

The Impact of Institutional Culture on Women Students in Hawaii

Carol A. Parker

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Dedication

This dissertation is dedicated to the courageous women in my family –

my mother Mary Adelaide Parker Braxton,

my grandmother Margaret Savilla Ammerman Parker,

my great grandmother Jane Adelaide Tracy Parker.

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So many people encouraged me along this journey in this dissertation and there are so many to thank. First, I want to thank Dr. Guilbert Hentschke, my doctoral dissertation chair, and my doctoral committee—Dr. Melora Sundt, Dr. Felicia Hunt, and for a short time Dr. Linda Hagedorn. Without their support, I could not have completed this dissertation.

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MAHALO NUI LOA

Carol A. Parker

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Abstract

Women in Hawai`i graduate at slightly higher rates than men at three of the four major institutions of higher education in Hawai`I (Institute for Women's Policy Research *The Status of Women in Hawaii 2006*) as compared to up to seventy-three percent of men at these same Hawaii institutions and compared to nearly eighty-five percent of women who enroll at women-only colleges.

With fewer than half of all enrolled women students at the four major Hawai`i institutions graduating it is important to understand the possible influences that may contribute to this problem -- one of which is observable institutional culture. Considerable research on the influence of elements of institutional culture has been done at most major institutions of higher education in the continental United States. However, little research is available at the four major institutions of higher education in Hawai`i on this topic as it relates to women students.

This dissertation attempts to recognize and assist in understanding elements of institutional culture on women's graduation rates at four multicultural coeducational higher education institutions in Hawai`i.

A study of elements of observable institutional culture, which appeared to affect higher education attainment (i.e. artifacts, values, basic assumptions and beliefs), was conducted through a review of literature in the fields of institutional culture, and higher education attainment in Hawai`i. A review and document analysis of publicly available data, publications, existing research analysis and secondary data analysis from sources that yield statistical data was undertaken to identify and explore observable elements of

institutional culture at four major institutions of higher education in Hawai'i that may be associated with women's graduation rates in Hawai'i.

A constant comparative methodology was applied to the study to determine answers to the following questions:

1. Using document analysis, what is revealed about elements of institutional culture (i.e., artifacts, values, basic assumptions and beliefs) at the four major institutions of higher education in Hawaii; University of Hawaii – Manoa, Hawaii Pacific University, Brigham Young University – Hawaii, and Chaminade University of Honolulu?
2. More specifically, does document analysis hold any promise for revealing an association between elements of institutional culture at the four major institutions of higher education and women's graduation and retention rates?

The study focused on identifying and understanding the effect of three elements of institutional culture on women's higher education attainment in Hawaii. These specific elements were defined by: (1) mission (symbols, values & beliefs), (2) role models and mentors, and (3) female faculty/female student ratio. The four major institutions of higher education in Hawaii were selected on the basis of (1) WASC (Western Association of Schools and Colleges) accreditation as a bachelor degree granting, not-for-profit, liberal arts university within the state of Hawaii; (2) a university recognized by the State of Hawaii Post Secondary Education Commission, and (3) NCES (National Center for Educational Statistics) data participation. The four universities studied included one public research university, one private liberal arts college, and two

religiously affiliated liberal arts colleges. All four universities had coeducational and multi-cultural student and faculty populations.

A profile was developed for each of the four universities using publicly available information and data from each university, WASC and NCES. The profile identified criteria by using a comparative approach to interpret the observable elements of institutional culture (i.e., artifacts, values, basic assumptions and beliefs) of these institutions. This was done by examining the observable artifacts (values, basic assumptions and beliefs) as found in their academic expectations; mission and history which support women; female role models; student body statistics; caring, supporting environment; opportunities for involvement; opportunities to learn about oneself; and actual educational attainment. The study will compare, contrast and connect the findings in order to show the differences between and similarities among the four major institutions of higher education in Hawaii, and to ascertain which elements of institutional culture may have the strongest impact on higher education attainment for their women students.

The results of this research should be interpreted with some caution, due to the small number of Hawaii institutions studied. Nevertheless, the results are thought provoking and suggest several possible associations that await support by additional studies.

First, the institutional culture at the four institutions differed in only the most general ways when it came to their stated mission and yet the difference in six-year graduation rates of women was substantial.

Second, a higher women students' enrollment rate by itself did not appear to be associated with higher graduation and retention rates.

Third, the ratio of women student to women faculty appeared to have a higher influence on graduation rates than the percentage of total woman faculty within the institution. It is surprising the degree to which this appears to be associated with women students' graduation rates at the four Hawaii institutions. There is much more to learn about the interaction of female students and female faculty within institutions that may explain this phenomenon.

This study was designed to present a better understanding of the possible effects that the elements of institutional culture at four major institutions of higher education in Hawaii have on women students' graduation and retention rates by finding one or two elements that may be more strongly associated with those same rates.

- The study identified one characteristic, namely women student to women faculty ratio that appeared to be more highly associated with women's graduation and retention rates than the several others that were explored.
- A second characteristic, which may be strongly associated, was that of a women's studies program or a women's center at the institution. The association of this characteristic was harder to observe since only one of the institutions had either a women's studies program or a women's center.

No other strong associations were observed among the four Hawaii institutions, and further, the influence of student socio-economic background and prior academic achievement on graduation and retention rates were not considered in this study. The

study explored the literature which identified the most prominent elements associated with women's higher education graduation rates and retention at institutions not located in Hawaii.

By identifying the elements of institutional culture, which may be associated with women's higher education attainment in Hawaii, and by revealing the negative and positive aspects these elements have on women's education, schools of higher education, may profit from this study. Knowing more about the institutional elements of Hawaii's colleges could assist Hawaii's institutions of higher education in serving their women students better. It is hoped that increased understanding of these elements could lead to the development of unique policies and procedures that would increase women's higher education attainment within Hawaii.

Chapter 1

In a world where education is becoming recognized as one of the most important factors in the elimination of poverty and in the successful progress of nations, research has shown that it is important to educate women (Gannicott & Avalos, 1994). Investing in women's education has a high return on investment in that educating one woman will educate additional women as they share their knowledge and skills (Cole, 2004; Earl 2001; Rizvi 2006). A meaningful education provides women with the knowledge and skills to succeed in their critical roles in family structures, child rearing, social networks, and household economics (Cleveland, 1998; David, 2000; Koehn, 2001). The more a nation empowers and educates its women, the more likely that nation will grow and prosper (Gannicott & Avalos, 1994).

Earning a bachelor's degree is associated with long-term cognitive, social, and economic benefits that are passed on to future generations (Kuh, Kinzie, Buckley, Bridges, Hayek 2007). The majority of adults need some form of higher education to live and work productively in a rapidly changing, information-based economy (Kuh, Kinzie, Buckley, Bridges, Hayek 2007). This is especially true for women. Higher education provides women with much needed knowledge and skills to succeed in an ever-changing, fast-paced, information-based world (David, 2000; Koehn, 2001). Studies indicate women's higher education attainment may be influenced by many factors related to the individual student, including educational background of parents, intellectual self confidence, socio-economic status, cultural heritage and personal educational experiences, as well as those related to elements of institutional culture (Kuh, Kinzie,

Buckley, Bridges, Hayek 2007; Hafner, 1985; Bayley, 1992; Astin, 1992; Pascarella & Terenzini, 1991; and Cushner, McClelland & Safford, 1992). Elements of institutional culture influence the mission of the institution as it relates to women; relationships with women role models; opportunities to observe the symbols, values and beliefs of the institution as they relate to women, a less than supportive or chilly climate, and a critical mass of women students and faculty (Whitt, 1992; Hall & Sandler, 1982; Tidball, 1980).

It is important for women enrolled in higher education to successfully attain graduation and the benefits that will follow. One influence on a woman's successful attainment of a higher education degree is the culture of the institution which she chooses to attend. As institutions work to ensure that their students have positive learning experiences, the role of the institution's own culture as a means to explain student behavior (Neff and Underwood, 1990) is often overlooked. Student accomplishments are impacted by the culture of the institutions they attend (Neff and Underwood, 1990; Nichols, 1995 and Dennis, 1998), as the learning environment created by the institutions' cultures has a strong impact on student confidence and academic performance (Nichols, 1995; Dennis, 1998).

Elements of Institutional Culture

Many definitions of institutional culture are used in literature, although exact definitions of culture are always changing. Kuh and Whitt (1988) define culture in higher education as:

the collective mutually shaping patterns of norms, values, practices, beliefs, and assumptions that guide the behavior of individuals and groups in an institute of higher education and provide a frame of reference within which to interpret the meanings of events and actions on and off campus (p. 127).

The essence of culture can be examined through three levels comprised of observable materials, artifacts, values, basic assumptions, and beliefs (Kuh & Whitt, 1988; Schein, 1985). This definition will be used for this study.

Culture provides the “central tendencies” which make it possible to generalize about the elements of an institution of higher education (Birnbaum, 1988). The culture of an institution is reflected in its mission, and in the makeup of its faculty and student populations.

Many colleges have similar guiding principles, yet each has a unique culture which produces its own power and influence on its students’ behaviors (Tierney, 1988). Within each institution’s makeup are individuals who may or may not believe all of the institution’s values, artifacts, or beliefs. Institutions of higher education are not homogenous entities; they are made up of many diverse groups (Martin & Siehl, 1983; Tierney, 1988; VanMaanen & Barley, 1984), such as student peer cultures, faculty cultures, and academic field cultures.

An institution’s published artifacts reflect its institutional culture and communicate powerful, important messages. These artifacts include its brochures, annual catalog, and annual report, which convey its mission statement, goals, and self descriptions. It is also reflected in the institution’s data, which gives a view of the institution that is based more on fact and less on conjecture.

There is little research available which specifically compares the elements of institutional culture between the major Hawaii institutions of higher education or their effect on Hawaiian women's education attainment. This study seeks to identify the degree which elements of institutional culture at major Hawaiian colleges and universities are associated with higher education attainment for female students in Hawaii. By studying institutions' cultures, women can make well-educated choices when planning their higher education, and choose an institution that best reflects their own culture.

Culture and Women in Higher Education

There are select factors that pertain to the culture of women attending higher education institutions. The way that culture affects these women students actually begins at home (Hafner, 1985; Pascarella & Terenzini, 1991; Bayley, 1992). The level of their fathers' and mothers' education predicts students' endeavors for higher education (Hafner, 1985). Those students whose parents attended college have a 75% higher chance of higher education attainment than those whose parents did not attend (Hafner, 1985). There is a significant difference in how this applies to male and female students. Females are less likely than males to be encouraged by their families to obtain higher levels of education. The educational background of the parents has an especially positive impact on African American women and other minorities (Pascarella & Terenzini, 1991). Women of these minorities of lower socio-economic status are more likely to use higher

education attainment as a way to improve their social status; consequently, they often achieve higher levels of education than their parents (Bayley, 1992) do.

There are additional factors that indicate differences between male and female students, including intellectual self-confidence (Astin, 1992). Men seem to have higher self-confidence in their ability to achieve a higher education (Hafner, 1985). When students were asked to rate their intellectual abilities in order to assess the intellectual self-confidence of students, Hafner (1985) found that women often underrate their academic abilities, while men often overrate theirs. Even in American schools, males tend to attribute their failures to external factors, such as a bad teacher or spending study time playing sports, while females are more likely to blame themselves, attributing failure to lack of intelligence or ability. When the boy does well, however, he will often attribute his success to his own personal traits (Cushner, McClelland and Safford, 1992, p. 32).

Educational theorists are also concerned with females' "hypothesized fear of success" (Betz & Fitzgerald, 1987; Teglasi, 1978; Weiner, 1979, p. 182). The original concept of "fear of success" is credited by Betz & Fitzgerald (1987) to Horner (1968) who describes it as the motive to avoid success. In women, this is ". . . characterized by a stable dispositional tendency to become anxious about achieving success, which tendency is thought to reduce achievement motivation and inhibit achievement-related behavior" (Betz & Fitzgerald, 1987, p. 153). These negative internal attitudes of many women may have been formed by observation in the home and during early years of education.

Observation and Women Role Models in Higher Education

It is critical to women students' retention and persistence that they have the opportunity to observe women who are in positions of authority who would be good role models (Goodman, 2002), such as faculty and administrators. People learn by observing. In a study by Maccoby and Jacklin, they state that although ". . . various theorists of child development have differing theoretical viewpoints; all stress the influence of imitation and identification" (Basow & Howe, 1980, p. 559; Maccoby & Jacklin, 1974). Bandura (1977) reports "most human behavior is learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed Models who possess engaging qualities are sought out . . . (p. 22)." Muss (1975) believes that a student's observation of her teacher may have a greater affect on the student than instructional methods. Using interviews with 135 female students from a wide range of educational institutions, Belenky, Clinchy, Goldberger, and Tarule (1986) found that these types of relationships were significant to cognitive development for females. They conclude females have a way of "connected knowing" (p. 117) based on their experiences and relational modes of thought (Belenky et al., 1986). Additionally, they found that females are especially influenced by relationships and are positively influenced by having professional female role models in their lives.

The issue of role modeling greatly effects achievement for women. There is significant evidence presented in studies of students and teachers in the United States, Canada, England, and Nigeria that indicates a positive relationship between same-sex role modeling and academic achievement (Johnson, 1973-74). Women students view

their professors as advisors and role models (Seymour & Hewitt, 1997). Those who support women's colleges stressed the importance of female faculty not only as successful, competent role models but also as sources of encouragement for women students (Colangelo, Dustin, & Foxley, 1979; Block, 1979). Female students are more concerned about being liked and respected by their teachers, more reliant on teachers for emotional support, and more easily influenced by their teachers, than male students (Colangelo, Dustin, & Foxley, 1979; Maccoby & Jacklin, 1974). Additional studies substantiate that same-sex role modeling is especially important for women students and that female role models reinforce achievement in female college students (Basow & Howe, 1980; Canes & Rosen, 1995; Douvan, 1976; Ehrenberg, 1995; Lentz, 1980; Solnick, 1995; Tidball, 1980; Finn, 1980). In general, females seem to value relationships and cooperation more than males. Female psychological and moral development places relationships and caring for others at the center of the developing female self (Gilligan, 1982).

Critical Mass of Women in Higher Education Institutions

Critical mass is defined in the *The Longman Dictionary of Contemporary English*, as "the amount of substance necessary for a reaction to begin" (p. 327); the term has been adapted within the field of education to indicate a level of representation that brings comfort or familiarity within the education environment (Laden & Hagedorn, 2000). The original idea of critical mass may have been conceived with a study of students in the natural sciences by M. Elizabeth Tidball (1986). By studying the graduation and

persistence patterns of women students attending several coeducational and women's colleges and universities over a period of more than 10 years, she found that the institutions that had more women (students and faculty) produce a greater proportion of women who become doctoral scientists (Tidball, 1986). Other studies indicate that having a large percentage of women in faculty and administrative positions may have a greater effect on women's persistence in a major than peer group proportionality (having a large percentage of female student peers) (Sax, 1996; Ivey, 1988; Meihnholdt & Murray, 1999; Sharpe & Sonnert, 1999). They also found that the number of women in faculty and administrative positions may have a greater effect on women's graduation and persistence in higher education than previously thought. When women students are able to observe women in positions of authority, they feel that they too can succeed in that field (WSSE, 2002).

It has been assumed that critical mass promotes retention and persistence by nurturing a "staying environment" for those students who align themselves with their campus's dominant culture (Myers & Caruso, 1992). As the number of students from previously excluded social minority groups' increase, it is surmised that they will foster inclusion of others from the same or similar backgrounds (Etzkowitz et al, 1994, pg. 53). On the other hand, when a critical mass is not achieved, as is often the case for minority students, marginalization is the most likely result (Etzkowitz et al, 1994). A lack of sensitivity and understanding may result without a critical mass of minority students and/or faculty (Myers & Caruso), along with feelings of "loneness" and isolation (Laden & Hagedorn, 2000). The dynamics between the minority and majority group changes as

a marginalized group approaches critical mass within an educational institution (Etzkowitz et al, 1994). “In the vernacular one often hears that there is power in numbers. This power, be it true or imagined, is the result of a critical mass of individuals” (Hagedorn et al, 2005).

A student’s individual characteristics – his or her self-esteem, self- concept, self-efficacy, and attitudes -- affect their higher education attainment through the their willingness and ability to associate with successful mentors and peers, and to major in ‘non-traditional’ courses of study that may require a more competitive attitude (Becker, 1984; Jones & Lamke, 1985; Zuckerman, 1988). There are additional elements of institutional culture -- such as faculty-student interaction, selectivity and size, classroom climate, and leadership opportunities -- that affect the higher education attainment of college students (Astin, 1993; Pascarella & Terenzini, 1992) by encouraging or discouraging students to interact with mentors (faculty and administration), recognizing the students achievements in the classroom, and encouraging the student to take on leadership roles. Studying how the results of these research studies may be associated with higher education attainment in Hawaii institutions of higher education will bring a greater understanding of the barriers that affect Hawaiian women’s higher education achievement.

Women Students’ Participation in Higher Education

Women are increasingly seeking higher education at higher rates, and make up the largest proportion of the student population (Shavlik, Touchton, & Pearson, 1989;

Zusman, 1999; National Commission on Educational Statistics 2004). In 2000, the enrollment of women in college increased from 7.5 million in 1990 to 8.6 million (National Commission on Educational Statistics (NCES) 2004, Enrollment by Degree Granting Institutions Report, Enrollment, by Sex of Student). Their study also indicated, using moderate projections, that the enrollment of women is expected to increase to 10.1 million by 2012, an increase of 18% from 2000. As a share of total college enrollment, women were 56% of all college students in 2000, compared with 55% in 1990, and are projected to be over 57% by 2012. In comparison, the enrollment of men in college increased from 6.3 million in 1990 to 6.5 million in 1992, before decreasing to 6.3 million in 1995. Thereafter, it increased to 6.7 million in 2000, and after experiencing another decrease in enrollment; moderate projections indicate enrollment of men is expected to increase to 7.5 million by 2012, a 12 percent increase from 2000. Men still earn the majority of doctoral degrees - 60% versus 40% for women (U.S. Department of Education, National Center for Education Statistics (NCES 2004); Integrated Postsecondary Education Data System (IPEDS), Fall 2002, Table C). Projections suggest that women will earn an increasing percentage of doctoral degrees in the future, but will not reach parity with men until long after 2012 (U.S. Department of Education, National Center for Education Statistics (NCES 2004); Integrated Postsecondary Education Data System (IPEDS), Fall 2002, Table C). Therefore, although increasing numbers of women participate in higher education, they still have not reached parity with men in higher degrees.

Table 1.1: Degrees Conferred by Title IV Degree-Granting Institutions & Percent Distribution

(By level of degree, control of institution, gender, and race/ethnicity: U.S., academic year 2001–02)

Control of institution, gender, and race/ethnicity	Total degrees		Associate's degrees		Bachelor's degrees	
	Number	Percent of total	Number	Percent of total	Number	Percent of total
All institutions	2,494,009	100.0	595,133	100.0	1,291,900	100.0
Control of institution						
Public	1,623,721	65.1	471,660	79.3	841,180	65.1
Private not-for-profit	751,019	30.1	45,761	7.7	424,322	32.8
Private for-profit	119,269	4.8	77,712	13.1	26,398	2.0
Gender						
Men	1,053,260	42.2	238,109	40.0	549,816	42.6
Women	1,440,749	57.8	357,024	60.0	742,084	57.4
Race/ethnicity						
White, non-Hispanic	1,696,327	68.0	401,196	67.4	914,660	70.8
Black, non-Hispanic	220,561	8.8	64,704	10.9	111,177	8.6
Hispanic	162,176	6.5	57,604	9.7	79,029	6.1
Asian/Pacific Islander	143,197	5.7	29,692	5.0	79,130	6.1
American Indian/Alaska Native	18,441	0.7	6,565	1.1	8,743	0.7
Race/ethnicity unknown	123,079	4.9	23,095	3.9	57,705	4.5
Nonresident alien	130,228	5.2	12,277	2.1	41,456	3.2
Control of institution, gender, and race/ethnicity	Master's degrees		Doctor's degrees		First-professional degrees ¹	
	Number	Percent of total	Number	Percent of total	Number	Percent of total
All institutions	482,118	100.0	44,160	100.0	80,698	100.0
Control of institution						
Public	249,820	51.8	27,622	62.5	33,439	41.4
Private not-for-profit	218,034	45.2	15,882	36.0	47,020	58.3
Private for-profit	14,264	3.0	656	1.5	239	0.3
Gender						
Men	199,120	41.3	23,708	53.7	42,507	52.7
Women	282,998	58.7	20,452	46.3	38,191	47.3
Race/ethnicity						
White, non-Hispanic	299,373	62.1	25,319	57.3	55,779	69.1
Black, non-Hispanic	36,906	7.7	2,268	5.1	5,506	6.8
Hispanic	20,450	4.2	1,352	3.1	3,741	4.6
Asian/Pacific Islander	23,015	4.8	2,184	4.9	9,176	11.4
American Indian/Alaska Native	2,405	0.5	175	0.4	553	0.7
Race/ethnicity unknown	36,286	7.5	1,933	4.4	4,060	5.0
Nonresident alien	63,683	13.2	10,929	24.7	1,883	2.3

¹First-professional degrees are awarded after completion of the academic requirements to begin practice in the following professions: chiropractic (D.C. or D.C.M.); dentistry (D.D.S. or D.M.D.); law (L.L.B. or J.D.); medicine (M.D.); optometry (O.D.); osteopathic medicine (D.O.); pharmacy (Pharm.D.); podiatry (D.P.M., D.P., or Pod.D.); theology (M.Div., M.H.L., B.D., or Ordination); or veterinary medicine (D.V.M.). NOTE: Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2002