence

that the institution, the academic department, or the individual faculty member has on the faculty socialization mechanism. Data from this survey instrument could be used to evaluate Weidman's (1989) proposition that institutional and departmental norms concerning organization of instruction are essential measures that should be considered as variables of interest in college impact research. Data could also be used to determine whether or not Weidman's theory of socialization (1989) can be extended to Kim and Sax's (2017) proposition that the backgrounds of faculty are important measures which ought to be considered as variables of interest in college impact research. Lastly, data could be used to determine if Weidman's theory of socialization (1989) can be extended to Summerlot and colleagues' (2009) proposition that the historical relationship between the academy and military organizations on campus is an important measure to consider as a variable of interest in college impact research for MCS.

The anticipated ongoing use of this instrument will be valuable as well. Vacchi and Berger (2014) highlighted the need for inquiry in this line of research and noted that while the student-faculty relationship and the role of faculty appears to be significant for MCS, it has been largely ignored in the literature. This study will contribute to current efforts to address the shortage of research for MCS that Vacchi and Berger (2014) referenced, with particular attention to the perceptions of faculty who teach them. Researchers, particularly within student affairs, higher education, sociology and psychology could benefit from the creation of this survey instrument in several ways. To begin, data from this instrument could generate a national database of faculty who teach

MCS. This database could be a starting off point for new studies and research collaborations about faculty perceptions of how their peers interact with MCS at civilian colleges and universities. The instrument would mainly support researchers interested in college impact studies unique to faculty behavior and pedagogy, but factors and variables exclusive to this instrument could also allow scholars to answer countless questions regarding the perceptions of faculty who interact with MCS. It could enrich the body of research on college impact and student-faculty interaction, filling the void of literature on the teaching of MCS at civilian institutions of higher education. Lastly, given this dearth of knowledge, it is important to mention that this study aims to serve as the first step of a research agenda examining the teaching behaviors of faculty who educate MCS at civilian colleges and universities.

### **Outline of the Remainder of Study**

Chapter 2 functions as the theoretical base for this survey. Chapter 2 begins with an outline of the guide that I will use for the construction of my survey based on DeVellis' (2017) model for scale development. The first step of DeVellis' (2017) model is to articulate clearly what it is that the researcher intends to measure. I do this by offering an overview of the MCSFIM (Appendix A). I will explain and substantiate through prior research why each variable and factor included in my model is relevant to the role of faculty in undergraduate socialization. Then, in Chapter 3, I will return to DeVellis' model and outline the methods for developing a scale instrument to measure the hidden curriculum. I will first discuss the steps I will take for item development and

the format for measuring constructs in the MCSFIM. After that, I will discuss the ways in which I will gather evidence for content validity. I will then discuss how and to whom this survey instrument could be administered to, during a future pilot study, with attention to specifying sample size. Lastly, Chapter 3 will end with a discussion about the need to evaluate this instrument's items and to take steps toward optimizing scale length.

### **Summary**

Chapter 1 detailed the importance of exploring teaching norms amongst those who teach MCS at civilian institutions of higher education. I framed the key concerns and foundations for this study through Weidman's theory of socialization (1989). I then focused on faculty behaviors in college classrooms that alienated MCS at civilian institutions of higher education, highlighting the need for an understanding of a normative structure of teaching behaviors unique to this faculty subset. Chapter 1 closed with the significance of this proposed study and an outline of the remaining chapters of this proposal.

## CHAPTER 2: LITERATURE REVIEW

Chapter 2 outlines the theoretical foundation for this study. DeVellis' (2017) theory and process of scale development establishes the groundwork for instrument development. To start, I will apply the first step of DeVellis' (2017) model for scale development in this chapter, as a guide for instrument construction and discuss the orienting concepts for this study. I then provide an overview of the MCSFIM (Appendix A), before substantiating the need for each dimension in the instrument. I do so by giving reasons for each dimension's relevance to understanding the hidden curriculum, substantiating each through scholarship from the fields of higher education, medicine, psychology, sociology, and student affairs. These conceptual dimensions could be especially important for explaining inputs to teaching norms amongst faculty who educate MCS that could ultimately impact MCS learning.

### **DeVellis' (2017) Model for Scale Development**

DeVellis (2017) devised guidelines for scale development to help researchers construct reliable and valid scale measurements. In this study, I will follow DeVellis' (2017) first four steps to scale construction in order to develop an instrument for measuring the MCS-Faculty Interaction mechanism. In this chapter, I will follow the first step of DeVellis' model by detailing the theoretical decisions I have made for scale development.

Step 1: Determine Clearly What It Is You *Want* to Measure

Step 2: Generate an Item Pool



- Step 3: Determine the Format for Measurement
- Step 4: Have the Initial Item Pool Reviewed by Experts
- Step 5: Consider Inclusion of Validation Items
- Step 6: Administer Items to a Development Sample
- Step 7: Evaluate the Items
- Step 8: Optimize Scale Length

### **Step 1: Determine Clearly What it is You Want to Measure**

It is essentially important to first determine what experience or phenomenon is to be measured when developing a scale instrument. Measurement has been described by Nunnally and Bernstein (1994) as an organized set of rules for assigning symbols to objects. The rules of measurement quantify attributes numerically and classify entities into distinct categories with respect to a given quality. To this end, theories or models that represent a phenomenon of interest can illuminate and clarify the objects, or variables, to be measured (Ghiselli, Campbell, & Zedeck, 1981). Researchers must fully evaluate the conceptual models or constructs before they assume how much each construct corresponds to specific attitudes of people. For this study, I created a new model for MCS-Faculty Interaction, the MCSFIM (Appendix A), with key dimensions and variables for the instrument substantiated through prior research in related fields. In this next section, I detail the theoretical decisions that I made for scale development. Then I introduce the MCSFIM.

**Norms.** As discussed in Chapter 1, this proposed study aims to develop measurements of teaching norms unique to Weidman's (1989) notion of the hidden curriculum that, as substantiated through the literature, MCS have often encountered. "Norms are generally accepted, sanctioned prescriptions for or prohibitions against, others' behavior, belief or feeling. i.e. what others *ought* to do, believe, feel – *or else*" (Morris, 1956, p. 610). Because norms are prescribed, preferential, permissive, or proscribed patterns of behavior (Merton, 1942, 1968, 1973), the extent to which faculty assign disapproval, as well as endorsement, to various teaching behaviors serves as the operational definition of norms for this study. This being so, one way to identify norms is to pinpoint behaviors that group members consider to be intolerable and serious enough to deserve sanctions (Braxton & Bayer, 1999; Braxton, Proper, & Bayer, 2011; Durkheim, 1995 [1912], Morris, 1956). The measurement of disapproval is assessed, in this instrument, through the type of penalties individuals believe suitable for each behavior stated in the form of a violation of a possible norm. In this way, the Durkheimian principle of determining norms by evaluating the opinions of individuals regarding the type of penalty that might be assigned for deviant behavior is followed in this study. In the following section I continue to detail what this instrument aims to measure, beginning with a brief outline of the MCSFI constructs.

**Constructs unique to the MCSFIM.** This instrument will measure the conceptual dimensions of the MCSFIM (Appendix A) that could be especially important for explaining inputs to faculty teaching behaviors and college impact for MCS. I will

measure the hidden curriculum of particularistic pedagogy as a latent construct. I will also operationalize individual faculty characteristics, academic discipline and characteristics, and, lastly, institutional type and characteristics. Teaching behaviors associated with the hidden curriculum include approaches to classroom inquiry and the management of friction. Justification for the incorporation of each dimension of the model is provided through pertinent scholarship from the fields of higher education, medicine, psychology, sociology and student affairs.

### **The Hidden Curriculum of Particularistic Pedagogy**

This hidden curriculum is a composite measure of four separate dimensions unique to the notion of particularistic pedagogy, including: 1) preferential inquiry; 2) diverse inquiry; 3) antagonistic friction; and 4) connective friction. Each dimension reflects faculty behaviors that have been documented in the empirical literature as contributing to student impact and have been established as an important aspect of the educational experiences of MCS, or those who teach MCS. These pedagogical approaches concern the ways that faculty build connections with and amongst students, how they manage classroom dialogue, foster peer learning and navigate inquiry, especially when course related topics concern military-policy, current global affairs, foreign policy, international relations, and the study of war and peace.

Braxton and Bayer (1999) coined the phrase “particularistic grading” (p. 32) and defined it as happening when “nonacademic characteristics of students (social/personal) are taken into account in the awarding of student grades.” I have modified Braxton and

Bayer's (1999) phrase so that it can refer to teaching practices in order to characterize faculty behaviors and student-faculty interactions that scholars have described within the literature on the education of MCS. The phrase "particularistic pedagogy" will therefore be defined as taking nonacademic student characteristics (social/personal) into account in the teaching of military-connected students.

I wish to measure particularistic pedagogy as I hypothesize it to be a unique aspect of the hidden curriculum and faculty socialization mechanism that influences college impact amongst MCS at civilian colleges and universities. This hidden curriculum consists of two opposing typologies of faculty behavior concerning the provision learning environments. In this regard, particularistic pedagogy can either optimize student learning or it can hinder the advancement of knowledge, depending upon the ways in which faculty take into consideration a students' nonacademic characteristics.

Individual faculty members' opinions regarding the ethics of war and their endorsement of military service have influenced the quality of learning opportunities they felt they were able to provide MCS (Barnard-Brak et al., 2011). There is therefore a possibility that faculty consideration of nonacademic student characteristics can inadvertently hinder learning opportunities for MCS. The dimensions of particularistic pedagogy that support inequitable learning environments include: 1) preferential inquiry, and 2) antagonistic friction. They are both discussed in greater detail later in this chapter.

On the other hand, it is also possible for a students' nonacademic characteristics (social/personal) to be considered in a manner that optimizes student learning. This oftentimes occurs when faculty provide accessible accommodations for a students' disability or particular learning needs (Gordon, Meyer & Rose, 2016; Meyer & Rose, 2000; Rose & Meyer, 2002). Dimensions of particularistic pedagogy that support equitable learning environments include: 1) diverse inquiry, and 2) connective friction. They are both discussed in greater detail later in this chapter. I begin the overview of the hidden curriculum by outlining strategies and approaches of faculty concerning their approaches to classroom inquiry.

**Inquiry: Diverse or preferential?** The inquiry construct is a composite measure of two separate dimensions, including: 1) diverse inquiry, and 2) preferential inquiry. Diverse inquiry occurs when faculty acknowledge a plurality of perspectives, thereby valuing nonmilitary and military-connected student's voices. Conversely, preferential inquiry occurs when faculty endorse the superiority of one singular perspective, which hinders military-connected students' voices.

With regard to their teaching role, faculty are responsible for providing both an effective civic education and a truly liberal education. Depending upon the behavioral approaches that faculty employ while interacting with both civilian and MCS in their classrooms, they can either optimize or encumber the academy's role in providing both an effective civic education and a truly liberal education to all students. As discussed in Chapter 1, there are numerous student accounts in the literature that describe how MCS

face considerable obstacles to learning when navigating ideological discussions in the classroom. This happens especially during inquiry into military-policy, current global affairs, foreign policy, international relations, and the study of war and peace.

Some faculty members have also noted that they experience difficulties when navigating similar topics. For example, one faculty member argued, “We cannot discuss our opinions without being portrayed as being unpatriotic or harassing veterans” (Downs & Murtazashvili, 2012, p. 209). Other faculty have expressed concerns that they saw a shift in college culture that was “not reinforcing critical thinking” (Kovach, 2017, p. 69), possibly due to concerns of “political correctness” (p. 65).

Downs and Murtazashvili (2012) posit that differences between military perspectives and nonmilitary points of view are natural, and that, if thoughtfully handled, this conflict of ideals can improve the educational experience of all students. There is a possibility that, if these very differences of perspectives are not thoughtfully handled, however, faculty can inadvertently hinder learning opportunities for MCS (Barnard-Brak, et al., 2011).

If inquiry is approached thoughtfully, faculty and students can experience the classroom and learning in a productive manner. Downs and Murtazashvili (2012) argue differences between military perspectives and nonmilitary points of view can, in fact, optimize student learning opportunities for both MCS and civilian students. Their research explored the ways that both non-Reserve Officer Training Corps (ROTC) students and ROTC students perceived their interactions with each other in the classroom

during discussions focused on differences between military perspectives and nonmilitary points of view, and how those interactions impacted them. Some students found that their interactions served to “humanize the other side” and bridge “different worlds” (p. 91). Ultimately, study findings suggested that “there is an *understanding* gap between civilians and the military within the university and the physical presence of ROTC serves to alleviate it” (Downs & Murtazashvili, 2012, p. 279, emphasis in original). It follows that classroom inquiry amongst civilians and MCS concerning military-policy can be navigated in such a way that improves learning outcomes for all students.

Many institutions of higher education are well known for embracing a diverse range of personal characteristics, beliefs, and worldviews, which is generally regarded to be a great benefit to the higher education of students. Nonetheless, in the context of educating MCS at civilian institutions of higher education, it appears that an interaction exists between political dispositions and the classroom behavior of faculty members concerning the ways in which they deliver scholarship and handle differences in ideological positions. Student accounts detail instances when faculty appeared to draw from scholarship that stemmed from a singular ideological disposition regarding course related topics. As one student shared, “The biggest problem with some faculty is their willingness to disregard teaching and embrace hateful soapbox political speech” (Elliot et al., 2011, p. 287).

Scholars have outlined several instances when the ideological dispositions of faculty were handled in a way that was not perceived as being objective. Participants in

Osborne's (2014) qualitative study, which explored military-civilian interactions on college campuses, described classroom sessions when they felt faculty had made "derogatory or overly simplistic comments about the military and the current conflicts in the Middle East" (p. 254). Persky and Oliver (2011) described how one faculty participant "viewed antimilitary bias as a form of discrimination and said that the bias of some faculty members [was] clearly manifested in the classroom" (p. 116).

The following student account is an example of how the particularistic pedagogy of preferential inquiry might influence academic integration for MCS (Weidman, 1989). A student who participated in a study conducted by Elliot and colleagues (2011) stated:

I don't care about your views on the war or the current political atmosphere. If you don't like veterans or military people don't voice it in class. It offends people and renders everything else you say biased. (p. 288)

This student fully objected to faculty behavior that expressed disapproval of students based on non-academic characteristics. Furthermore, this student took that train of thought one step further and explained that when a faculty member publicly makes judgements about students based on non-academic characteristics (e.g., concerning their connection to the military) then they would no longer find that faculty members' ideas as legitimate. Because this type of faculty behavior could negatively influence the "extent to which students accept faculty expectations for their academic performance as legitimate" (Weidman, 1989, p. 310), a particularistic pedagogy of preferential inquiry most likely negatively influences college outcomes for MCS.



Braxton and Bayer (1999) determined that faculty believe peers behave unethically if they “do not acknowledge differences of opinion and interpretation in the classroom” (p. 22), or “if they are intolerant of views other than his/her own” (p. 22). Perhaps a more ethical treatment of imparting scholarship in the classroom might occur when faculty recognize the validity of views other than their own, when they include, and are open to, a diverse range of perspectives, or when faculty acknowledge and allow differences of opinion and interpretation to be safely explored within their classroom.

Research also documents that the ways in which faculty utilize scholarship in their classroom teaching impacts student learning. Studying the impact of teaching methods on student learning within the general student population, Cruce and colleagues (2006) discovered that students’ cognitive development and orientations to learning were positively impacted by pedagogical methods that utilized scholarship and an intellectual emphasis. It therefore follows that the intellectual practice of acknowledging a plurality of diverse perspectives, thereby valuing nonmilitary and military-connected student’s voices, could potentially impact college outcomes for MCS in a positive manner. In summary, the ways in which faculty navigate the relationship between course content, their personal identity regarding their own ideological dispositions, and the ideological dispositions of their students, appears to matter to both their students and their peers in the academy.

To summarize, numerous scholarly accounts detail instances when views regarding military-policy were not handled objectively (DiRamio et al., 2008; Elliot et

al., 2011; Osborne, 2014; Persky & Oliver, 2011). This sort of faculty behavior has been found to adversely impact students (Cole, 2007; Komarraju, Musulkin, & Bhattacharya, 2010), and academic peers perceive it to be a faculty behavior which ought to be severely sanctioned (Braxton & Bayer, 1999).

The way in which faculty handle differences in ideological dispositions regarding military-related issues when it comes to the delivery of scholarship and ideology has not been empirically explored amongst those who educate the MCS population. Exploring whether a normative pattern of teaching behaviors exists that is associated with pedagogical approaches to inquiry amongst faculty who educate MCS is therefore an important aspect of the faculty socialization mechanism to explore.

In what ways do faculty regard how their peers handle inquiry amongst themselves, civilian students and MCS? What influences faculty to engage in aspects of pedagogy related to inquiry? Are there any associations between any institutional or departmental characteristics and the ways in which faculty approve or disapprove of their colleague's management of classroom inquiry? Questions of this nature have not been explored in the literature focused on those who educate MCS at civilian institutions of higher education but warrant investigation. Being able to understand the pedagogical decisions that faculty make regarding the delivery of scholarship and ideology in the classroom through inquiry, particularly as they intersect with faculty identity, academic department and institutional-level characteristics, opens countless possibilities to studies examining college impact unique to faculty behavior and pedagogy.

Researchers therefore need access to empirically based data focused on teaching behaviors unique to managing inquiry in the classroom amongst faculty who teach MCS at civilian colleges and universities. For this reason, an essential component of the MCSFIM (Appendix A) and instrument concerns both diverse inquiry and preferential inquiry. Having a database of teaching behaviors unique to both aspects of inquiry will enable researchers this instrument, the MCSFI-Q (Appendix B), to see whether individual faculty level variables, academic department-level variables, or institutional-level variables are associated with this particular teaching behavior. Moreover, researchers will also be able to see which characteristics (individual, departmental, institutional) are salient for teaching behaviors concerning inquiry across all institutional types. In the next section, I discuss the pedagogical approaches that faculty take concerning the handling of friction in the classroom as it relates to opportunities for student learning and student voice.

**Friction: Connective or antagonistic?** The friction dimension is a composite measure of two separate dimensions, including: 1) connective friction, and 2) antagonistic friction. Connective friction occurs when faculty move through friction to foster connection making by valuing voice for both nonmilitary students and MCS. Friction often occurs during discourse about course related topics focused on military-policy. Antagonistic friction occurs when faculty allow opposition to restrain connection making and minimize military-connected student's voices during classroom sessions when such hot topics are navigated.

The friction dimension is based on a theory of “productive friction” put forth by Downs and Murtazashvili (2012), who argue that differences between military perspectives and nonmilitary points of view can, in fact, optimize student learning opportunities for both MCS and civilian students. According to Downs and Murtazashvili (2012), “productive friction” occurs when faculty foster an “appropriate dialectical relationship” amongst themselves, MCS and civilian students (p. 412). A dialectic approach has been described as a logical discussion of ideas between people holding different points of view about a subject and who want to establish truth through reasoned arguments (Corbett, 1965). Others define dialectical as: a synthesis or integration of opposites (Linehan et al., 2006).

The ways in which faculty navigate friction in the classroom could positively influence college outcomes. Kim and Sax (2015) found that students were introduced to norms of college success when they were educated by faculty who developed normative contexts similar to those that foster connective friction. Findings revealed that students who challenged their professor’s ideas in class tended to report higher levels of academic self-concept when compared with students who did not challenge their professor’s ideas in class, or with those who did so less frequently (Kim & Sax, 2015). Within the literature focused on the experiences of MCS, however, it appears that the faculty-developed normative contexts of some classrooms are not conducive to fostering connective friction.

Instead, it appears that MCS have not felt comfortable to enter into open discussions about topics that broach views on military-policy, current global affairs, foreign policy, international relations, and the study of war and peace. Furthermore, it also appears that it is risky for military-connected students to dialogue with their professors in the classroom when topics such as these arise during classroom discussions. DiRamio and colleagues (2008) described one particular theme that emerged from their interviews and discussed how MCS “adopted a socialization strategy best described as blending in” which, in part, involved “being quiet and neutral in class” (p. 88).

They explained: “While it was clear in the interview data that many of the student-veterans held strong opinions about the war and geopolitics, overall they were reluctant to express themselves” (DiRamio et al., 2008, p. 88). The authors then offered a statement made by one MCS who appeared to have adopted a strategy of blending in: “Because of the political sway of the college and most of the students here . . . sometimes you feel a little unwelcome because of your political views” (DiRamio et al., 2008, p. 88).

Taking on a discreet and impartial demeanor in the classroom is undoubtedly inconsistent with the conduct of a student who challenges the ideas of their professors. Although the students in the abovementioned description from DiRamio and colleagues (2008) “held strong opinions about the war and geopolitics” (p. 88), they avoided talking about military-policy ideas in the classroom. It is likely that it would be risky for MCS to broach such ideas with their professors in the classroom. As discussed in Chapter 1, such

risks include being chastised, criticized and denigrated in the classroom by faculty for expressing views that endorse military intervention or which were supportive of certain military-policies.

Elliot and colleagues (2011) conducted a study that explored alienation on campus amongst MCS at a medium-sized public university in the western US and found that classroom contexts did not embrace free and open dialogue in the classroom. On the contrary, they found that students in this study reported being openly denigrated by faculty and gave accounts of professors who, knowing that they had a student with military-affiliations in the classroom, referred to those who served in the military as “baby killers” and “torturers” (Elliot et al., 2011, p. 287). Feeling excluded exclusively due to his military affiliation, one student in this study by Elliot and colleagues (2011) “wished he was not slandered in the classroom” (p. 287).

These classroom encounters appear to reflect faculty developed normative contexts wherein MCS experienced critique that was condescending and demeaning. When faculty humiliate students, retention suffers (Lundquist, Spaulding, & Landrum, 2002, 2003). It has also been determined faculty believe their peers should be severely sanctioned if they publicly demean their students, such as if they make condescending remarks to a student in class (Braxton & Bayer, 1999). Research indicates that receiving condescending critiques from faculty and experiencing negative interactions with faculty could adversely affect the academic and intellectual development of students (Cole, 2007; Komarraju et al., 2010), underscoring the undesirable nature of this type of faculty

behavior. Specifically, Cole (2007) found that students' intellectual self-concept was negatively impacted as a result of receiving negative critiques from faculty. Komarraju and colleagues (2010) also found that negative experiences with faculty predicted declines in students' academic self-concept.

The ways that faculty handle friction in the classroom can also impact peer learning. Faculty are responsible for organizing the ways in which MCS interact with civilian students in the classroom. This is an important aspect to consider because peer learning and peer support have been found to be associated with many positive college outcomes. Empirical findings indicate that the interactions students have with their peers in the classroom can influence student persistence and success in a variety of ways. For example, student's perceptions of educational gains has been positively influenced by peer learning (Ethington, 2000), peer support has been found to be related to persistence, grade point average and retention (Hausmann, Schofield, & Woods, 2007; Robbins, Lauver, Le, Davis, Langley, & Carlstrom, 2004), and an instructional emphasis on cooperative learning made positive impacts on students' cognitive development and orientations to learning (Cruce et al., 2006).

The ways in which peer learning occurs in the classroom influences the social relationships that MCS and civilian students share together during their undergraduate education. Being that social relationships have been shown to influence student success among MCS (Campbell & Riggs, 2015; Elliot, 2015; Mastrocola & Flynn, 2017; Ness et al., 2015; Whiteman et al., 2013), faculty have a responsibility to do their best to create

classroom contexts that are supportive of peer learning. Positive relations with others have been found to be related to academic self-efficacy, positive help seeking, and lower performance-avoid behaviors among MCS (Mastrocola & Flynn, 2017; Ness et al., 2015). When MCS perceived more peer emotional support than typically encountered, they experienced increases in academic self-efficacy (Whiteman et al., 2013). Social interaction with peers also ensured positive effects on college GPA and sense of belonging among military-connected students (Campbell & Riggs, 2015). Lastly, a relationship was discovered between receiving social support from peers and experiencing fewer incidences of negative interactions on campus (Elliot, 2015).

Social isolation experienced in the classroom has been a frequently cited concern among MCS (Durdella & Kim, 2012; Persky & Oliver, 2011). As previously mentioned, a recurrent finding in scholarship concerning the experiences of MCS reported by various scholars involves instances when participants stated they felt that they did not fit-in with classroom norms due to their connections with the military (Bauman, 2009; Elliott et al., 2012; Osborne, 2014; Summerlot et al., 2009). In Chapter I, I also outlined several accounts in the academic literature that detail instances when faculty publicly demeaned MCS in their classrooms.

Students often look to their professors for cues about classroom norms regarding expectations for student collaboration and collegiality. When faculty behave in demeaning ways toward MCS, they communicate to civilian students that they are not expected to interact in positive ways with their MCS peers either. This is an example of



Weidman's (1989) informal hidden curriculum as faculty would most likely never specifically write in their syllabus that they will tolerate antisocial behavior directed by civilian students toward military-connected students. However, by modelling their own proclivity to interact with MCS in negative ways, faculty non-verbally communicate their expectations for peer learning between military and civilian students to the entire classroom.

Social relationships and peer learning are positively related to college outcomes for all learners and are especially important for MCS outcomes. It therefore stands to reason that ensuring opportunities for peer learning in the classroom is important. Moreover, the ways in which faculty manage friction in the classroom is important to this same end as well.

In summary, recent research findings suggest that open dialogue between students and faculty can positively impact the academic development of all students (Kim & Sax, 2015). Findings also indicate that receiving condescending critiques from faculty, as well as experiencing negative interactions with faculty, can adversely impact students' academic development (Cole, 2007; Komarraju et al., 2010). MCS have described their experiences in faculty developed classroom contexts that did not appear to have been conducive to open dialogue (DiRamio et al., 2008), but instead involved critique that was condescending and demeaning (Elliot et al., 2011), or when they felt that they did not fit in with classroom norms due to their connections with the military (Bauman, 2009; Elliott et al., 2012; Osborne, 2014; Summerlot et al., 2009).

Faculty behaviors and pedagogical choices regarding the management of friction and dialogue in classrooms where MCS are educated therefore represents an important arena to investigate. Given that the way that faculty approach friction through the dialectic method in the classroom has been found to positively influence college outcomes, it stands to reason that ensuring opportunities for open dialogue in the classroom is important. Being able to understand the pedagogical decisions that faculty make regarding organizing and implementing strategies to move through friction to foster connection making in the classroom opens countless possibilities to studies examining college impact unique to faculty behavior and pedagogy.

Exploring whether a normative pattern of teaching behaviors exists that is associated with pedagogical approaches managing friction amongst faculty who educate MCS is therefore an important aspect of the faculty socialization mechanism to explore. In what ways do faculty regard how their peers handle friction amongst themselves, civilian students and MCS? What influences faculty to engage in aspects of pedagogy related to friction? Are there any associations between any other faculty background characteristics and the ways in which faculty manage friction in the classroom?

Researchers therefore need access to empirically based data focused on teaching behaviors unique to managing friction in the classroom amongst faculty who teach MCS at civilian colleges and universities. For this reason, an essential component of the MCSFIM(Appendix A) and instrument, the MCSFI-Q (Appendix B), concerns friction in the classroom. Having a database of teaching behaviors unique to friction in the

classroom will enable researchers using the MCSFI-Q (Appendix B) to see whether individual faculty level variables, academic department-level variables, or institutional-level variables are associated with this particular teaching behavior. Moreover, researchers will also be able to see which characteristics (individual, departmental, institutional) are salient for teaching behaviors concerning friction across all institutional types. In the next section, I discuss the institutional characteristics dimension of the MSCFIM and instrument, the MCSFI-Q.

### **Institutional Characteristics**

The institutional type and characteristics dimension is a composite measure of four separate concepts, including: 1) branch campuses on military bases; 2) historical relationship with ROTC; 3) military organizations on campus; and 4) professional development for teaching MCS. Each of these dimensions can be independently ascertained and therefore do not need to be included in the instrument itself.

Supportive of Weidman's (1989) theory of socialization, Braxton and colleagues (1996) discovered that organizational norms influenced the pedagogical behaviors of faculty. They found that principles of pedagogy which faculty were most easily able to employ were those principles which had norms in place to support them (Braxton et al., 1996). Therefore, at an organizational level, findings from Braxton and colleagues' (1996) study suggest that the pedagogical behaviors that faculty sanction or reward could highlight the institutional norms, values, and culture of the organization that influence MCS-faculty interactions.

The potential for institutional-level characteristics to exert norms that influence college impact have been empirically substantiated in several studies (Fuentes, Alvarado, Berdan, & DeAngelo, 2014; Kim, 2010; Kim & Sax, 2009, 2011, 2015; McBain, 2015). Recent scholarship suggests that institutional characteristics can restrict faculty mentoring for certain subsets of students (Fuentes et al., 2014) and influence the extent to which independent thinking in the classroom is rewarded (Kim & Sax, 2015).

Institutional-level norms have recently been found to be a source of influence that have impacted national higher education policy concerning MCS enrolled at civilian institutions of higher education (McBain, 2015). Coupling McBain's (2015) findings with Weidman's (1989) assertions regarding the influential role of structures at an institutional level to operate as socializing agents, it follows that institutional characteristics associated with the historical relationship between higher education institutions and military-serving agencies could also influence teaching norms that uniquely impact MCS-faculty interactions. Amongst those who educate MCS at civilian colleges and universities, it is probable that teaching behaviors are influenced by institutional-level inputs related to civil-military relations.

Three institutional-level characteristics of interest to this study concern the institution's relationship with the military as demonstrated through the presence of military- and veteran- serving agencies and branch campuses on military bases. This dimension also considers the institutions' historical relationship with ROTC, which

references whether or not ROTC was ever removed from campus due to civil-military tensions.

The anti-Vietnam war protests of the mid 1960's represent an historical aspect unique to student and faculty interactions at particular colleges and universities. During the Vietnam war, a coterie of faculty at Michigan State University participated in activism on campus through hosting anti-war teach-ins which, within that same week, inspired faculty at 35 other campuses to do the same (DeBenedetti & Chatfield, 1990). By the end of 1965, the practice of faculty holding anti-war teach-ins became widespread, occurring throughout 120 institutions of higher education across the nation (DeBenedetti & Chatfield, 1990). Five years later, tensions between institutions of higher education and the military were considerably amplified. In the Spring of 1970, the Ohio National Guard was called to the Kent State University campus to calm students who were protesting the U.S. invasion of Cambodia. Guardsmen reacted to a group of protesters by firing at the students; killing four, injuring nine, and leaving one student permanently paralyzed (Adams, 2010).

It is possible that, especially at the institutions where this type of conflict was prevalent, civil-military tensions could still exist and possibly support particular teaching behaviors that could hinder learning opportunities for MCS (Summerlot et al., 2009). Summerlot and his colleagues explored the experiences of MCS and compared two groups of students. One group attended institutions that had removed ROTC. The other group attended institutions that had not experienced this type of civil-military tension.

Teaching behaviors were perceived as “challenging” and “ambivalent” to MCS at colleges and universities that had a long history of civil-military tension, especially concerning the removal of ROTC. Conversely, teaching behaviors were perceived as “supportive” to MCS at institutions that had not endured considerable civil-military tensions (Summerlot et al., 2009, p. 73). Because it is possible that the nature of the relationship an academy has had with the military could influence the quality of student-faculty interactions at civilian colleges and universities, the MCSFIM (Appendix A) considers various indicators of civil-military relations at an institutional level.

Kim and Sax (2015) found that faculty-developed classroom contexts have the potential to differently influence student outcomes dependent upon the extent to which institutional-level normative pressures encourage, or allow, students to challenge professor’s ideas. Notably, in some institutions, students did not benefit from challenging their professor’s ideas in the classroom. Institutional norms within some institutions most likely encouraged debate and independent thought in the classroom, as students enrolled in these institutions profited from challenging their professor’s ideas. Moreover, it is possible that institutional norms of coherence of thought were either encouraged or expected from students at institutions where students did not profit from challenging the ideas of their professors in class. Kim and Sax (2015) recommended future research consideration of how various institution-level variables might contribute to differing influences of challenging a professor’s ideas in class on students’ academic self-concept. Questions of this nature have also been unexplored in the MCS literature.

Therefore, an exploration of these sources could prove to illuminate an important aspect of the faculty-student interaction mechanism that influences the ways in which faculty contribute to college impact.

Researchers therefore need access to empirically based data focused on institutional characteristics concerning civil-military relationships at civilian colleges and universities. For this reason, an essential component of the MCSFIM (Appendix A) and instrument, the MCSFI-Q, concerns institutional characteristics. Having such information will allow for researchers using the MCSFI instrument to see whether institutional-level variables are associated with particular teaching behaviors. Moreover, researchers will also be able to see which institutional characteristics are salient for any of the four dimensions of particularistic pedagogy across all institutional types. The next subsection will discuss the departmental type and characteristics construct.

### **Academic Discipline and Departmental Characteristics**

The academic discipline and departmental characteristics variables concern: 1) colleagues in department with military experience, and, 2) professional development training offered in department for teaching MCS.

Conceptually, the academic department influences faculty behavior and faculty expectations for students, which in turn determines the department's socializing impact on students (Weidman, 1989). Academic departments influence the normative contexts that faculty establish through their organization of instruction and the setting of student expectations through the sanctions and goals they set for faculty. As research in the area

of student-faculty impact shows, academic departments that encouraged greater faculty accessibility have been found to foster favorable student outcomes (Kim, 2010; Kim and Sax, 2009, 2011), highlighting the influential nature of academic departments concerning student learning.

Supportive of Weidman's (1989) theory of socialization, Braxton and colleagues (1996) discovered that departmental norms influenced the pedagogical behaviors of faculty. They also found that principles of pedagogy which faculty were most easily able to employ were those principles which had norms in place to support them (Braxton et al., 1996). Therefore, at the academic departmental level, findings from Braxton and colleagues' (1996) study suggest that the pedagogical behaviors that faculty sanction or reward could highlight the structural norms, values, and culture of the academic department that influence MCS-faculty interactions.

Researchers therefore need access to empirically based data focused on teaching norms amongst faculty who teach MCS at civilian colleges and universities that consider departmental characteristics. For this reason, an essential component of the MCSFI model (Appendix A) and instrument concerns departmental characteristics. Having such information will allow for researchers using the MCSFI instrument to see whether departmental-level variables are associated with particular teaching behaviors. Moreover, researchers will also be able to see which departmental characteristics are salient for all four dimensions of particularistic pedagogy across all institutional types.



The following discussion outlines the last dimension of interest in the MCSFI model (Appendix A) and regards individual faculty characteristics.

### **Individual Faculty Characteristics**

This dimension is a composite measure of nine separate concepts unique to individual faculty characteristics, including: 1) administrative experience; 2) personal history of military service; 3) familial history of military service; 4) peer history of military service; 5) perceptions of ROTC on campus; 6) professional status; 7) research activity; 8) sex; and 9) tenure status.

An understanding of faculty identities could prove critical to illuminate why some students benefit more or less from student-faculty interactions (Kim & Sax, 2017). Research shows that student-faculty interactions lead to different outcomes, rendering them more or less effective in fostering student learning and development across disparate subgroups (Colbeck, Cabrera, & Terenzini, 2001; Cole, 2010; Kezar & Moriarty, 2000; Kim, 2010; Kim & Sax, 2009; Sax, Bryant, & Harper, 2005). While scholars largely agree this phenomenon exists, there is much more to be learned about what causes it, as little is known about the main effect of faculty identities along with how they might interact with student identities (Hurtado, Alvarez, Guillermo-Wann, Cuellar, & Arellano, 2012; Kim & Sax, 2017). In essence, there is a lack of understanding about the characteristics and identity of the faculty members with whom students interact, which could prove to be critical to illuminate why some students benefit more or less from the interactions they have with faculty.

Some clues in the literature partially illuminate the ways in which individual faculty identity can influence faculty behavior and pedagogy amongst those who teach MCS at civilian colleges and universities. For instance, it is very likely that a faculty members' experience with military service influences the nature of the interactions that faculty have with students. Faculty with military experience seem to exhibit unique characteristics that positively influence the student-faculty interaction mechanism. Himmerich and Meyers (2015) documented that nearly half (43%) of their MCS respondents reported prominent increases in their own comfort levels with faculty who had military experience. Livingston and colleagues (2011) found that MCS felt faculty who had military history provided a "warm-climate" for military students (p. 134). Students in several other studies also reported that they experienced positive interactions with faculty who had military experience (Himmerich & Meyers, 2015; Livingston et al., 2011; DiRamio et al., 2008; Kovach, 2017; Wilson, 2013).

It is also possible that views on military service also matter. Gonzalez and Elliot (2016) recently documented, "An important predictor of willingness to help student veterans was overall attitudes toward them, such as believing that they were more deserving of a college education given their military service" (p. 39), suggesting particular faculty identities concerning attitudes about military service influence faculty behavior. Results from Barnard-Brak et al.'s (2011) study indicated that faculty identities concerning views on military service could influence college impact. Their study looked for associations among faculty members' opinions of military service, views on the U.S.

involvement in the Iraq/Afghanistan wars, and faculty members' perceived ability to teach MCS who presented PTSD symptoms. Findings indicated "the more likely a faculty member would endorse negative feelings about serving in the military, the less likely that he or she would endorse having self-efficacy to work with returning student-veterans with symptoms of PTSD" (Barnard-Brak et al., 2011, p. 32/33). They also discovered that the more faculty members indicated, "regardless of my perceptions about the war, I respect the service of veterans" (p. 32), the more likely they were to additionally report greater levels of self-efficacy to teach and work with military-connected students who presented PTSD symptoms (Barnard-Brak et al., 2011).

There are several implications for MCS enrolled in a course taught by faculty who endorse "negative feelings about serving in the military" (Barnard-Brak et al., 2011, p. 31). Faculty views regarding military service influenced the extent of a faculty members' belief in their "ability to organize and execute the courses of action required to successfully accomplish a specific teaching task" (p. 233) unique to classroom contexts inclusive of MCS presenting PTSD symptoms. Research indicates that a strong relationship exists between teachers' self-efficacy levels, quality of instruction and positive student learning outcomes (Tschannen-Moran, et al., 1998; Woolfolk Hoy et al., 2006). The consequence of being taught by a faculty member who endorses negative feelings concerning military service could, therefore, be quite profound for MCS with PTSD. Because faculty within this subset are more likely to have lower levels of self-efficacy in teaching (Barnard-Brak et al., 2011), the quality of the instruction they

provide MCS could be very poor, hindering student learning. Notably, the academic achievement of MCS with PTSD symptoms, who attend courses taught by faculty within this subset, may decrease (Tschannen-Moran et. al., 1998).

Therefore, as substantiated through the literature, understanding the characteristics and identities of faculty members who educate MCS could prove critical to illuminate why some students benefit more or less from the interactions they have with faculty. To date, no other studies have explored faculty identities within the literature focused on the higher education of MCS (Kim & Sax, 2017). Questions of this nature have been unexplored in the MCS literature as well. Due to the limited nature of current data concerning the main effect of faculty identities along with how they might interact with student identities (Hurtado et al., 2012; Kim & Sax, 2017), and given that it could be likely that individual views on military-policy influence MCS-faculty interactions (Barnard-Brak et al., 2011; DiRamio et al., 2008; Gonzalez & Elliot, 2016; Himmerich & Meyers, 2015; Kovach, 2017; Livingston et al., 2011; Wilson, 2013) a consideration of an individual faculty member's connections to the military seems warranted.

Consequently, an exploration of these sources could prove to illuminate an important aspect of the faculty-student interaction mechanism that influences the ways in which faculty contribute to college impact. Researchers therefore need access to empirically based data focused on teaching norms amongst faculty who teach MCS at civilian colleges and universities that includes a consideration of possible inputs from faculty characteristics. For this reason, one component of the MCSFIM (Appendix A)

and instrument, the MCSFI-Q (Appendix B), concerns individual faculty characteristics. Having such information will allow for researchers using the MCSFI-Q to see whether variables concerning individual faculty characteristics are associated with particular teaching behaviors. Moreover, researchers will also be able to see which individual faculty characteristics are salient for each dimension of particularistic pedagogy across all institutional types.

### **Summary**

I first began this chapter by outlining DeVellis' theory and application for scale development (2017), which served as the foundation for my study. I then provided an overview of the theoretical model for the hidden curriculum of particularistic pedagogy, justifying the inclusion of each construct through prior literature.

### **CHAPTER 3: METHODOLOGY**

This chapter outlines the careful thought involved in the methodological craft of this study, as well as the limitations that the method inherently involves. The beginning of Chapter 2 highlighted some of the orientating, or intellectually directed, concepts used to develop this instrument. The existing empirical works on student-faculty impact and MCS-faculty interactions drove the development of the survey. Based on a review of literature on MCS-faculty interactions at civilian institutions of higher education, the teaching behaviors identified in the model seem well-grounded to serve as constructs for an instrument. The first section of this chapter draws on the concepts discussed in Chapter 2. It outlines important theoretical considerations that impacted the design of this instrument in order to provide the relevant context which is needed to justify the methods I intend to use. Following the description of the context of this study, in the second segment of this chapter I then outline how I crafted this instrument, as guided by DeVellis' (2017) methods for scale development. The third section of this chapter draws on the concepts discussed in Chapter 1 regarding norms and provides context, from a design perspective, for theoretical considerations that impact the construction of this instrument. Lastly, following this discussion on norms, I outline my research design and methods used for crafting this instrument, as guided by DeVellis' (2017) methods for scale development, in the final segment of this chapter.

## **Context**

The central topic of concern for this study was to create a pool of items that reflect MCS-faculty interactions at civilian colleges and universities. As previously mentioned, Weidman's (1989) theory posits that norms inform the creation- and maintenance of a hidden curriculum. An approach to measuring normative behaviors in higher education, originally developed by Braxton et al.'a (1992) and as later modified by Caboni, Braxton, Deusterhaus, and colleagues (2005), pairs well with studies grounded in Weidman's (1989) theory of undergraduate socialization.

To identify a normative structure for the professoriate, Braxton and colleagues (1992) asked faculty to indicate the appropriateness of particular teaching behaviors. Having defined norms as "the degree of impropriety faculty members ascribe to various teaching behaviors" (p. 537), Braxton and colleagues (1992) approached the creation of their instrument in a manner "consistent with the general principle advanced by Durkheim (1934) that norms are best known or recognized by individuals when violated" (p. 539). Later, in 2005, Caboni and colleagues (2005) extended that approach by additionally considering altruism, or the orientation towards the other (Astin, 1977) and the degree of appropriateness ascribed to particular teaching behaviors. In this same vein, and because norms are prescribed, preferential, permissive, or proscribed patterns of behavior (Merton, 1942, 1968, 1973), the extent to which faculty assign disapproval and endorsement to various teaching behaviors serves as the operational definition of norms for this study.

**Discovering normative structures.** As discussed earlier in Chapter 1, when individuals participate in a consistent pattern of behavior, those behaviors become expected or standard practice and thus normative (Opp, 1982). Some behaviors result in reward and elicit endorsement whereas others invoke disapproval because of the penalties that result from them (Horne, 2001; Durkheim, 1995 [1912]). Informal rules or norms amongst members of a group constitute normative structures that guide professional behaviors.

These normative structures function as a systematic set of values that control, direct or strongly influence group members' behaviors (Merton, 1968). As an organized set of values, normative structures also set parameters for appropriate and inappropriate professional behaviors. As such, one approach to discovering normative structures is to identify those behaviors that group members consider acceptable and others they deem unacceptable (Caboni et. al., 2005; Durkheim, 1995 [1912]; Homans, 1950; Morris, 1956; Opp, 1982).

In higher education, norms inform the range of teaching behaviors that faculty deem socially significant (Braxton & Bayer, 1999). Faculty teaching norms can be identified and weighed for their social significance by measuring perceptions of appropriateness concerning prescribed teaching behaviors which ought to occur, and proscribed teaching behaviors which ought not to occur. Prescribed behaviors elicit varying degrees of endorsement and the extent to which such behaviors elicit approval gauges the behaviors' social significance (Caboni et al., 2005). In a similar vein,



proscribed behaviors elicit varying degrees of moral outrage or indignation and the extent to which such behaviors provoke indignation gauges the behaviors' social significance (Braxton & Bayer, 1999; Durkheim, 1995 [1912]).

When faculty signify that a particular teaching behavior ought to be sanctioned, their indignation indicates the belief that moral boundaries were crossed (Durkheim, 1995 [1912]) and thereby signals the existence of a norm. The greater the outrage or indignation, the more socially significant that particular normative orientation is. Similarly, the extent to which a behavior is appreciated by group members also serves as a means to gauge social significance.

Consistent with these approaches (Braxton & Bayer, 1999; Caboni et al., 2005), this study aimed to create a valid and reliable multi-institutional survey instrument to operationalize faculty perceptions of appropriateness concerning an inventory of teaching behaviors derived from literature on MCS-faculty interactions at civilian colleges and universities. The measurement of the extent of disapproval is assessed through the type of penalties individuals believe suitable for each behavior stated in the form of a violation of a possible norm. In this way, the Durkheimian principle of determining norms by evaluating the opinions of individuals regarding the type of penalty that might be assigned for deviant behavior was followed in this study. Directly measuring faculty perceptions of the professorial normative environment should reveal data that can help scholars gain a preliminary understanding of pedagogical work amongst faculty who

educate MCS and how this subset of faculty endorses or discourages their colleagues' teaching behaviors.

### **Purpose and Research Design**

Chapter 3 details the methodological decisions behind this instrument's item generation, construction, development, and review. As previously mentioned, the methodological process for developing this instrument was guided by DeVellis' (2017) methods for scale development. I approached each step to scale development by integrating a comprehensive mix of suggestions from survey methodology scholarship when I made decisions for the design and development of this instrument. I include the MCSFI-Q (Appendix B) as a reference for the following methods discussion. Given that I addressed the first step in Chapter 2, I begin Chapter 3 with DeVellis' (2017) second step.

- Step 1: Determine Clearly What It Is You *Want* to Measure
- Step 2: Generate an Item Pool
- Step 3: Determine the Format for Measurement
- Step 4: Have Initial Item Pool Reviewed by Experts
- Step 5: Consider Inclusion of Validation Items
- Step 6: Administer Items to a Developmental Sample
- Step 7: Evaluate the Items
- Step 8: Optimize Scale Length

## **Step 2: Generate an Item Pool**

The second step of DeVellis' (2017) approach is to create a pool of items that reflect the construct of interest while keeping the specific measurement goal in mind. In the next section, I outline the process for measuring latent variables and discuss methods for constructing items.

### **Measuring Latent Variables**

Latent variables are oftentimes used by researchers in the social and behavioral sciences who wish to investigate a phenomenon of interest that cannot be directly quantified. Typically, latent variables are used to measure a unique characteristic of a particular individual that it is not directly observable. Because specific aspects of latent variables differ, possibly in strength or magnitude, under a specific set of conditions during a specific time period, they take on a specific value and can be quantified. The strength of a latent variable is presumed to cause an item to take on a certain value (DeVellis, 2017; Ghiselli et al., 1981). As such, a scale developed to measure a latent variable will estimate the latent variables' unobservable magnitude, or strength, at the place and time of measurement through empirical correlations between observed variables. If observed variables are empirically correlated, a causal relationship between the latent variable and the measured variables is assumed.

I developed a series of items related to the latent constructs in the MCSFIM. Regarding particularistic pedagogy, I developed latent constructs that operationalize teaching behaviors unique to preferential inquiry and antagonistic friction. Appendix C

details the latent construct definitions for the MCSFI-Q survey instrument, and Appendix D details the specific items that portray the two latent constructs.

### **Question Item Construction**

DeVellis (2017) outlined important aspects to consider when creating items, which include reflecting the scale's purpose, as well as considering characteristics of both good and bad items. To generate the pool of items for this survey, I started by developing a definition for each construct to be measured. I then relied heavily on the literature focused on MCS-faculty interactions, student-faculty impact studies focused on the general student population, as well as literature concerning pedagogical approaches to civil-military relations and discussions on military-policy (Downs & Murtazashvili, 2012).

**Reflecting the scale's purpose.** Because each item is a "test" of the strength of the construct, it is crucial to consider the definitions of the constructs and the purpose of the specific measurement goal when choosing items (DeVellis, 2017). A pool of items should share a focus on specific attitudes, as opposed to attitudes in general.

Measurement theory assumes that relationships among items are logically connected to the relationships of items to the latent variable, or construct. Each construct measured by the MCSFI has its own definition and careful attention was made to ensure that each item reflected its construct's definition.

**Redundancy.** Writing very similar items in slightly different ways is recommended because a collective group of items can allow the phenomenon to be

exemplified in various ways and can thereby constitute a more reliable test. Redundancy is an asset because it is the basis for internal-consistency reliability, which in turn establishes validity ( DeVellis, 2017). A scale is internally consistent as far as its items causally affect each other or if they share a common cause, meaning the items are intercorrelated. It is useful when items are redundant in that they express a similar idea in a somewhat different way. The final item pool developed for the inquiry and friction constructs tap various aspects of the phenomenon by touching on a multitude of relevant behaviors and characteristics unique to both.

**Number of items.** An item pool should include a large number of items so that it can be a wellspring from which the scale can emerge ( DeVellis, 2017). It is difficult to determine a specific number of items that is just right. However, a common guideline is to start off with a larger item pool than one expects to use for the final scale. Eventually, the item pool is whittled down until it consists of a core of items which most strongly represent the constructs' likeness. DeVellis (2017) notes that it is common for a 10-item scale to evolve from a 40-item pool after several items are eliminated based on criteria such as unwanted resemblance to other items, wordiness, or questionable relevance. With this suggestion in mind, the original item pool that I generated consisted of 35 items for each construct. The final pool consists of 10 inquiry items and 13 friction items.

### **Step 3: Determine the Format of Measurement**

The third step in DeVellis' (2017) guidelines for scale development is to determine the format for measurement (e.g., categorical, dichotomous, open-ended

responses, or scale). Decisions about formatting and generating items in the scale instrument should go hand in hand so that the two steps complement one another. The MCSFI instrument utilizes summated Likert rating scales to measure factor items examining an individual's attitude regarding the appropriateness of teaching behaviors in the context of educating MCS at civilian colleges and universities.

**Likert scales.** This type of scaling is widely accepted for use in instruments that measure attitudes, beliefs or opinions. Although a number of general strategies are available to researchers in order to measure attitudes, social scientists typically use three primary scales to construct items: summated rating scales such as the Likert scale, equal-appearing interval scales such as the Thurstone scale, and cumulative scales such as the Guttman scale.

Likert scales are both flexible and easily constructed (Hopkins, 1998) which lends themselves well to novice scale developers. With a Likert scale, respondents are confronted with declarative statements and rating scales. They are then required to perform a matching activity where they gauge their own attitude in a conceptual manner (e.g., "I don't think that is appropriate") and then decide which point on a rating scale most closely matches their attitude (Ostram & Gannon, 1996).

This process requires a considerable amount of cognitive work and requires that they execute four main steps (Cannel, Miller, & Oksenberg, 1981; Schwarz & Wyer, 1985; Tourangeau & Rasinski, 1988). First, participants need to interpret the meaning of the item and infer its intent. Next, they must attempt to recall relevant information, and

then blend whatever evidence comes to mind into a single opinion. Finally, participants transform that opinion into a response by choosing one of the response options offered by the questionnaire.

Because each of these steps naturally involves extensive cognitive work, attitude ratings can be easily confounded. When designing this questionnaire, I took measured steps, through cognitive interviewing, to reduce the likelihood of error that stemmed from requiring too much from the participants. The cognitive interviewing process allowed me to develop this questionnaire in such a way that future participants should be able to perform the necessary cognitive tasks required of them in a thorough and unbiased manner.

Data quality can suffer if participants interpret the meaning of items and infer their intent differently than the investigator intends them to. Therefore, during cognitive interviews, I investigated the ways that participants interpreted the meaning of items, and the ways that they inferred their intent. I then revised the items until it was clear that the measures that I took addressed the deficiencies in the instrument's items that participants identified.

Data quality can also suffer if participants construe scale point values differently than investigators do, or if the investigator designates numbers to the scale points for analysis that belie the messages participants mean to send through their responses. Therefore, during cognitive interviews, I also investigated the extent to which participants had trouble with discriminating item response categories in a meaningful

way. I then revised the instrument until it was clear that the measures that I took addressed the deficiencies in the instrument's response categories that participants identified.

**Response options.** Braxton and Bayers' (1999) response options do not progress evenly from one end of the appropriateness-continuum to the other. They instead offered two options for appropriate, and three options that regard a continuum of inappropriate behaviors (1 = Appropriate/encourage, 2 = Discretionary, 3 = Mildly inappropriate/ignore, 4 = Inappropriate/handle informally, 5 = Very inappropriate/requires intervention). This is a conscious decision made for theoretical purposes following Durkheimian principles. My instrument offers the same five points for response options. Moreover, faculty respondents are similarly asked to assign penalties to teaching behaviors which they deem inappropriate.

**Verbal labeling of response items.** The verbal labeling of response items clarifies the meanings of response points and aids in translation ease for participants, which reduces respondent burden. Braxton and Bayers' (1999) method for response options incorporated consequences into their response categories (1 = Appropriate/encourage to 5 = Very inappropriate/requires intervention), which clarifies and distinguishes the differences between each point on the scale. I also did the same to further allow for a reasonably precise and constant understanding of the meaning of each point on the scale.



This choice was driven by theoretical Durkheimian principles, but it is also a methodologically savvy choice as well because it avoids the problem of “nearness” (Kuncel, 1973/1977). When mapping a judgement onto a response scale, how close the respondents’ attitude is to the conceptual partitions between adjacent points on the scale matters a great deal. It is problematic when a scale response does not differentiate itself well from its adjacent point.

The use of a specific consequence associated with each point on the scale measuring appropriateness helps to clarify the meaning of each point and ensures that it is unique, therefore counteracting the “nearness” effect, or the chance that a respondent will choose one option on one occasion and another option on a different occasion (Kuncel, 1973, 1977). The use of such labeling should also improve reliability, as various studies suggest that reliability is higher when all points are verbally labeled as opposed to when only some are (e.g., Krosnick & Berent, 1993).

**Number of points.** The reliability of using a 6-point scale has been studied as well using simulations (Lissitz & Green, 1975). Test-retest and cross-sectional reliability increased from 2- to 3- to 5-point scales but plateaued thereafter for 7-, 9-, and 14-point scales. Givon and Shapira (1984) found that moving from 2-point scales toward 7-point scales resulted in pronounced improvements in the reliability of items, but the improvements were quite minimal beyond 7 points. Several studies suggest that concurrent validity improves with increasing scale length (Rosenstone, Hansen, &

Kinder, 1986; Smith & Peterson, 1985), that context effects are stronger in especially long scales when compared to those of moderate length (Schwarz & Wyer, 1985).

Similar to the research on reliability, the general consensus supports the notion that validity is compromised by considerably long scales and is lower for scales with fewer numbers of points than in scales with a moderate number of points. Therefore, the choice to use a 6-point scale for this instrument is a sound decision in terms of validity and reliability.

**Item variability.** As mentioned previously in step two, variability is a desirable quality in measurement, as it is necessary in order to allow for the discrimination of differences in an underlying attribute. Variability can be achieved through conscious decisions regarding respondents with either numerous options for response within items, or to offer many scale items. Asking respondents to reply to too many options on many questions might tire or bore the respondents which would lower the reliability of their responses. When measuring behaviors, the process and frequency of a behavior is commonly a deciding factor regarding the appropriateness of said behavior as opposed to the behavior being judged dichotomously to be either right or wrong. Respondents could become confused from numerous items that indicate various frequencies, however. To diminish this possibility, this instrument uses four key terms to signify frequency: “routinely”, “regularly,” “occasionally,” and “rarely.” A standard set of key terms was found, during cognitive interviewing, to reduce the likelihood that individuals surmise conflicting interpretations and ensure a level of consistency for coding purposes.

**Order of response alternatives.** Several studies have shown that individuals are influenced by the order in which they are presented with response alternatives. When response options are presented visually, primacy effects, or the proclivity of respondents to choose options that are presented early rather than those presented last, occur and bias the response (Ayidiya & McClendon 1990; Becker, 1954; Bishop, Hippler, Schwarz, & Strack, 1988; Campbell & Mohr, 1950; Isreal & Taylor, 1990; Krosnick & Alwin, 1987; Schwarz, Hippler, & Noelle-Neumann, 1992). When item response alternatives are resented visually, a primacy effect occurs, whereby response options presented early are more likely to be selected (Klayman & Ha, 1984; Koriat, Lichtenstein, & Fischhoff, 1980; Yzerbyt & Leyens, 1991).

To prevent primacy effect from occurring and influencing the reliability of this questionnaire, when it is piloted, I suggest that future researchers counterbalance the order that item responses are presented. A random half of respondents should receive one order (1 = Appropriate, 5 = Very Inappropriate) and the other half should receive the reverse order (1 = Very Inappropriate, 5 = Appropriate), therefore washing each other out concerning primacy effects due to response ordering. This approach will lead to the need for data analysis considerations to be made. Essentially, the two forms will need to be re-coded so that they match each other before data analysis can be executed. This raises an extra step to the analysis work. However, given that it reduces possible error due to primacy effects, I believe it will be a beneficial step to take nonetheless.

**Variables.** Because a future study using this instrument will be exploratory by nature, normative clusters of teaching behaviors are not known a priori. They are expected to emerge as a result of the analyses performed on collected data. However, the creation of broad categories was guided by extant literature concerning classroom interactions between faculty and MCS at civilian institutions of higher education and are used in the creation of this questionnaire. These broad categories include: preferential inquiry and antagonistic friction.

As outlined in Chapter 2, particularistic pedagogy is defined as taking nonacademic student characteristics (social/personal) into account in the teaching of military-connected students. I explained that particularistic pedagogy can be implemented in a destructive or constructive way. A destructive approach to particularistic pedagogy would be implemented in a way that hinders the advancement of knowledge by minimizing student voice and restraining connection making. A constructive approach would be implemented in a way that, instead, optimizes student learning by valuing voice and fostering connection making.

This study focused solely on the development of items for destructive approaches, which include preferential inquiry and antagonistic friction. However, I also provide definitions here for constructive approaches, which include diverse inquiry and connective friction. I include these definitions for those readers who wish to understand the reverse or opposite aspects of these behaviors with the aim to more fully clarify the

boundaries of each. As touched on in Chapter 2, each construct has its own definition.

For clarity, I provide the definitions to each construct here as well.

Table 1:

*Construct Definitions*

Construct Title	Definition
Preferential Inquiry	pedagogical methods for managing classroom inquiry between MCS and non-military students characterized by an endorsement of the superiority of one singular perspective which hinders military-connected student's voices
Diverse Inquiry	pedagogical methods for managing classroom inquiry between MCS and non-military students characterized by an acknowledging a plurality of perspectives, thereby valuing nonmilitary and military-connected student's voices
Antagonistic Friction	pedagogical methods for managing friction between MCS and nonmilitary students characterized by allowing opposition and hostility to restrain connection-making and minimize military-connected student's voices
Connective Friction	pedagogical methods for managing friction between MCS and non-military students characterized by moving through friction to foster connection-making by valuing voice for both nonmilitary and military-connected students

**Step 4: Have the Initial Item Pool Reviewed by Experts**

Validity is the extent to which an instrument, as constructed, measures the latent variable of interest, and how well it does so. Although there are many interpretations and debates amongst survey methodologists around the concept of validity (Padilla & Benítez, 2014) recent theoretical work indicates that validity is an evaluative judgement, not a characteristic (Cizek, 2012; Kane, 2006, 2013; Sireci, 2009, 2012; Zumbo, 2009).

Validity is a property of a measurement tool in the specific context of its use, not an inherent property of an instrument in and of itself. In other words, simply asking, “Is that instrument valid?” does not appreciate the concept that a measurement tool might be valid within one context but not in another. The assessment of validity is always particularized for a specific context. Researchers can only assess the validity of an instrument with regard to its given purpose and for the specific population of respondents to whom it is intended. Validity evidence can be “inferred from the manner in which a scale was constructed, its ability to predict specific events, or its relationship to measures of other constructs” (DeVellis, 2017, p. 83). To this end, there are three corresponding types of validity evidence: content and construct validities (often provided by expert reviewers and through cognitive interviewing), and criterion-related validity.

**Content validity.** A good scale covers the full continuum of the latent variable of interest (DeVellis, 2017). Scale content should capture only those aspects of the latent variable as articulated in its definition, and not relate to any aspects outside this definition. The adequacy of a scale to perform as such is an issue of validity. Validity based on questionnaire content comes from the analysis of the relationship between the content of the questionnaire and the latent variable it intends to measure.

Content validity is defined early on by the actions the scale creator takes toward item development. Researchers should take concerted efforts to understand how a measurement tool can best represent the varying dimensions of the latent variable of interest. Expert reviewers play a crucial role during item development, especially when a

researcher is creating an instrument to measure a previously undefined construct.

Determining the extent to which an instrument has reasonable content validity relies on evaluative judgement and logical analysis (Cizek, 2012; Kane, 2006, 2013; Sireci, 2009, 2012; Zumbo, 2009). Expert reviewers critically analyze each item and their respective construct to judge the extent to which the item pool truly captures the full spectrum of the phenomenon of interest.

**Construct validity.** Sources of construct validity evidence determine the theoretically based relationship that exists between the latent variable and other relevant constructs (Cronbach & Meehl, 1955). Cronbach (1990) argued that there are three aspects of construct validation. First, researchers create constructs based on theoretical principles. Second, researchers develop hypotheses about the relationship they expect to exist between the latent variable and other constructs. For instance, based on the theoretical principals of which the construct is based upon, the scores derived from an instrument should share a certain pattern of associations with other relevant constructs. Lastly, once scores have been derived from an instrument, researchers must test these predicted relationships empirically.

There are both logical and empirical components to the analysis of construct validity (Hopkins, 1998). Expert's judgment can be useful toward determining the relationship of the construct of interest to the instrument's content. Experts can help with the development on an instrument in that they can give the researcher feedback which will most likely improve the content validity of the final version of the instrument.

Interviewing participants to understand how they see the relevance of a set of items that are candidates for eventual inclusion in the scale can also illuminate construct validity (Padilla & Benítez, 2014).

### **Expert Review Through Cognitive Interviewing**

Relevant field experts external to the development of the instrument should review the item pool for content and construct validity (DeVellis, 2017). The purpose of the fourth step in DeVellis' (2017) guidelines for scale development is to understand how experts regard the relevance of the pool of items that are candidates for eventual inclusion in the scale. Gaining such an understanding can be used to maximize the content validity of the scale. For my instrument, 11 individuals who are experts in collegiate pedagogy were utilized to judge and analyze the scale through cognitive interviewing. This step was taken to ensure that the scale was constructed in such a way that content and construct validities were maximized (Hopkins, 1998; Kerlinger & Lee, 2000).

Cognitive interviewing is one method of conducting a study of response processes and responds directly to the 1999 American Educational Research Association (AERA) *Standards*' guidelines. According to the *Standards for Educational and Psychological Testing* (1999), the study of response processes to questionnaires is considered to be one source of validity evidence, and the study of response processes illuminates distinctive aspects of validity (AERA, 1999). Toward that end, I conducted a study of response processes by utilizing cognitive interviewing methods to uncover and resolve content validity issues (Willis et al., 1991). Both construct and content validity evidence were



provided by experts in collegiate pedagogy who evaluated item content in relation to explicit construct definitions. Before detailing the method, I will first provide a brief summary of the ways in which I approached and conducted my study of response processes.

Having developed an initial set of candidate items for inclusion in this scale, I then went on to test the acceptability of the items through a study of response processes by conducting three rounds of cognitive interviews. Eleven total individuals who represent the scale's target audience participated. During round one, four separate one-hour long interviews were conducted. During each interview, participants met with me individually, in a private space, to review draft MCSFI-Q items and verbally provide their feedback.

The goal of each cognitive interview was to understand how my instrument's target population conceptually interpreted the construct as I defined it, to determine the language they used to characterize it, and to get their opinions about whether the construct resonated with them (DeVellis, 2017). I recorded each interview and took copious notes. After the first round of interviews concluded, I then transcribed the interview data and analyzed findings in order to uncover and resolve content validity issues (Willis et al, 1991). I conducted an item-by-item review of problems and solutions raised regarding items, content, and response options. This process guided the modification of the draft one item pool (Appendix E) so that an updated, second version, of the MCSFI-Q (Appendix F) could be created.

This same sequential process of interviewing, analyzing findings, and revising items was undertaken two additional times, during round two and then again with round three. Rounds two and three used different versions of the instrument that were informed by the results of the preceding round. For round two, MCSFI-Q version two (Appendix F) was fielded with four participants. For round three, MCSFI-Q version three (Appendix G) was similarly fielded with four participants. In this way, the initial set of candidate items evolved over time with the guidance of field experts who could attend to identifying content validity issues and help me resolve them by drawing on their research expertise as well as their professional experience.

The next section of Chapter 3 describes my rationale for choosing to conduct a study of response processes through cognitive interviewing. I then outline decisions made toward the design of this response processes study, including: goals, sampling, data collection, techniques, and data analysis. Lastly, I discuss the limitations of studies of response processes through cognitive interviewing.

**Rationale.** Over the last three decades, cognitive interviewing has become firmly established as a tool for developing survey questionnaires. When the construct to be measured by an instrument is newly defined, as is the case with my instrument, survey methodologists generally recommend conducting an item development study utilizing cognitive interviews for content and construct validation purposes (DeVellis, 2017). Moreover, Willis (2005) argues that the expert review and cognitive interview procedure

should be combined whenever possible to uncover and resolve content validity issues because both procedures tend to produce results that are overlapping, but not identical.

**Goals.** As previously mentioned, in the case of this study, item development was geared toward specific aspects of newly defined constructs. Each construct reflects faculty behaviors that have been documented in the empirical literature as contributing to student impact and have been established as an important aspect of the educational experiences of MCS, or those who teach MCS. These pedagogical approaches concern the ways that faculty build connections with and amongst students, manage classroom dialogue, foster peer learning and navigate scholarly inquiry, especially when course related topics concern military-policy, current global affairs, foreign policy, international relations, and the study of war and peace. As carefully outlined in Chapter 2, based on a review of literature on MCS-faculty interactions at civilian institutions of higher education, the teaching behaviors identified in the model seem well-grounded to serve as constructs for an instrument.

Although I also examined content from measures of related constructs (aspects of student-faculty interactions like respect and connectedness; Komarraju et al., 2010), I geared the item development for this instrument to specific aspects of the faculty-student interaction mechanism *as I defined it*. In these unique instances, it is important to understand how the instrument's target population tends to conceptually interpret the constructs of interest (DeVellis, 2017). A critical aspect of the inquiry and friction constructs is that they involve how faculty manage student-to-student interaction, as well

as faculty-to-student interaction, in classrooms where MCS and non-military students are educated. Therefore, I needed to understand the manner in which faculty members, who teach at a civilian university that educates MCS, tends to conceptually interpret the constructs of interest. Specifically, the goal of each cognitive interview was to understand how my instrument's target population conceptually interpreted the construct as I defined it, to determine the language they used to characterize it, and to get their opinions about whether the construct resonated with them (DeVellis, 2017).

**Sampling.** The AERA et al. (1999) *Standards* indicate that participant selection should include relevant subgroups of examinees as determined by considering how participant characteristics relate to the construct to be measured. The purpose of this instrument is to understand pedagogical work amongst faculty who educate MCS and the various institutional, departmental, or individual sources that influence faculty teaching behaviors. This study therefore required a criterion sampling of faculty whose expertise was relevant to this scale and represented a range of experiences of university teaching and of content area specializations (Patton, 2002).

**Participant characteristics.** A purposeful, criterion-based, sample of faculty members with expertise in the field of education at a public university in New England was invited to participate in cognitive interviews. The choice of the institution where the study would be conducted was based on its being a civilian university that educates a student subpopulation of MCS. In addition to considering content area expertise, I also attended to this instrument's soundness in methods by having an expert in the field of

scale construction, Dr. Jason Garvey, Ph.D., review the instrument. Table 2 below gives an overview of the cognitive interview participant's key characteristics.

Table 2:

*Cognitive Interview Participant Characteristics*

Pseudonym	Research Expertise/ Professional Experience	Military Connection
1. JG	Scale construction	MCS students
2. KK	Scale construction	MCS students
3. DS	Global studies; Critical pedagogy	MCS students
4. AT	Critical pedagogy	MCS students
5. PB	Teacher educator	MCS students
6. EB	Teacher educator	family connections
7. JF	Course specialized for MCS	MCS students
8. MG	Special education	MCS students
9. JH	Teacher educator	family connections
10. LW	Professional learning communities	MCS students
11. SH	Education research methods	none

**Number of participants.** Given that cognitive interviewing is a qualitative method, the criteria of theoretical saturation and relevance was a consideration that I made when determining the number of participants (Patton, 2002; Willis, 2005). After interviewing 11 total participants over the course of twelve one-hour long interviews, and analyzing the interview data, no new findings emerged from the interviews. I therefore determined that this total amount was sufficient for the purposes of my study.

**Data collection.** The cognitive interviews were conducted one-on-one with participants during February and March, 2019. A consent form was provided to participants, and at the time of the interview, the participant's assent was also required for them to participate. The study was approved by the Institutional Research Protections

Offices at the University of Vermont (Protocol #00000162). Interviews oftentimes took place in the faculty member's offices, but sometimes were conducted in spare office space on campus. The interviews lasted 60 minutes. Cognitive interviews were conducted at the same time as faculty members were answering the MCSFI questionnaire. All of the interviews were digitally recorded, and item-by-item transcripts were produced. Copious notes were also taken by the researcher. These notes included my reflections, hunches and the thoughts that took place in my mind during data collection (Merriam, 2009). Participants' names were not included on any collected data. All information collected about participants during the course of this study was stored without any identifiers. I took careful steps toward reducing the chances that participants could be linked to their answers.

**Techniques.** As previously discussed, the goal of each cognitive interview was to understand how participants conceptually interpreted the construct as I defined it, to determine the language they used to characterize it, and to get their opinions about whether the construct resonated with them (DeVellis, 2017). To achieve these goals, I chose to take an interpretivist approach to cognitive interviewing (e.g., Gerber & Wellens, 1997; Miller, 2011; Miller, Chepp, Willson & Padilla, 2014). This approach focuses on how participants lived experiences inform their interpretations and answers to questionnaire items. It differs from approaches that focus on simply understanding the mental processes that participants undergo while responding, which typically rely on asking participants to think out loud and describe their comprehension, recall abilities,

and ability to choose a response option. I chose the interpretivist approach instead because it was better suited to the nature of my questionnaire. To start, Wilson and colleagues (1996) discovered that think-aloud interviews focused on mental processes do not work well in these situations. They found that participants cannot spontaneously report about their cognitive processes in situations where they are asked to form an opinion about something. Being that the MCSFI-Q requires participants to make an opinion about a specific teaching behavior in terms of its appropriateness, a different approach was needed.

For this study, experience-based probing was used during cognitive interviews while participants interacted with the questionnaire items. The interpretivist approach to cognitive interviewing assumes that participants can explain and logically evaluate their personal experiences best through the narrative process. In keeping with this notion, after a faculty participant read a particular item, they were placed in the role of “story teller” (Miller et. al., 2014). As discussed previously, MCSFI-Q items depict pedagogical approaches that faculty take toward building connections with and amongst students, managing classroom dialogue, fostering peer learning and navigating scholarly inquiry. I probed to ask faculty participants to either describe or explain the ways that, in their own teaching practice, they have experienced these various types of classroom interactions. In this sense, faculty participants told me stories that detailed the particular context of their lives. Their stories also outlined the different experiences that they reflected on in order to choose their response. During this process, faculty discussed the importance and

relevance of each item to their practice. Their narratives described, with great detail, how they conceptually interpreted the constructs as I defined them. Participant narratives also helped clarify the language that faculty use to characterize the constructs and to explicate their opinions about the extent to which the construct resonated with them.

**Data analysis.** As previously mentioned, all interviews were digitally recorded and transcribed verbatim by the researcher. The transcripts were compared with their respective digital recordings to ensure accuracy. Anonymous data was analyzed, focusing on content and construct validities. A thematic approach (Braun, Clarke, Hayfield, & Terry, 2019; Ryan & Bernard, 2003) was used for the analysis of cognitive interview data. I coded the interviews manually, using a thematic coding framework that I developed based on notes taken during interviews. These notes included my reflections, hunches and the thoughts that took place in my mind during data collection (Merriam, 2009).

The framework described each item in terms of its content validity. The framework also described the language participants used to characterize the constructs. Content validity was assessed by analyzing interview transcriptions for descriptions of teaching behaviors and strategies for managing classroom interaction. Analysis of content validity considered: 1) how items were interpreted with reference to the conceptual model; and 2) participants' opinion of the relevance and acceptability of the items; as well as 3) participants' opinion of the relevance and acceptability of response options. Resultant patterns of problems were used to assess whether the items were



working as intended and to make improvements to the questionnaire. These combined sources of evidence informed the modification and development of the MCSFI-Q.

**Limitations.** While cognitive interviewing is a useful method for obtaining validity evidence, it is not helpful in providing reliability evidence for an instrument. Therefore, the limitations of this method are that it cannot produce psychometric data for related reliability analysis. Additional steps will be necessary for testing this instrument for reliability in a future study.

Bias is a prevalent problem in questionnaire design. The AERA *Standards* (1999) specify that one type of bias, called “construct irrelevant variance,” occurs when there has been an inadequate sampling of content to the extent that “items elicit varieties of responses other than those intended” (AERA et al., 1999, p. 78). Sources of validity evidence were obtained by using cognitive interviewing, which is one method of conducting a study of response processes that responds directly to the 1999 AERA *Standards for Educational and Psychological Testing* guidelines. To minimize bias in the design of the MCSFI-Q, both construct and content validity evidence were obtained from experts in collegiate pedagogy who evaluated item content in relation to explicit construct definitions (DeVellis, 2017). Taking an interpretivist approach to cognitive interviewing helped maximize content validity because it “succinctly identifies the actual phenomena that respondents include in their answer – the construct that is ultimately captured by the survey question” (Miller et. al., 2014, p. 22). Moreover, the sources of content and construct validity evidence that I collected through cognitive interviewing,

and subsequently responded to during item development, work in conjunction to support the argument that bias in the design of the MCSFI-Q has been minimized. Therefore, this questionnaire has the potential to collect accurate data.

### **Summary**

This chapter outlined the careful thought involved in the methodological craft of this study, as well as the limitations that the method inherently involves. The first section of this chapter drew on the concepts discussed in Chapter 2 and outlined important theoretical considerations that impacted the design of this instrument. I also detailed how I crafted the MCSFI-Q, as guided by DeVellis' (2017) methods for scale development. Lastly, I outlined my research design and methods used for crafting this instrument, as guided by DeVellis' (2017) methods for scale development. The next chapter documents the cognitive interview process, findings, and the ways in which cognitive interview results informed and guided the item development and refinement process for the MCSFI-Q.

## CHAPTER 4: COGNITIVE INTERVIEW FINDINGS

### Introduction

This study aimed to create a valid multi-institutional survey instrument to operationalize faculty perceptions of appropriateness concerning an inventory of teaching behaviors derived from literature on MCS-faculty interaction at civilian colleges and universities. This chapter documents the findings derived from cognitive interviews. It documents how cognitive interview findings guided the item development and refinement process. I begin this chapter by documenting the timeline of the interview and revision process. Following this discussion, I then revisit the context for this study by describing the theoretical underpinnings for discovering normative structures that guided the MCSFI-Q's construction. After this discussion, I outline findings unique to each element of the MCSFI-Q, starting with: 1) the instrument's directions, followed by 2) its response options, and finally, 3) the instrument's item pool. Within each of these three sections, I also describe how interview findings informed the revision process by detailing the modifications I made to the MCSFI-Q in response to participant feedback. Lastly, Chapter Four ends with a synthesis of interview results aggregated across interviews and elucidates trends that consistently occurred throughout cognitive interviews. The following paragraphs document the timeline of the interview and revision process.

As discussed in Chapter 3, I conducted twelve one on one interviews, in person, that lasted one hour each. Eleven total faculty members participated in this study over the course of five weeks. The following paragraphs document the timeline of the

interview and revision process. I divided interview participants into three groups in order to conduct three consecutive rounds of interviews. Each round of interviewing was followed by instrument revision. I conducted the first round with three participants during the week of February 18<sup>th</sup>, 2019. The following week, after round one, I transcribed each interview and analyzed the findings for trends concerning problems with content validity and item construction. The findings from round one interviews guided changes to the initial MCSFI-Q instrument (Appendix E) which led to the construction of a second draft of the instrument (Appendix F). A second draft of the MCSFI-Q (Appendix F) was presented to four faculty participants during the second round of cognitive interviews, held the week of March 4<sup>th</sup>, 2019. The following week, I transcribed each round two interview and analyzed these new findings, in relation to findings from round one, for trends concerning problems with content validity and item construction. Findings from round two, in concert with findings from round one, guided changes to the second draft of the instrument (Appendix F) which led to the construction of a third draft (Appendix G). Lastly, this third draft of the MCSFI-Q (Appendix G) was presented to four faculty participants during the third round of cognitive interviews held the week of March 18<sup>th</sup>, 2019. The following week, I transcribed each round three interview and analyzed the new findings, in relation to findings from round one and round two, for trends concerning problems with content validity and item construction. Lastly, findings from round three, in concert with findings from round one and two, guided changes to the third draft (Appendix G) and led to the construction of the final

draft of the MCSFI-Q (Appendix B). In this chapter, I provide documentation for findings unique to each element of the MCSFI-Q, including the instrument's directions, its response options, and the instrument's item pool. I also describe how interview findings informed the revision process by detailing the modifications I made to the MCSFI-Q in response to participant feedback. Before I turn to this documentation of findings, however, I provide a brief overview of the theoretical underpinnings for discovering normative structures that guided the MCSFI-Q's construction.

### **Discovering Normative Structures**

As previously discussed in Chapter 3, the construction of this instrument was guided by a design that Braxton and his colleagues (1992) developed towards identifying a normative structure for the professoriate. The measurement of the extent of disapproval is assessed through the type of penalties individuals believe suitable for each behavior stated in the form of a violation of a possible norm. In this way, the Durkheimian principle of determining norms by evaluating the opinions of individuals regarding the type of penalty that might be assigned for deviant behavior was followed in this study.

Having defined norms as “the degree of impropriety faculty members ascribe to various teaching behaviors” (p. 537), Braxton and colleagues (1992) approached the creation of their instrument in a manner “consistent with the general principle advanced by Durkheim (1934) that norms are best known or recognized by individuals when violated” (p. 539). To measure norms, they asked faculty to indicate the appropriateness of particular teaching behaviors. In this same vein, and because norms are prescribed,

preferential, permissive, or proscribed patterns of behavior (Merton, 1942, 1968, 1973), the extent to which faculty assign disapproval to various teaching behaviors serves as the operational definition of norms for this study.

As discussed earlier in Chapters 1 and 3, when individuals participate in a consistent pattern of behavior, those behaviors become expected or standard practice and thus normative (Opp, 1982). Some behaviors result in reward and elicit endorsement whereas others invoke disapproval because of the penalties that result from them (Horne, 2001; Durkheim, 1995 [1912]). Informal rules or norms amongst members of a group constitute normative structures that guide professional behaviors.

These normative structures function as a systematic set of values that control, direct or strongly influence group members' behaviors (Merton, 1968). As an organized set of values, normative structures also set parameters for appropriate and inappropriate professional behaviors. As such, one approach to discovering normative structures is to identify those behaviors that group members consider acceptable and others they deem unacceptable (Caboni et al., 2005; Durkheim, 1995 [1912]; Homans, 1950; Morris, 1956; Opp, 1982).

In higher education, norms inform the range of teaching behaviors that faculty deem socially significant (Braxton & Bayer, 1999). Faculty teaching norms can be identified and weighed for their social significance by measuring perceptions of appropriateness concerning proscribed teaching behaviors which ought not to occur. Proscribed behaviors elicit varying degrees of moral outrage or indignation and the extent

to which such behaviors provoke indignation gauges the behavior's social significance (Braxton & Bayer, 1999; Durkheim, 1995 [1912]). When faculty signify that a particular teaching behavior ought to be sanctioned, their indignation indicates the belief that moral boundaries were crossed (Durkheim, 1995 [1912]) and thereby signals the existence of a norm. The greater the outrage or indignation, the more socially significant that particular normative orientation is.

### **Cognitive Interview Results**

The next section of Chapter 4 outlines findings unique to each element of the MCSFI-Q, including the instrument's directions, its response options, and the instrument's item pool. Within each of these three sections, I also describe how interview findings informed the revision process by detailing the modifications I made to the MCSFI-Q in response to participant feedback. I begin by outlining findings unique to the instrument's directions.

### **MCSFI-Q Directions**

As previously mentioned, the construction of this instrument was guided by a design that Braxton and his colleagues (1992) developed towards identifying a normative structure for the professoriate. This section introduces the MCSFI-Q directions and documents related interview findings. Faculty members who participated in the first round of interviews were presented with the initial MCSFI-Q (Appendix E). The directions for the first version read as follows.

Teaching is a complex activity composed of many behaviors and expectations. Listed below are some behaviors related to college teaching. Some teaching behaviors may appear to be appropriate to some faculty members but not to others. Using the response categories listed below, please indicate your opinion on each of the listed behaviors as you think they might ideally apply to a faculty member teaching a college course of about 40 enrolled students (including civilian and military-connected), whether or not you teach such a course yourself.

The directions in the initial version of the MCSFI-Q (Appendix E) indicated the following response options: 1) Appropriate, 2) Discretionary, 3) Mildly Inappropriate/ ignore, 4) Inappropriate/ handle informally, and 5) Very Inappropriate/ requires intervention.

The directions for the initial version of the MCSFI-Q (Appendix E) also provide a definition for military-connected students, which reads: students who currently or previously serve(d) in the U.S. military (Army, Navy, Coast Guard, ROTC, or National Guard). Lastly, the prompt is also an important factor to note concerning the directions. The prompt provided to participants in the initial version of the MCSFI-Q (Appendix E) read: You become aware that a colleague.... This prompt was then followed by a list of items which depict brief scenarios describing hypothetical situations to which a respondent is asked to react.

During the first round of testing, participants who interacted within the initial version of the MCSFI-Q (Appendix E) wanted clarification regarding the actions



associated with response options three, four and five. After reading the directions, “JH” asked, “Should I be thinking about how administration would handle this or how I should handle it?” “DS” asked, “Who is supposed to be handling this? Is it me?” To shore up this confusion, I modified the directions for the second round of interviewing so that they clarified that the participants themselves should think about how they would respond, not how they think others should. I added the following sentence to the directions for the second version of the MCSFI-Q (Appendix F). This sentence reads: In certain instances, faculty might act in response to teaching behaviors that appear inappropriate to them.

The prompt was mentioned during the second round of testing by participants who interacted with the second version of the MCSFI-Q (Appendix F). At this point, the prompt read: You become aware that a colleague. One participant, “JF,” noted, “Okay, so I ‘become aware that a colleague did something. How do I know it isn’t hearsay?” Another participant, “MG” asked, “Is this a situation where a professor hears at the water cooler that another professor mocked a student?” Later during our interview, “MG” also said:

If I’m a chair, and I’m evaluating student evaluations and I get consistent comments from students that say, ‘I try to express my opinion in class and the professor immediately attacks my perspective and so I didn’t feel like I could share in class.’ It’s not only inappropriate, but it would be unethical for me to not raise this issue.

“JF’s” question regarding hearsay, and “MG’s” point about ethical obligations led me to modify the prompt. I accordingly revised the prompt for the third draft of the MCSFI-Q (Appendix G) so that it read: A student tells you about their classroom experience, wherein one of your colleagues.

During the third round of interviews, “PB” suggested one change regarding the wording of the directions. One sentence in the directions for the third draft of the MCSFI-Q (Appendix G) says, ‘Using the response categories listed below, indicate your opinion on each behavior as you think it might ideally apply to a faculty member teaching a college course of about 40 enrolled students (civilian and MCS), whether or not you teach such a course yourself.’

After reading this sentence, “PB” noted, “Ideally? I think a good idea would be to change this to ‘ultimately’ instead.” A different participant commented on the course size. “AT” said, “I think you should change the class size to 25-30 because you don’t want someone to say, ‘oh, I never teach a class that’s as big as that.’ It could be a red flag to participants.” He also made another suggestion and shared, “Some participants could be department chairs who don’t teach, so that additional piece about whether or not you teach it doesn’t matter.” These suggestions made by “PB” and “AT” during the third round of interviews led to modifications which are reflected in the final draft of the MCSFI-Q (Appendix B). Lastly, during round three, the modified prompt was also mentioned. “AT” said, “The student is talking about their own classroom experience, so the faculty member is not receiving hearsay. You’re talking about their own experience,

it's not, 'oh, I heard that Jimmy didn't have a good experience in such and such class.'”

None of the three other participants indicated any problems with this prompt. This concludes the directions section of this chapter as all findings unique to MCSFI-Q directions have been documented. The next section of Chapter 4 outlines findings unique to the response options as well as modifications made in response to participant feedback.

### **MCSFI-Q Response Options**

As discussed in Chapters 1 and 3, this instrument measures disapproval through the type of penalties individuals believe suitable for behavior stated in the form of a violation of a possible norm. During all three rounds of cognitive interviewing, the response options for the MCSFI-Q remained the same. They are provided below in Table 3 for ease of reference. In response to participant feedback, I modified the response options for the final MCSFI-Q (Appendix B).

Table 3:

#### *MCSFI-Q Response Options*

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#### **Version One**

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- 1 = Appropriate/ encourage
  - 2 = Discretionary
  - 3 = Mildly Inappropriate/ ignore
  - 4 = Inappropriate/ handle informally
  - 5 = Very Inappropriate/ requires formal intervention
-

**Appropriate; Encourage.** Some participants remarked on the ‘Appropriate/encourage’ response option. After reading the response options for the first time, “JF” asked, “Are you saying, ‘I think that teacher is doing something appropriate, so therefore I’m going to go to that teacher and encourage them to do that?’” Having engaged with the survey for 10 minutes, “PB” commented, “I would expect some of these to fall into the ‘encourage’ category. I think to myself, where are the ones that I would encourage?”

**Discretionary.** The discretionary category also raised some questions and remarks. About midway through his interview, “DS” mentioned, “Almost all appropriates would be discretionary for me. I don’t see the difference.” When reviewing the response options for the first time, “MG” said, “Discretionary isn’t an action. What are you being discretionary about?” Similarly, when he first started engaging with the survey, “JF” said, “I’m wondering what discretionary means. [Does it mean it] depends on the circumstances? What is the intermediate between ‘attitude’ and ‘action?’” He suggested, “Maybe you could write, ‘Could be inappropriate, maybe intervene?’ [instead].”

**Mildly Inappropriate; Ignore.** A few participants spoke about how this response category, as written, implies that both are coupled. Some noted that the way that this category is written implies that perception and action are causally related, which is a logical fallacy. “PB” said, “I might think that something is mildly inappropriate but that doesn’t necessarily mean that I wouldn’t generally ignore it.” She asked, “Are you definitely ignoring it because it’s mildly inappropriate?” Echoing “PB’s” observation,

“JF” shared, “If I ignore something, I do not necessarily think it is mildly inappropriate.” A third participant, “MG” spent the full interview reacting to the response options. He clarified, “I can feel negatively about it and still choose not to take an action.” One participant, “PB,” could not choose option 3, ignore, for many of the MCSFI-Q items. To explain why, she said:

I would put some of these things at a three, but you’ve attached ‘ignored’ to it, [and] I feel like a professor should not ignore any of these behaviors, so that is what is moving some of these things over to a four for me.

Later in her interview, “PB” further clarified:

So, you have teachers who are discipline specific also, you know? There is that whole other level where teacher educators need to model this practice. Some [respondents] from other disciplines might come at this and say, well, if it’s mildly inappropriate, obviously I am going to ignore it, because it’s just mildly inappropriate. Whereas a teacher educator, who needs to be modeling every step of the way, we would not necessarily put these things on the same plane.

Others did not have this same reaction and found no problems choosing option three, ignore, and discussed the reasoning behind their decision as well. One factor influencing participant’s decision to choose the ‘ignore’ response option concerned the internal consequences they might experience if they were to do otherwise. “LW” shared, “You can get yourself tied in knots if you respond to every complaint that students have about something happening in the classroom.” Another participant, “MG,” nearly echoed her

sentiment. He said, “If you intervene, if you take an action on every single thing that you find egregious, you can’t. You’re just overwhelmed.”

The nature of the relationship between the respondent and the hypothetical faculty member was also discussed as being an important reason as to why participants might choose option three, ignore. In response to an item that read: Regularly affirms students who reject military-intervention as a valid tool of diplomacy, “LW” shared:

Yes, it’s inappropriate, but would I use whatever capital I have with that person to talk about it? Probably not. And that’s always the equation that you’re sorting out when you’re approaching a colleague about a complaint from a subordinate.

She went on to give an example of a recent experience when she informally approached a colleague. “LW” explained:

I had a situation very recently where I saw one of my faculty colleagues behaving in ways that I thought were very destructive to their relationships with their peers. So, I asked this colleague to come and, you know, ‘can we talk?’ And they were immediately defensive, and it went very badly. And what this colleague said was, you know, clearly, this is not a safe space for me to ever share that I’m unhappy about something. And that’s what this person saw it as. I was very aware that I don’t have a lot of chips here in this game, because I don’t know you very well and this is what I’m observing, and it changed the whole dynamic of the relationship and I really regret doing it. So that’s the equation you’re doing, do I have the relationship with this person to have context for this conversation.

“MG” also spoke about how the nature of the relationship between himself and the hypothetical faculty member was important. He said:

Let’s say I’m at a meeting and one faculty member attacks another faculty member in a really unkind unfair way. We may have department, or program norms, where we’re going to confront that. And I might feel a lot more compelled to say, ‘hey, you know, we had an interaction at our last meeting that I’m concerned about that I’d like to talk about, and we’re going to bring it up in this meeting– or I might go to that individual privately and say ‘hey, we’ve got to do something to repair that because that was really not helpful to our program’ But again, the extent to which I take an action has a lot to do with my relationship to that colleague. How close I am. The closer I am to that colleague, the more likely I am to take an action. The more distant they are, the less likely it is.

Different reasons for choosing option three, ignore were also discussed. For some, the existence of student evaluations and faculty supervision mattered. In response to an item that read: Chastises students who disagree with them about approaches to diplomacy, “JF” noted that he would choose option three, ignore. He explained:

Yeah, you hear about that kind of thing a lot, but again, I would ignore it because you have the student evaluations, there is a system in place to handle that sort of thing. You just can’t go and talk to everybody who you hear is a bad teacher.

Another participant, “MG” spoke about faculty supervision in relation to choosing option three, ignore. He said:

If I heard that one of my colleagues mocked a student, I'm probably not going to go to them and say, 'Hey, I heard you mocked a student. Cut it out.' So, yes, that sucks, and I feel bad for the student. I'm embarrassed that I have a colleague who would do that. I'm probably going to distance myself from that colleague. I'm not going to cozy up to them. And I'm going to trust that the people who are supposed to be supervising this person are doing their job. I'm going to trust that the supervisors are confronting that person. That they are telling them that, yeah, 'You can't treat students this way, it's not cool.'

Lastly, the importance of autonomy in the classroom was discussed. In response to an item that read: Positively reinforces instances when students minimize the value of their classmate's wartime experience, "LW" explained:

There is also going to be a lot of respect on the part of the faculty member for the other faculty role in managing the classroom. So, I don't really want someone to come to me and saying, you know, on Tuesday you didn't' really say something supportive in response to that. You know, that sort of micromanaging is very tedious.

**Inappropriate; Handle Informally.** "LW" gave some concrete examples of how she could envision herself carrying out option four, handle informally. In response to an item that read: Responded to a student's account of wartime experience with a dismissive hand gesture, "LW" chose option four, handle informally. She explained, "Assuming that I believe the student did observe that, and I do not have any reason to



think it's not the case, then I'd probably talk to the professor. I'd start at least with an informal conversation." In response to a different item that reads: Does not question when a student is quick to attack alternative perspectives, "LW" also chose option four, handle informally. She shared:

If it is a faculty member that I think could maybe be in over their head, then I might address it with them. Looking at the level of experience – I might talk about teaching a class with very heated discussions and how it was very hard for me when I was first starting teaching, and so one of the strategies I use is this.... Or you know, the professional development folks here at UVM have some workshops on handling difficult conversations in class and I went to one of them and it was really great. Here's the schedule. I might do one of those things.

**Very Inappropriate; Requires Formal Intervention.** Similar to what participants spoke about regarding the 'mildly inappropriate, ignore' category, one of "LW's" responses highlights how this response category, forces participants to couple 'very inappropriate' and 'requires formal intervention' together. "LW" felt that an item that read: Likens students who served in the military to those who must support military-intervention, indicated a "very inappropriate" behavior. However, she did not choose option five. She explained, "I'd say that's very inappropriate but I'm not going to bring this to the dean."

**Modification of Response Options.** Given the abovementioned feedback about response options, I chose to make a few changes to the final instrument (Appendix B).

For ease of reference, the changes I made are reflected in Table 4.

Table 4:

*MCSFI-Q Response Options*

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<b>Final Version</b>
1 = Appropriate, to be encouraged
2 = Discretionary, could be appropriate or inappropriate
3 = Mildly Inappropriate, but generally ignored
4 = Inappropriate, should be informally addressed by colleagues/administrators suggesting improvement or change
5 = Very Inappropriate, requires formal intervention

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The next section of Chapter 4 outlines findings unique to the MCSFI-Q item pool. Within this section, I also describe how interview findings informed the item pool revision process by detailing the modifications I made to each item within the MCSFI-Q item pool in response to participant feedback.

### **MCSFI-Q Item Evolution**

As discussed in Chapter 2, the MCSFI-Q explores two distinct dimensions: Preferential-Inquiry and Antagonistic-Friction. Preferential inquiry occurs when faculty endorse the superiority of one singular perspective, which hinders military-connected student's voices. Antagonistic Friction occurs when faculty allow opposition to restrain connection making and minimize military-connected student's voices during classroom

sessions when such hot topics are navigated. The following section of Chapter 4 provides a detailed account of how the Preferential-Inquiry and Antagonistic-Friction item pools evolved. Beginning with its earliest draft, and ending with its final version, I walk the reader through multiple iterations of every item. I provide the direct quotes from participants which guided the development of each item. I begin with discussing the findings relevant to the Preferential-Inquiry item pool.

### **Evolution of the Preferential Inquiry Item Pool**

The Preferential-Inquiry item pool consists of 10 items total. The first item in this pool is Item-P1. Four different versions of Item-P1 were reviewed by experts during cognitive interviews. The final version of Item-P1 reads as follows:

ITEM-P1 <i>Final Version</i>
Absolutely rejects military-intervention as being a legitimate tool of diplomacy.

The following items and narratives walk the reader through each iteration of Item-P1.

The earliest versions read:

ITEM-P1	
<i>Version 1</i>	<i>Version 2</i>
Convictions about pacifism bias the perspectives they are willing to cover in class	Handles differences in ideological dispositions with bias.

For Item-P1, version 1, “DS” commented, “The teacher’s personal convictions? We do that all the time, right? The last thing I want to do is to leave my convictions at the door.” A second version of Item-P1 did not refer to a faculty member’s personal

convictions, but still attended to the ways that differences in ideological dispositions might be handled in the classroom. It read as follows:

ITEM-P1	
<i>Version 2</i>	<i>Version 3</i>
Handles differences in ideological dispositions with bias.	Embraces a narrow range of perspectives concerning topics related to military-policy.

In response to version two of Item-P1, participant “DS” noted, “Bias loads it up a little bit, you see?” When “JH” reviewed this item, she also commented about how personal bias could be handled in the classroom, and said:

There is a very large continuum here of ways that you can show a bias. I could see a really mild way to do that. You could have bias in favor of MCS students, so when there are differences [in ideological dispositions] you handle them in a sensitive manner, because you’re biased toward supporting military-connected students. But there could also be pretty severe instances of that, like if you have a strong negative bias against anyone connected with the military.

The comments of both participants raised an important concern for me to attend to. First, the word bias can be interpreted as having a negative connotation, which would imply to respondents that there was one desirable way to respond. This word would therefore reduce the reliability of responses in that some respondents could choose to answer in a socially desirable way instead of in a way that truly reflected their own perception. Secondly, as “JH” pointed out, an individual can also have a bias in favor of supporting a specific subpopulation of students. Being that this word can be interpreted either way,

this raises reliability concerns. Any item containing the word bias could therefore cause measurement problems.

An alternative version of Item-P1 did not contain the word bias and was crafted less subjectively. It read as follows:

ITEM-P1	
<i>Version 3</i>	<i>Version 4</i>
Embraces a narrow range of perspectives concerning topics related to military-policy.	Routinely champions peaceful negotiation when discussing international dispute resolutions.

In response to Item-P1, version 3, “DS” noted, “I don’t know what ‘a narrow range of perspectives’ means. To me, I would say, ‘failed to explore a variety of perspectives concerning military-policy’ instead. ‘Narrow’ doesn’t quite capture that. To me that’s mildly inappropriate.” “JH” also shed an important light on Item-P1, version three. She noted:

I think that’s a really tricky one I think because you just get into a lot of academic freedom stuff. Because faculty can kind of teach kind of what they want, as long as it’s being true to the field. You would hope that faculty would use a broad range, but there’s not a whole lot you can do about it. I would wish they wouldn’t, but I don’t think you’d have a lot of teeth behind that.

I took in all of the abovementioned concerns to modify Item-P1 for the second round of cognitive interviewing. Item-P1, version four, reads as follows:

ITEM-P1	
<i>Version 4</i>	<i>Final Version (5<sup>th</sup> revision)</i>
Routinely champions peaceful negotiation when discussing international dispute resolutions.	Absolutely rejects military-intervention as being a legitimate tool of diplomacy.

One round two participant, “JF”, has considerable experience with teaching, mentoring, and interacting with veteran students at a civilian institution of higher education. In response to Item-P1, version four, “JF” spoke to the ways in which he would expect veteran students to experience this type of faculty behavior. He observed:

I think it’s okay for a teacher to champion their own views, as long as they are open to hearing and discussing the views of others who may have disagreed. I know for a fact that a number of veterans would not want to speak up against that though. Because you’d be speaking up against the authority in the classroom. Typically, at [this institution] everybody generally agrees with that [peaceful negotiation] anyway, and so the veteran doesn’t feel like their voice can be heard.

I found this participant’s observation to be exceptionally important. It helped me craft new language that would get at this notion of particular voices being unequal to others in the classroom. This key distinction moved my descriptions of faculty behaviors toward ways in which one perspective might be touted as being superior to all others. It also marked a very important shift in the entire item pool development and also helped me to shore up several issues that were raised during other cognitive interviews regarding the lack of clear contexts.

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ITEM-P1  
*Final Version (5<sup>th</sup> revision)*

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Absolutely rejects military-intervention as being a legitimate tool of diplomacy.

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To craft the final version of Item-P1, I used “JF’s” insights about how it matters when faculty are “open to hearing and discussing the views of others who may have disagreed.” I chose to include ‘absolutely rejects’ to emphasize that Item-P1 references a hypothetical faculty member who is not open to listening to the views of students who disagree with them. It is also important to note that Item-P1 speaks to the question of whether military-intervention is legitimate. Because military-connected students are present in this hypothetical classroom situation, Item-P1 taps aspects of classroom climate concerning the extent to which particular voices could be hindered, namely, the voices of military-connected students.

Three different versions of Item-P2 were reviewed by experts during cognitive interviews. The final version of Item-P2 reads as follows:

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ITEM-P2  
*Final Version*

---

Is apt to counter military-connected student’s ideas, specifically those they disagree with because of their politics.

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This section walks the reader through each iteration of Item-P2. To begin, the earliest versions of Item-P2 read as follows:

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ITEM-P2	
<i>Version 1</i>	<i>Version 2</i>
Expresses a powerful bias toward dismissing military-intervention.	Is inclined to lean heavily on points of view that oppose military-intervention.

---

Version one of Item-P2 did not resonate with participants because, as previously discussed with regard to Item-P1, the word bias was problematic. A second version of Item-P2 read as follows:

ITEM-P2	
<i>Version 2</i>	<i>Version 3</i>
Is inclined to lean heavily on points of view that oppose military-intervention.	Makes decisions about perspectives covered in class with a preference toward diplomacy.

As discussed with regard to Item-P1, faculty participants reacted strongly to items that depicted the handling of personal convictions and perspectives in the classroom. These early versions were consistently problematic. Participants indicated that this type of behavior raises issues around intellectual freedom, specifically as it regards to autonomy and the rights of faculty to hold and disseminate their ideas without restriction.

For example, “PB” explained, “This brings up a whole first amendment rights issue – this is a highly debatable, highly contestable issue in higher education. That’s part of academic freedom. That’s part of being an intellectual.”

As such, I decided to eliminate items that referenced, in this specific way, the particular ideas that faculty members hold and disseminate. I still needed the item pool to tap the handling of opinions and ideals in the classroom. However, this notion needed to be approached in a different way if the item pool was to be conceptually valid.

My next attempt was to craft items for the preferential inquiry item pool that describe instead the ways in which course materials are handled. Item-P2, version three, is one example of that attempt. It reads as follows:



ITEM-P2	
<i>Version 3</i>	<i>Final Version (4<sup>th</sup> revision)</i>
Makes decisions about perspectives covered in class with a preference toward diplomacy.	Is apt to counter military-connected student's ideas, specifically those they disagree with because of their politics.

During round two of cognitive interviewing, items pertaining to the ways in which course topics and materials can be handled in higher education did not resonate with faculty participants either. When attempting to choose a response option to version three of Item-P2, “JF” said, “It depends. Is it a course specifically about peaceful negotiation?”

A related item read: covers course material that favors support of peaceful dispute resolution over military-intervention. “JF” provocatively noted, “You can assign Mein Kampf and discuss it. What matters is what you do with it. You have intellectual freedom; you can cover whatever you want.” Other participants voiced similar observations that raised an especially compelling argument against the use of items pertaining the choice of course materials.

ITEM-P2
<i>Final Version</i>
Is apt to counter military-connected student's ideas, specifically those they disagree with because of their politics.

To craft the final version of Item-P2, I considered participant input about the handling of course material, as well as “JF’s” insights about how it matters when faculty are “open to hearing and discussing the views of others who may have disagreed.” This

final version of Item-P2 depicts one way in which a faculty member might express a powerful bias toward dismissing particular perspectives.

The next section outlines the evolution of Item-P3. Two versions of Item-P3 were reviewed by experts during cognitive interviews. The final version is written as follows:

ITEM-P3 <i>Final Version</i>	
Routinely praises particular students who dominate discussion, specifically those who side with the professor's approach to foreign policy.	

The following charts and narrative below provide each iteration of Item-P3 as well as participant quotes. To begin, the earliest versions of Item-P3 read as follows:

ITEM-P3	
<i>Version 1</i>	<i>Version 2</i>
Exhibits a powerful bias toward amplifying diplomacy.	Champions peaceful negotiation approaches to diplomacy over military-intervention efforts.

As previously discussed, items P1 and P2 did not resonate with participants because of the word bias. This too was a problem with Item-P3, version one. A second version read:

ITEM-P3	
<i>Version 2</i>	<i>Final Version (3<sup>rd</sup> revision)</i>
Champions peaceful negotiation approaches to diplomacy over military-intervention efforts.	Routinely praises particular students who dominate discussion, specifically those who side with the professor's approach to foreign policy.

Version two of Item-P3 was problematic as well because it was missing the element of giving preference to alternative views. In order to craft Item-P3 so that it would tap preferential treatment of one ideology over another, I chose to consider how faculty manage student-to-student interactions. This choice was guided by observations made by “DS” concerning missing aspects of the Preferential Inquiry domain as a latent construct. He pointed out that there were no items within the Preferential Inquiry item pool that depicted the ways that faculty manage student-to-student interaction in the classroom. “DS” shared: “A lot of these are about a faculty member’s response to a military-connected student more often than how they respond to students interacting with other students.” In fact, there were not any items within the Preferential Inquiry item pool that reflected the handling of student-to-student interaction. This was a major shortcoming. In response, I modified the item pool so that it was not missing an important aspect of the latent construct.

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ITEM-P3

*Final Version*

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Routinely praises particular students who dominate discussion, specifically those who side with the professor’s approach to foreign policy.

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This final version of Item-P3 depicts one way in which a faculty member might express a powerful bias toward amplifying particular perspectives, while managing to avoid the word bias. By referencing the handling of student-to-student interact, Item-P3 also taps an important aspect of the latent construct that was previously missing from the item pool.

The next section outlines the evolution of Item-P4. Three versions of Item-P4 were reviewed by experts during cognitive interviews. The final version is written as follows:

ITEM-P4 <i>Final Version</i>
Occasionally asks military-connected students, ‘don’t you agree that the war you participated in was unjust?’

Three versions of Item-P4 were reviewed by experts during cognitive interviews. The following items and narratives walk the reader through each iteration of Item-P4. To begin, the earliest versions were written as follows:

ITEM-P4	
<i>Version 1</i>	<i>Version 2</i>
Declared that participation in wartime activities was evil during an exchange of ideas.	Shamed an MCS for “participating in an unjust war” while debating with them.

For Item-P4, version one, “DS” commented, “Alright, well evil is very loaded. I would say that is highly inappropriate. The evil part, the morality, you’re not going to get any variance at all.” Item-P4, version two, also involves a situation where student voice is hindered, but does so without including the word evil. It reads as follows:

ITEM-P4	
<i>Version 2</i>	<i>Version 3</i>
Shamed an MCS for ‘participating in an unjust war’ while debating with them.	Questions military connected students as to whether they participated in an unjust war.

In response to Item-P4, version two, “DS” remarked:

It doesn’t sound like debating if you’re shaming. I couldn’t imagine any caring teacher saying anything other than that is inappropriate. You could say [instead],

if you want to soften it, ‘questioned whether a military-connected student participated in an unjust war.’

It became clear that my use of the word shamed was clearly implying a judgement. In other words, some participants might not be opposed to this item if the word shamed was removed.

Another participant, who specializes in survey design, noted that the word ‘debate’ was problematic. “JG” said:

In my opinion debate is not an effective pedagogy. I used to use debate in my class and it became combative and tense and people left feeling hurt and like they didn’t learn. Maybe get away from using debate. Not everyone is going to use that in the classroom. Maybe try ‘during conversation with a student’ instead.

The comments of both participants raised important concerns for me to attend to. I decided to forgo using the words ‘debate’ and ‘shamed’ for the entire item pool.

Item P4, version three, reads as follows:

ITEM-P4	
<i>Version 3</i>	<i>Final Version (4<sup>th</sup> revision)</i>
Questions military connected students as to whether they participated in an unjust war.	Occasionally asks military-connected students, ‘don’t you agree that the war you participated in was unjust?’

In response to Item-P4, version three, “JF” shared, “Well I’d say it’s okay to question something. I would ignore that.” Item-P4 was also commented on by “PB.”

After she paused for considerable thought, “PB” said:

That's interesting. Is the faculty member saying, do you know that you participated in an unjust war? Using the word 'questions' sounds a little like you're on trial, right? You could [instead] say, 'asks military-connected students whether they feel that the war they participated in was unjust,' which is more open, and gives the student the chance to say, 'yes, I think it was unjust,' or, 'I think it was not unjust.'

It appeared that Item-P4 was beginning to move toward more clarity and grace, but still needed some tweaking. I took all feedback into consideration and ended with the following version of Item-P4 that reads as follows:

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ITEM-P4

*Final Version*

---

Occasionally asks military-connected students, 'don't you agree that the war you participated in was unjust?'

---

This final version of Item-P4 works well because it bridges both worlds of being reasonably plausible and yet also depicts a behavior that might not automatically rise to the level of highly- or moderately-inappropriate for all participants. I chose to keep an air of judgement in Item-P4 because the latent Preferential Inquiry construct concerns faculty behavior that is characterized by the endorsement of one singular perspective which hinders military-connected student's voices.

When a faculty member asks a military-connected student this type of question, as indicated by Item P4, they make a few assumptions. The first assumption is that the war was unjust. The second assumption is that the student voluntarily participated in said "unjust" war. In saying, 'don't you agree,' the faculty member implies that there is one

correct way to answer. While it is true that their military-connected student could answer, ‘no, I do not agree with your assumption,’ the literature suggests that most military-connected students will not challenge their professors, being that they are a person in a position of power. Therefore, phrasing Item-P4 in such a way taps aspects that pertain to classroom climate. Moreover, if I had chosen to use the last suggestion from “PB” verbatim, it might tap the latent Diverse Inquiry construct because “PB’s” suggestion speaks to the acknowledgement of a plurality of perspectives.

The next item, P5, refers to an in-class student-faculty interaction as well. Two versions of Item-P5 were reviewed by experts during cognitive interviews. The final version of Item-P5 reads:

---

ITEM-P5
<i>Final Version</i>
Regularly dismisses student’s justifications for military intervention while simultaneously promoting peaceful approaches toward diplomacy.

---

The following section outlines the different iterations of Item-P5, ending with its final version. To begin, the earliest versions were written as follows:

---

ITEM-P5	
<i>Version 1</i>	<i>Version 2</i>
Covers course material that favors support of diplomacy over military-intervention.	Strongly dismisses any perspective in favor of military-intervention, simultaneously supporting those in favor peaceful dispute resolution.

---

Version one of Item-P5 did not resonate with participants because, as previously discussed concerning Item-P2, its reference to the handling of course material was problematic. Moreover, Item-P5, version one, is problematic because it is missing the

element of giving preference to alternative views. The second version of Item-P5 attends to this important aspect of the latent construct, and reads as follows:

ITEM-P5	
<i>Version 2</i>	<i>Final Version (3<sup>rd</sup> revision)</i>
Strongly dismisses any perspective in favor of military-intervention, simultaneously supporting those in favor peaceful dispute resolution.	Regularly dismisses student’s justifications for military intervention while simultaneously promoting peaceful approaches toward diplomacy.

After reading Item-P5, version 2, “PB” paused for a moment. She then noted:

[I] don’t have an understanding of the degree to which these things happen. If it were to regularly happen, then I’d think differently than if it only happened once. If you can somehow convey frequency in those short pithy statements, that would really help. If they screwed up once, it’s one thing. But if you [as a respondent] do not know, then it immediately shifts to a 4 [on the scale] because there is a chance that this behavior is ongoing, and, in that instance, I just cannot ignore it.

“JH” also raised a similar concern. While attempting to choose a response option, she paused for a moment. After pausing, “JH” explained:

I would say its...[pauses for thought]...it’s hard to say. If it’s an isolated incident, then I’d say it’s mildly inappropriate. But, if it’s a pattern over time, then that’s different. I can’t really tell from this item if that’s a one-time incident or not. I’d really need to know more.

Both participant comments highlighted another major shortcoming with the entire item pool. Frequency clearly needed to be addressed. In response, I modified the item pool so



that it indicated the degree to which behaviors occur. The final version of Item-P5 reads as follows:

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ITEM-P5 <i>Final Version</i>
Regularly dismisses student’s justifications for military intervention while simultaneously promoting peaceful approaches toward diplomacy.

---

By depicting a faculty member’s reaction to a student’s contribution, this final version of Item-P5 taps the extent to which views, other than one’s own, are tolerated in the classroom.

Item-P6 also refers to an in-class student-faculty interaction. Three different versions of Item-P6 were reviewed by experts during cognitive interviews. The final version of Item-P6 reads as follows:

---

ITEM-P6 <i>Final Version</i>
Said they questioned the credibility of evidence that a military-connected student put forth, ‘because it was based on [the student’s] wartime experience.’

---

The following items and narratives walk the reader through each iteration of Item-P6. To begin, the earliest versions were written as follows:

---

ITEM-P6	
<i>Version 1</i>	<i>Version 2</i>
Censured an MCS who supported an argument with a personal account from wartime experience.	Responds to a student’s personal account of wartime experience by stating, “that’s just your opinion.”

---

For Item-P6, version one, “DS” commented:

Censured is certainly a loaded word. If you’re arguing that they censured a student because of using personal accounts – or is it because they are using a

personal account from wartime experience? I could argue to my class, ‘I don’t want any personal accounts.’ [Student says:] ‘Well, in my experience’ [faculty says:] ‘I’m not interested in what you experience, I’m interested in what you think.’ To make that sort of false distinction, but it’s a distinction. So, in that sense...[takes time to pause and think]... well, censured a military-connected students’ use of their military experience to support their argument. There’s no question that you’re not criticizing their use of a personal account. You’re making it clear that a faculty member is criticizing their account of wartime experience. I’d say that’s very inappropriate.

As such, it appeared that the use of the word censured, in and of itself, could very likely lead most participants to state that such a behavior was very inappropriate, regardless of what the remainder of the item described. I wondered if some participants might not be opposed to this item if the word censured was replaced with a more neutral verb. A second version of P6 did not include the word censured. It read as follows:

ITEM-P6	
<i>Version 2</i>	<i>Version 3</i>
Responds to a student’s personal account of wartime experience by stating, “that’s just your opinion.”	Expresses disapproval when students base their arguments on personal experience rather than in reflection of course material

In response to version two of Item-P6, “AT” remarked:

When someone articulates an opinion, then it should be based on a pattern of evidence. the real question should be, given what you are saying, given the evidence that you present, why is it that you’re making that particular assertion?

And the personal experience should be valuable as a basis of evidence, it's not the only thing that matters, but it is a characteristic of something that is important.

“AH” was focused on the interaction, and not on my use of a verb that had a subjective note to it. It now seemed clear that neutral verb usage was helpful. However, the item was still missing some context. Namely, the reasons for which the student was providing their evidence was unclear. I revised the item accordingly to draft the third version of Item-P6. It reads as follows:

ITEM-P6	
<i>Version 3</i>	<i>Final Version (4<sup>th</sup> revision)</i>
Expresses disapproval when students base their arguments on personal experience rather than in reflection of course material	Said they questioned the credibility of evidence that a military-connected student put forth, ‘because it was based on [the student’s] wartime experience.’

In response to version three of Item-P6, “JG” commented, “I want students to base their arguments on personal experience. That is very appropriate. But if they do it without reflecting on course material, I’m going to be upset.”

It was beginning to appear that this item was nearly ready, but still it lacked specificity to the empirically based military-connected student experience. The initial impetus for crafting this item was in response to the empirical literature. I revisited Gonzalez’ (2012) dissertation, in which she detailed direct quotes from MCS that spoke to this specific type of interaction. One participant stated (p. 81):

In one class, we were talking about something that dealt with perception and terrorism. I think it had to do with them building a mosque a block away from ground zero. There was a huge difference between what three veterans’ opinions

(including myself) and everyone else in the class. So, I voiced my opinion and they said well what experience do you have? I told them that I had been deployed in garrison which means I've been deployed here but supporting troops in Iraq. So, I've never been boots (on the ground) in Iraq or Afghanistan but I've supported them. I told them that and although my job was very relevant in what we were talking about but she [the teacher] completely disregarded what I had said. I was then asked, "how do you know this." It actually took one of the other veterans who had been deployed in Afghanistan to back me up and make the point.

This participant's quote (Gonzalez, 2012, p. 81) informed the final draft of Item-P6, which reads as follows:

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ITEM-P6

*Final Version*

---

Said they questioned the credibility of evidence that a military-connected student put forth, 'because it was based on [the student's] wartime experience.'

---

It is important to note that Item-P6 deliberately includes the word wartime instead of warfare. Although this might seem like an inconsequential nuance, it is actually important. In using the word wartime, Item-P6 refers to evidence based on experience in both non-combat support capacities such as medics, as well as in regard to experience gained from combat. As this MCS asserted (Gonzalez, 2012, p. 81), it is a distinction that matters.

Item-P6 does not precisely reflect this student’s statement, which was another deliberate choice. The final draft of Item-P6 specifies that a hypothetical faculty member questioned the credibility of evidence that a military-connected student put forth, implying that they think, as “AH” commented, the student’s experience is not “valuable as a basis of evidence.” The hypothetical professor in Item-P6 implies that their student’s experience is inferior in value to other (non-military) experiences, likely conveying that they believe the student’s perspective is inferior as well.

In the next section, I outline the evolution of Item-P7. Three different versions of Item-P7 were reviewed by experts during cognitive interviews. The final version reads:

---

ITEM-P7
<i>Final Version</i>

---

Routinely ignores students who volunteer ideas, related to course content, that contradict the professor’s views.
---

---

The following items and narratives walk the reader through each iteration of Item-P7. To begin, the earliest versions read as follows:

---

ITEM-P7	
<i>Version 1</i>	<i>Version 2</i>

---

A support of pacifism inclined them to ignore multiple representative views, especially concerning military-policy.	Was inclined to dismiss any consideration of military intervention.
---	---

---

The first version of Item-P7 was problematic for a few reasons. First, the word pacifism lends itself to a wide range of interpretations. “DS” explained, “I would wonder, what do you mean by pacifism,” and suggested using instead “peaceful resolutions of conflict.” He went on to explain:

If you're trying to get at peaceful intervention, it might not be pacifism. A conscientious objector might be a pacifist, and yet they might object to certain types of peaceful interventions. If you went in and cut off people's food supply to get them to acquiesce, that's peaceful in one sense of the word. It's not a military-intervention, put it that way. But a pacifist would be very critical of that. Some conscientious objectors would, for example, be willing to participate in medical units, but others wouldn't even be willing to do that. I don't know if both would be considered pacifists.

“DS” highlighted one more problem with the wording of Item-P7, version one:

What do you mean by ‘representative’? ‘Especially military perspectives’- is that what is being ignored, among other things? ‘Inclined toward ignoring?’ I would say – multiple – if you're ignoring multiple views, you're ignoring a lot! How about saying instead: ‘ignored a variety of perspectives, particularly military ones.’

I considered “DS’s” input about word usage to craft the second version of Item-P7, which reads:

ITEM-P7	
<i>Version 2</i>	<i>Version 3</i>
Was inclined to dismiss any consideration of military intervention.	Was unwilling to engage with an MCS who articulated an argument concerning military-policy that opposed their own view.

Version two of Item-P7 is problematic as well for the same reasons that experts highlighted in regard to items P1 and P2. Mainly, Item-P7, version two, does not fully

articulate that the faculty member establishes a superiority of one viewpoint over all others. For this reason, Item-P7 needed further revision. The third version attends to this important aspect of the latent construct, and reads as follows:

ITEM-P7	
<i>Version 3</i>	<i>Final Version (4<sup>th</sup> revision)</i>
Was unwilling to engage with an MCS who articulated an argument concerning military-policy that opposed their own view.	Routinely ignores students who volunteer ideas, related to course content, that contradict the professor's views.

While item-P7, version three, did a nice job of highlighting the superiority of one perspective over others, it still had some problems due to insufficient context. As “LW” pointed out:

How can you tell if they're [the faculty member] 'unwilling to engage' with a student? What proof would the student have? If a student told me this, I'd say, 'Well, tell me more.' And the student tells me, 'Well, he never calls on me when I want to share but he always calls on kids who agree with him.' Then I would say, 'okay, I can see where you would think he isn't willing to engage [in conversation] with you.' But if the student says, 'well, whenever I ask professor G a question, he gives me shorter answers than I think are warranted.' Then that'd be a very different thing.

This third version of Item-P7 was also problematic because it does not indicate frequency, as “PB” noted. There was also the need for more context. I revised accordingly to draft the final version of Item-P7. It reads as follows:

---

ITEM-P7  
*Final Version*

---

Routinely ignores students who volunteer ideas, related to course content, that contradict the professor's views.

---

This final version of Item-P7 depicts one way in which a faculty member might express, through their in-class behaviors, an inclination toward dismissing particular perspectives.

The next item in the Preferential Inquiry pool, Item-P8, involves the way that faculty manage student-to-student interaction in the classroom. Two versions of Item-P8 were reviewed by experts during cognitive interviews. Its final version reads as follows:

---

ITEM-P8  
*Final Version*

---

Occasionally pits students against one another by praising only those students who agree with the professor's perspectives.

---

The following section outlines the different iterations of Item-P8. To begin, the earliest versions were written as follows:

---

ITEM-P8	
<i>Version 1</i>	<i>Version 2</i>
Sidesteps any dialogue regarding the advantages of national security efforts.	Redirects dialogue away from any argument that champions military-intervention.

---

In response to Item-P8, version one, "DS" commented, "Well, what if this is a political science class, for example, and the faculty member is completely sidestepping talking about national security efforts? That would pretty much cover everything. I'd use



something else.” The second version of Item-P8 uses language that narrows the topic area, and reads as follows:

ITEM-P8	
<i>Version 2</i>	<i>Final Version (3<sup>rd</sup> revision)</i>
Redirects dialogue away from any argument that champions military-intervention.	Occasionally pits students against one another by praising only those students who agree with the professor’s perspectives.

In response to version two of Item-8, “EB” said:

Okay, just playing devil’s advocate here, but, how could you even tell? I think I know what you’re trying to get at, but what does that really look like in the classroom? I think you need to put some more language in there that describes specifically what is going on, what the faculty member is doing.

I took “EB’s” point into consideration along with “DS’s” observation that the item pool was missing faculty management of student-to-student interaction to craft the final version of this item. I also took into consideration “PB’s” concern regarding frequency.

The final version of Item-P8 reads:

ITEM-P8
<i>Final Version</i>
Occasionally pits students against one another by praising only those students who agree with the professor’s perspectives.

Item-P8, in its final version, provides a sharper context by tapping peer interaction and indicating the regularity in which the behavior occurs.

In the next section, I outline the evolution of Item-P9. Two different versions of Item-P9 were reviewed by experts during cognitive interviews. The final version reads:

ITEM-P9 <i>Final Version</i>
Routinely groups students by military-status when discussing the pros and cons of military-intervention.

The following items and narratives walk the reader through two iterations of Item-P9. To begin, the first version reads:

ITEM-P9	
<i>Version 1</i>	<i>Final Version (2<sup>nd</sup> revision)</i>
Groups students solely by their existing viewpoints when debating the pros and cons of military-intervention.	Routinely groups students by military-status when discussing the pros and cons of military-intervention.

In response to Item-P9, version one, “PB” noted:

So, that’s a grouping technique. As long as it’s mixed in with other techniques, then I would be okay with it. This is a situation where it could be appropriate, but it could also be inappropriate, depending on the context. Just as an example, are they grouping students this way as a provocative way to stimulate discussion? If it were intentional, and they were upfront about their choice, then it might be appropriate.

Another participant, “JG,” also commented on this item. His role in the expert review through cognitive interviewing process was to evaluate the items for their construction based on his expertise in survey design. “JG” commented, “In my opinion debate is not an effective pedagogy. I used to use debate in my class and it became combative and tense and people left feeling hurt and like they didn’t learn. Maybe get away from using debate. Not everyone is going to use that in the classroom.” A third participant spoke a

great deal about the first version of this item as well. In response to Item-P9, version one, “AT” had this to share:

So, that’s a great question – this notion of grouping students. How is it that you’re creating a learning environment? If you’re tracking or segregating students based on their beliefs, that’s problematic in the case of general pedagogy, and then specifically in terms of this group selection that’s also problematic. Because, to some degree, the assumption is pro-military intervention might be concentrated around military-connected students. If we [faculty members] are grouping based on our assumptions that’s a problem. There may be a time, depending on the assignment, where you would want to group students, but you would do that intentionally as part of the design. Part of this is that I’m reading it through my frame as well. When I’ve had military-connected students in the past, their existing viewpoints would be a way in which I would be able to categorize them. Whether or not they have had a military-experience, that does not necessarily represent their existing viewpoints. And so, I think the viewpoints question allows us to say, what is the viewpoint that the student now occupies? It’s making the assumption that the experience is equal to the viewpoint and that isn’t always the case.

Given “JG’s” suggestion, I modified the wording in Item-P9, version one, to avoid the word debate. “AT’s” interpretation of Item-P9, version one, precisely mirrored what I was hoping the item to convey. However, neither “PB” nor “JG” picked up on this

nance, even after I probed further to ask. The input that “AT” provided me was illuminating. His point that, “Whether or not they have had a military-experience, that does not necessarily represent their existing viewpoints” guided my decision to indicate, in Item-P9, that the hypothetical faculty member was grouping students by their military-status characteristics. Given “PB’s” input concerning the need for more context, I modified the item to indicate a frequency of behavior. The final version of Item-P9 reads:

---

ITEM-P9  
*Final Version*

---

Routinely groups students by military-status when discussing the pros and cons of military-intervention.

---

In response to the final version of Item-P9, “LW” said:

One could argue that this is a pedagogical technique, but it seems like there is a sense of privilege for one group over the other – you know, ‘Okay, now we’re going to hear from Group A, but Group B, I don’t really care what you think.’

Then, yeah, that’s inappropriate.

This final version of Item-P9 depicts one way in which a faculty member might, through their in-class behaviors, hinder connection making by assuming that all military-connected students identify with one particular perspective.

The last item in the Preferential Inquiry pool, Item-P10, involves faculty-student interaction in the classroom. All three versions of Item-P10 were reviewed by experts during cognitive interviews. Its final version reads as follows:

---

ITEM-P10  
*Final Version*

---

Tells students at the start of the course, “the only way you should think about the topics we cover in this course is as an advocate of peace”

---

The following section outlines three different iterations of Item-P10. To begin, the earliest versions were written as follows:

---

ITEM-P10	
<i>Version 1</i>	<i>Version 2</i>
A support of pacifism inclined them to expresses criticism of military-intervention during every class session.	Assigns reading materials that explore approaches to international dispute resolution from a singular perspective.

---

After reading Item-P10, version one, “DS” shared his input:

I would wonder what do you mean by pacifism? If you’re talking about peaceful resolutions of conflict – I can say, yes, I’m not sure every class session – okay – but if ‘pacifism’ means no place for alternative perspectives...as it could be that if you have certain ideologues – [for example]...if we would take, ‘I am an advocate of peace, and that’s the only way you can think about these things’ then I would say it’s mildly inappropriate or inappropriate. Because of the repetitive nature of it, it sounds a little like brainwashing. But it depends on what your context is.

A second version of Item-P10 read:

---

ITEM-P10	
<i>Version 2</i>	<i>Final Version (3<sup>rd</sup> revision)</i>
Assigns reading materials that explore approaches to international dispute resolution from a singular perspective.	Tells students at the start of the course, “the only way you should think about the topics we cover in this course is as an advocate of peace”

---

This version of P-10 was problematic because it refers to the handling of course material, which, as discussed with relation to Item-P2, does not resonate with faculty members. First, perhaps the course is specifically about one single approach to international dispute resolution. Second, as “JF” indicated, “What really matters is what you do with it.” I crafted the final version of Item-P10 by taking both participants’ input into consideration. It reads:

---

ITEM-P10

*Final Version*

---

Tells students at the start of the course, “the only way you should think about the topics we cover in this course is as an advocate of peace”

---

When responding to the final version of Item-P10, “AT” said, “The fact that it has quotations, it gives me the space to envision something very particular, as opposed to something general.”

The final version of Item-P10 depicts one way in which a faculty member might, through their in-class behavior, minimize military-connected student voice. As “AT” noted, it also clarifies the context by using quotes to indicate exactly what the hypothetical faculty member says. Item-P10 is the last item in the Preferential Inquiry item pool.

## Evolution of the Antagonistic Friction Item Pool

The following section of Chapter 4 documents cognitive interview findings relevant to items within the Antagonistic Friction item pool. I begin with outlining the evolution of Item-A1. Two different versions of Item-A1 were reviewed by experts during cognitive interviews. The final version reads:

---

ITEM-A1 <i>Final Version</i>
Regularly critiques the way military-connected students express their ideas about foreign policy.

---

The following section outlines three different iterations of Item-A1. To begin, the earliest versions were written as follows:

---

ITEM-A1	
<i>Version 1</i>	<i>Version 2</i>
Subjected an argument expressed by an MCS to severe criticism.	Critiques the arguments expressed by military-connected students when debating with them.

---

When responding to Item-A1, version one, “DS” said:

Severe criticism? ‘Criticism’ is almost always presented as a negative term. And ‘severely’ suggests that it’s a negative. What I mean is you cannot be positively severely criticized. So, this cannot be positive in any regard. How about using critique instead?

The second version of Item-A1 read:

---

ITEM-A1	
<i>Version 2</i>	<i>Final Version (3<sup>rd</sup> revision)</i>
Critiques the arguments expressed by military-connected students when debating	Regularly critiques the way military-connected students express their ideas

---

---

with them.

about foreign policy.

---

In response to this second version of Item-A1, “JF” said:

Does that mean, ‘critiquing the argument,’ is that different from disagreeing with them? Is that different from engaging in an argument? Well, critiques an argument...[pause] ...That to me sounds like a student puts forth a case, and the teacher, instead of addressing the case directly, is attacking the argument per se instead of engaging in the debate. To me this sounds more like belittling the student or how they express their idea for instance. To me, that sounds like saying, ‘you haven’t expressed that appropriately’ or ‘you haven’t constructed your argument appropriately’ or, ‘you’re not a good arguer’ as opposed to what the content of their idea is.

As mentioned earlier, the use of the word ‘debate’ was problematic. Given “JG’s” input, I modified the wording in Item-A1, version two, to avoid using this word. I also incorporated “JF’s” input into the crafting of the final version of Item-A1, which reads:

---

ITEM-A1

*Final Version*

---

Regularly critiques the way military-connected students express their ideas about foreign policy.

---

The final version of Item-A1 depicts one way in which a faculty member might, through their in-class behavior, minimize military-connected student voice. It also clarifies the context by indicating the frequency of this hypothetical faculty member’s behavior.



Next, I outline the evolution of the next item in the Antagonistic Friction pool, Item-A2. Three different versions of Item-A2 were reviewed by experts during cognitive interviews. The final version reads:

---

ITEM-A2
<i>Final Version</i>
Routinely praises students who quickly counter the ideas offered by their military-connected classmates.

---

The following section outlines four different iterations of Item-A2. To begin, the earliest versions were written as follows:

---

ITEM-A2	
<i>Version 1</i>	<i>Version 2</i>
Ignored when a civilian student reprehended their peer’s argument in support of military-intervention.	Allows debate between MCS and non-military students to become acrimonious

---

In response to Item-A2, version one, “JH” shared, “I’m not sure what that would look like. I’m trying to picture what reprehended would look like. I would use a different word to make that a little clearer.” The use of the word reprehended was an issue for “DS” as well. He said, “Reprehensible is commonly used, but reprehended, I don’t know. You wouldn’t want the use of the word to interfere.”

The use of the verb ‘ignore’ was also problematic for “MG” and “DS.” When responding to Item-A2, version one, “MG” said:

I think the term “ignore” is too loaded a term. I think “takes no action” is better because ignoring it infers that it doesn’t matter, as opposed to ‘I have chosen to

not take an action’. You can feel very negatively and choose to not take an action.

“DS” said:

Here again, it’s very inappropriate that nothing is done about this. Whether creating a climate you have in the classroom – it might be other students – their peers might say – hey you can’t talk like that – I think the issue around the climate in the classroom and a community of learners is one you’ll need to think about.

In response to this input, I rewrote Item-A2 so that it did not use the word ‘reprehended.’ There was still the matter of the classroom climate that “DS” spoke about, to attend to. Many items in the Antagonistic Friction item pool were crafted to convey student-to-student interaction that restrains connection making and minimizes particular student’s voices. Using the verb ignore was problematic. I decided to try the verb allows instead, for all items in the Antagonistic Friction pool, in order to convey that the hypothetical faculty member was not taking any action, as “MG” suggested. As such, Item-A2, version two, reads:

ITEM-A2	
<i>Version 2</i>	<i>Version 3</i>
Allows debate between MCS and non-military students to become acrimonious	Praises students who are quick to attack alternative perspectives.

When “JG” interacted with the Antagonistic Friction item pool, he highlighted a new problem with all items that began with the verb ‘allow.’ He shared:

I'm stuck on the beginning. I can't get past it. 'Allowing a student'...[pause]  
 There is a wide spectrum of how allowing can happen. Allowing just does not  
 resonate with me. It implies a power dynamic. You might want to say [instead]  
 'shuts down conversation when...' or you could also try 'does nothing when  
 students...' You could also try 'supports students when they...', or 'affirms  
 students when they...' Maybe, 'positively reinforces students when they...'

“AT” also remarked on version two of Item-A2. He said:

I'd say, [instead] utilizes teaching methods that result in acrimonious debate.  
 Because what that's doing is saying, there wasn't sufficient support for this debate  
 to be productive. What you're doing is you're dropping into something that  
 results in acrimonious debate. When I think of an individual's experience in the  
 classroom, they might view an interaction as acrimonious. And then the question  
 becomes how did it become acrimonious?

As previously mentioned, the use of the word debate was also problematic for Item-A2,  
 version two. I therefore needed to craft Item-A2 in such a way that it did not mention  
 debate. It also needed to avoid the verb allow which depicted a faculty member who  
 affirms certain behaviors. Given these concerns, and “AT's” question asking how the  
 interaction became acrimonious, I redrafted version three of Item-A2 so it read:

ITEM-A2	
<i>Version 3</i>	<i>Final Version (4<sup>th</sup> revision)</i>
Praises students who are quick to attack alternative perspectives.	Routinely praises students who quickly counter the ideas offered by their military-connected classmates.

Item-A2, version three, was beginning to resonate with participants. However, “AT” wanted to know, “Could you write this so that it’s clear that the interaction involves military-connected students?” I incorporated “AT’s” input into the final version in order to provide Item-A2 with more context. It reads:

---



---

ITEM-A2
<i>Final Version</i>

---

Routinely praises students who quickly counter the ideas offered by their military-connected classmates.
--

---

As noted earlier with regards to Item-P5, both “PB” and “JH” noted the need for items to indicate frequency. In response, I crafted the final version of Item-A2 to also indicate the extent to which this type of faculty behavior occurs.

I will now outline the evolution of the next item in the Antagonistic Friction pool, Item-A3. Two different versions of Item-A3 were reviewed by experts during cognitive interviews. The final version reads:

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---

ITEM-A3
<i>Final Version</i>

---

Routinely interrupts military-connected students, in particular, during conversations about current global problems.
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---

This section reviews three different iterations of Item-A3. To begin, the earliest versions were written as follows:

---

ITEM-A3	
<i>Version 1</i>	<i>Version 2</i>

---

Interrupts students when debating with them.	Interrupts the student during conversations about military-intervention.
--	--

---

When responding to this item, “JF” asked, “What if you said, ‘interrupts students during conversation’ instead?” As mentioned earlier, “JG” also commented on the use of the word debate as well. Given both participant’s input, I modified the wording in Item-A3, version two, to avoid referencing debate. Version two reads:

ITEM-A3	
<i>Version 2</i>	<i>Final Version (3<sup>rd</sup> revision)</i>
Interrupts the student during conversations about military-intervention.	Routinely interrupts military-connected students, in particular, during conversations about current global problems.

When responding to version two of Item-A3, “LW” said:

Yeah, I’d say, ‘Tell me more about that. Does professor G interrupt every student when they try to express their thoughts? Or does he allow other students to speak uninterrupted? Do you feel professor G singles you out to interrupt?’ And then, if the student says, ‘It’s just me. I’m the only one with these opinions and I’m the one he interrupts.’ Then that’s inappropriate and I’d do something. But, if I happen to know as a professor that this is a faculty member who interrupts me at every faculty meeting, then I’m going to be like, yeah, he likes the sound of his own voice. I’d say, you know, have you talked to him about it? I’d need to know from the student what their evidence was.

I incorporated “LW’s” input into the final version in order to provide Item-A3 with more context. It reads:

ITEM-A3
<i>Final Version</i>
Routinely interrupts military-connected students, in particular, during conversations

---

about current global problems.

---

As indicated earlier with regards to Item-P5, both “PB” and “JH” noted the need for items to indicate frequency. In response, the final version of Item-A3 indicates how frequently it occurs, and the unique nature of this type of faculty behavior.

The next item in the Antagonistic Friction pool, Item-A4, involves student-to-student interaction in the classroom. Three versions of Item-A4 were reviewed by experts during cognitive interviews. Its final version reads as follows:

---

ITEM-A4  
*Final Version*

---

Never intercedes when conversation shuts down after nonmilitary students respond, with an air of contempt, to what their military-connected classmates say.

---

The following section outlines three different iterations of Item-A4. To begin, the earliest versions were written as follows:

---

ITEM-A4	
<i>Version 1</i>	<i>Version 2</i>
Did not question a student for aiming an emotionally loaded comment toward another student.	Allows civilian students to launch incendiary remarks toward MCS.

---

In response to version one of Item-A4, “DS” shared:

If you are meaning did not ask the student, ‘Why did you speak this way to your classmate? - a soft way of ‘question’ - then I wouldn’t use the word question. It wouldn’t be good teaching for criticizing a student by saying ‘you shouldn’t use an emotionally loaded comment’.

I revised the item accordingly in response to the input “DS” shared. Version two of Item-A4 reads:

ITEM-A4	
<i>Version 2</i>	<i>Version 3</i>
Allows civilian students to launch incendiary remarks toward MCS.	Does not design course with prevention of incivility between civilian and MCS in mind.

In response to version two of Item-A4, “AT” said, “I think you want to steer away from using these words – incendiary and launch given that you’re talking about military-connected students and these words convey a certain meaning.” I took “AT’s” feedback into consideration when crafting version three of Item-A4, which reads:

ITEM-A4	
<i>Version 3</i>	<i>Final Version (4<sup>th</sup> revision)</i>
Does not design course with prevention of incivility between civilian and MCS in mind.	Never intercedes when conversation shuts down after nonmilitary students respond, with an air of contempt, to what their military-connected classmates say about approaches to diplomacy.

“LW” pointed out, “How would we know this is true? What kind of proof would the student have who is telling me this?” A different participant, “JH” also wanted more context. He said, “You could add, ‘Without allowing their peer to have a rebuttal’ or ‘Then conversation shut down’ ... [pauses] Yeah, so I’d really want more information.” In response, I revised again to produce the final version of Item-A4. It reads:

ITEM-A4
<i>Final Version</i>
Never intercedes when conversation shuts down after nonmilitary students respond, with an air of contempt, to what their military-connected classmates say.

I incorporated the abovementioned feedback to craft this final version of Item-A4 so that the context is clarified and so the frequency of this behavior is known. Next, I review the evolution of Item-A5. Two different versions of Item-A5 were reviewed by experts during cognitive interviews. The final version reads:

ITEM-A5	
<i>Final Version</i>	
Oftentimes responds with a dismissive sigh to military-connected students who struggle to reexamine what they believe about politics through a new lens.	

The following section outlines three different iterations of Item-A5. To begin, the earliest versions were written as follows:

ITEM-A5	
<i>Version 1</i>	<i>Version 2</i>
Vehemently declared, at length, that an idea presented by an MCS was reprehensible.	Responded to an MCS's comment about politics with a dismissive sigh.

In response to Item-A5, "DS" wanted to know, "What was the idea? Some ideas might be reprehensible. Given the faculty member's response, I'd really wonder what it was that the student said." Another participant, "JH," said: "Vehemently declaring, that sounds so formal. Also, it's very strong. I'd want to know more." In response, I modified this item to use less formal language. Version two reads:

ITEM-A5	
<i>Version 2</i>	<i>Final Version (3<sup>rd</sup> revision)</i>
Responded to an MCS's comment about politics with a dismissive sigh.	Oftentimes responds with a dismissive sigh to military-connected students who struggle to reexamine what they believe about politics through a new lens.



Another participant, “PB” asked, “What was the comment?” The item still needed to provide more context. As such, I revised this item a third and final time, so it reads as follows:

---

ITEM-A5  
*Final Version*

---

Oftentimes responds with a dismissive sigh to military-connected students who struggle to reexamine what they believe about politics through a new lens.

---

Although the final version of Item-A5 does not specify an exact comment made by a military-connected student, it does indicate that this hypothetical student is grappling with new ideas. It also indicates the frequency in which this hypothetical faculty member’s behavior occurs. Item-A5 depicts a faculty behavior which is characterized by allowing opposition to restrain connection making and minimize particular student’s voices during classroom sessions when hot topics are discussed.

The next item in the Antagonistic Friction pool, Item-A6, involves another in-class faculty-student interaction. Three versions of Item-A6 were reviewed by experts during cognitive interviews. Its final version reads as follows:

---

ITEM-A6  
*Final Version*

---

Frequently shuts down military-connected students when they try to contribute to discussion.

---

The following section outlines three different iterations of Item-A6. To begin, the earliest versions were written as follows:

ITEM-A6	
<i>Version 1</i>	<i>Version 2</i>
Expressed disapproval toward an MCS who based her argument on assumption rather than fact.	Is quick to attack an MCS's ideas about military-intervention.

“JH” asked, “How did they express disapproval? What does that look like?” In response, version two of Item-A6 provides a more specific action, and reads:

ITEM-A6	
<i>Version 2</i>	<i>Final Version (3<sup>rd</sup> revision)</i>
Is quick to attack an MCS's ideas about military-intervention.	Shut down a military-connected student who was trying to contribute to discussion.

In response to Item-A6, version two, “LW” shared:

Well, that's what happens in classrooms. Professors are going to attack perspectives. Perspectives that they disagree with. Do they disagree with them because of their politics, do they disagree because the student made a really weakly supported point? That's something that is sort of, I would say to the student, 'toughen up.'

I took participant input into consideration to craft the final version of Item-A6, which reads:

ITEM-A6
<i>Final Version</i>
Frequently shuts down military-connected students when they try to contribute to discussion.

In response to the final version of Item-A6, “LW” noted:

That’s cutting someone off, that’s interrupting them. You know, it’s saying ‘We’re done hearing from you. I get your point Dave, let’s here from Lynn instead. Which is definitely worse than only calling on students [with whom] I agree with. This is even more inappropriate than that.

The final version of Item-A6 depicts a faculty behavior characterized by allowing opposition to restrain connection-making and minimize military-connected student’s voices. This version provides a clear context and indicates the frequency in which such a behavior occurs.

The next item in the Antagonistic Friction pool, Item-A7, involves student-faculty interaction in the classroom. Two versions of Item-A7 were reviewed by experts during cognitive interviews. Its final version reads as follows:

---

ITEM-A7  
*Final Version*

---

Sometimes wonders aloud ‘I don’t know why you [a military-connected student] would ever agree to participate in warfare’

---

The following section outlines three different iterations of Item-A7. To begin, the earliest versions were written as follows:

---

ITEM-A7

---

<i>Version 1</i>	<i>Version 2</i>
Condemned a student for participation in what the professor referred to as “acts of violence.”	Shamed an MCS for participating in military-service when debating with them the merits of pacifism.

---

In response to version one of Item-A7, “DS” shared:

If you put MCS in there, it makes it pretty clear that it’s a personal comment –  
You say ‘condemned a student’ – are there times when it is appropriate to

condemn a student? I can't imagine the pedagogical benefit of condemning a student in class. If you had "condemned an MCS student for having participated in what the professor called acts of violence" then that would be more clear.

A second version of Item-A7 read as follows:

ITEM-A7	
<i>Version 2</i>	<i>Final Version (3<sup>rd</sup> revision)</i>
Shamed an MCS for participating in military-service.	Wondered aloud 'why Michael [a military-connected student] would ever agree to participate in warfare'

"DS" also provided feedback on version two. He said:

Again, the 'shamed' – there is an assumption that the MCS is critical of pacifism – almost – you don't quite get that – but it could be that the MCS is a pacifist – 'shamed' for me is the judgement of the teacher of the meaning of having been in military service.

"JH" also indicated the need for more neutral verb usage. She said, "You might want to consider using some less judgmental verbs. Instead of using 'shamed' maybe try, 'questioned' or 'said.'"

I took both participant's input into consideration to craft the final version of Item-A7, which reads:

ITEM-A7
<i>Final Version</i>
Sometimes wonders aloud 'I don't know why you [a military-connected student] would ever agree to participate in warfare'

The final version of Item-A7 is written with less evaluative, more neutral language. It utilizes quotes in order to convey the exact words that this hypothetical faculty member said. It also indicates the frequency in which this behavior occurs.

The next item in the Antagonistic Friction pool, Item-A8, involves student-to-student interaction in the classroom. Four versions of Item-A8 were reviewed by experts during cognitive interviews. Its final version reads as follows:

ITEM-A8	
<i>Final Version</i>	
Rarely pushes for further dialogue when nonmilitary students liken their military-connected classmates to hypocrites for supporting peaceful conflict resolution.	

This section outlines five different iterations of Item-A8. To begin, the earliest versions were written as follows:

ITEM-A8	
<i>Version 1</i>	<i>Version 2</i>
Refused to question a student who severely criticized an argument expressed by their MCS classmate while debating about the role of military-intervention.	Did not question a student who critiqued their MCS peer’s argument in support of military-intervention.

In response to version one of Item-A8, “JH” said, “Refused to? Did someone ask them to intervene? It implies that someone asked them to intervene, but they chose not to.”

Version two of Item-A8 is similar but does not open with ‘refused to.’ It reads:

ITEM-A8	
<i>Version 2</i>	<i>Version 3</i>
Did not question a student who critiqued their MCS peer’s argument in support of military-intervention.	Allows civilian students to critique their MCS classmate’s arguments when discussing the complexities of military-intervention.

Version two of Item-A8 begins with ‘did not question,’ which, as “DS” noted in reference to version one of Item-A4, is problematic as well. The third version avoids the use of ‘did not question’ and instead indicates that the faculty member ‘allows’ the student behavior. It reads:

ITEM-A8	
<i>Version 3</i>	<i>Version 4</i>
Allows civilian students to critique their MCS classmate’s arguments when discussing the complexities of military-intervention.	Positively reinforced a student who critiqued their MCS classmate’s argument supporting military intervention.

In response to version three of Item-A8, “JF” noted, “Complexities of military-intervention? That’s a little leading I think.” This item was also problematic because of the verb ‘allow,’ as discussed previously in reference to Item-A2. I needed to craft a new version of Item-A8 so that it depicts a faculty member who affirms certain behaviors but does not include the verb ‘allows.’ Version four represents such an attempt and reads:

ITEM-A8	
<i>Version 4</i>	<i>Final Version (5<sup>th</sup> revision)</i>
Positively reinforced a student who critiqued their MCS classmate’s argument supporting military intervention.	Rarely pushes for further dialogue when nonmilitary students liken their military-connected classmates to hypocrites for supporting peaceful conflict resolution.

In response to version four of Item-A8, “LW” said:

I would say that’s a complex conversation. There is a lot going on. What exactly gives you the impression that the professor is using positive reinforcement? Are they saying, ‘Interesting point, Dave – Lynn, do you want to clarify that?’ – does that mean that I just positively reinforced Dave because I said, ‘interesting point’?

What exactly does a professor do that a student perceives as positively reinforcing? What does that look like?

The final version of Item-A8 attends to these concerns highlighted by participants and reads:

---

ITEM-A8  
*Final Version*

---

Rarely pushes for further dialogue when nonmilitary students liken their military-connected classmates to hypocrites for supporting peaceful conflict resolution.

---

Item-A8, as a final version, aims to clearly articulate the nature of the student-to-student interaction as well as the way that the faculty member handles such interactions in the classroom. This type of interaction would very likely hinder connection making between nonmilitary and military-connected students.

The next item in the Antagonistic Friction pool, Item-A9, involves student-to-student interaction in the classroom. Two versions of Item-A9 were reviewed by experts during cognitive interviews. Its final version reads as follows:

---

ITEM-A9  
*Final Version*

---

Occasionally echoes students who say their military-connected classmate's ideas are 'typical of a rigid thinker.'

---

This section outlines three different iterations of Item-A8. To begin, the earliest versions were written as follows:

ITEM-A9	
<i>Version 1</i>	<i>Version 2</i>
Neglected to admonish a student for labelling their classmate’s personal accounts of wartime experience as “just their opinion”	Affirms students who refer to a classmate’s wartime experiences as “just their opinion”

In response to Item-A9, “JG” said: “What is a student’s personal account? Is that their bank account? I would maybe reword that as, ‘Responds to a student’s sharing of their personal experience by stating’...”. As “DS” shared, this item was also problematic due to its use of the word neglected. He said, “Neglected implies that they didn’t do something that they should have, you see? It would be better to use ‘did not’ in place of ‘neglected’.” This feedback guided construction for Item-A9 version two, which reads:

ITEM-A9	
<i>Version 2</i>	<i>Final Version (3<sup>rd</sup> revision)</i>
Affirms students who refer to a classmate’s wartime experiences as “just their opinion”	Occasionally echoes students who say their military-connected classmate’s ideas are ‘typical of a rigid thinker.’

In response to version two of Item-A9, “PB” noted:

What does “affirming a student” look like? Affirm can mean, allowing it to happen, or it can mean providing the student language. It can be affirming by allowing it to go on, or it can mean saying, ‘Oh yes, I agree.’ So, the word affirm is a wide range. It could also be verbal or nonverbal. I think it works, I think the verbs you’re using are helpful – I don’t know that I mind ‘affirm’ as long as you’re aware that does lend itself to a wide range. What if you say, ‘nods head



when a student says’, or ‘echoes a student who says’? If you’re more specific, that might be helpful.

“PB’s” advice helped me craft the final version of Item-A9, which reads:

---

ITEM-A9

*Final Version*

---

Occasionally echoes students who say their military-connected classmate’s ideas are ‘typical of a rigid thinker.’

---

Because Item-P11 references wartime experience already, I chose to go in a new direction with Item-A9. The final version of Item-A9 depicts a student-to-student interaction that has been reported in the empirical literature focused on the experiences of MCS in higher education. It goes one step further to imagine how a faculty member might add to that dynamic in a way that hinders connection making and student voice for MCS.

The next item in the Antagonistic Friction pool, Item-A10, involves another student-to-student interaction in the classroom. Three versions of Item-A10 were reviewed by experts during cognitive interviews. Its final version reads as follows:

---

ITEM-A10

*Final Version*

---

Routinely nods their head in affirmation toward students who call their military-connected classmate’s support of military-intervention ‘tantamount to terrorism’

---

This section outlines five different iterations of Item-A10. To begin, the earliest versions were written as follows:

ITEM-A10	
<i>Version 1</i>	<i>Version 2</i>
Refused to rebuke students who interrupt MCS while debating about military-intervention.	Ignores when non-military students interrupt MCS while debating “hot topics.”

Similar to version one of Item-P8, this item was problematic because of its verb usage.

The second version of Item-A10 reads:

ITEM-A10	
<i>Version 2</i>	<i>Version 3</i>
Ignores when non-military students interrupt MCS while debating “hot topics.”	Does not intervene when a military-connected student is regularly interrupted

In response to Item-A10, “JG” said, “When I come across ‘MCS’ I keep having to remember what that means. I think people will totally forget what that is – especially electronically. You should probably spell it out fully.” There were two more problems with this item. First, the verb usage in version two of Item-A10 was also problematic, as discussed with reference to the word ignore, in Item-P2 version one. Second, as mentioned earlier, the use of the word debate was a problem as well. In response, I modified version two of Item-A10, and crafted version three, which reads:

ITEM-A10	
<i>Version 3</i>	<i>Final Version (4<sup>th</sup> revision)</i>
Does not intervene when a military-connected student is regularly interrupted.	Routinely nods their head in affirmation toward students who call their military-connected classmate’s support of military-intervention ‘tantamount to terrorism’

In response to version three of Item-A10, “LW” shared:

A lot of these items are reminding me of students on the spectrum. Students on the spectrum frequently get in trouble because they blurt, because they have hyper focus issues, because they don't read the room well. If a student came and talked to me about a classroom situation that involved some of these behaviors, because students with autism is an area of research for me, I might go to the professor and say, I heard about this student in your class. He sounds like he's a handful. And the professor says, yes, he's always putting his hand up, he blurts, he derails the conversation. I'd say, oh, I can help you with this. Because that is what I do – all of those things are classic autism behaviors and I give presentations to faculty on strategies to work with students on the spectrum. I think the disability piece is an interesting digression.

Given "LW's" feedback, version three of Item-A10 needed revision. The final version reads:

---

ITEM-A10  
*Final Version*

---

Routinely nods their head in affirmation toward students who call their military-connected classmate's support of military-intervention 'tantamount to terrorism'

---

The final version of Item-A10 specifies a statement instead of indicating a student interrupting their classmate, in direct response to "LW's" valuable input. In addition, it clarifies exactly how the faculty member affirms this student's statement, and the frequency in which they do so. This type of interaction would very likely hinder connection making and minimize student voice for MCS.

The next item in the Antagonistic Friction pool, Item-A11, involves in-class student-faculty interaction. Two versions of Item-A11 were reviewed by experts during cognitive interviews. Its final version reads as follows:

---

ITEM-A11	
<i>Final Version</i>	

---

Occasionally says to military-connected students, “looks like you’re having a tough time thinking for yourself.”

---

This section reviews three different iterations of Item-A11. To start, the earliest versions were written as follows:

---

ITEM-A11	
<i>Version 1</i>	<i>Version 2</i>

---

Is caustic toward MCS during classroom debate.	Directs caustic remarks toward MCS while discussing hot topics.
--	---

---

Again, the reference to debate in version one of Item-A11 was problematic, as initially discussed in connection to Item-P9, version one. This insight led me to craft version two of Item-A11, which reads:

---

ITEM-A11	
<i>Version 2</i>	<i>Final Version (3<sup>rd</sup> revision)</i>

---

Directs caustic remarks toward MCS while discussing hot topics.	Occasionally says to military-connected students, “looks like you’re having a tough time thinking for yourself.”
---	--

---

In response to version two of Item-A11, “LW” shared, “I’d want to ask the student to tell me what their professor actually said.” In response to this feedback, I crafted the final version of Item-A11, which reads:

---

ITEM-A11	
<i>Final Version</i>	

---

Occasionally says to military-connected students, “looks like you’re having a tough time thinking for yourself.”

---

The final version of Item-A11 specifies a hypothetical statement instead of characterizing it as ‘a caustic remark.’ It also indicates the frequency of this faculty member’s behavior, which, as “PB” indicated, is important. This type of interaction is likely to minimize student voice for MCS, and very likely to hinder connection making between MCS and faculty.

The second to last item in the Antagonistic Friction pool, Item-A12, involves student-to-student interaction. Three versions of Item-A11 were reviewed by experts during cognitive interviews. Its final version reads as follows:

---

ITEM-A12	
<i>Final Version</i>	

---

Rarely intercedes, nor expects others to, when students ask their military-connected classmates: “How many people have you killed?”

---

This section reviews five different iterations of Item-A12. To start, the earliest versions were written as follows:

---

ITEM-A12	
<i>Version 1</i>	<i>Version 2</i>

---

Ignored when a civilian student likened an MCS to a terrorist.	Allows students to call service-people immoral for having participated in war making.
--	---

---

In response to version one of Item-A12, “DS” shared:

If you’re talking about what’s the climate in the room – I would hope that a peer would question that and say, hey, what do you mean, terrorist? It is impossible to get past the relativism – who is the terrorist? The guy who flies the plane? Is it

the person sitting in Kansas city controlling the drone that's flying over Iraq? Or is it the person putting the IED in the road? It depends on where you're sitting.

“AT” also commented on version one of Item-A12. He said:

Then the question becomes whether participating in any part of the military is an act of terrorism. What it's doing is making generalized comments about an individual based on an understanding of structures and systems. And so, this is problematic because a student is making generalizations about another student that may or may not be true.

As discussed previously, items that began with the verb ‘ignored’ were problematic. I therefore needed to modify version one to that end. Although neither participant raised a specific problem with my use of the word terrorist in version one, I decided to try more nuanced language with version two of Item-A12. It reads as follows:

ITEM-A12	
<i>Version 2</i>	<i>Version 3</i>
Allows students to call service-people immoral for having participated in war-making.	Affirmed a student who called a classmate immoral for having participated in warfare.

The construction of version two was also problematic for three reasons. First, in response to this item, “JG” said: “When I read ‘service-people,’ I think it could be maybe referring to someone working in the service industry.” Second, “JG” also commented, “War-making sounds like baby-making. I think you’ll want to change that.” Third, version two of Item-A12 included the verb ‘allows,’ which, as previously discussed in connection to Item-A2. As such, I revised Item-A12 a third time, so it read:

ITEM-A12	
<i>Version 3</i>	<i>Final Version (4<sup>th</sup> revision)</i>
Affirmed a student who called a classmate immoral for having participated in warfare.	Rarely intercedes, nor expects others to, when students ask their military-connected classmates: “How many people have you killed?”

Again, as “PB” and “LW” pointed out, there are many ways to affirm a student. To tighten up the context further, I crafted the final version of Item-A12 to read:

ITEM-A12 <i>Final Version</i>
Rarely intercedes, nor expects others to, when students ask their military-connected classmates: “How many people have you killed?”

Because Item-A6 already dealt with name-calling, I changed the item so that it instead specified a specific statement. Given “DS’s” input that students can also be expected to intercede, this item specifies that the hypothetical faculty member does not have expectations for students to be responsible for the classroom climate. Item-A12 depicts an interaction that would most likely hinder connection making and minimize student voice for military-connected students.

The last item in the Antagonistic Friction pool, Item-A13, involves in-class faculty-student interaction. Three versions of Item-A13 were reviewed by experts during cognitive interviews. Its final version reads as follows:

ITEM-A13 <i>Final Version</i>
Sometimes refers to U.S. troops as “human rights violators” in class.

This section reviews three different iterations of Item-A13. To begin, the earliest versions were written as follows:

ITEM-A13	
<i>Version 1</i>	<i>Version 2</i>
Excoriated a student as a war criminal during an exchange of ideas with an MCS focused on military-policy.	Likened U.S. troops to “torturers” while debating the merits of military intervention.

In response to version one of Item-A13, “DS” shared, “Excoriated, okay, that’s very inappropriate. I couldn’t imagine any caring teaching saying anything other than that is inappropriate.” I then asked “DS” to reread version one of Item-A13 without the word ‘excoriated’ to tell me whether that changed the meaning of the item for him. “DS” replied, “I would say no, because calling someone a war criminal is really a hell of a label to put on somebody.” Given that the word excoriate is value laden, I chose to not move forward with using this verb. Being that “DS” found the behavior to be inappropriate without the verb excoriate, this was unlikely to change the item’s meaning for participants. A second version of Item-A13 read:

ITEM-A13	
<i>Version 2</i>	<i>Final Version (3<sup>rd</sup> revision)</i>
Likened U.S. troops to “torturers” while debating the merits of military intervention.	Sometimes refers to U.S. troops as “human rights violators” in class.

The second version, however, was problematic because of its reference to debate, as discussed in connection to Item-P9 version one. It also lacked specificity regarding frequency. The final version of Item-A13 reads:

ITEM-A13 <i>Final Version</i>
Sometimes refers to U.S. troops as “human rights violators” in class.

In response to the final version of Item-A13, “LW” shared:



If I know the specific thing that the professor said, that they said: ‘U.S. troops are human rights violators,’ there’s not a lot of room for doubt there. Whereas if a student tells me that they didn’t stop another student from derailing conversation, I don’t know about the conversation. But if I know a specific statement that was said, that’s a little more unequivocal. If the intent and impact are clear, then that’s easier to make a judgement about.

The final version of Item-A13 depicts one way in which a faculty member might, through their in-class behavior, minimize MCS voice and hinder connection making. It also clarifies the context by indicating the frequency of this hypothetical faculty member’s behavior and specifying a precise statement.

### **Synthesis**

As discussed in Chapter 3 this study focused solely on the development of items for destructive approaches to particularistic pedagogy, which includes the Preferential Inquiry and Antagonistic Friction domains. Seven themes emerged during cognitive interviews across both domains, including: 1) classroom culture and climate; 2) personal stances toward learning philosophies, 3) problems with evaluative verbs, 4) the need for frequency indicators, 5) inquiry through dialogue as opposed to debate, 6) the elevation of certain perspectives, and lastly, 7) the need for both item pools to reflect student-to-student interaction as well as student-faculty interaction.

## Classroom Climate and Culture

Participants drew connections to concepts of classroom climate and classroom culture while interacting with the questionnaire, confirming that this item pool taps aspects of classroom climate and culture. Three such examples are provided here in Table 5.

Table 5:

### *Classroom Climate and Culture Connections*

<b>Item</b>	<b>Participant Comment</b>
Ignored when civilian students mock MCS for their political ideals	“JH” shared: That’s a problem; faculty are supposed to create safe climates for students with diverse perspectives.
Ignored when a civilian student likened an MCS to a terrorist	“DS” said: If we’re talking about the climate in the room, I would hope that a peer would question that and say, hey, what do you mean, terrorist?
Does not question when a student is quick to attack alternative perspectives.	“AT” shared: It really is that sort of ‘I don’t have to be a bully if Sammy is going to do it for me;’ it’s empowering bullies in the classroom. A lot of classrooms use that dynamic for classroom management, when [faculty] sort of promote the classroom culture to be able to do that.

Some indicated they would like to understand the role that faculty and students play with regard to classroom climate. For example, in response to an item that read, ignored when civilian students mock MCS for their political ideals, “DS” commented:

It would be good if you had created a climate that makes it so that when students do this to other students, students see this as part of their community, and they'd say, hey that's not an appropriate way to do this. But that's not a climate that exists and that would be a climate that this item refers to. My responses might be different if I had created a climate with my class where we all saw it as our responsibility for treating each other humanely and respectfully. But given that I don't know that, this to me is very inappropriate.

“MG” also spoke to this concern when he commented:

What's omitted here is whether they allow it with or without some kind of reasoned rationale. Are you asking, do you just let students spew with any vitriolic thing they want to say in the name of free speech? Or are you saying, back up your claim with some thoughtful reasoned approach? It's hard to answer that without knowing whether [they] did something [about] it.

These insights indicated the possibility for potential measurement problems.

Respondents might assume that one of their peers behaved in this way without a reasoned response. However, others could read the same item and find themselves unable to respond due to a lack of information about how their hypothetical peer followed up on the interaction. For these reasons, I clarified the item pool to indicate the way in which the faculty member intercedes, and their expectations for others, when faced with certain student-to-student interactions. I believe the final revisions shore up issues that

participants raised concerning the need for more context related to classroom culture and climate.

### **Education Philosophy**

The second theme that emerged during cognitive interviews relates to respondent's personal philosophy of education and how responses could be, in part, a reflection of a participant's stance regarding education philosophy. Whether stemming from Nell Noddings' ethic of care, John Dewey's emphasis on the importance of experience, or Nevitt Sanford's challenge and support philosophy, many participants made linkages between the ways in which they arrived at their responses and their personal philosophy of education.

For example, in response to an item that read: criticizes the arguments expressed by students when debating with them, "JG" remarked, "I believe in Nevitt Sanford's challenge and support philosophy, and I will always challenge students in their arguments when debating them. Criticizing them feels like it's a step away from challenging them. Criticizing feels punitive."

"DS," when asked to articulate how he arrived at a particular response option, referred to Nell Noddings' ethic of care, stating, "I couldn't imagine any caring teaching saying anything other than that is inappropriate." Likewise, when responding to an item that read: allows students to label their classmate's personal accounts of wartime experience as "just your opinion," "AT" drew connections to John Dewey's emphasis on the importance of experience. He stated:

The real question should be, given what you are saying, given the evidence that you present, why is it that you're making that particular assertion? And the personal experience should be valuable as a basis of evidence, it's not the only thing that matters, but it is a characteristic of something that is important.

"PB" also drew a connection between her personal educational philosophy and the way in which she arrived at a response option. She also pondered how other participants, from different disciplines and therefore, possibly holding different ethos, might do the same.

In response to an item that read: rewards competition over collaboration, "PB" explained:

So, there we get into the ethos and culture of the classroom, of the college, of the discipline, of the university. Whether you're a progressivist, whether you're a constructivist, whatever your paradigm is, there is a right answer, right? For me, in my profession I think that collaboration and competition are diametrically opposed. One is good, and one is bad. But what if this is a business school where competition is prized heavily?

As discussed in Chapter 2, the development of the Preferential-Inquiry and Antagonistic-Friction domains were both guided by the ways in which faculty members view their responsibility to the teaching role. Faculty teaching role performance norms are guided by the goals that faculty uphold to serve the welfare of their clients, such as their students (Braxton & Bayer, 1999). Because some participants arrived at their responses after first considering their personal philosophies of education, it appears that this item pool taps

the importance of one's educational philosophy with relation to teaching role performance norms.

### **Evaluative Verbs**

The third theme that emerged during cognitive interviews relates to the use of evaluative verbs. Items constructed using evaluative verbs oftentimes led participants to state, without question, that such a behavior would be highly inappropriate. This was the case regardless of the remaining context described within the item and led me to be concerned about resultant measurement issues.

For instance, in response to an item that read: ignores when civilian students mock military-connected students for their political ideals, "JH" shared, "This to me is very inappropriate, particularly with the word mock. Criticize, a whole lot of other terms would make that move on the scale, but mocking is something different." Likewise, in response to an item that read: berated an MCS for mistakenly basing an argument on assumption rather than fact, "DS" remarked, "Berated, I would say that's very inappropriate. Challenging, that would move the scale, challenging might even be appropriate." Table 6 illustrates the various word changes that were made response to problems raised.

Table 6:

*Word Usage Changes*

<b>Evaluative Verbs</b>	<b>Less Evaluative, Somewhat Neutral Verbs</b>
Berates; Criticizes	Challenges; Engages
Mocked; Excoriated; Shamed	Questioned; Said
Condemned	Called
Evil	Questionable
Attack (perspectives)	Counter (perspectives)

**Frequency**

The fourth theme that emerged during cognitive interviews relates to the need for frequency indicators. The first version of the item pool did not indicate the frequency in which faculty members behave a certain way. During the first round of interviews, “JH,” whose expertise is in the area of literacy, commented, “When I read these items, the ones that are written in the present tense, to me, indicate an ongoing behavior, whereas the items written in past tense indicate they only happened once.” Given her expertise, I decided that, for round two, I would intentionally use present tense to indicate ongoing behavior, and past tense to indicate a one-time occurrence.

Unfortunately, that attempt did not resonate with other participants. For instance, “PB” shared, “If it’s an isolated incident then it’s mildly inappropriate – but if it’s a

pattern over time, then it's different. I can't really tell though." Another participant, "JG," lent his measurement expertise. He said, "I wonder if you should use words like continually or repetitively instead of relying on the present tense [to convey an ongoing behavior] because I assumed that was a one-time thing." In response to these comments, and similar cognitive interviewing findings, the final version of items now uses words or phrases such as occasionally, regularly, routinely, only, and, is inclined to, as a way to indicate frequency.

### **Inquiry through Dialogue**

The fifth theme that emerged during cognitive interviews relates to the need for the final inquiry item pool to reflect the ways that faculty manage inquiry through dialogue, as opposed to debate. When I crafted the first draft of the item pool for both domains, many items focused on debate. Experts indicated this technique was not prevalently used and might not resonate with the majority of participants. It appeared that I was depicting both domains too narrowly (DeVellis, 2017; Messick, 1995). I determined that the item pool needed to instead reflect the ways that faculty manage inquiry through dialogue, as opposed to debate. This choice was grounded in Downs and Murtazashvili's (2010) work, which references the dialectic approach (Corbett, 1965). A dialectic approach has been described as a logical discussion of ideas between people holding different points of view about a subject who want to establish truth through reasoned arguments (Corbett, 1965). Others define dialectical as a synthesis or



integration of opposites (Linehan et. al., 2006). The final item pool reflects these descriptions of the dialectic approach.

### **Preference of Perspectives**

The sixth theme that emerged during cognitive interviews relates to how the Preferential-Inquiry item pool should depict instances when faculty elevate certain perspectives and undervalue others. Experts indicated that items concerning the appropriateness of course materials and faculty members' ideologically grounded convictions were irrelevant to the teaching profession in higher education. These aspects were therefore irrelevant to both phenomena. Data analysis indicated that the inquiry item pool should, however, tap the ways in which faculty discourage certain world views from being explored. This was deemed especially important within classroom contexts where MCS, who possibly ascribe to viewpoints that differ from their professor's, are educated. Toward this end, the Preferential-Inquiry item pool evolved to depict instances when faculty preferentially elevate certain perspectives and undervalue competing ideals. Specific examples of this theme are provided later in this chapter when I review the evolution of each item as guided by participant feedback, starting with the earliest drafts and ending with the final version.

### **Include Faculty and Students**

Lastly, the seventh theme that emerged during cognitive interviews relates to how the item pool should reflect the ways that Preferential-Inquiry and Antagonistic-Friction occur during student-to-student interaction as well as during faculty-student interaction.

Experts highlighted ways of tapping the inquiry and friction phenomenon that the initial item pool excluded. Experts noted how the initial pool of Preferential Inquiry items only dealt with faculty behaviors and did not incorporate any student-to-student interactions. Similarly, friction items only concerned student-to-student interactions and were missing faculty-student interaction. Once again, I revisited my theoretical underpinnings of the constructs for guidance and found solutions. Namely, I realized that I needed to address how Antagonistic Friction occurs during faculty-student and student-to-student interaction. I also needed to do the same for inquiry.

This decision was supported by the empirical literature concerning MCS in higher education. As noted in Chapter 2, peer support is important within both the inquiry and friction constructs due to its influence on MCS learning. Amongst MCS, peer support influences academic self-efficacy (Whiteman et al., 2013); college GPA and sense of belonging (Campbell & Riggs, 2015); incidences of negative interactions on campus (Elliot, 2015); and social isolation in the classroom (Durdella & Kim, 2012; Persky & Oliver, 2011). Faculty-student interactions are likely to influence peer support as well. Namely, when faculty behave in demeaning ways toward MCS, they communicate to non-military students that they are not expected to interact in positive ways with their MCS classmates either. Therefore, the inclusion of faculty-student interaction, as well as student-to-student interaction, within the inquiry and friction dimensions is necessary.

## **Summary**

In summary, experts drew connections to classroom culture and climate when interacting with both item pools. They also drew connections to their own personal stance toward educational philosophy. Experts indicated problems with evaluative verbs and highlighted the need for frequency indicators. Experts also suggested that the final inquiry item pool should reflect the ways that faculty manage inquiry through dialogue, as opposed to debate. They indicated that the Preferential-Inquiry item pool should depict instances when faculty elevate certain perspectives and undervalue others. Lastly, experts indicated that the item pool should reflect the ways that Preferential-Inquiry and Antagonistic-Friction occur during student-to-student interaction as well as during faculty-student interaction.

## **CHAPTER 5: DISCUSSION, FUTURE RESEARCH & LIMITATIONS**

### **Introduction**

Since 2001, there has been an increase in the number of MCS attending institutions of higher education under the Post 9/11 GI Bill. MCS navigate a particularly complex collegiate environment in their pursuit of higher education. Considering MCS experiences in higher education, the role of faculty seems to be significant (Vacchi, 2013), and something researchers should examine further, but is largely overlooked in the literature (Vacchi & Berger, 2014). Within the college impact literature, there currently exists no research on student-faculty interactions amongst faculty who teach MCS (see Kim & Sax, 2017). This study attempts to redress this gap in the research literature relevant to faculty interactions with MCS, particularly as these exchanges influence undergraduate socialization (Weidman, 1989). Toward that end, this study focused primarily on developing a valid multi-institutional survey instrument, the MCSFI-Q that operationalizes perceptions of teaching behaviors amongst faculty who educate MCS at civilian colleges and universities.

As previously mentioned, the methodological process for developing this instrument was guided by DeVellis' (2017) methods for scale development. I approached each step to scale development by integrating a comprehensive mix of suggestions from survey methodology scholarship when I made decisions for the design and development of this instrument (Appendix B). Given that I addressed the fourth step in Chapter 4, I begin Chapter 5 with DeVellis' (2017) fifth step, which will need to be

attended to in a future research study. I then discuss step six and offer advice for administering the instrument with a focus on sample size requirements. Following, I then outline important aspects of step seven, highlighting need to evaluate whether this item pool consists of reliable items that share a common latent variable. The eighth and final step of DeVellis' (2017) scale development guidelines regards how to optimize scale length. I briefly discuss the reasons for doing so, and three important considerations to be made during this final stage of scale development. Following my discussion of these last four steps for scale development, I then outline the implications of this study for future research. Lastly, I note its limitations.

#### **Step 5: Consider Inclusion of Validation Items**

This step will need to be attended to if this scale is to be fully developed. The fifth step in DeVellis' (2017) scale development guidelines suggests that researchers include items in their scale that detect flaws or problems. One way to do this is to include a social desirability scale to assess whether respondents are concerned with social approval. Social desirability is a common bias affecting survey instruments. To minimize bias in this scale, validation items should be incorporated into its design in the future.

#### **Step 6: Administer Items to a Developmental Sample (Pilot Study)**

To test this instrument, it must be administered to a developmental sample of participants. To ensure that this sample is representative of the overall population, the target population for a future pilot study should encompass full-time and part-time faculty

members at civilian colleges or universities. A random sample of participants, by institutional type (liberal arts and research), should be chosen. Then, within each institution focus on sampling from both hard and soft disciplines. Distribute the survey to each of the faculty members from the randomly selected hard and soft disciplines within that institution.

Several methodologists suggest that the number of participants per variable is an appropriate way to determine sample size. Many methodologists (Arrindell & Van der Ende, 1985; Everitt, 1975; Nunnally, 1978; Velicer & Fava, 1998) suggest that researchers employ a subject-to-variables (STV) ratio of 10 cases per item when determining sample size. MacCallum and colleagues (1999) demonstrated that when each factor is defined by several items, and the extent to which an item correlates with all other items (communality) is high (greater than .60), sample sizes can be relatively small. However, when communality is low, MacCallum and colleagues (1999) note that larger sample sizes are needed.

Because one cannot know how strong a communality will be until results are analyzed, Henson and Roberts (2006) suggest the best rule of thumb is to get the largest possible sample. Considering the need to protect faculty from survey fatigue, following Henson and Roberts (2006) suggestion and requesting access to too many faculty members at one institution might be unrealistic, however. I therefore suggest aiming for STV ratio guidelines of ten cases per item as supported by Arrindell & Van der Ende (1985), Everitt (1975), Nunnally (1978), and Velicer and Fava (1998).

This instrument is comprised of 33 items. With a goal of maintaining an STV ratio of 10 cases per item, one would therefore need at least 303 responses for data analysis findings to be reliable. Assuming a possible 12% response rate, which is a high estimate for survey research (Dillman, 2011), one would need to invite a sample of approximately 2,518 participants in order to ensure the necessary 302 cases to work with.

Due to the fact that response rates are influenced by survey implementation procedures (Dillman, 2011), I recommend several steps be considered when interacting with participants. These steps are briefly outlined here. First, faculty should receive a Pre-notice email that explains what the survey is about and invites them to participate. Two to three days later, participants should receive an email that articulates the importance of their participation and gives instructions for completion.

Participants who have completed the survey would be sent a postcard that thanks them for their participation, approximately five to seven days after the questionnaire has been submitted by faculty participants. At the same time, non-respondents should also be sent a thank-you email that expresses appreciation for respondents' anticipated participation, indicating the hope that their survey will be submitted soon. This email thank you would include a URL to the online questionnaire. Lastly, two weeks later, non-responders should receive a second email that again includes the questionnaire URL and we survey instructions. These steps could prove helpful toward enhancing response rates.

### **Step 7: Evaluate the Items**

DeVellis (2017) describes the evaluation step as being second in importance only to item development. Following the pilot survey, evaluations must be performed to determine whether or not the instrument is reliable. Equally important, the performance of each individual item must be evaluated in order to establish whether or not this pool of items constitutes a scale.

After the survey is administered to a sample population, the performance of each item must be evaluated to determine whether they meet criteria for inclusion in the respective factor scale. Factor scales should be made up of items that provide the best grouping of empirical indicators of the construct of interest (Carmines & Zeller, 1979). Mainly, the goal is to achieve valid and reliable scale measurements for the survey instrument. Future data analysis steps will involve several distinct stages of data analysis. I will first provide a brief analytic overview of 5 stages of data analysis before explaining each of them in greater detail.

The first stage involves cleaning up and preparing the data for future analysis. To do this, the future researcher will need to calculate means and produce other descriptive statistics for all items. Raw means should be used to identify items that meet criteria for inclusion into subsequent data analysis. The calculated means are then sorted into four groups. Items with the highest mean value will be sorted into one of three groups according to cut-off levels, exclude items with mean scores below the lowest cut-off level from further analysis (Bray, 2003).



Because of the skewness that is inherent in the response scale, the second stage of data analysis involves data transformation. Calculated means are transformed in this stage using an exponential shift to eliminate the confounding effects of skewness (Fox, 1997). In the third stage of data analysis, exploratory principal components factor analysis is conducted on items that have means surpassing minimum inclusion thresholds (Kim & Mueller, 1978). These factor analyses will create scales that should be tested using Cronbach's (1990) alpha for scale reliability. Factors will then become the dependent variables or "norms."

The fourth stage of data analysis concerns reliability. Using Cronbach's alpha, test the scales created through exploratory principal components factor analysis to estimate how reliable, or reproducible, the factors are (Kim & Mueller, 1978). Lastly, in the fifth stage, empirically test for construct validity using correlation analyses for each of the factor levels. The following paragraphs will explain in greater detail how to identify items that meet criteria for inclusion into subsequent data analysis.

Bray (2003) used a similar response option scale for normative items. I suggest using the same cutoffs for creating normative categories that he used. Bray (2003) classified scores 4.20 or higher into the "high crimes" category meaning these items depict scenarios that faculty consider serious enough to take formal action. He also classified scores ranging from 4.00 to 4.20 as "minor felonies" meaning these items depict scenarios that border on high crimes but would certainly prompt at least informal action, possibly a formal response. Bray (2003) labelled items that receive mean values

in the 3.75 to 4.00 range as “misdemeanors” that would likely create an informal response but would most likely not incite formal action. Lastly, he excluded items falling below the 3.75 threshold because these items depict scenarios that are more likely to indicate the choice to ignore.

**Handling Skewness.** In the next few paragraphs I will explain in greater detail how to transform mean values of items to eliminate confounding effects of skewness inherent in the response scale. Data from this study needs to undergo exploratory principal components analysis (PCA). Because exploratory PCA is based on Pearson correlation coefficients which require that variables relate to each other in a linear manner, this method of analysis demands linearity (Kim & Mueller, 1978). As such, data that is highly skewed could interfere with exploratory PCA interpretations.

High levels of skewness in the data resulting from the piloting of this survey instrument should be anticipated. This should be expected given that response options for this study were coded consistent to Durkheimian notions which state that norms are best perceived when violated (Durkheim, 1934). Toward this end, a value of 1 on the response option scale constitutes acceptable behavior and values 3 through 5 indicate varied levels of unacceptable behavior. As a result, the nature of this response option scale naturally skews items that meet threshold criteria toward the upper end of the scale. In other words, because this response option scale is more heavily weighted toward unacceptable behavior it is very likely that data will have high levels of skewness.

High skewness values indicate that a large proportion of responses are condensed within a narrow range of the response option scale or that two diametrically opposed forces are at play (Fox, 1997). If data are not transformed to move skewness values toward a normal distribution value of 1 then the impact of outliers will be diminished, and mean values used for subsequent statistical methods might not provide a good indication of sample population behavior. In other words, the data will be asymmetrically grouped, and the responses will not be aligned with the assumptions of linearity.

To address this asymmetrical grouping of the data, a transformation will need to be performed by which all variables in this dataset are modified by the same function in order to produce a more symmetrical distribution (Fox, 1997). The aim of this transformation should be to move skewness values more closely toward a normal distribution value of 1. Multiple transformations can be used to reduce skewness. These include exponential, logarithmic, reciprocal, square root, and squared transformations (Nunnally & Bernstein, 1994).

All transformations should be explored. Some transformations will increase skewness and others will reduce it. The optimal transformation will be the one that most greatly reduces skewness in a consistent manner (Fox, 1997). After the optimal transformation is determined, and all variables have been transformed, skewness values should be recomputed for each variable across the three normative cut-off levels.

**Factor Analysis Design.** In the next few paragraphs I will explain in greater detail important aspects of conducting exploratory principal components factor analyses on items that have means surpassing minimum inclusion thresholds. At this stage in data analysis, three normative categories will have been made by this point: 1) “high crimes,” 2) “minor felonies,” and 3) “misdemeanors” (Bray, 2003). To start, conduct exploratory principal components factor analysis for items that have means surpassing minimum inclusion thresholds within each of the three categories.

It will be important to ensure an acceptable subject-to-variables (STV) ratio. I suggest aiming for an STV ratio of 10 cases per item as supported by Arrindell & Van der Ende (1985), Everitt (1975), Nunnally (1978), and Velicer and Fava (1998) for principle components analysis. For example, if the “high crimes” category has 12 items with means surpassing minimum inclusion thresholds, then responses from 120 subjects would be acceptable.

Factor scales can now be determined. Consider the following aspects when developing factor scales: alpha reliability scores, conceptual clarity, and factor loadings (Kim & Mueller, 1978). A starting point is to compute factor loadings for factor and scale development. However, it will be important to simultaneously consider the conceptual clarity of the factors when sorting through factor loadings (DeVellis, 2017).

Some items might need to be moved in order to ensure conceptual fit and high scale reliability. This scale will need to be able to distinguish between three main categories: “high crimes”, “misdemeanors”, and “minor felonies” (Bray, 2003). Toward

that end and because this study is exploratory in nature, maximizing the separation between the factors will allow for a better conceptualization of the data. This should be considered when making decisions about factor loadings.

**Construct Validity.** This scale will need to be empirically tested for construct validity. Construct validity involves empirical and theoretical components, measuring the relationship between items (DeVellis, 2017). An instrument has high construct validity if the items and scales measuring the same dimension are highly correlated (convergent validity) and if the items and scales measuring different dimensions have low correlations (discriminant validity; Aiken, 2000).

One option for doing so is by using correlation analyses for each of the factor levels. Spearman's correlation coefficient can be used to measure convergent validity for items that group within each factor (Nunnally & Bernstein, 1994). To check for discriminant validity, bivariate correlations can be computed. Results from both tests can be used to flag items that are divergent from other items, as well as to flag items that share multicollinearity with other items.

**Reliability.** If the instrument performs in predictable, consistent ways, it is reliable. For an instrument to be reliable, the scores it produces should not change unless there is a change in the actual variable it intends to measure. Furthermore, it should also consist of reliable items that share a common latent variable. This instrument should be evaluated for internal consistency, which is typically equated with Cronbach's (1951) coefficient alpha.

In terms of these items, Cronbach's (1951) coefficient alpha could be used to partition the total variance among this set of items into true differences in participant's perceptions of appropriateness, and differences caused by everything but these true differences in participant's perceptions of appropriateness. In other words, it could be used to partition total variance among this set of items into 1) true variation in the latent variable, and 2) error.

Although there are other ways to evaluate internal consistency, computing Cronbach's (1951) coefficient alpha is commonly used and would work well for this particular set of items. Nunnally and Bernstein (1994) indicate that a reliability of .80 is good and .70 is acceptable for research when it is in an emergent stage of validation. After performing factor analysis and computing Cronbach's (1990) alpha, items that have the lowest factor loading when compared to other items in this scale ought to be eliminated.

### **Step 8: Optimize Scale Length**

Once this pool of items has been evaluated for reliability and underlying constructs have been identified, the next, and final step of DeVellis' (2017) scale development process can be attended to. In short, the investigator will need to balance the need for brevity and reliability. Shorter scales will be easier for participants to answer. However, longer scales tend to be more reliable. Because this scale is currently made up of only 23 items, brevity should not be too great of a concern, making the reliability considerations more important. If the scale has a low reliability, then it will be

impossible to assign meaning to scores resulting from this instrument (DeVellis, 2017). I therefore suggest placing a premium on reliability.

There are a few other important considerations to be made during this final stage of scale development. Mainly, Comrey and Lee (1992) suggest three conditions for interpreting factors. First, they note that higher factor loadings indicate a stronger overlap between the factor and the true variance of the item. Second, a factor that has many items with substantial loadings is more easily interpretable. Third, the latent quality of the factor is most easily inferred when its definition is pure. These three conditions should be considered as indicators for making decisions regarding scale length. I will now turn to a discussion regarding the implications of this study for future research.

### **Outcomes and Contributions**

This study highlights the benefits from conducting cognitive interviews with field experts. At this present time, I am unaware of any studies that have approached the expert review process in such a manner. As previously discussed, my instrument is a measure of a previously undefined construct. Sterba and colleagues (2007) also sought to measure a previously undefined construct and conducted an item development study in order to gather validity evidence for their instrument. In their study, cognitive interviews were conducted separately from the expert review process. This study departed slightly from Sterba and colleagues' (2007) work. Mainly, instead of conducting two separate procedures to obtain validity evidence, I obtained evidence from cognitive interviews and

from field experts concurrently by purposefully selecting cognitive interview participants who were also experts in this measure's phenomenon of interest.

Because my questionnaire's target audience consists of faculty members who teach at a civilian college or university, cognitive interviewing needed to be conducted with individuals who represented these specific characteristics. I also needed relevant field experts to provide their assessment of each item's representativeness concerning the content my instrument intends to measure. Being that the field experts I needed also happened to be faculty members, I could therefore attend to both types of content validity checks in tandem during cognitive interviewing sessions.

Where Sterba and colleagues (2007) collected written feedback as to how representative the items were of the content the instrument was developed to measure, I collected verbal feedback instead. I found that this approach garners tremendous insights and is very valuable to the instrument development process. As described in Chapter 3, I relied on structured prompts during the cognitive interview process whereby field experts were asked to judge the extent to which individual items were essential to an overall understanding of the construct this instrument intends to measure.

I embraced an interpretivist approach to cognitive interviewing and followed Miller's (2011) lead by using the interview as a method for collecting narratives that detailed how and why participants responded to survey questions the way they did. This allowed me to understand how the lived experiences of my participants informed their responses to survey questions (Beatty, 2004; Gerber & Wellens, 1997; Miller, 2011).



The lived experiences of all of my participants comprise of, in part, teaching undergraduate students at a civilian institution of higher education. Some participants' lived experiences also include conducting research in the areas of teaching methods, student learning, critical pedagogy and professional learning communities.

As such, I was able to collect rich narratives from my participants about the ways in which they responded to survey questions in my instrument. Because their narratives were informed by their lived experiences as field experts and practitioners, the data I was able to collect was very rich and informative. Collecting feedback in person presented opportunities for clarification and meaning making.

Beatty and Willis (2007) found that in approaching the interview process as a “detective,” interviewers can discover unanticipated problems in an item or response option. During each interview, I directed dialogue with an eye toward solving analytical questions and attending to conceptual gaps. Because my participants were experts, I could guide discussion in order to learn about how closely the scale content related to the construct of interest.

There were times when participants alluded to aspects of the construct of interest that my scale instrument failed to include. For example, this became especially apparent when I detected inconsistencies amongst participants regarding the way they understood a particular survey item or why they chose their response. Because I was able to immediately probe for further understanding during the course of the interview, I

gathered rich insights into my scale's content with relation to its construct of interest. The quality of the data I collected was therefore greatly enhanced.

I also found that attending to the expert review in person allowed for seemingly small nuances of understanding and importance to organically arise during the interview sessions. While participants told stories about their lived experiences, they drew connections between their involvement as faculty members/researchers and the content of my scale. In telling their stories, they were able to describe the unique context of their lives as faculty members/researchers and I was able to ask them questions about the various experiences that they reflected on in order to choose their response.

I was able to ask participants to elaborate when it appeared that their understandings might not fall within the intended construct. This back and forth process allowed for the phenomena that each item captured to be revealed. It also allowed for me to gather an understanding of how the phenomena related to the lived experiences of each respondent to identify a spectrum of interpretive patterns.

This was especially important because I was developing a scale for a previously undefined construct. In order to shore up its shortcomings, I was able to modify the scale in between the three separate phases of cognitive interviews. Because the participants were experts, when their narratives alluded to aspects of the construct of interest that my scale instrument failed to include, participants were able to make suggestions for improvement that were guided by their expertise and practical experience.

During the scale revision process, with each participants' feedback in mind, I could then attend to the spectrum of participants' interpretive patterns. If the participants in my study had not also been experts, this would not have been possible. In short, by approaching cognitive interviewing in this manner, I garnered tremendous insights from participants' teaching practice and research expertise and was able to put those insights to good use during the scale revision process.

**Posing Sensitive Questions.** The MCSFI-Q raises highly sensitive questions about malfeasance and impropriety, questions about vulnerable populations as well as questions in which participants could expose something that would be harmful to themselves. I took a very deliberative approach toward being in conversation with potential participants through the use of a cognitive interviewing study in order to evaluate the item pool during development (Miller et. al., 2014). In this regard my approach to instrument design paid careful attention to the manner in which the MCSFI-Q could effectively pose such questions while reducing the likelihood that items would be alienating or threatening to the population of interest.

A very natural expansion of my work would be to look at student-faculty interaction unique to other marginalized student populations in higher education (see Kim & Sax, 2017). There are a number of ways that researchers might wish to use a survey instrument to explore questions of this nature. For example, researchers could investigate perceptions of student-faculty interaction norms unique to first-generation students, or students of color. In this case, the survey instrument's item pool would, most likely, also

involve highly sensitive questions which would lend themselves well to being evaluated for appropriateness and relevance to the participant sample through cognitive interviewing (Miller et. al., 2014). Consequently, a cognitive interview study would be particularly beneficial toward developing an item pool that effectively asks participants highly sensitive questions while reducing the likelihood that the items would be alienating or threatening.

However, if these same researchers were to follow DeVellis' (2017) guidelines, they would miss out on these valuable contributions because cognitive interviewing is excluded from DeVellis' (2017) steps to scale development. As such, the findings of this study complement, complicate and challenge DeVellis' (2017) approach to survey research methods specifically concerning the exclusion of cognitive interviewing studies within his 8 steps for scale development. Because of this omission, DeVellis' (2017) approach does not attend closely enough to the manner in which researchers can develop instruments that effectively ask participants highly sensitive questions about malfeasance and impropriety, about vulnerable populations or questions in which participants could expose something that would be harmful to themselves. Therefore, DeVellis' (2017) approach could be improved if his steps to scale development included cognitive interviewing for item evaluation (Miller et. al, 2014).

### **Limitations of this Study**

Through the use of cognitive interviewing with field expert participants, this study gathered critical insight into question performance, as well as rich insights into the

validity of scale content with relation to the scale's construct of interest. As such, I was able to determine that particular interpretive patterns exist which are unique to this scale's two constructs of interest; antagonistic friction, and preferential inquiry.

However, this study does not offer any understanding of the magnitude or extent to which these patterns might exist in a developmental survey sample. Moreover, it does not offer any understanding of the extent to which, across various groups of respondents, how such variations in interpretive patterns might occur. In order to address these limitations, DeVellis' (2017) steps six, seven and eight will need to be attended to in a future study.

### **Conclusion**

Results from this study led to the conclusion that the final instrument is comprised of conceptually valid items that operationalize teaching behaviors amongst faculty who educate MCS at civilian colleges and universities. Therefore, these same results led to the conclusion that the final instrument has the potential to collect accurate data.

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## APPENDIX A: Visual MCSFIM

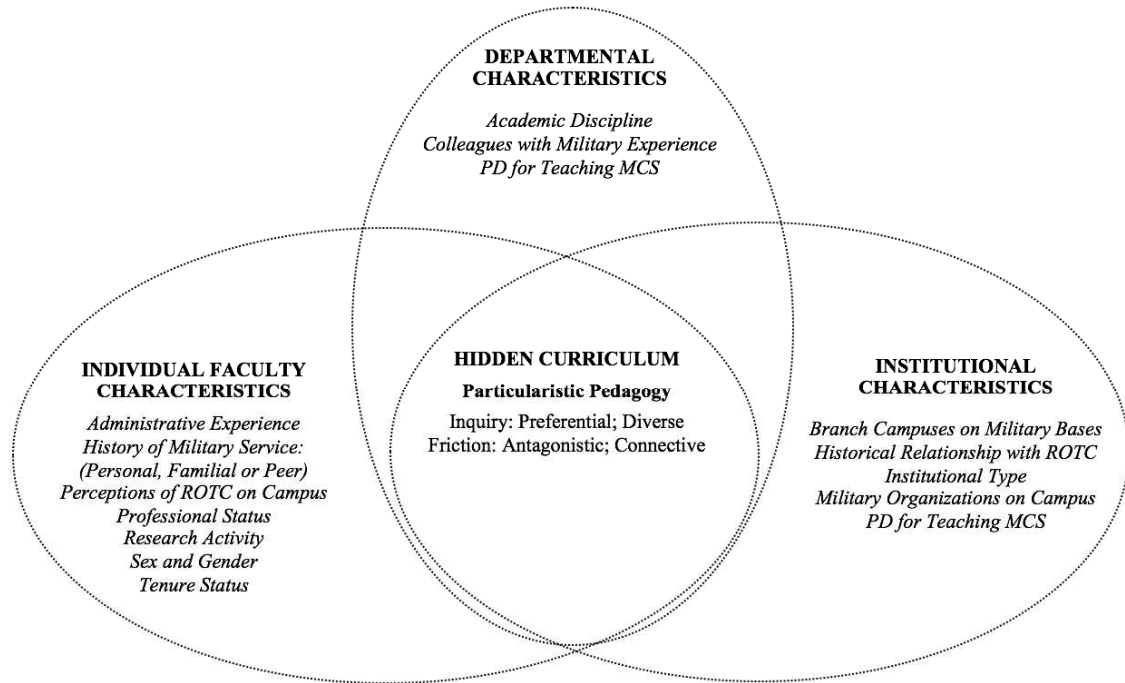


Figure 1. A Model of Military-Connected Student-Faculty Interaction

## **APPENDIX A: MCSFIM**

### The Model of Military-Connected Student-Faculty Interactions

#### The Hidden Curriculum: Particularistic Pedagogy

1. Inquiry (preferential, diverse)
2. Friction (antagonistic, connective)

#### Institutional Inputs

1. Historical relationship with ROTC
2. Military organizations on campus
3. Branch campuses on military bases
4. PD: Tailored instruction for MCS offered

#### Academic Department Inputs

1. Discipline Type
2. Colleagues with military experience
3. PD: Tailored instruction for MCS offered (dept specific)

#### Faculty Background and Identity

- 1) Tenure status
- 2) Leadership position(s) held
- 3) Relationship to Military
  - a. Personal, familial or peer history of military service



## APPENDIX B: MCSFI-Q (final)

### Teaching Behaviors Inventory: Faculty Interaction with Military-Connected and Civilian Students

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***Directions:***

Teaching is a complex activity composed of many behaviors and expectations. In certain instances, if a behavior seems inappropriate, some faculty might choose to intervene in response to one of their colleagues' teaching behaviors.

Listed below are some behaviors related to college teaching. Using the response categories listed below, indicate your opinion of each behavior, as it might apply to one of your colleagues teaching a class of 25-35 students (both civilian and military-connected students).

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***The response categories are as follows:***

<b>Appropriateness</b>	<b>Let military-connected students be defined as:</b>
1 = To be encouraged	Students who currently or previously serve(d) in the U.S. military.  (Army, Navy, Marines, Coast Guard, ROTC, or National Guard).
2 = Could be appropriate or inappropriate	
3 = Mildly inappropriate but generally ignored	
4 = Inappropriate, would be handled informally by colleagues or administrators suggesting change or improvement	
5 = Very inappropriate, would require formal administrative intervention	

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**APPENDIX B: MCSFI-Q (final)**

<i>A student tells you about their classroom experience, wherein one of your colleagues:</i>	Appropriate, to be encouraged	Discretionary, could be appropriate or inappropriate	Mildly inappropriate, but generally ignored	Inappropriate, to be handled informally by colleagues or administrators suggesting change or improvement	Very Inappropriate, requires formal administrative intervention
1. Absolutely rejects military-intervention as being a legitimate tool of diplomacy.	1	2	3	4	5
2. Is apt to counter military-connected student's ideas, specifically those they disagree with because of their politics.	1	2	3	4	5
3. Routinely praises particular students who dominate discussion, specifically those who side with the professor's approach to foreign policy.	1	2	3	4	5
4. Occasionally asks military-connected students, 'don't you agree that the war you participated in was unjust?'	1	2	3	4	5

## APPENDIX B: MCSFI-Q (final)

5. Regularly dismisses student's justifications for military intervention while simultaneously promoting peaceful approaches toward diplomacy.	1	2	3	4	5
6. Said they questioned the credibility of evidence that a military-connected student put forth, 'because it was based on [the student's] wartime experience.'	1	2	3	4	5
7. Routinely ignores students who volunteer ideas, related to course content, that contradict the professor's views.	1	2	3	4	5
8. Occasionally pits students against one another by praising only those students who agree with the professor's perspectives.	1	2	3	4	5
9. Routinely groups students by military-status when discussing the pros and cons of military-intervention.	1	2	3	4	5
10. Tells students at the start of the course, "the only way you should think about the topics we cover in this course is as an advocate of peace"	1	2	3	4	5
11. Regularly critiques the way military-connected students express their ideas about foreign policy.	1	2	3	4	5
12. Routinely praises students who quickly counter the ideas offered by their military-connected classmates.	1	2	3	4	5
13. Routinely interrupts military-connected students, in particular, during conversations about current global problems.	1	2	3	4	5
14. Never intercedes when conversation shuts down after nonmilitary students respond, with an air of contempt, to what their military-connected classmates say.	1	2	3	4	5
15. Oftentimes responds with a dismissive sigh to military-connected students who struggle to reexamine what they believe about politics through a new lens.	1	2	3	4	5

**APPENDIX B: MCSFI-Q (final)**

16. Frequently shuts down military-connected students when they try to contribute to discussion.	1	2	3	4	5
17. Sometimes wonders aloud ‘I don’t know why you [a military-connected student] would ever agree to participate in warfare’	1	2	3	4	5
18. Rarely pushes for further dialogue when nonmilitary students liken their military-connected classmates to hypocrites for supporting peaceful conflict resolution.	1	2	3	4	5
19. Occasionally echoes students who say their military-connected classmate’s ideas are ‘typical of a rigid thinker.’	1	2	3	4	5
20. Routinely nods their head in affirmation toward students who call their military-connected classmate’s support of military-intervention ‘tantamount to terrorism’	1	2	3	4	5
21. Occasionally says to military-connected students, “looks like you’re having a tough time thinking for yourself.”	1	2	3	4	5
22. Rarely intercedes, nor expects others to, when students ask their military-connected classmates: “How many people have you killed?”	1	2	3	4	5
23. Sometimes refers to U.S. troops as “human rights violators” in class.	1	2	3	4	5

**APPENDIX B: MCSFI-Q (final)**

A FEW QUESTIONS ABOUT YOU AND YOUR INSTITUTION

- 24) Are you considered a full-time faculty member by your institution for the current academic year? (check one)
- Yes, full-time
  - No, part-time, but more than half-time
  - No, half-time
  - No, less than half-time
- 25) Your academic rank: (check one)
- Professor
  - Associate Professor
  - Assistant Professor
  - Instructor
  - Lecturer
  - Other (specify: \_\_\_\_\_ )
- 26) Your tenure status: (check one)
- Tenured
  - Untenured, but on tenure track
  - Untenured, and not on tenured track
- 27) Are you, or have you ever been, a Department Head/Chair or a Dean? (check one)
- No
  - Yes, but not now
  - Yes, and am currently
- 28) Do you, or have you ever, served in the U.S. military (e.g.: Army, Navy, Marines, Air Force, Coast Guard, ROTC, National Guard)?
- No
  - Yes, but not now
  - Yes, and am currently
- 29) Number of years you have been employed at your present institution: \_\_\_\_\_
- 30) Discipline of your present academic department: \_\_\_\_\_

**APPENDIX B: MCSFI-Q (final)**

- 31) Are any of your faculty peers connected with the military (e.g.: Army, Navy, Marines, Air Force, Coast Guard, ROTC, National Guard) that you are aware of?
- Yes, but they do not currently serve
  - Yes, and they currently serve
  - Unsure (skip to 10)
  - No (skip to 10)
- 32) Within your academic department, how many of your faculty peers are military-connected (e.g.: Army, Navy, Marines, Air Force, Coast Guard, ROTC, National Guard)?
- 1
  - 2
  - 3
  - 4
  - 5
  - more than 5
  - I'm not sure
- 33) Are any of your family members or friend's military-connected (e.g.: Army, Navy, Marines, Air Force, Coast Guard, ROTC, or National Guard)?
- No
  - Yes
- 34) Has your academic department offered any training or professional talks focused on tailoring instruction for military-connected students?
- Yes
  - No
- 35) Have you sought out any training focused on tailoring instruction for military-connected students on your own?
- Yes
  - No

## APPENDIX C: LATENT CONSTRUCT DEFINITIONS

Construct Title	Definition
Preferential Inquiry	pedagogical methods for managing classroom inquiry amongst themselves, MCS, and civilian students, characterized by an endorsement of the superiority of one singular perspective, which hinders military-connected student's voices
Diverse Inquiry	pedagogical methods for managing classroom inquiry amongst themselves, MCS, and civilian students, characterized by an acknowledging a plurality of perspectives, thereby valuing nonmilitary and military-connected student's voices
Connective Friction	pedagogical methods for managing friction amongst themselves, MCS, and civilian students, characterized by moving through friction to foster connection-making by valuing voice for both nonmilitary and military-connected students
Antagonistic Friction	pedagogical methods for managing friction amongst themselves, MCS, and civilian students, characterized by allowing opposition and hostility to restrain connection-making and minimize military-connected student's voices

## APPENDIX D: MCSFI-Q ITEM POOL PORTRAYING LATENT CONSTRUCTS

### Preferential Inquiry Items

ITEM-P1: Absolutely rejects military-intervention as being a legitimate tool of diplomacy.

ITEM-P2: Is apt to counter military-connected student's ideas, specifically those they disagree with because of their politics.

ITEM-P3: Routinely praises particular students who dominate discussion, specifically those who side with the professor's approach to foreign policy.

ITEM-P4: Occasionally asks military-connected students, 'don't you agree that the war you participated in was unjust?'

ITEM-P5: Regularly dismisses student's justifications for military intervention while simultaneously promoting peaceful approaches toward diplomacy.

ITEM-P6: Said they questioned the credibility of evidence that a military-connected student put forth, 'because it was based on [the student's] wartime experience.'

ITEM-P7: Routinely ignores students who volunteer ideas, related to course content, that contradict the professor's views.

ITEM-P8: Occasionally pits students against one another by praising only those students who agree with the professor's perspectives.

ITEM-P9: Routinely groups students by military-status when discussing the pros and cons of military-intervention.

ITEM-P10: Tells students at the start of the course, "the only way you should think about the topics we cover in this course is as an advocate of peace"



## APPENDIX D: ITEM POOL PORTRAYING LATENT CONSTRUCTS

### Antagonistic Friction Items:

ITEM-A1: Regularly critiques the way military-connected students express their ideas about foreign policy.

ITEM-A2: Routinely praises students who quickly counter the ideas offered by their military-connected classmates.

ITEM-A3: Routinely interrupts military-connected students, in particular, during conversations about current global problems.

ITEM-A4: Never intercedes when conversation shuts down after nonmilitary students respond, with an air of contempt, to what their military-connected classmates say.

ITEM-A5: Oftentimes responds with a dismissive sigh to military-connected students who struggle to reexamine what they believe about politics through a new lens.

ITEM-A6: Frequently shuts down military-connected students when they try to contribute to discussion.

ITEM-A7: Sometimes wonders aloud ‘I don’t know why you [a military-connected student] would ever agree to participate in warfare’

ITEM-A8: Rarely pushes for further dialogue when nonmilitary students liken their military-connected classmates to hypocrites for supporting peaceful conflict resolution.

ITEM-A9: Occasionally echoes students who say their military-connected classmate’s ideas are ‘typical of a rigid thinker.’

ITEM-A10: Routinely nods their head in affirmation toward students who call their military-connected classmate’s support of military-intervention ‘tantamount to terrorism’

ITEM-A11: Occasionally says to military-connected students, “looks like you’re having a tough time thinking for yourself.”

ITEM-A12: Rarely intercedes, nor expects others to, when students ask their military-connected classmates: “How many people have you killed?”

ITEM-A13: Sometimes refers to U.S. troops as “human rights violators” in class.

## APPENDIX E: MCSFI-Q DRAFT ONE

### Teaching Behaviors Inventory: Faculty Interaction with Military-Connected Students

#### ***Directions:***

Teaching is a complex activity composed of many behaviors and expectations. Listed below are some behaviors related to college teaching. Some teaching behaviors may appear to be appropriate to some faculty members but not to others.

Using the response categories listed below, please indicate your opinion on each of the listed behaviors as you think they might ideally apply to a faculty member teaching a college course of about 40 enrolled students (including civilian and military-connected), whether or not you teach such a course yourself.

The response categories are as follows:

<i>Appropriateness</i>	Military-Connected Students (MCS)
1 = Appropriate	<i>Definition</i>
2 = Discretionary	Students who currently or
3 = Mildly inappropriate/ ignore	previously serve(d) in the U.S.
4 = Inappropriate/ handle informally	military
5 = Very inappropriate/ requires formal intervention	<i>(Army, Navy, Marines, Coast Guard, ROTC, or National Guard).</i>

**APPENDIX E: MCSFI-Q DRAFT ONE**

<i><b>You become aware that one of your colleagues:</b></i>	Appropriate/ encourage	Discretionary	Mildly inappropriate, ignore	Inappropriate/ handle informally	Very Inappropriate, requires intervention
1. Convictions about pacifism bias the perspectives they are willing to cover in class	1	2	3	4	5
2. Expresses a powerful bias toward dismissing military-intervention.	1	2	3	4	5
3. Exhibits a powerful bias toward amplifying diplomacy.	1	2	3	4	5
4. Declared that participation in wartime activities was evil during an exchange of ideas.	1	2	3	4	5
5. Covers course material that favors support of diplomacy over military-intervention.	1	2	3	4	5

**APPENDIX E: MCSFI-Q DRAFT ONE**

6. Censured an MCS who supported an argument with a personal account from wartime experience.	1	2	3	4	5
7. A support of pacifism inclined them to ignore multiple representative views, especially concerning military-policy.	1	2	3	4	5
8. Sidesteps any dialogue regarding the advantages of national security efforts.	1	2	3	4	5
9. Groups students solely by their existing viewpoints when debating the pros and cons of military-intervention.	1	2	3	4	5
10. A support of pacifism inclined them to expresses criticism of military-intervention during every class session.	1	2	3	4	5
11. Subjected an argument expressed by an MCS to severe criticism.	1	2	3	4	5
12. Ignored when a civilian student reprehended their peer's argument in support of military-intervention.	1	2	3	4	5
13. Interrupts students when debating with them.	1	2	3	4	5
14. Did not question a student for aiming an emotionally loaded comment toward another student.	1	2	3	4	5
15. Vehemently declared, at length, that an idea presented by an MCS was reprehensible.	1	2	3	4	5
16. Expressed disapproval toward an MCS who based her argument on assumption rather than fact.	1	2	3	4	5
17. Condemned a student for participation in what the professor referred to as "acts of violence."	1	2	3	4	5
18. Refused to question a student who severely criticized an argument expressed by their MCS classmate while debating about the role of military-intervention.	1	2	3	4	5

19 Neglected to admonish a student for labelling their classmate's personal accounts of wartime experience as "just their opinion"	1	2	3	4	5
20. Refused to rebuke students who interrupt MCS while debating about military-intervention.	1	2	3	4	5
21. Is caustic toward MCS during classroom debate.	1	2	3	4	5
22. Ignored when a civilian student likened an MCS to a terrorist.	1	2	3	4	5
23. Excoriated a student as a war criminal during an exchange of ideas with an MCS focused on military-policy.	1	2	3	4	5

## APPENDIX F: MCSFI-Q DRAFT TWO

### Teaching Behaviors Inventory: Faculty Interaction with Military-Connected and Civilian Students

#### *Directions:*

Teaching is a complex activity composed of many behaviors and expectations. Listed below are some behaviors related to college teaching. Some teaching behaviors may appear to be appropriate to some faculty members but not to others.

Using the response categories listed below, indicate your opinion on each behavior as you think it might ideally apply to a faculty member teaching a college course of about 40 enrolled students (civilian and MCS), whether or not you teach such a course yourself.

The response categories are as follows:

Military-Connected Students (MCS)

#### *Appropriateness*

#### *Definition*

- 1 = Appropriate
- 2 = Discretionary
- 3 = Mildly inappropriate/ ignore
- 4 = Inappropriate/ handle informally
- 5 = Very inappropriate/  
requires formal intervention

Students who currently or previously  
serve(d) in the U.S. military

*(Army, Navy, Marines, Coast Guard,  
ROTC, or National Guard).*

## APPENDIX F: MCSFI-Q DRAFT TWO

<i><b>You become aware that one of your colleagues:</b></i>	Appropriate/ encourage	Discretionary	Mildly inappropriate/ ignore	Inappropriate/ handle informally	Very inappropriate/ requires intervention
1. Handles differences in ideological dispositions with bias.	1	2	3	4	5
2. Allows debate between MCS and non-military students to become acrimonious	1	2	3	4	5
3. Champions peaceful negotiation approaches to diplomacy over military-intervention efforts.	1	2	3	4	5
4. Shamed an MCS for “participating in an unjust war” while debating with them.	1	2	3	4	5
5. Strongly dismisses any perspective in favor of military-intervention, simultaneously supporting those in favor peaceful dispute resolution.	1	2	3	4	5
6. Responds to a student’s personal account of wartime experience by stating, “that’s just your opinion.”	1	2	3	4	5
7. Was inclined to dismiss any consideration of military intervention.	1	2	3	4	5

## APPENDIX F: MCSFI-Q DRAFT TWO

8. Redirects dialogue away from any argument that champions military-intervention.	1	2	3	4	5
9. Routinely groups students by military-status when discussing the pros and cons of military-intervention.	1	2	3	4	5
10. Assigns reading materials that explore approaches to international dispute resolution from a singular perspective.	1	2	3	4	5
11. Critiques the arguments expressed by military-connected students when debating with them.	1	2	3	4	5
12. Allows debate between MCS and non-military students to become acrimonious	1	2	3	4	5
13. Interrupts the student during conversations about military-intervention.	1	2	3	4	5
14. Allows civilian students to launch incendiary remarks toward MCS.	1	2	3	4	5
15. Responded to an MCS's comment about politics with a dismissive sigh.	1	2	3	4	5
16. Is quick to attack an MCS's ideas about military-intervention.	1	2	3	4	5
17. Shamed an MCS for participating in military-service when debating with them the merits of pacifism.	1	2	3	4	5
18. Did not question a student who critiqued their MCS peer's argument in support of military-intervention.	1	2	3	4	5
19 Affirms students who refer to a classmate's wartime experiences as "just their opinion"	1	2	3	4	5
20. Ignores when non-military students interrupt MCS while debating "hot topics."	1	2	3	4	5



## APPENDIX F: MCSFI-Q DRAFT TWO

21. Directs caustic remarks toward MCS while discussing hot topics.	1	2	3	4	5
22. Allows students to call service-people immoral for having participated in war making.	1	2	3	4	5
23. Likened U.S. troops to “torturers” while debating the merits of military intervention.	1	2	3	4	5

## APPENDIX G: MCSFI-Q DRAFT THREE

### Teaching Behaviors Inventory: Faculty Interaction with Military-Connected and Civilian Students

#### ***Directions:***

Teaching is a complex activity composed of many behaviors and expectations. Listed below are some behaviors related to college teaching. Some teaching behaviors may appear to be appropriate to some faculty members but not to others.

Using the response categories listed below, indicate your opinion on each behavior as you think it might ideally apply to a faculty member teaching a college course of about 40 enrolled students (civilian and MCS), whether or not you teach such a course yourself.

The response categories are as follows:

Military-Connected Students (MCS)

#### *Appropriateness*

#### *Definition*

- 1 = Appropriate
- 2 = Discretionary
- 3 = Mildly inappropriate/ ignore
- 4 = Inappropriate/ handle informally
- 5 = Very inappropriate/  
requires formal intervention

Students who currently or previously serve(d) in the U.S. military

*(Army, Navy, Marines, Coast Guard, ROTC, or National Guard).*

**APPENDIX G: MCSFI-Q DRAFT THREE**

<i>A student tells you about their classroom experience, wherein one of your colleagues:</i>	Appropriate/ encourage	Discretionary	Mildly inappropriate/ ignore	Inappropriate/ handle informally	Very inappropriate/ requires intervention
1. Embraces a narrow range of perspectives concerning topics related to military-policy.	1	2	3	4	5
2. Makes decisions about perspectives covered in class with a preference toward diplomacy.	1	2	3	4	5
3. Routinely praises particular students who dominate discussion, specifically those who side with the professor's approach to foreign policy.	1	2	3	4	5
4. Questions military connected students as to whether they participated in an unjust war.	1	2	3	4	5
5. Regularly dismisses student's justifications for military intervention while simultaneously promoting peaceful approaches toward diplomacy.	1	2	3	4	5

### APPENDIX G: MCSFI-Q DRAFT THREE

6. Expresses disapproval when students base their arguments on personal experience rather than in reflection of course material	1	2	3	4	5
7. Was unwilling to engage with an MCS who articulated an argument concerning military-policy that opposed their own view.	1	2	3	4	5
8. Occasionally pits students against one another by praising only those students who agree with the professor's perspectives.	1	2	3	4	5
9. Tells students at the start of the course, "the only way you should think about the topics we cover in this course is as an advocate of peace"	1	2	3	4	5
10. Regularly critiques the way military-connected students express their ideas about foreign policy.	1	2	3	4	5
11. Praises students who are quick to attack alternative perspectives.	1	2	3	4	5
12. Routinely interrupts military-connected students, in particular, during conversations about current global problems.	1	2	3	4	5
13. Does not design course with prevention of incivility between civilian and MCS in mind.	1	2	3	4	5
14. Oftentimes responds with a dismissive sigh to military-connected students who struggle to reexamine what they believe about politics through a new lens.	1	2	3	4	5
15. Shut down a military-connected student who was trying to contribute to discussion.	1	2	3	4	5
16. Wondered aloud 'why Michael [a military-connected student] would ever agree to participate in warfare'	1	2	3	4	5

### APPENDIX G: MCSFI-Q DRAFT THREE

17. Allows civilian students to critique their MCS classmate’s arguments when discussing the complexities of military-intervention.	1	2	3	4	5
18. Occasionally echoes students who say their military-connected classmate’s ideas are ‘typical of a rigid thinker.’	1	2	3	4	5
19. Does not intervene when a military-connected student is regularly interrupted	1	2	3	4	5
20. Occasionally says to military-connected students, “looks like you’re having a tough time thinking for yourself.”	1	2	3	4	5
21. Affirmed a student who called a classmate immoral for having participated in warfare.	1	2	3	4	5
22. Sometimes refers to U.S. troops as “human rights violators” in class.	1	2	3	4	5
23. Excoriated a student as a war criminal during an exchange of ideas with an MCS focused on military-policy.	1	2	3	4	5
24. Routinely groups students by military-status when discussing the pros and cons of military-intervention.	1	2	3	4	5