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Factors Influencing Students' Likelihood of Pursuing Academic Dental Careers and Comparison by Under-Represented Minority Status and Gender

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Abstract: *Purpose/Objectives: Female and under-represented racial and ethnic minority (URM) dental faculty are disproportionate to the gender, racial, and ethnic composition of the nation, despite trainees' and patients' preference for concordant faculty and providers. Although dental students represent a pipeline of potential faculty, little is known about their interest in academia. The purpose of this study was to determine if interest in academia, and facilitators and barriers in pursuing academia differed by gender, race, and ethnicity among a sample of dental students at one dental school located in the southeastern United States.*
Methods: A survey was sent to 334 dental students at a single dental school in the southeastern region of the United States. Overall there was a 54% response rate, totaling 180 students who participated in the study.
Results: Gender and racial/ethnic background influence students' decisions to consider a career in academic dentistry, along with personal influence variables and beliefs about barriers to success in academic dentistry.
Conclusion: Growing future faculty may depend on finding ways to match students with faculty mentors of same racial and ethnic backgrounds, increasing opportunities to explore career options during dental school via reduced required curriculum hours. This alternative would allow for more opportunities for URM to address access to care issues, as well as serve vulnerable and low income populations. Future studies should survey URM and female students within all US/Canadian dental schools when they are admitted, and again, just prior to matriculation, to determine if efforts to increase the academic pipeline are effective.
Keywords: *Academics, Dental, Gender, Under-represented, Women*

I. Introduction

Diversifying the health workforce is an important consideration for meeting patient's preferences for concordant providers, increasing provider presence in medically and minority underserved populations,[1,2] in eliminating health disparities, and achieving the promise of the Affordable Healthcare Act of health equality for all. Historically, diversifying the health workforce has focused on the dental provider and less so on dental faculty member, despite faculty being responsible for the recruitment, education, and promotion of generations of dental providers. Additionally, trainee's preferences for concordant faculty role modeling and mentorship are well documented. Recruitment of a higher proportion of dental students from under-represented minorities into dental school may be predicted by the presence of diverse faculty.[1]

In terms of underrepresented racial and ethnic minority (URM), which includes Black, Hispanic, or Native-American/Pacific Islander, and females, the make-up of academic dentistry is markedly different from the general U.S. population. In 2014, females made up 51% of the US population and 37% of full-time dental faculty (Table 1). URM made up over 30% of the U.S. population, but approximately 14% of full-time dental faculty (Table 1).[2] Over the last three years, there has been a slight percentage increase in women faculty but a slight percentage decrease in URM faculty. Considering that dental students represent a large pool of prospective future faculty, the point of view of URM and female trainees, regarding facilitators and barriers to pursuing academia, is critical to diversifying academic dentistry.[3]

In the 2008 Dental School Graduate Survey, of the American Dental Education Association, 1.2% of graduating Black students, 1.5% of Hispanic students, and none of the Native American students chose teaching/research/administration as a career option.[4] Females were more likely than males to choose academia or research suggesting that females may be drawn to the profession given the opportunity to be self-employed or to work part-time in a multi-practitioner site. However, Froeschle and Sinkford found that females felt less welcome and supported than males in academia, suggesting that females may not view academic dentistry as a sustainable career.[5] McAndrews et al. reported that dental students were more likely to consider academia if

they had teaching experience during training, and if they perceived their faculty as role models and as having a manageable workload.[6] Little else is known, about when, why and how URM and women dental students make their decisions about academia.[7] Although there have been studies in medicine identifying factors related to likelihood of URM and women seeking academic positions, little is known about similar decision-making processes about URM and female dental students in the field of dentistry.[4,7] We adapted a modified version of Sanchez et al.'s study on medical student perspectives on academic careers, to explore the perspectives of diverse dental students at a particular Florida dental school.[3] Specifically, this study compared dental students perspectives, by gender and race/ethnicity, regarding academia by (1) year in dental school, anticipated debt, and satisfaction with opportunities to explore career options; (2) personal interests and values and; (3) beliefs about barriers to success in academic dentistry.

In dentistry, teaching experience has been associated with student likelihood of pursuing academic careers. Students who have teaching experiences during dental school are more likely to teach later, if only in a part time capacity.[6] Students desire to enter academia is also impacted by their perceptions of faculty role and faculty workload. Students may view faculty as being positive role models however, their desire to enter academics is tempered when they perceive junior faculty as overworked, undertrained and undervalued.[8] Another factor that deters URM from seeking faculty positions is the visible lack of URM faculty promotion.[9]

As a profession, many students find the practice of dentistry appealing because it affords the opportunity to run their own business. For women, who value having control of time, having a dental practice is particularly suitable.[10] Individuals who opt to be an employee rather than business owner are more likely to be interested in pursuing academic dentistry.[11]

Increasing the racial and ethnic diversity of dental faculty is critical to recruiting, retaining, and promoting racial and ethnic providers who can respond to the oral healthcare needs of an increasingly diverse dental population. Based on the 2004 census, it is expected that by 2050 the Hispanic population increase will be 103 million, Asian-Americans will be more than 33 million, and African-Americans will increase to 61 million. An expected increase in the population of racial and ethnic minorities shows that meeting health needs will become increasingly more vital.[3]

Another factor driving this need is health services research which shows that minority professionals are more likely to care for medically and minority underserved populations.[12] There is a severe shortage of URM dentists.[13] Given research findings that URM dentists are more likely to practice in underserved communities, increasing diversity in the dental work force is likely improve access to care for underserved populations. It might also reduce poor health dental outcomes for racial and ethnic minorities that translate to a loss of productivity, unnecessary absenteeism, and increased health care costs.[12] Although there have been studies in medicine identifying factors related to likelihood of URM and women seeking academic positions, little is known about similar decision-making processes about URM and female dental students in the field of dentistry.[4, 7]

II. Methods and Materials

A researcher-constructed survey (Tables 2A-2D), adapted from Sanchez et al[3] and the 2013 ADEA's Survey of Dental School Seniors [14], was sent via an encrypted email through SurveyMonkey to 334 first through fourth year dental students at a single southeastern U.S. dental school. Institutional review board approval was granted from the University (IRB #U-1134-2013).

One hundred and eighty students responded (response rate 54%) however, the analysis only consists of the 152 who reported being female or male. In terms of biologic sex, 87 (57%) were female and 65 (43%) were male. There were 68 (38%) white-, 37 (21%) Hispanic or Latino-, and 29 (16%) Asian- and 4% (7) Black self-identified respondents. Three respondents (2%) were "other minority" and 37 (21%) did not report race/ethnicity. With regard to year in dental school, 62 (41%) were first year, 28 (17%) second year, 33 (22%) third year and 31 (20%) fourth year students. All data were analyzed in SAS version 9.3 (Cary, N.C.). Chi-square or Fisher exact tests were used for statistical comparisons with the level of significance set at $p<0.05$.

III. Results

The frequency and percentage of respondents to each survey item appears in Tables 2A-2D. Factors associated with gender, race/ethnicity and year in school were compared to participant's intention to pursue careers in academic dentistry (see Table 3). No differences due to gender or year in school were associated with student intention to pursue a career in academic dentistry. Proportionally, 48% Asian and 43% Blacks indicated their intention to pursue a career in academic dentistry compared to 21% of the whites and 30% of the Hispanic ($p = 0.0543$).

To examine differences among factors that determined a desire to pursue an academic career in dentistry, we examined URM status and gender, and the variables of year in dental school, anticipated debt, and satisfaction with opportunities to explore career options. We had 30% of respondents identified as interested in

pursuing academic dentistry. The factors that contributed to their interest in pursuing academic dentistry were examined. Additionally, URM and gender differences on personal influence variables and beliefs about barriers to success in academic dentistry were explored by comparing URM (Black and Hispanic) to non-URM (White and Asian) and females by males. The results are reported in Table 4.

Several differences between URM and non-URM were observed. URM were significantly more satisfied or very satisfied with *opportunities to explore career options during dental school* compared to non-URM, p=.0494. Compared to non-URM, URM endorsed and were significantly more likely to agree or strongly agree with the statement that, *The ability to address access to care issues* influenced their desire to seek positions in academic dentistry, p= .0249. URM rated the statement *Community status and prestige* influenced their desire to seek academic dentistry as important/very important significantly more often than non-URM, p=.0178. URM rated the statement *Opportunity to serve vulnerable and low income populations as a reason to pursue academic dentistry* as important/very important significantly more often than non-URM, p =.0256. URM agreed the statement *Racial and ethnic minorities have a harder time succeeding in academic dentistry* significantly more often than non-URM, p<.0001. URM agreed with the statement that *There are barriers to advancement and professional development in academic dentistry that currently exists based on race and ethnicity* significantly more often than non-URM, p=.0304. Only one difference due to gender was found. Females agreed the statement that, *Women have a harder time succeeding in academic dentistry*, significantly more often than males, p=.0270.

IV. Discussion

As shown in this study, racial/ethnic background influenced students' decisions to consider careers in academic dentistry, though gender did not. However, personal influence variables such as perceptions of opportunities to explore career options during dental school, the ability to address access to care issues, community status and prestige, and the opportunity to serve vulnerable and low income populations, differed by racial/ethnic identity. Beliefs about barriers to success in academic dentistry also influence students desire to seek careers in academic dentistry, including the beliefs that racial and ethnic minorities have a harder time succeeding in academic dentistry, that there are barriers to advancement and professional development in academic dentistry based on race and ethnicity, and that women have a harder time succeeding in academic dentistry. Year in school and debt levels were not associated with URM or females' intention of seeking an academic dental career.

The former finding differs from Jeffe et al.[20] who while comparing medical students' career interest as a first year and then as a fourth year found that compared to males, females gain interest in academia, whereas URM, in comparison to Whites, lose interest.[15]

Similar to the findings reported by Jeffe et al.,[20] URM students in this study believe that women and racial minorities have a harder time experiencing success in the academy.[3] This finding is not surprising given Froeschle and Sinkford's observation that academic dentistry is not particularly hospitable to female entrants.[5] Study participants also believed that race and ethnicity were barriers to advancement in academic dentistry.

Participants indicated that an ability to serve vulnerable and low-income populations and address access to care issues, were influential factors in their decisions to pursue academic dentistry. Two-fifths of the participants were undecided about their career choice during dental school suggesting that this period of time and the type of learning experiences that students receive can be influential. For example, as McAndrew, Brunson and Kamboj observed, providing student opportunities to teach or conduct research could be influential in their decisions to pursue academic dentistry.[6] Sanchez and his colleagues concur. In their study, the use of focus groups revealed that students believed that a structured approach would enhance their awareness of academic career paths.[3] Students in their study reported that research training, clarification of the promotion process, mentorship, protected time for faculty to teach and conduct research, and an institutional infrastructure that supported diversity and inclusion would increase their likelihood of seeking academic careers.[3] In a previous study of fourth year dental students, Rupp et al. found that of the 561students surveyed, that students' knowledge of academic issues was low.[16] Respondents' intending to pursue a faculty career pursue were associated with gender, plans to specialize, knowledge of academic issues, having a parent in higher education, and personal teaching experience.[16] Also, only a little over half of the 55 dental schools who participated in a telephone interview reported having a course or program "designed to educate students about a career in dental education."[16] However, unlike the present study, Rupp et al. did not focus on females and, racial and ethnicity minority students' intentions to pursue academic dentistry.

While considering ways to increase enrollment among URM-identified students, Pendleton and Graham reported that URM-identified dentists are more likely to practice in under-served areas, according to dental schools with an intention to serve vulnerable populations.[17] This observation, along with the study findings, suggest that dental schools are advised to recruit and graduate URM.

The curriculum at the school where the study was conducted is quite prescribed. There is little opportunity for students to select elective course work or independent study in areas of their own interest. Thus, the structure of the dental school curricular program severely limits students' ability to conduct clinical research or experience teaching opportunities. If dental education is serious in its desire to grow future faculty, then finding ways to reduce required curriculum hours and creating opportunities for students to teach and/or conduct research will need to become feasible options.

V. Conclusion

Despite the relative lack of evidence, several initiatives have been undertaken to increase the number of URM and women dental faculty. In Florida, the University of Florida and Florida Atlantic Medical University developed a proposal to sponsor a Minority Education Program, although the proposal was later denied by the university system governing board. With the support of a HRSA grant, the University of Florida also provided a summer developmental program for the last five years with the aim of increasing URM to seek academic dental careers.[18]

Nationally, the American Dental Education Association (ADEA) and the National Institute of General Medical Sciences have provided tuition and other support for racial and ethnic minority students who sought entry into the dental workforce.[19] Over the past 20 years, ADEA has made improving minority representation in dental education a priority.[19] Since 2003, the Robert Wood Johnson Foundation changed its Summer Medical Education Program to a Summer Medical and Dental Education Program (SMDEP) with the aim of increasing the diversity among students entering dentistry. Nine stated including Texas, Kentucky, Nebraska, Washington, New Jersey, Connecticut, New York, Los Angeles, and Ohio sponsor these programs. From 2004 to 2010, the ADEA Minority Dental Faculty Development Program (MDFDP) awarded grants to support the direct costs for education of URM and low-income dentists to dental education institutions.[19] ADEA also supported mentoring programs that encouraged URM to seek out a career as faculty, but this does not extend to dental students.[19] This initiative resulted in a modest increase among URM-identified Dental Faculty.[19] In 2000-2001, URM were 8.1% of faculty, by 2007-2008, the total rose to 9.3%.[19] Initially this lack of significant increase was thought partially to be a consequence of student demographics.[9] However, over the last ten years, percentages of women and Asian-identified dental students have steadily increased suggesting that student demographics alone do not fully explain the lack of URM-identified and women faculty.[15]

The findings are limited to the school where this study was performed as well as the use of a convenience sample, self-report, and the low number of racial/ethnic students in the sample. The lack of a control group is another limitation of the study. Future studies should seek to expand the depth of inquiry by focusing data collection solely on URM-identified students or by trying to survey all dental students within all US/Canadian dental schools. Also, a more robust methodological approach would be to survey students at the time they receive their letter of acceptance and then again during the last semester of dental school. Such pre- and post-test comparisons would permit a deeper understanding of how dental school experiences influence students' career decisions across time rather than relying on students' perceptions at only a single point in time.

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Tables

Table 1: Race/Ethnicity and Gender of Full-Time Faculty in U.S. Dental Schools 2008-2014 by % (n)

	2008-2009	**2009-2010**	**2010-2011**	**2011-2012**	**2012-2013**	**2013-2014**
Black or African American						
Female	44% (107)	46.7% (99)	48.1% (103)	48.9% (114)	51.8% (128)	52% (125)
Male	56% (136)	53.3% (113)	51.9% (111)	51.1% (119)	48.2% (119)	48% (117)
Total Number	242	212	214	233	247	242
Hispanic or Latino						
Female	46% (179)	48.7% (148)	48.4% (185)	46.4% (211)	47.9% (202)	49% (209)
Male	54% (210)	51.3% (156)	51.6% (197)	53.6% (244)	52.1% (200)	51% (216)
Total Number	389	304	382	455	402	425
American Indian or Alaska Native						
Female	47.1% (8)	53.3% (8)	64.3% (9)	58.3% (7)	66.7% (8)	60% (9)
Male	52.9% (9)	46.7% (7)	35.7% (5)	41.7% (5)	33.3% (4)	40% (6)
Total Number	17	15	14	12	12	15
Native Hawaiian or Pacific Islander						
Female	NA	37.5% (3)	27.3% (3)	31.3% (5)	41.2% (7)	41% (7)
Male	NA	62.5% (5)	72.7% (8)	68.8% (11)	58.8% (10)	59% (10)
Total Number	NA	8	11	16	17	17
Asian[1]						
Female	35% (249)	38.7% (153)	42.7% (208)	43.1% (250)	41.8% (254)	42% (253)
Male	65% (463)	61.3% (242)	57.3% (279)	56.9% (330)	58.2% (354)	58% (352)
Total Number	712	395	487	580	608	605
White						
Female	30.9% (1147)	30.8% (1035)	31% (1070)	31.9%(1038)	32.6% (1055)	33%(1037)
Male	69.1% (2564)	69.2% (2324)	69% (2381)	68.1%(2217)	67.4% (2180)	67%(2076)
Total Number	3711	3359	3450	3255	3235	3113
Two or More Races						
Female	NA	17.9% (5)	13.3% (4)	31.6% (6)	31.3% (5)	30% (6)
Male	NA	82.1% (23)	86.7% (26)	68.4% (13)	68.8% (11)	70% (14)
Total	NA	28	30	19	16	20
Not Reported/Unknown						
Female	40.9% (36)	34.9% (130)	34.6% (125)	32.5% (49)	31.8% (93)	32% (96)
Male	59.1% (52)	63.2% (235)	63.2% (228)	67.5% (102)	68.2% (199)	68% (202)
Total Number	88	372	361	151	292	298
Nonresident Alien						
Female	NA	NA	NA	37.2% (48)	32.1% (61)	31% (70)
Male	NA	NA	NA	62.8% (81)	67.9% (121)	69% (159)
Total Number	NA	NA	NA	129	190	229
Total						
Female	33.4%(1,723)	33.7%(1,596)	34.5%(1,707)	35.6%(1,727)	36% (1,814)	37%(1,812)
Male	66.6%(3,437)	66.2%(3,107)	65.3%(3,232)	64.4%(3,123)	64% (3,225)	63%(3,152)
Total Number	5,160	4,693	4,949	4,850	5,039	4,964

[1] Asian includes Native Hawaiian and Pacific Islander for 2008-09.
NA: Not Available
Source: American Dental Education Association, Survey of Dental School Faculty, 2008-2014

Table 2A: Survey of Florida Dental Students Perceptions' of Academic Dental Careers

Respondent Characteristics	**%**	**N**
Gender		
Male	43%	65
Female	57%	87
Race/ethnicity		
Black	4%	7
White	38%	68
Hispanic	21%	37
Asian	16%	29
Other	2%	3
Declined to report	20%	36
Year in dental school		
Freshman	41%	62
Sophomore	17%	26
Junior	22%	33
Senior	20%	31
Anticipated total debt		
Less than $100,000	18%	27
$100,001-$150,000	10%	15
$150,001-$200,000	28%	42
More than $200,000	45%	68
Satisfaction with opportunities to explore career options during dental school		
Very dissatisfied		
Dissatisfied	5%	9
Neutral	11%	19
Satisfied	40%	72
Very Satisfied	33%	59
	12%	21
Do you plan to work in AD as a career?		
Definitely yes		
Probably yes	4%	7
Probably not	23%	41
Definitely not	57%	103
	16%	29
How do you define academic dentistry? (items endorsed)		
Working in a university of to develop teaching and increase the knowledge in the area of dentistry	77%	138
Interaction with and mentoring of dental student	54%	97
Providing leadership and service to help build the next generation of dentists	54%	98
Research involved in the production of new knowledge	42%	76
Indicate your ultimate career aspiration. (check all that apply)		
Faculty: Basic science		
Faculty: Clinical practice Faculty: Clinical teaching Faculty: Research	3%	6
State or Federal agency	23%	41
Dental or other health administration without practice	13%	24
Private practice	3%	6
	7%	12
	12%	22

Undecided	18% 34%	32 62
Are there any factors that make you interested in AD? (check all that apply)		
The intellectual stimulation of being part of the scientific process	39%	70
The ability to address access to care issues	34%	61
Being part of the decision making within the local and professional communities	20%	36
Loan and repayment opportunities		
Opportunity to be part of faculty practice	29%	53
Writing articles	15%	27
Designing and implementing research	4%	7
Teaching in didactic, clinical and/or laboratory setting	8%	14
Exploring new technologies and materials	39%	71
Opportunity to influence the future of dentistry	33%	60
Have a positive impact on your students	52%	93
Thrive on the politics involved with your advancement in AD	54%	98
Employee benefits	4%	7
Guaranteed income as a professor and clinical income	20%	36
	22%	40
Are there any factors that make you disinterested in AD?		
Can't make a decent living	8%	14
Limited individual freedom	12%	22
Writing articles	13%	24
Politics involved in academia	24%	44
Competing pressures from service work, teaching and research	9%	16
Difficulty of getting research grants	4%	8
Length and quality of training as a junior faculty	3%	6
Satisfaction with the time left or family and leisure	2%	3
Lack of geographic choice	10%	18
Dealing with unmotivated students	5%	9
Teaching in didactic, clinical and/or laboratory setting	2%	3
No Answer	7%	13

Table 2B: Responses from Students Intending to Pursue a Career in Academic Dentistry

	%	n
To what extent has educational debt influenced your decisions to pursue a career in AD?		
Completely	4%	8
Very much	19%	35
Moderately	31%	56
Only slightly	12%	22
Not at all	33%	59
When did you decide to pursue an AD career?		
Prior to dental school	31%	38
First year of dental school	30%	37
Second year of dental school	13%	16
Third year of dental school	15%	19
Fourth year of dental school	11%	13
10. Please indicate if your interest in pursuing a career in AD has:		
Decreased during dental school	33%	40
Stayed the same during your dental training	46%	56
Increased during dental school	22%	27
Please rank which areas you would like to concentrate your efforts in AD.		
Basic Science Research	34%	42
Clinical Research	43%	53
Clinical Practice	77%	95
Teaching	62%	76
Leadership/Administrative Work	28%	35
Mentoring	55%	68
Please indicate if you have participated in the following activities prior to or during dental school rate the following statements (check all that apply)	16%	29
Co-authored a published paper or scientific abstract	2%	3
Co-authored computer resource	6%	11
Co-authored other publication	2%	4
Acquired grant funding	46%	82
Participated in outreach activities	34%	62
Participated in teaching	28%	51
Participated in a institution (e.g., admission, education, student government, etc.) committee	51%	92
Participated in a health professional/specialty organization (e.g., ADA, ADEA, ASDA, HAD, SAID)	21%	38
Participated in other committee		
Other (please specify)		
If you pursue a career in AD, do you plan to work		
Full-time	32%	39
Part-time	68%	84

Table 2C: Responses from Students Intending to Pursue a Career in Academic Dentistry

	Very important % (n)	Important % (n)	Unimportant % (n)	Very Unimportant % (n)	Not Applicable % (n)
Please indicate how important each of the following personal influences was in developing your interest in pursuing AD as career					
Your family dentist	12%(15)	21%(26)	24%(30)	14%(17)	28%(35)
A family member, relative, or friend who is a faculty dentist	13%(16)	19%(23)	20%(24)	11%(13)	38%(47)
A family member, relative, or friend who is not a faculty dentist	9%(11)	24%(29)	22%(27)	13%(16)	33%(40)
Personal teaching experience	16%(19)	42%(51)	15%(18)	5%(6)	22%(27)
Awareness of workplace supply and trends in AD	7%(8)	33%(40)	21%(26)	10%(12)	30%(36)
A mentor/role model	21%(26)	52%(64)	11%(14)	3%(4)	12%(15)
Please indicate how important each of the following factors was in influencing your interest to pursue AD as career.					
Community status and prestige	9%(11)	30%(36)	32%(39)	18%(22)	11%(14)
Service to my own race/ethnic group	9%(11)	33%(40)	31%(38)	16%(19)	11%(14)
Opportunity to serve vulnerable and low income populations	21%(26)	50%(61)	15%(18)	7%(8)	8%(10)
Family commitments	13%(16)	43%(53)	19%(23)	9%(11)	16%(19)
Ability to perform research	5%(6)	28%(34)	34%(41)	23%(28)	9%(11)
Ability to teach	16%(19)	55%(67)	16%(19)	4%(5)	10%(12)

Table 2D: Responses from Students Intending to Pursue a Career in Academic Dentistry

	Strongly Agree % (n)	Agree % (n)	Neither Agree nor Disagree % (n)	Disagree % (n)	Strongly Disagree % (n)
Please state your level of agreement with the following statements					
Racial and ethnic minorities have a harder time succeeding in AD	7%(8)	22%(27)	31%(38)	24%(29)	17%(21)
Women have a harder time succeeding in AD	5%(6)	21%(26)	25%(31)	28%(35)	20%(25)
A career in AD will not allow me to have family	2%(3)	9%(11)	27%(33)	41%(50)	21%(26)
I am confident in my ability to secure grant funding.	7%(8)	18%(22)	45%(55)	24%(29)	7%(8)
There are numerous opportunities at my institution for me to develop teaching skills.	7%(9)	52%(63)	31%(38)	8%(10)	2%(2)
I have access to leadership development opportunities.	8%(10)	57%(69)	28%(34)	6%(7)	2%(2)
I do not have sufficient guidance to develop a publishable research project.	5%(6)	23%(30)	39%(48)	24%(30)	7%(9)
There are barriers to advancement and professional development in academic dentistry that currently exists based on race and ethnicity.	3%(4)	20%(24)	37%(45)	32%(39)	8%(10)
There are barriers to advancement and processional development in academic dentistry that currently exists based on gender.	4%(5)	18%(21)	38%(46)	33%(39)	8%(9)

Table 3: Factors Associated with Intention to Pursue Career in Academic Dentistry

Factor	**Intending to Pursue Career in AD % (n)**	**p-value**
Gender		.1678
Male	23%	
Female	33%	
Race/ethnicity		.0543*
Asian	48%	
Black	43%	
White	21%	
Hispanic	30%	
Other	50%	
Year in dental school		
Freshman	31%	.9224
Sophomore		
Junior	31%	
Senior		
	24%	
	29%	

* denotes statistical significance

Table 4. Comparison by URM Status (Black and Hispanic versus White and Asian) and Comparison by Gender on Factors Influencing Academic Dentistry

Factor	**URM[(1)]**	**Not URM[(2)]**	**p-value**	**Female**	**Male**	**p-value**
Anticipated total debt						
Less than $100,000	7%	23%	.0581	20%	15%	.7561
$100,001-$150,000	7%	13%		8%	12%	
$150,001-$200,000	34%	25%		29%	26%	
More than $200,000	52%	39%		44%	46%	
Satisfaction with opportunities to explore career options during dental school						
Very dissatisfied	11%	3%	.0494*	5%	6%	.9818
Dissatisfied	5%	13%		11%	9%	
Neutral	30%	43%		38%	40%	
Satisfied	36%	33%		33%	32%	
Very Satisfied	18%	8%		13%	12%	
The intellectual stimulation of being part of the scientific process						
Not endorsed	55%	67%	.1446	62%	63%	.8989
Endorsed	45%	33%		34%	37%	
The ability to address access to care issues						
Not endorsed	55%	74%	.0249*	63%	74%	.1655
Endorsed	45%	26%		34%	26%	
Teaching in didactic, clinical and/or laboratory setting						
Not endorsed	64%	54%	.2705	54%	65%	.1897
Endorsed	36%	46%		46%	35%	
Exploring new technologies and materials						
Not endorsed	70%	66%	.6276	66%	71%	.4931
Endorsed	30%	34%		34%	29%	
Opportunity to influence the future of dentistry						
Not endorsed	45%	44%	.8908	43%	54%	.1668
Endorsed	55%	56%		57%	46%	
Have a positive impact on your students						
Not endorsed	43%	44%	.9095	41%	49%	.3355
Endorsed	57%	56%		59%	51%	
Personal teaching experience						
Unimportant/Not Applicable	50%	37%	.1866	41%	44%	.6939
Very Important/Important	50%	63%		59%	56%	
Awareness of workplace supply and trends in AD	58%	62%	.6615	63%	57%	.5657

Unimportant/Not Applicable Very Important/Important	42%	38%		37%	43%	
A mentor/role model Unimportant/Not Applicable Very Important/Important	30% 70%	24% 76%	.5150	28% 72%	23% 77%	.5744
Community status and prestige Unimportant/Not Applicable Very Important/Important	47% 53%	70% 30%	.0178*	65% 35%	55% 45%	.2687
Opportunity to serve vulnerable and low income populations Unimportant/Not Applicable Very Important/Important	16% 84%	36% 64%	.0256*	26% 74%	34% 66%	.3601
Racial and ethnic minorities have a harder time succeeding in AD Disagree Agree	47% 53%	83% 17%	<.0001*	68% 32%	77% 23%	.3289
Women have a harder time succeeding in AD Disagree Agree	63% 37%	77% 23%	.1106	67% 33%	85% 15%	.0270*
There are barriers to advancement and professional development in academic dentistry that currently exists based on race and ethnicity Disagree Agree	66% 34%	84% 16%	.0304*	77% 23%	77% 23%	.9249
There are barriers to advancement and processional development in academic dentistry that currently exists based on gender Disagree Agree	68% 32%	82% 18%	.0838	78% 22%	78% 22%	.9879

(1) Black or Hispanic (2) White or Asian

* denotes statistical significance