Variation among Academic Disciplines: An Update on Analytical Frameworks and Research

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> **Abstract:** *As the number of subjects taught at American colleges and universities has continued to increase, many scholars have examined how the academic practices and experiences of faculty differ across scholarly disciplines. Since the publication of Braxton and Hargens' 1996 book chapter, however, this research has not been comprehensively reviewed. This paper examines research on the impact of academic disciplines on college and university faculty published after 1996. The findings of this review suggest that while there is much that is currently known about differences among academic disciplines, there remains a need for increased scholarship in this area.*

Scholarly research on the professoriate has yielded significant evidence that two factors compose the primary means by which differences among American academics are created and reinforced (Clark, 1997; Light, 1974). The first, institutional type, is a manifestation of America's inordinately large, uniquely competitive system of higher education (Clark, 1997). American faculty are dispersed among over 5,000 institutions of higher education. Some are public and some are private, some are research universities, while others are liberal arts colleges, and many are for-profit colleges while many more are non-profit institutions. Institutional diversity is also evident by categories such as Historically Black College and Universities, women's colleges, fundamentalist colleges, and catholic colleges (Clark, 1997).

Of no less importance in the differentiation within the academic profession are academic disciplines. Before the beginning of the 1850s,

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most American institutions of higher learning offered classes in only a few basic academic disciplines such as mathematics, classical languages, and philosophy (Braxton & Hargens, 1996). Today, institutions such as the University of Texas at Austin and the University of California at Los Angeles (UCLA) offer courses in over 170 fields of study including pre-athletic training, interior design, and dance.

Differences in the academic profession attributable to differences among academic disciplines are the focus of this article. As the number of subjects taught at American colleges and universities has continued to increase, many scholars have examined how the academic practices and the experiences of faculty differ across scholarly disciplines. One of the first comprehensive surveys of this research was performed by John M. Braxton and Lowell L. Hargens in their 1996 book chapter titled *Variation among Academic Disciplines: Analytical Frameworks and Research*. In this chapter, Braxton and Hargens reviewed a diverse body of research on both the development of frameworks for classifying academic disciplines and the observed differences between various academic fields in such areas as journal acceptance rates, research productivity, and faculty beliefs about general education requirements. The findings of this review lead Braxton and Hargens to conclude that "the differences among academic disciplines are profound and extensive" (Braxton & Hargens, 1996, p. 35). Since the publication of this book chapter, however, many additional studies have examined variation among academic disciplines. This proliferation of new research has created a need to update the work of Braxton and Hargens.

In this paper, I summarize research published after 1996 which examines variation in academic disciplines. I begin by reviewing research on the conceptualization of academic disciplines in an attempt to uncover whether new frameworks for studying differences in academic disciplines have developed in the late 1990s and early 2000s. The second section of this paper reviews recent empirical assessments of academic disciplines. This section reviews the findings of studies published after 1996 which have examined disciplinary differences in areas such as teaching methodologies, disciplinary structure, and the experiences of scholars. The paper concludes with a summary of the findings and recommendations for future research on academic disciplines.

Recent Frameworks for Classifying Academic Disciplines

Of the eleven academic discipline classification schemes detailed by Braxton and Hargens (1996), five were found to have received the most empirical attention: the Hagstrom (1964) model based on the idea of disciplinary consensus, the Hargens (1975) model based on normative and functional integration, the Zuckerman and Merton model based on disciplinary codification, the Lodahl and Gordon (1972) model based on levels of paradigm development, and the Biglan (1973) model based on the hard/soft, pure/applied, and life/non-life distinction (Braxton & Hargens, 1996). Each of these classification schemes, all of which developed outside of the higher education research community, is based upon the notion that individual fields of study have different levels of paradigmatic development based on their level of consensus. High paradigmatic fields have high levels of agreement among their practitioners with regard to issues such as appropriate research topics and methods (Braxton & Hargens, 1996). Low paradigmatic fields, on the other hand, exhibit less agreement with regard to the appropriate research questions for their field and even less agreement on the appropriate methodology for addressing these questions (Alise, 2007; Braxton & Hargens, 1996; Kuhn, 1962, 1970).

Since 1996, only one other significant attempt to classify academic disciplines has been introduced within the higher education community. This classification attempt, however, is not a "new" typology but rather a reintroduction an earlier schema which had not yet found its way into the higher education literature at the time of the Braxton and Hargens (1996) study. This classification system was introduced by John Smart and his colleagues and is based on the Holland Theory of Occupational Classification (Smart, Feldman & Ethington, 2000). The Holland theory is a personality-based career development framework which proposes that individuals at the time of their occupational choice have various skills and abilities due to their inherited characteristics and their environmental circumstances. These skills and abilities can be used to classify individuals into six personality types: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional. Individuals of different personality types are better equipped to deal with certain occupational environments (Holland, 1973, 1997). As individuals begin the process of choosing an occupation, Holland proposes that he/she will search out

those occupational environments which best fit with their personality. For example, an individual who is very practically-oriented, enjoys physical, hands-on activities, and works well with tools (i.e., the realistic personality type) will seek occupations where these skills are valuable, such as farmer or carpenter. On the other hand, an individual who is very creative, individualistic, and enjoys somewhat chaotic environments (i.e., the artistic personality type) is likely to seek occupations such as musician, actor, or interior designer.

Smart et al. (2000) used Holland's framework as the foundation for their classification of academic disciplines. They did this by classifying various academic disciplines using the *Educational Opportunities Finder* (Rosen, Holmberg & Holland, 1994). Table 1 provides the results of this classification.

Table 1
Academic Disciplines by Holland Types

Type	Academic Disciplines
Investigative	Biology and life sciences, economics, geography, math/statistics, physical sciences, finance, aeronautical engineering, civil engineering, chemical engineering, astronomy, earth science, pharmacy, anthropology, ethnic studies, geography, and sociology
Artistic	Architecture, fine arts (art, drama, music), foreign languages, English, music, speech, theater, and environmental design
Social	Ethnic studies, home economics, humanities (history, philosophy, religion, rhetoric), library science, physical and health education, psychology, social sciences (anthropology, political science, social work), education
Enterprising	Business, communications, computer/information science, law, public affairs, journalism, marketing, industrial engineering,

Source: (Holland, 1973, 1997); Smart et al. (2000)

One of the first things one notices about this chart is the fact that two of the original categories of the Holland classification scheme are missing. This is because Smart et al. excluded the realistic and conventional categories due to the fact that very few college students and faculty fit into these categories. Smart et al. also postulate that many academic disciplines have a primary category and a secondary category. A field such as ethnic studies, for example is primarily a social field, but also has qualities of an investigative field.

Recent Findings Regarding Disciplinary Differences

Though there has only been one major classification scheme introduced since 1996, research on the differences among academic disciplines has been plentiful. The vast majority of this work has used either the Smart at al. (2000) theory of disciplinary classification or the Biglan (1973) model of disciplinary classification. This section will review the findings of this research.

Research using the Holland Classification Scheme

The Socialization Hypothesis

Research on college faculty using the Holland classification scheme is based primarily on the idea that "faculty create academic environments inclined to require, reinforce, and reward the distinctive patterns of abilities and interests of students in a manner consistent with Holland's theory" (Smart et al. 2000, p. 96). This socialization hypothesis has been the basis for several recent studies on the professoriate. Using an analysis of variance methodology on data from the 1986 and 1990 surveys of the Cooperative Institutional Research Program out of UCLA, Smart et al. (2000) found that "faculty members in different clusters of academic disciplines create distinctly different academic environments as a consequence of their preference for alternative goals for undergraduate education, their emphasis on alternative teaching goals and student competencies in their respective classes, and their reliance on different approaches to classroom instruction and ways of interacting with students inside and outside their classes" (p. 238). Specifically, faculty in each disciplinary category create academic environments in a manner consistent with Holland's theory. Faculty in artistic and investigative environments are more successful at socializing their students to the goals and ideals of their academic disciplines in comparison to faculty in

social and enterprising fields (Smart et al., 2000). These findings lead Smart et al. (2000) to conclude that the socialization assumption of the Holland theory was supported.

Smart and Thompson (2001) provide further evidence in support of the socialization assumption of the Holland classification scheme. These researchers, using a 4 x 2 MANOVA methodology on data collected from 587 full-time faculty at a single doctorial-granting university, examined the relative emphasis faculty members in Investigative, Artistic, Social, and Enterprising academic environments placed on the development of alternative student competencies in their classes. Their findings showed that faculty in each of the four academic environments reinforced and rewarded students for the development of skills viewed as ideal for their respective academic environment while not emphasizing the development of other skills deemed not necessary for their academic discipline. For example, faculty in Investigative environments placed greater emphasis on students' development of such investigative competencies as analytical abilities, mathematical skills, and scientific abilities while at the same providing few rewards for students' acquisition of "enterprising" competencies such as leadership and managerial skills, and persuasive abilities.

This discipline-specific socialization process has also been found to take place with faculty at the graduate level. Using data from interviews with 24 faculty members with graduate student teaching responsibilities, Thompson (2003) explored professional socialization processes and methods in each of the four disciplinary fields described by Holland (2000).The findings of this study suggested that through interactions with faculty members "graduate students are encouraged, reinforced, and rewarded for their display of attributes salient to the academic discipline, and thus academic environment" (Thompson, 2003, p. 428). Thompson suggest that this occurs through environmental demands which stimulate graduate students to perform the preferred activities of the academic environment, encourage students to see themselves in ways consistent with the preferred values of the academic environment, and reward students for the display of the preferred values of the academic environment (Thompson, 2003). These findings lead Thompson to agree with Smart et al. (2000) that Holland's typology is a salient method for understanding interdisciplinary differences.

Teaching beliefs and practices. The Holland classification scheme has also been used to examine differences in the teaching practices of faculty. Many of these studies have found evidence that faculty in different academic disciplines employ significantly different educational practices in the classroom (Umbach, 2006). Smart and Mach (2007) examined disciplinary differences in teaching practices by examining how faculty in various disciplines designed and structured their undergraduate courses. Using MANOVA on data from over 14,000 faculty members, the researchers were able to find substantial differences in the manner by which faculty in each of the four academic environments structured and designed courses. For example, faculty in Investigative fields placed greater emphasis on "analyzing data" as opposed to faculty in the three other disciplinary categories who placed greater emphasis on "understanding people". In addition, faculty in Enterprising academic disciples tended to structure their courses to emphasis student acquisition of "career and communication skills" which is different than faculty in the other three disciplines who tended to emphasis students' ability to understand themselves and people from other backgrounds (Smart & Umbach, 2007).

Using hierarchical linear modeling (HLM) on a sample of over 13,000 faculty at 134 colleges and universities, Mach (2006) also found evidence of differences in teaching practices among faculty in different academic disciplines. Specifically, Umbach found that faculty in Realistic fields are more likely than faculty in other fields to use active and collaborative techniques in their instruction. Faculty in Realistic fields were significantly more likely to emphasize higher order cognitive activities in their classes in comparison to faculty in other fields. Finally, Umbach found that faculty in Social disciplines used diversity-related activities in their classes more than faculty in other disciplines.

More recently, Smart et al. (2009) examined the extent to which faculty in academic environments based on the Holland classification emphasized different student learning outcomes in their classrooms. This study found that faculty in different academic fields emphasize different student learning outcomes. For example, the study found that faculty in Investigative environments place a much stronger emphasis on analyzing quantitative problems in comparison to their colleagues in the three other environments.

Departmental functioning and leadership. A different aspect of academic disciplinary differences was studied by Hearn and Anderson (2002) in their examination of departmental conflicts over promotion and tenure. Using the Holland classification typology, they were able to find evidence that faculty disputes with regard to promotion and tenure are somewhat a function of the academic environment. With regard to departmental tenure votes, Hearn and Anderson found that social departments had the most very split votes with a rate of 20%. Realistic disciplines, with only a 6% rate, had the lowest number of very split tenure decisions while investigative disciplines had a very split vote rate of 9%. These findings led the researchers to conclude that the Smart et al. classification typology offers useful insight into variations in departmental functioning.

Biglan (1973) Classification Scheme

Though the Smart et al. (2000) typology has been a popular theoretical foundation for studying academic differences, the Biglan(1973) model has been the most used classification scheme in examining differences among academic disciplines since 1996. The Biglan classification scheme, as mentioned earlier, is based on the idea that academic disciplines vary in their level of consensus. Using multidimensional scaling analysis in 1973, Biglan found that faculty similarities with regard to various attitudes and behaviors could be summarized along three dimensions; the hard/soft dimension, the applied/pure dimension, and the life/nonlife dimension. The strongest of these dimensions, the hard/soft dimension, is based on the level of paradigmatic development within a field. Disciplines with high paradigmatic development such as chemistry, physics, and engineering are classified as hard disciplines while disciplines with lower levels of paradigmatic development such as sociology, history, and educational administration are soft disciplines. The other dimensions, applied/pure and life/non life, are based on the applicability of the scholarship engaged in and the level to which scholarship in a given field involves the study of life.

Teaching beliefs and practices. Braxton, Olsen, and Simmons (1998) used the Biglan classification scheme to examine disciplinary differences in the use of Chickering and Gamson's (1991) seven principles of good practice in undergraduate education by faculty. Using hierarchical multiple regression, they found that faculty in soft fields are no more likely than faculty in hard fields to provide prompt feedback, encourage cooperation among students, and emphasis time on task. On the other hand, faculty in soft fields were found to be more likely to use active learning techniques, value diversity, have contact with students, and have higher expectations of students.

Colbeck (1998) also looked a differences in teaching practices among disciplines using the Biglan model. Using data on English and Physics professors from two public 4-year universities, Colbeck examined the extent to which faculty in soft and hard disciplines integrated research into other areas of their job. Her findings suggest that though faculty in both hard and soft sciences often attempted to integrate their research into other aspects of their work, it was often done somewhat differently. Faculty in physics were more likely to integrate their research into their training of students in how to conduct research. English faculty, however, were more likely to integrate research into their classroom teaching.

Barnes et al. (2001) conducted an extensive study on differences in faculty attitudes about teaching goals and grading among disciplines. Using both descriptive statistics and regression analysis, their findings suggested that faculty in hard fields were more likely than faculty in soft fields to see grades as serving a gate keeping function, a finding which the authors claimed was consistent with the fact that hard fields generally have a more codified body of knowledge that students are expected to master (Barnes et al., 2001). Faculty in hard fields were also more likely than faculty in soft fields to select "subject matter facts and principles" as their primary teaching goal. Faculty in soft fields were more likely to select "student development" as their primary teaching goal. These findings provide more support to the idea that faculty in different fields tend to have different beliefs about teaching and the usefulness of grading (Barnes et al., 2001).

Faculty beliefs about teaching and learning were also the focus of Nelson Laird, Schwartz, Kuh, and Shoup's (2006) study. In their study of faculty at 109 American colleges and universities, Nelson Laird et al. examined

disciplinary differences in faculty's emphasis on the use of deep learning[1]. The findings of the study indicate that faculty in soft disciplines such as education, the humanities, and the social sciences emphasized deep learning more than their colleagues in the hard disciplines.

Braxton and Boyer (1999) in their book titled *Faculty Misconduct in Collegiate Teaching* found that disciplinary differences may even have an impact on beliefs about faculty norms. While moral turpitude and lack of attention to course planning were inviolable norms across disciplines, five norms, including condescending negativism and disrespect for the needs of students and faculty, were found to differentiate by discipline.

Kidwell and Kidwell (2008) also found disciplinary differences to play a role in faculty ethical behavior. Using data from faculty in 89 business schools across the US, the authors found that faculty in quantitative (high paradigmatic) business disciplines were more likely to view activities such as showing controversial media and bringing up racially or sexually charged matters as less ethical than their counterparts in qualitative (low paradigmatic) business disciplines.

While each of the aforementioned studies provided evidence that academic disciplines have a strong influence on faculty beliefs and practices, there is some evidence questioning the relative strength of this influence. Lee (2007) used data from the Cooperative Institutional Research Program on over 4,000 academic departments to examine the relative impact of institutional culture and academic disciplines on departmental culture. Her findings offer support for the notion that academic disciplines are influential in faculty beliefs and behaviors while also providing evidence that institutional culture may have more of an impact on faculty ideals than academic disciplines. While Lee found that the academic discipline was a relative more powerful influence on a department's instrumental orientation and multicultural orientation, the overall departmental culture with regard to areas such as prestige

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[1] Deep learning is defined by the authors of this study as a personal commitment to understand the material which is reflected in using various strategies such as reading widely, combining a variety of resources, discussion ideas with others, reflecting on how individual pieces of information relate to larger constructs or patterns, and applying knowledge in real world situations (Biggs, 1989).

orientation, student centeredness, and collegiality were more influenced by institutional characteristics than academic disciplines. These findings call into question the relative strength of the influence of academic disciplines on faculty attitudes and behaviors.

Departmental Functioning and Leadership. Scholars have also used the Biglan model to examine disciplinary differences in areas other than faculty teaching. Hearn and Anderson (2002) found that faculty disputes over promotion and tenure were more likely to occur in soft fields as opposed to hard fields of study. In examining the impact of academic disciplines on faculty turnover, Xu (2008) found that female scholars in hard, pure, life fields of study had much stronger intentions on leaving their current position than female scholars in other fields. Asian-American faculty were found to have much stronger turnover potential than White faculty in hard, pure fields while African American faculty in hard, applied fields had stronger intention of leaving their current position than White faculty. Other interesting findings from this study include the fact that workload and productivity measures affected faculty turnover differently based on the disciplinary classification and that evaluation of environmental support from other faculty had a differential impact on intent to leave an institution (Xu, 2008). The findings of Xu, however, were somewhat contradictory to the work of Barnes, Agago, and Coombs (1998). In their study of faculty stress and its impact on intentions to leave academia, the researchers found that disciplinary differences only account for around two percent of the variance in faculty intention to leave. These findings led the researchers to conclude that disciplinary differences have little impact on faculty decisions to leave the profession (Barnes et al., 1998).

Del Fevero (2006) looked at the relationship between academic disciplines and the administrative behavior of academic deans. Her findings indicate that "the effects of discipline cannot be discounted in framing studies of administrators' perceptions of their leadership context and the behavior which necessarily flows from those perceptions" (p. 1). For example, Del Fevero found that a dean's association with an applied field of study had a positive influence on the dean's reported engagement in multi-frame behaviors. For deans in pure and high consensus (hard) fields, individual work and organizational contexts appeared to exert more homogeneous forces on the administrative work context. Also,

deans in pure fields reported relying more on trial-and-error than deans from applied fields.

Academic leadership was also the focus of Kekale's (1999) qualitative study of disciplinary differences among college and university faculty. In this paper, faculty from several academic fields were asked their preference with regard to academic leadership. In soft fields, scholars typically preferred more democratic and collegial academic leadership. Faculty in soft fields also tended to dislike "efficient, hard results-oriented" (p. 233) management due to their belief that it was unfair and undemocratic. Faculty in hard fields, however, preferred a leadership style where decisions were based on measurability and linear thinking. These findings were consistent with the characteristics typically associated with soft and hard academic disciplines.

Research practices employed. In his doctoral dissertation, Alise (2007) looked for differences between academic disciplines with regard to preferred research methods. His study provides evidence that pure fields are more likely to publish studies using quantitative methods than applied fields while applied fields are more likely to publish research using qualitative and mixed methods than pure fields.

Evidence from Non-American Institutions

Many scholars who have examined variation among academic disciplines have used non-American university settings for their study. Ballantyne, Bain, and Packer (1999) examined teaching practices at Australian universities and found some predictable variation in teaching styles based on academic disciplines. While the lecture method was the dominate mode of teaching across disciplines, Ballantyne et al. found evidence that faculty in soft disciplines spent most of their teaching time either lecturing or leading tutorials as compared to faculty in hard disciplines who often used "practical sessions" as their primary teaching technique. Ballantyne et al. also found that faculty in hard fields used computer based teaching techniques much more than faculty in soft fields while faculty in soft fields used cooperative/collaborative learning techniques more than faculty in hard fields. Neither of these are unexpected findings given what is known about the nature of hard and soft disciplines.

In a case study of four academic departments in one Finnish university, Ylijoki (2000) examined how academic disciplines effected the core beliefs, values, and norms of an academic department. The findings of this study indicate that differences in departmental professional orientation, reference point of study, professional aims, and primary activities can be understood on the basis of the discipline's position in Biglan's hard-soft and pure-applied paradigm. This study also found that these differences among disciplinary fields can have distinct meanings for students with regard to their beliefs about the virtues and vices of studying.

A third study that has used data on faculty at non-American universities is Norton et al.'s (2005) study of teaching beliefs and intentions. In this study of 697 faculty at four institutions of higher education in the United Kingdom, it was found that faculty in different disciplines significantly differed with regard to their teaching intentions. These differences, according to the authors of the study, are largely a result of differences in teachers' conceptions of teaching. For example, Norton et al. found that hard discipline faculty produced significantly lower scores than soft discipline faculty on belief in using interactive teaching techniques, but significantly higher scores than soft discipline faculty on belief in training students for jobs.

Conclusions and Recommendation

The goal of this study was to provide a comprehensive review of research addressing differences among academic disciplines with regard to the university faculty. Though efforts were made to ensure the comprehensiveness of this review through the examination of publication databases such as the Social Science Citation Index, ERIC, WilsonWeb, and Google Scholar, it is possible that not every piece of research written on differences among academic disciplines has been reviewed in this paper. It is believed, however, that this paper offers a complete overview of this research and provides the reader with a thorough synopsis of current knowledge in this area of inquiry.

One of the most interesting findings of this literature review is the fact that little effort appears to have been made to classify academic disciplines since the early efforts reviewed by Braxton and Hargens in 1996. A possible explanation of this could be the fact that the

classification schemes created prior to 1996 have been sufficiently accepted by the higher education community and scholars see no need to modify them. While the research presented here would appear to indicate that this is the case, further research addressing this question should be conducted.

A second finding of this research is similar to the conclusions of Braxton and Hargens (1996) in that there are substantial differences among academic disciplines in a number of areas with regard to the faculty. This review found disciplinary differences to have a substantial impact in areas such as faculty socialization, faculty teaching beliefs and activities, departmental functioning, preferred research practices, faculty satisfaction, and academic leadership styles. More specifically, faculty in soft disciples have been found to be more orientated towards teaching then faculty in hard fields as evidence by the fact that faculty in soft disciplines are more likely to employ principles of good practice in their classroom teaching, integrate research into classroom teaching, and emphasis deep learning in their classroom teaching. In addition, faculty in hard disciplines have fewer disputes with regard to tenure decisions, are more likely to change institutions, and prefer a leadership style where decisions were based on measurability and linear thinking. These results provide addition credence to the idea that any study of university faculty must take into account differences among academic disciplines.

These outcomes, however, should continue to be explored as part of a research agenda that studies various elements of academic disciplines. As noted in the work of Lee (2007) and Barnes et al. (1998), there is some question as to the relative influence of academic disciplines in relation to other mechanisms that could account for different behavior among faculty (such as institutional characteristics). This question should continue to be explored. In addition, Del Fevero's (2006) work on how academic disciplines influence the behavior of administrators should be expanded to focus on upper level administrators such as vice-chancellors/vice presidents and chancellors/presidents. Given the socialization assumption that permeates work on academic disciplines, it would be interesting to examine whether the behavior, beliefs, or ideals of upper level college and university management can be attributed in part to the type of educational environment a university executive was educated in.

Research on academic disciplines should also employ newer, more advanced research methodologies. In particular, it would be interesting if researchers began using hierarchical linear modeling (HLM) to determine what portion of attitudinal or behavior differences among faculty members can be attributed to the discipline and what proportion can be attributed to other factors such as institutional differences. As noted, it has been widely accepted in literature on faculty behavior that two very important factors in understanding and studying the college faculty are institutional type and discipline type. Very few studies, however, have employed a methodology which addressed both of these factors. HLM could be a way at doing this.

Future research on academic disciplines should also look to examine differences in faculty behavior within disciplines. For example, within the field of history there are several subfields such as American history, European history, African American history, etc. The assumption of most classification models is that faculty within these sub-disciplines have very similar values and attitudes. This, however, might not always be the case. Unfortunately, not enough research on intra-disciplinary differences has been conducted by the higher education community. These questions should become part of the research agenda on academic disciplines.

Overall, while there is much that we already know about differences among academic disciplines, there remains much we do not know about these differences. As a result, there remain several areas of inquiry for future scholars. This research should continue to focus on the outcomes mentioned earlier as well as incorporate newer outcomes yet to be studied. As researchers continue to grapple with these difficult questions, the higher education community will benefit from a more complete understanding of faculty and how variations in academic disciplines can account for substantial difference within academia.

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Contents. Â The third chapter exposes the specific analytical methodologies one may use to analyze the degree of reconciliation in a specific context. Â It is widely acknowledged within the academic community that the Bosnian War constitutes the most complex conflict since the end of the World War II. The match of ethnic, religious and socioeconomic cleavages turned the Bosnian conflict into a case study worth approaching from several disciplines such as anthropology, political science, international relations or even economy. Discipline Classification Systems. Numerous analytical frameworks are evident in the literature for classifying academic disciplines for purposes of comparative study. Four of these frameworks have drawn much of the focus of empirical work in the study of discipline differences. These are codification, level of paradigm development, level of consensus, and the Biglan Model. Each of these frameworks is reviewed in turn with relevant commentary on categorical variation determined through empirical study. Codification. Â "Variations among Academic Disciplines: Analytical Frameworks and Research." In Higher Education: Handbook of Theory and Research, Vol. XI, ed. Analytic Contents of Research Techniques Preface Acknowledgments About the Author. Part I. Preliminary Considerations 1. The Selection of a Research Approach 2. Review of the Literature 3. The Use of Theory 4. Writing Strategies and Ethical Considerations. Part II. Â In each chapter, I share examples drawn from varied disciplines. These examples are drawn from books, journal articles, dissertation proposals, and dissertations. Â These changes include an update on the characteristics of qualitative research, the types of designs available to the researcher, an extended discussion about the role of the researcher and reflexivity, and an improved section about the steps in qualitative data analysis and interpretation. The same research topic can be approached very differently within different theoretical frameworks: In literature, a scholar using postmodernist literary theory would analyze The Great Gatsby differently than a scholar using Marxist literary theory. In psychology, a behaviorist approach to depression would involve different methods and assumptions than a psychoanalytical approach. Â To investigate this problem, you have identified and plan to focus on the following problem statement, objective, and research questions: Problem: Many online customers do not return to make subsequent purchases. Objective: To increase customer loyalty. academic disciplines. scholarly communities who specify what to study, organize theories, used certain methods of investigation, share research, offer career paths for scholars. interdisciplines. Â four primary and overlapping drivers of interdisciplinary research and learning. the inherent complexity of nature and society, the desire to explore problems and questions that are not confined to a single discipline, the need to solve social problems, the need to produce revolutionary insights and generative technologies. p. 33. Â the final defining element of a discipline and its perspective - concerns how one conducts research, analyzes data or evidence, tests theories, and creates new knowledge, ways to obtain evidence of how some aspect of the natural or human world functions.

T. he dissertation is a labor of love requiring much work, sweat, and tears, as well as organization skills and extensive resources from others who are involved with the process. Selecting an appropriate theoretical framework for your dissertation research is an important and necessary process with which all doctoral students should engage. The selection of a theoretical framework requires a deep and thoughtful understanding of your problem, purpose, significance, and research questions. Research is an academic activity and as such the term should be used in a technical sense. According to Clifford Woody research comprises defining and redefining problems, formulating hypothesis or suggested solutions; collecting, organising and evaluating data; making deductions and reaching conclusions; and at last carefully testing the conclusions to determine whether they fit the formulating hypothesis. D. Slesinger and M. Stephenson in the Encyclopaedia of Social Sciences define research as "the manipulation of things, concepts or symbols for the purpose of generalising to extend, correct Variation among academic disciplines: Analytical frameworks and research. In J. C. Smart (Ed.), The handbook of theory and research in higher education (pp. 1–46). New York, NY: Agathon Press. Google Scholar. Bronstein, P., & Farnsworth, L. (1998). Gender differences in faculty experiences of interpersonal climate and processes for advancement. Research in Higher Education, 39, 557–585. Article Google Scholar. Bunton, S. A., & Corrice, A. M. (2011). Variation among academic disciplines: An update on analytical frameworks and research. Journal of the Professoriate, 6(1), 9–27. Google Scholar. PDF | On Jan 1, 1996, J.M. Braxton and others published Variation among academic disciplines: Analytical frameworks and research | Find, read and cite all the research you need on ResearchGate. Soft disciplines have lower levels of paradigmatic development, and practitioners in these disciplines exhibit less agreement regarding appropriate research questions for their field and appropriate methodologies for addressing these questions (Braxton and Hargens 1996). In contrast, hard disciplines have high paradigmatic development, and there are high levels of agreement among practitioners on issues such as appropriate research topics and methods (Braxton and Hargens 1996). academic disciplines. scholarly communities who specify what to study, organize theories, used certain methods of investigation, share research, offer career paths for scholars. interdisciplines. four primary and overlapping drivers of interdisciplinary research and learning. the inherent complexity of nature and society, the desire to explore problems and questions that are not confined to a single discipline, the need to solve social problems, the need to produce revolutionary insights and generative technologies. p. 33. the final defining element of a discipline and its perspective - concerns how one conducts research, analyzes data or evidence, tests theories, and creates new knowledge, ways to obtain evidence of how some aspect of the natural or human world functions.