

# **Virginia Tech**

## **Graduate Student Climate Survey Report**

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# Introduction

Virginia Tech (VT) is dedicated to providing an inclusive and affirming environment by creating a climate of respect, civility, and understanding as outlined in the [VT Principles of Community](#). To assess the climate of inclusion among graduate students and to inform efforts to turn the *Principles of Community* into practice, this report describes and analyzes results of the 2016 VT Graduate Student Climate Survey. Administered by the Graduate School every three years, the VT Graduate Student Climate Survey offers a snapshot of student experiences of inclusion across dimensions of diversity including but not limited to race, ethnicity, gender, veteran status, ability, and sexual orientation. The Graduate Student Climate Survey provides a venue for anonymous graduate student feedback regarding campus and department climate, advising, mentoring, and student support; as well as for sharing experiences on the journey through graduate education, both in and out of the classroom.

Virginia Tech graduate students represent a community of communities.<sup>1</sup> The Virginia Tech Graduate School encompasses nearly 7,000 graduate students enrolled in 150 graduate degree programs across seven campuses. VT graduate students are citizens of more than 90 countries, representing diverse ages, genders, languages, races and ethnicities, religious traditions, abilities, and aspirations. This report creates a resource for reflection among members of the VT graduate community – students, administrators, and faculty – aiming to nurture a climate of inclusion. The report’s co-authors include students, faculty, and administrators collaborating across departments and campuses, guided by VT’s *Principles of Community* and by the Association of American Colleges and Universities (AACU 2015), which holds diversity and equity are fundamental goals of higher education and essential to democracy.<sup>2</sup>

The 2016 Graduate Student Climate Survey updates and revises the 2013 Graduate Student Survey, which has served as a vital resource for community members (Beane, Schnitzer, Fang, Johnson 2014). Results of 2013 survey led to improvements in services for students with disabilities, enhanced resources for students with children, and inspired the formation of a group for graduate students over 30-years-of-age. The 2013 survey also highlighted the sources of stress experienced by members of the graduate community, including financial strain, which have informs the discussion of resources and funding structure in the development of the university strategic plan, *Beyond Boundaries*. In developing the 2016 survey, members of the research team reviewed, refined, and shortened the survey instrument. New questions about department-level experiences and about the experiences of traditionally marginalized identities were added. For the first time, the 2016 survey also reached out to an expanded sample population by including graduate students outside of Blacksburg. The 2016 Graduate Student Climate Survey reached a larger, more inclusive student population.

The results of the survey include a need a for greater attention to the graduate community who identify as LGBTQ and demand for increased training for faculty who advise graduate students. In general, the findings indicate a mostly agreeable sense of academic and social support. The 18-20% of non agreeable

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<sup>1</sup> A recent university-wide survey concluded, “There is no single, uniformly perceived climate for diversity at Virginia Tech” (Hutchison & Hyer, 2000, v)

<sup>2</sup> For only when a campus is truly inclusive, can it make a claim to excellence” (Haring-Smith, 2012, 2).

responses will be further analyzed by colleges and departments to determine action plans for improvement.

## Virginia Tech Principles of Community

We adopt and practice the following principles as fundamental to our on-going efforts to increase access and inclusion and to create a community that nurtures learning and growth for all of its members:

- *We affirm* the inherent dignity and value of every person and strive to maintain a climate for work and learning based on mutual respect and understanding.
- *We affirm* the right of each person to express thoughts and opinions freely. We encourage open expression within a climate of civility, sensitivity, and mutual respect.
- *We affirm* the value of human diversity because it enriches our lives and the University. We acknowledge and respect our differences while affirming our common humanity.
- *We reject* all forms of prejudice and discrimination, including those based on age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, and veteran status. We take individual and collective responsibility for helping to eliminate bias and discrimination and for increasing our own understanding of these issues through education, training, and interaction with others.
- *We pledge* our collective commitment to these principles in the spirit of the Virginia Tech motto of *Ut Prosim (That I May Serve)*.

[VT Principles of Community](#)

## Survey Methodology

The 2016 Graduate Student Climate Survey was offered to all graduate students enrolled in the spring term. On March 4, 2016, students were invited via email to participate in the web-based survey and were sent two reminders before the April 15 deadline. We worked with a third-party vendor, Campus Labs that provided an anonymous submission process and tracked completion of the survey. Specifically, the director for the Office of Recruitment and Diversity Initiatives in the Graduate School sent the initial call to participate and two subsequent reminders on March 11 and April 1. Data were stored with the Campus Labs system.

Participants were anonymous, however, confidentiality could not be guaranteed as students could potentially be identified based on self-reported demographics. The 2016 survey builds on the 2013 survey, improving in four important ways. First, the survey instrument was reviewed, refined, and shortened (from 98 prompts to 71). Members of the research team undertook a deliberative, question-by-question review of the 2013 survey instrument with an eye toward improving question clarity and salience. Second, the 2016 survey reached out to an expanded population (from 4,763 to 6,167) by including graduate students outside of the main Blacksburg campus, which more than doubled the number of survey respondents (from 324 to 1094). Third, the expanded population resulted in more responses and a higher response rate. Lastly, the revised survey included questions about perceptions of inclusion and diversity, where students were prompted to reflect on how persons with marginalized identities are treated on campus in addition to questions about how the respondent experienced diversity and inclusion.

The emailed invitation reached 6,167 graduate students. Of those students, 1,460 respondents started the survey and 1,094 (18%) completed the survey. Based on a comparison of the survey respondents and university census data on overall graduate student population, we believe the survey sample is broadly representative of the Virginia Tech graduate student population.

Chi-square test for association is used throughout this report to test if there are relationships between graduate students' perceptions about experience and campus climate-related topics (measured as categorical variables), and students' demographic backgrounds and identities (also categorical variables). Throughout this report, *p* values for significant results are assumed to be less than 0.05, unless otherwise noted.

# Student Diversity

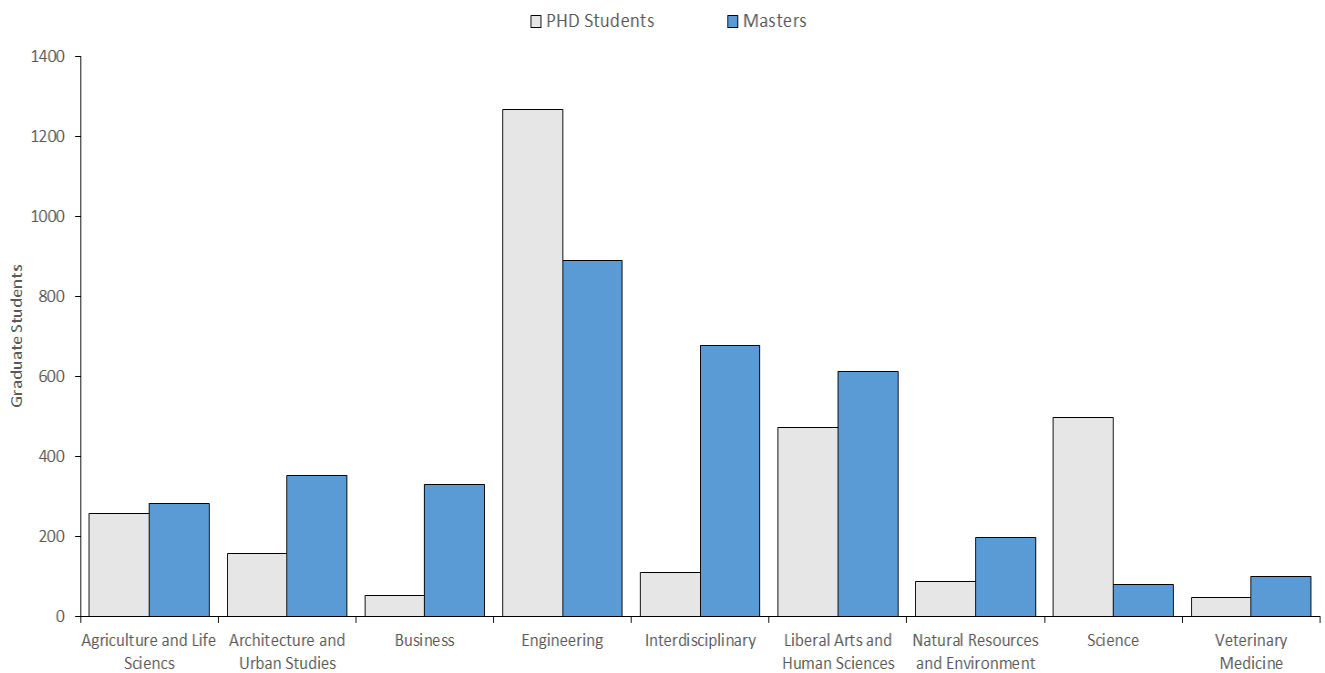
This section describes the diversity of Virginia Tech graduate students, looking at both population and the survey sample. Counts and proportions are presented in Table 1 - Student Population and Survey Sample (pp. 25-26).

## University Population

The Virginia Tech Graduate School encompasses nearly 7,000 graduate students enrolled in 150 graduate degree programs, including 3,200 master’s degree (masters) and 3,000 doctoral students. These degrees are housed in eight colleges, with 12% enrolled in interdisciplinary programs spanning the colleges.

Figure 1 depicts graduate student population by college and degree program.

Figure 1  
*Graduate Students by College and Degree Program*



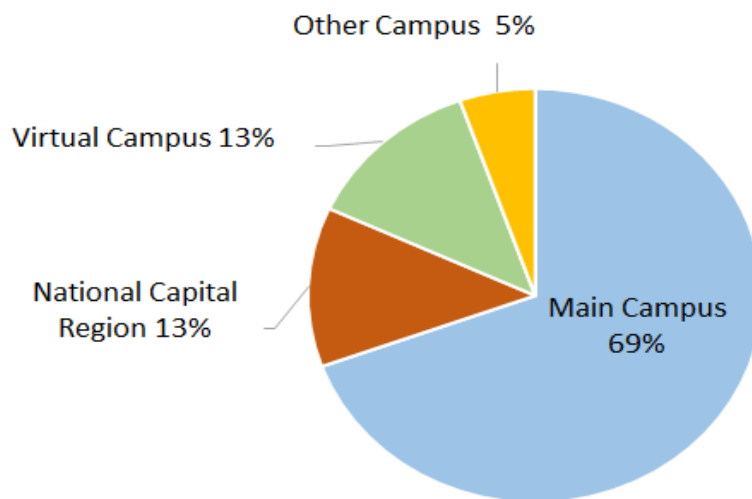
The College of Engineering enrolls the largest number of graduate students, accounting for 1/3 of all students enrolled in VT graduate programs. In 2016, the College of Engineering enrolled more than 2,000 students, including 1,200 doctoral and almost 1,000 masters students. The College of Liberal Arts and Human Sciences is the second largest, accounting for 17% of all graduate students, including 500 doctoral and 650 master’s students. The Colleges of Science, Agriculture and Life Sciences, Architecture and Urban Studies, and Business each enrolls between 500 and 600 students. The College of Natural Resources and Environment enrolls about 250 graduate students. The College of Veterinary Medicine

enrolls about 150 masters and doctoral students, as well as almost 500 professional degree students. Students pursuing the Doctorate of Veterinary Medicine were excluded from this survey because those students are considered outside of the Graduate School’s administrative purview.

### A. Campus Location

Figure 2 depicts the Spring 2016 total headcount enrollment of VT Graduate School students by campus location. In Spring 2016, 71%, or about 4,800 of 7,000, VT graduate students were enrolled at the Main Campus in Blacksburg. Virginia Tech’s National Capital Region (NCR) represents the largest concentration of graduate programs outside of Blacksburg. About 800 VT graduate students, including more than 150 masters students and 200 doctoral students, enroll at NCR facilities in Falls Church, Alexandria, Arlington, Fairfax, Leesburg, Manassas, and Middleburg.

Figure 2  
*Graduate Students by Campus Location*



In Spring 2016, 12% of VT graduate students were enrolled in online graduate programs through the Virtual Campus. Of the 800 Virtual Campus students, about 60% list permanent addresses in Virginia. Others list addresses from such locations as Durham, North Carolina; Tacoma, Washington; San Diego, California; and Akron, Ohio. Virtual Campus students are enrolled in graduate programs in fields such as Information Technology, Education, Agriculture, Natural Resources, and Aerospace, Civil, and Electrical Engineering.

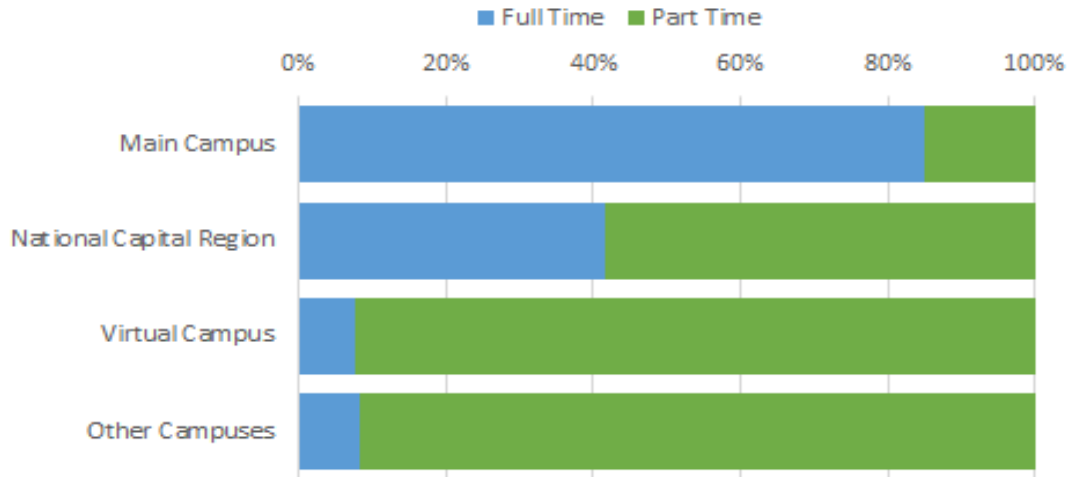
The distribution of 2016 survey respondents across campus locations closely mirrors the graduate student population as a whole. The survey sample includes a slightly larger proportion of Blacksburg-based students. Virtual Campus students are slightly under-represented, making up 9% of the sample compared with 12% of the graduate student population.

### B. Enrollment Status

Two-thirds of VT graduate students are enrolled full-time (see Figure 3.3). Graduate students enrolled full-time account for 78% of the survey sample. Students enrolled part-time are under-represented in the survey sample, accounting for 22% of respondents. Among survey respondents, 3.5% were veterans, and approximately half of survey respondents reported they were between 25 and 34.

Figure 3

*Graduate Students by College and Enrollment Status*



### C. Financial Resources and Dependents

Among survey respondents, 24% of graduate students reported having one or more dependents. Survey respondents identified a range of financial resources. Approximately 43% of the respondents reported having an assistantship. About 15% use student loans to finance their graduate studies.

### D. International Students

International students constitute 30% of the graduate student population. In Spring 2016, there were about 2,000 international students enrolled in Virginia Tech graduate programs (32%), including citizens of more than 90 countries. *Figure 3.4* represents the countries of citizenship, with the size of the name proportional to the number of graduate students. Students from China constitute the largest populations of international graduate students. One out of 10 VT graduate students is a Chinese citizen. Many students are from India, Iran, South Korea, Egypt, as well as smaller countries, including Bahrain, Benin, Bolivia, Georgia, Haiti, Kenya, Madagascar, Romania, Rwanda, Zambia, and Zimbabwe. International students are underrepresented in the survey sample, making up about 24% of respondents.

Figure 4  
*International Graduate Students - Country of Citizenship*



### **E. Race and Ethnicity**

The race and ethnicity was asked for all U.S. or permanent residents. About half of enrolled Virginia Tech graduate students who are U.S. Citizens or have permanent resident status, identify as White. About 5% identify as African American; 4% identify as Asian American; and 3% identify as Hispanic.

About 3% of respondents identified more than one race or ethnicity.<sup>3</sup> More than half of these graduate students identify as Hispanic. About 4 out of 10 Hispanic respondents also selected African-American, American Indian, and Asian, or White. Of graduate students identifying as Asian American, 28% selected at least one additional category, including White, Hispanic, and Native Hawaiian/Pacific Island. About 7% of respondents selected “I prefer not to report.”

### **F. Gender Identity and LGBTQ**

The graduate student population in 2016 was made up of 4,027 male identified students (58%) and 2,838 female (41%). The students who chose not to report or who fell outside of the binary were 25 (<1%). For the survey, respondents identify as female is 41% and 47% of survey identify as male. Females are overrepresented in the survey sample. The population percentage age for transgender students is reported at 0.29%. Seventy-two respondents (7%) identified as lesbian, gay, bisexual, or queer.

## **Survey Results**

The 2016 VT Graduate Student Climate Survey covers many aspects of student experiences and perceptions. This section summarizes results across four survey sections: 1) Virginia Tech Community

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<sup>3</sup> Race and Ethnicity - Students were given the option to self-identify and the results reflect their selections.



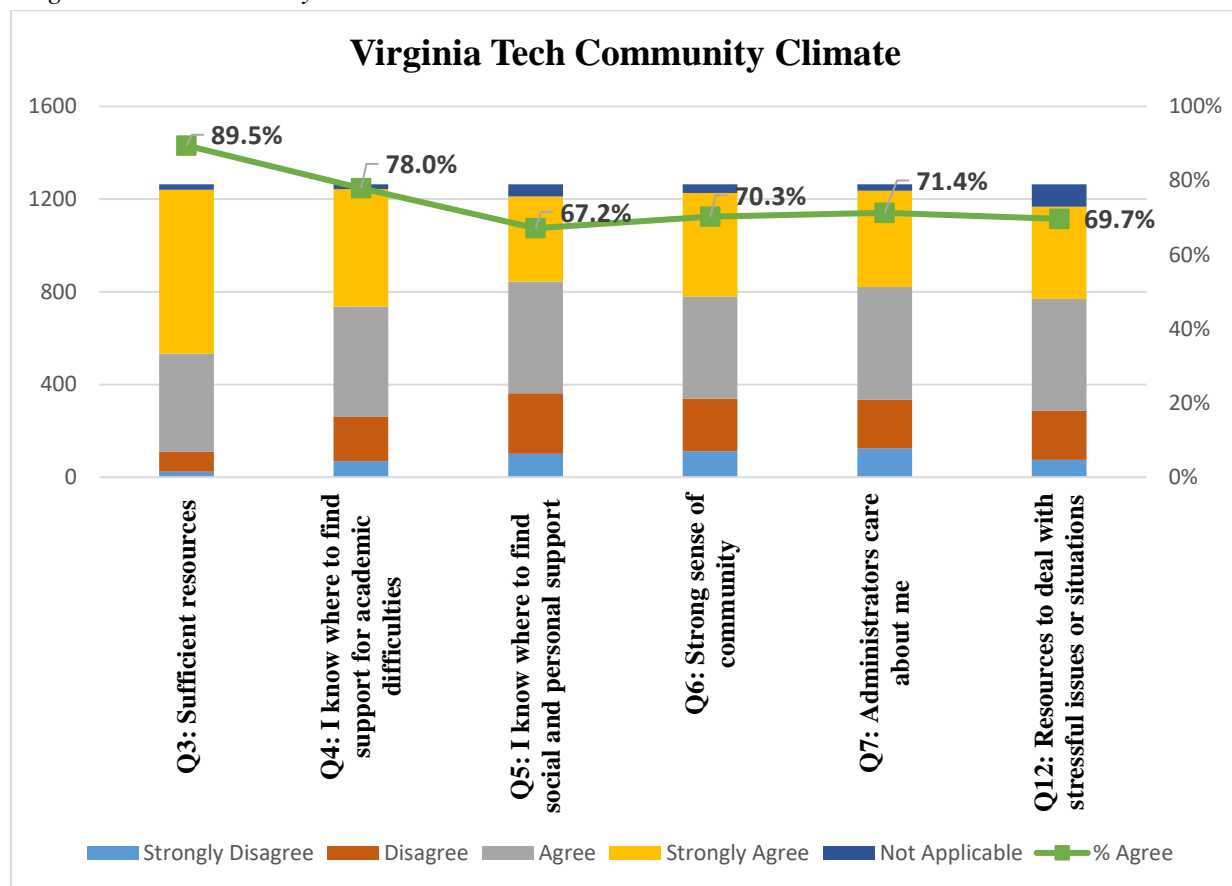
(Q3-Q14); 2) Department Community (Q15-Q23); 3) Advising and Mentoring (Q24-Q47); and 4) Diversity and Inclusion (Q48-Q59). For each section, 1) we identify general patterns across questions; 2) examine differences across student populations: college, campus, enrollment status, race/ethnicity/citizenship, gender and sexual orientation; 3) and share response rates based on the question.

### A. Virginia Tech Community (Q3-Q12)

Most respondents felt there are sufficient resources to ensure their academic success (90%) and know where to find academic support (78%) (see Figure 6). However, 20% of the respondents indicated they did not feel supported. The qualitative data offer additional insight regarding this perceived lack of support. One student wrote:

*There needs to be more support for students at the tail end of their degree in the writing stages.*

Figure 5  
Virginia Tech Community



**Note:** The numbers in this figure, as scaled by the vertical axis on the right, shows the percentage of students who agreed with the corresponding statements, who reported that they strongly agree or agree with those statements in the survey (same for all figures below).

Respondents also felt positively that they knew where to find social and personal support (67%) and felt a strong sense of community (70%). We found a similar perspective in the qualitative responses, such as this one:

*Everyone is extremely supportive. There is a strong sense of unity at VT, great school.*

Conversely, one comment captured why one-third of respondents may have disagreed with this statement:

*There needs to be greater marketing efforts to graduate students about the support services available. Virginia Tech has a lot to offer, but no one really knows about the offerings.*

However, this sense of community differs across extended campus locations, and for those who identify as LGBTQ. Only 52% of the National Capital Region and 60% of virtual campus respondents agreed with this statement. A virtual student commented that they would like to see more community building:

*As a non-NCR Virtual Campus student, I wish there was more of an effort to connect all VC students of the same discipline.*

Furthermore, LGBTQ respondents and those who chose not to disclose their race and/or ethnicity had the lowest levels (57-59%) of agreement.

Figure 5.1  
VT Sense of Community

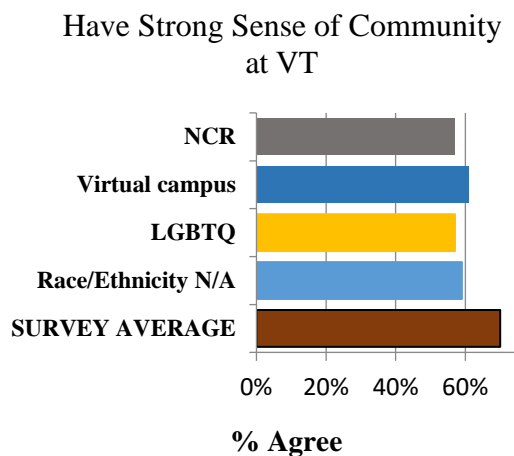
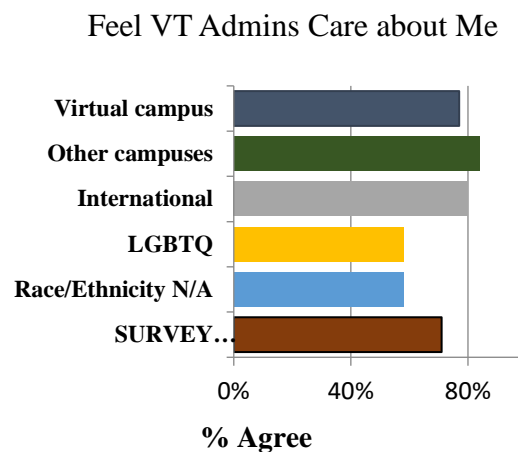


Figure 5.2  
VT Administrators Care



Majority (71%) of the respondents felt that VT administrators cared about them, and 27% either somewhat (17%) or strongly disagreed (10%). Virtual campus respondents (77%) and *campus-other* respondents (84%) agreed the strongest with this statement. LGBTQ respondents (39%) and those who chose not to disclose their race and/or ethnicity (39%) had the highest level of disagreement with this statement.

Some respondents provided specific names of people and departments who have helped or hindered their ability to be successful in getting questions answered or tasks completed. Other qualitative responses, such as the one that follows, provided insight about manpower and communication:

*Administration seems unorganized (or understaffed). I get numerous emails about things I don't care about and then don't get notified about important details regarding GTA, tuition, exams, etc.*

Approximately 61% of the respondents either somewhat (38%) or strongly (23%) agreed that the Graduate Life Center (GLC) helped to connect them to the graduate community. Almost ¼ (24%) of the respondents somewhat (17%) or strongly (7%) disagree with this sentiment. In addition, 13% selected the *not applicable* option with students providing additional insight. One student wrote:

*It is hard to feel I am a part of the community over the virtual campus.*

There also seems to be a lack of understanding of what the GLC provides, as illustrated by this comment:

*I don't always know where I could look for specific resources, but I know that if I ask at the GLC, they can direct me.*

When asked if the GLC provides relevant programs and services, 60% of the respondents either somewhat (39%) or strongly (21%) agreed. However, 30% strongly (8%) or somewhat (24%) disagreed with this sentiment. Majority of the respondents (69%) felt that the GLC staff are approachable and helpful, and 11% either somewhat (8%) or strongly (3%) disagreed. This, again, can be a lack of understanding of services, as one student noted:

*I never actively looked for any GLC programs to involve myself with, however, the times that I've interacted with the GLC staff they have been friendly and helpful.*

Approximately 70% of the respondents felt that good VT resources are available to help students deal with stress. However, 23% either somewhat (17%) or strongly (6%) disagreed. Stress is the most prevalent theme that comes out of this section of the report. Students all feel stress and they deal with it in different ways. The sources of stress varies, but most students who commented about their stress stated that finances and work volume (both academic and assistantships) are most prevalent. Students also mentioned a lack of clear advising or direction as a source of stress, as the following comment suggests:

*A combination of financial and academic stress. Also, I guess not having a clear purpose in life is kind of stressful. I understand that I should be doing my thesis, but I feel a little lost.*

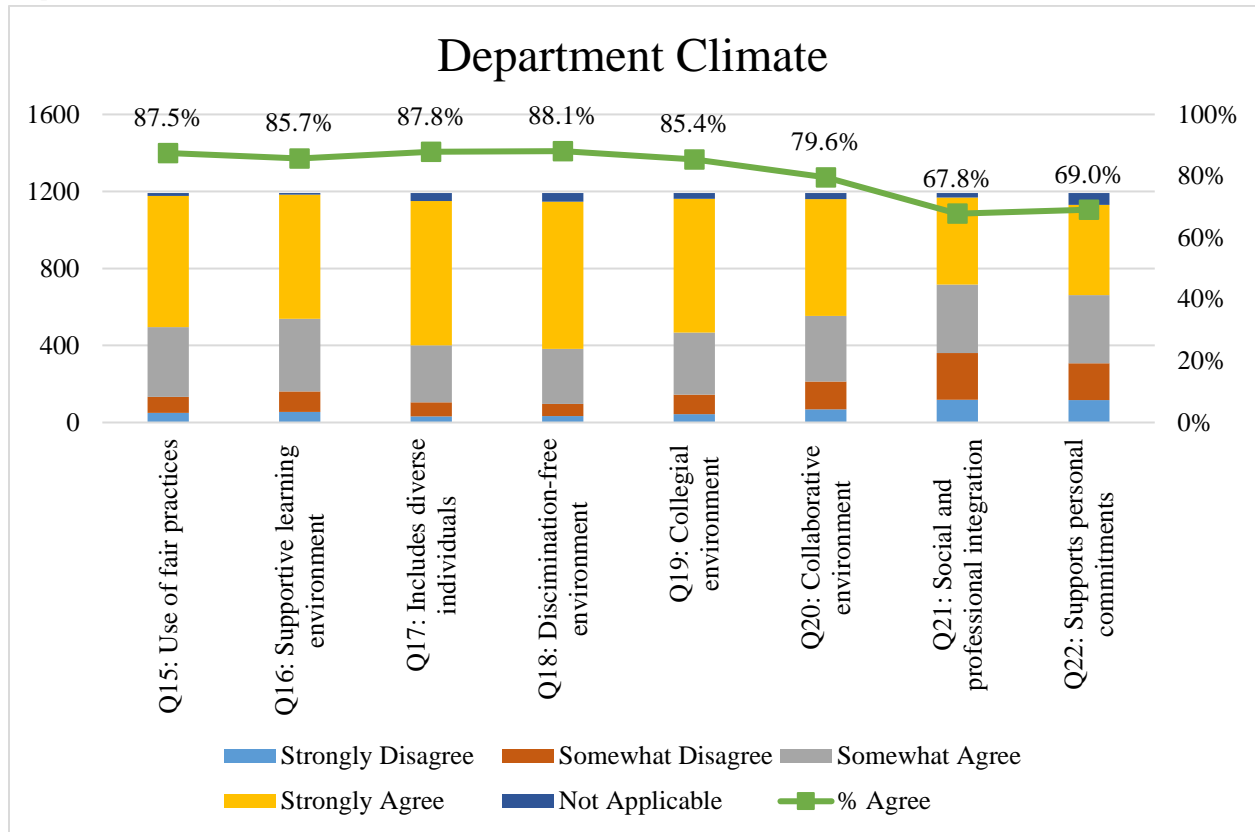
Although only a portion of the survey respondents identified as having dependents (25%), childcare is a strong theme in the section asking about stress, as one student commented “*better child care options for infants and toddlers.*”

Only students on Blacksburg campus were asked about safety. Most (93%) of the respondents stated that they feel safe on campus, while the remainder either somewhat (5%) or strongly (2%) disagreed.

## B. Department Community (Q15-Q23)

Almost 9 out of 10 respondents (87%) reported that they believe their department uses fair practices. Almost 11% either somewhat (7%) or strongly (4%) disagreed with this statement. Those who chose not to disclose their race and/or ethnicity expressed the most disagreement (26%) with this statement. A summary of the results for this section can be found in *Figure 6*.

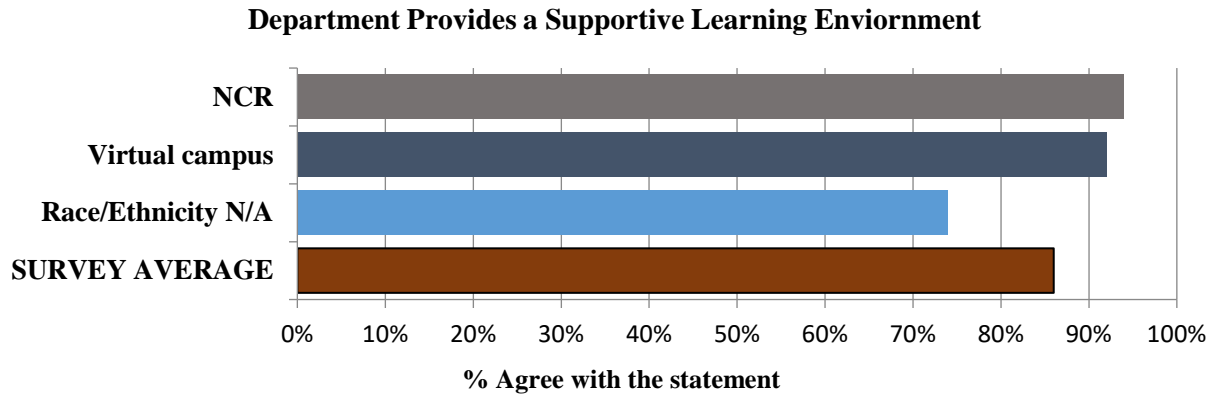
Figure 6  
*Department Community*



The majority of the respondents (86%) felt that their department provides a supportive learning environment. Approximately 14% of the respondents either somewhat (9%) or strongly (5%) disagreed with this sentiment. [Q16] Of those who felt unsupported, comments such as the following emerged:

*In my own department, there isn't a close sense of community. I interact mostly as an individual rather than as a part of a group.*

Figure 6.1  
*Department Learning Environment*



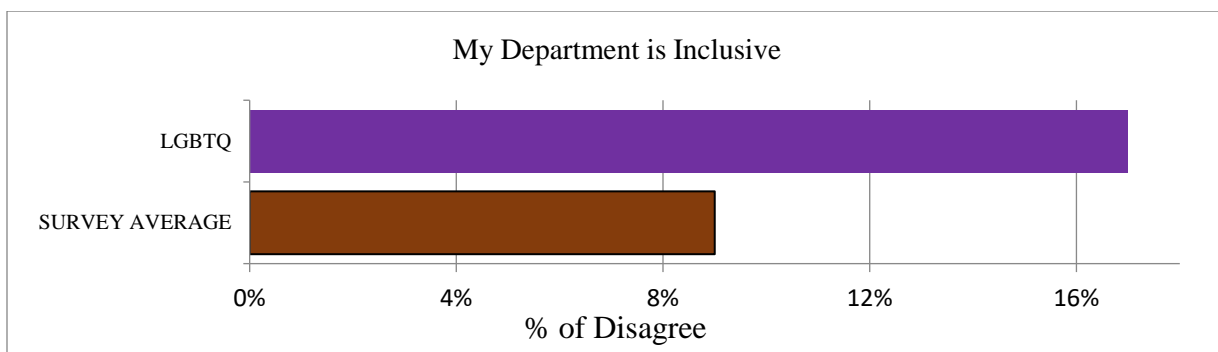
Both the NCR (94%) and virtual campus (92%) respondents had a slightly higher level of agreement with this statement. Those who chose not to disclose their race and/or ethnicity had the highest level of disagreement (25%) with this statement. Students who span departments during their time here have a unique perspective to compare environments, such as one student who commented:

*The department of my graduate assistantship is leaps and bounds beyond my academic department when it comes to inclusion, fairness, and supportive learning environments that welcome me to bring my whole self to Virginia Tech each day. My department can learn a lot from my one professor and the department that covers my tuition.*

The majority of the respondents (88%) felt that their department is inclusive, however, 9% either somewhat (6%) or strongly (3%) disagreed. A portion of the virtual campus respondents (17%) found this statement to be nonapplicable. Approximately 17% of the LGBTQ respondents disagreed, and one student commented:

*There doesn't seem to be enough in the way of LGBT outreach.*

Figure 6.2  
*Department Inclusivity*



Other students expressed varying forms of isolation:

*I'm not sure anyone in my department knows who I am.*

*No other graduate students talk to me, or even acknowledge me in the hallway.*

While these cases were not the majority, the nearly 10% of students who felt their department is not inclusive are being challenged to exist and succeed alone. A concern that arose in this section of comments has to do with the accessibility of campus buildings (mostly referring to the Blacksburg campus), as one student noted:

*We could start creating an inclusive environment by making all buildings and walkways accessible to Tech's disabled population.*

Majority of the respondents (88%) felt that their department works to provide a discrimination-free environment, while 9% either somewhat (6%) or strongly (3%) disagreed. Majority of the respondents (85%) felt that their department encourages a collegial environment among students. However, 13% either somewhat (9%) or strongly (4%) disagreed. A segment of the virtual campus respondents (15%) found this statement to be nonapplicable. Those who chose not to disclose their race and/or ethnicity had the highest level of disagreement (23%) with this statement. The qualitative comments in this section supported the notion that discrimination is rarely or never witnessed. One student shared:

*I never experienced or witnessed any issues regarding discrimination at Virginia Tech.*

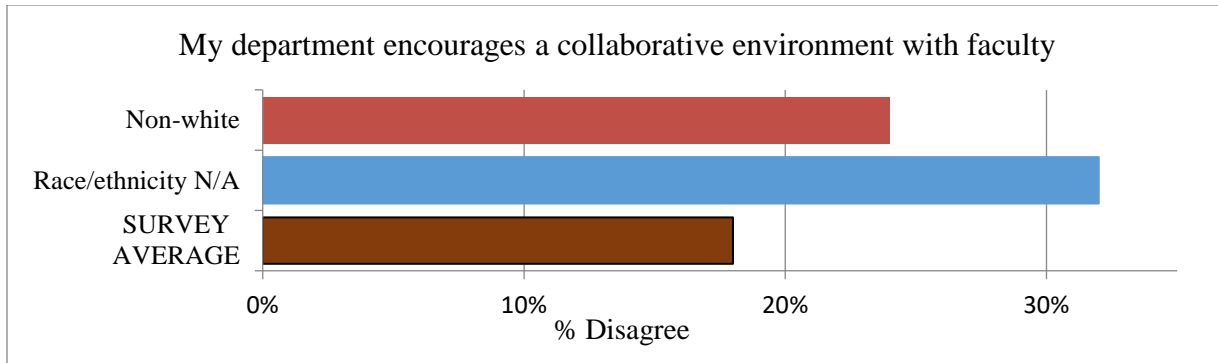
Some students stated that they would report discrimination, but have never had a reason to do so.

Majority of the respondents (80%) felt that their department encourages a collaborative environment with faculty. Approximately 18% either somewhat (12%) or strongly (6%) disagree with this statement. One student commented:

*... welcoming, fair, and strong department, academic bullying does still play a role in the department.*

The *campus-other* respondents had the highest level of agreement (88%) with this statement. Thirteen percent of the virtual campus students found this statement to be nonapplicable. Those who chose not to disclose their race and/or ethnicity (32%) and non-whites (24%) had the highest level of disagreement with this statement.

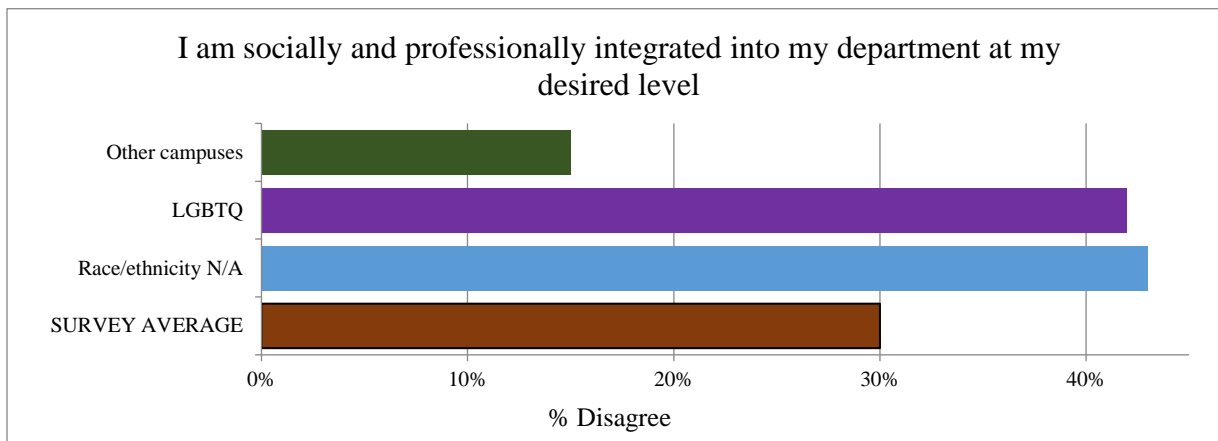
Figure 6.3  
*Department Collaborative with Faculty*



Most of the respondents (68%) felt they were socially and professionally integrated into their department at their desired level. However, 31% of the respondents either somewhat (21%) or strongly (10%) disagreed with that statement. Students at *campus-other* had the highest level of agreement (82%) with this statement. Those who chose not to disclose their race and/or ethnicity (43%) and LGBTQ respondents (42%) also had a high level of disagreement with this statement. Students whose sexual and racial identities are not in the majority felt the least integrated in their department which suggests that departments are not intentional in their effort to include these students socially or professionally into the majority culture. One student wrote:

*I did not have any opportunity to get involved in the department climate as I expected when I joined the department. The department has a big problem regarding accepting other cultures.*

Figure 6.4  
*Integration into Department*



Most of the respondents (69%) felt that their departments were supportive of their personal commitments. However, 26% of the respondents either somewhat (16%) or strongly (10%) disagreed. Blacksburg respondents had the highest level of disagreement (30%) with this statement. Additionally, those who chose not to disclose their race and/or ethnicity had the highest level of disagreement (36%) with this statement. Approximately 14% of the virtual campus respondents found this question to be nonapplicable.

Many students cited *personal reasons* as a form of stress and they indicate that their departments are either not aware or do not care about these matters. One student responded:

*I come in to meet with my advisor and then leave, there is no real discussion about personal life or other commitments and I do not share them in fear they would be considered "distractors" from my main focus which should be academics.*

Overall, students feel that they are valued by their department and that their department makes an effort to provide an inclusive and supportive environment. However, there are two subdomains that received the least favorable scores. It appears that students' desired level of integration is not being expressed by the students and/or captured by the department. Additionally, there is room for improvement in the subdomain of department support for outside commitments.

### **C. Advising and Mentoring (Q24-Q47)**

Overall, advising is strong at Virginia Tech, but approximately 20% of respondents had issues with their advisor. A summary of the results for this section can be found in Figure 7.

About 4 out of 5 respondents indicated they are satisfied with faculty and department advising, reporting that their advisors provide clear expectations and respond to student inquiries in a timely manner. About 20% graduate students reported they are dissatisfied with faculty and department advising. About 13% of students reported that their advisor does not respond in a timely manner. About 17% said their advisor does not offer helpful advice about current progress and next steps. This section of comments is the most descriptive and expressive.

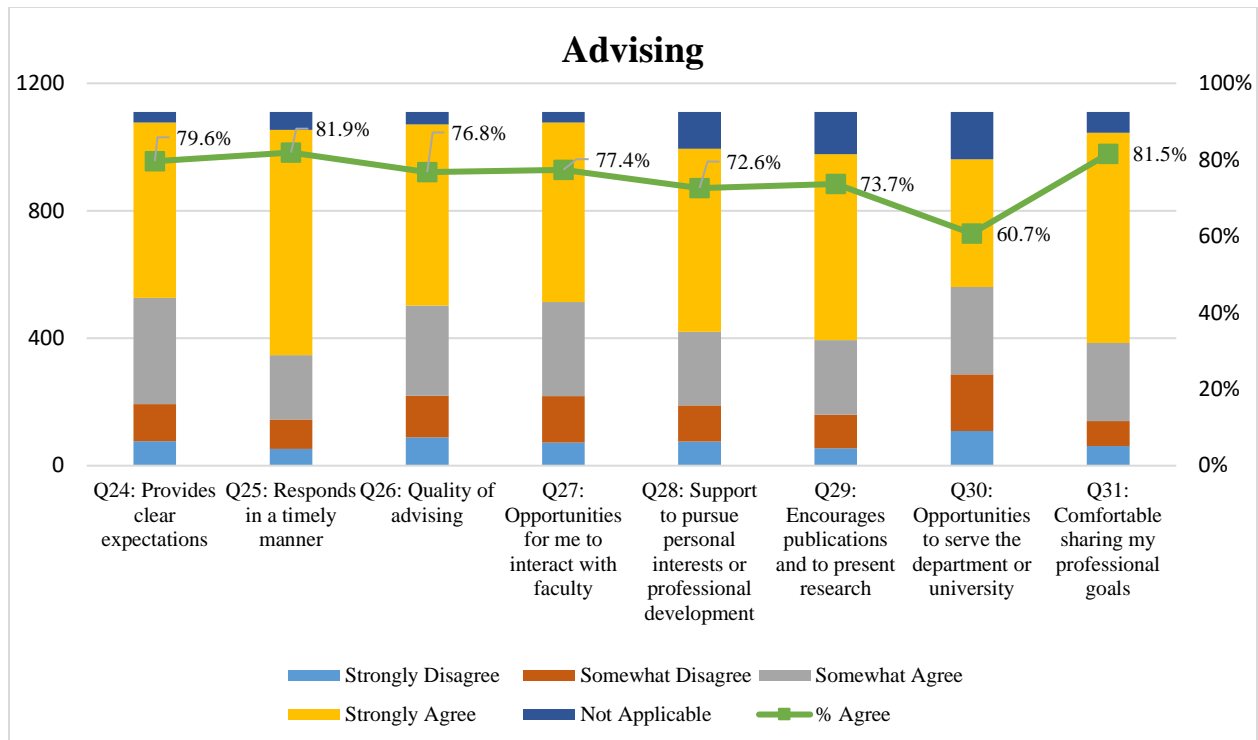
Students have a lot to say about their advisors and advising experiences. The variation in comments is reflective in the variation in faculty expectations for working with graduate students. The following is one example of the frustrations expressed by the respondents in comments:

*Graduate students are evaluated each semester, but the advisors never are. There is nowhere for us to formally make our expectations clear of what we need from them to be successful.*

Some of the students mentioned power being the source of fear associated with their advisor, and frustration stemming from lack of communication or lack of support and expectation.

Figure 7  
*General Advising*





Mentoring is an important part of the graduate school experience. However, only 36% of graduate students said they have a mentor who has been influential during their graduate experience. According to a study about doctoral student experience (Ülkü-Steiner et Al., 2000), “mentors of any gender were considered a key component related to student success. Specifically, skilled mentors promote the professional productivity of their students and also foster students’ confidence in their ability and enthusiasm in the field” (Ülkü-Steiner et al., 2000, 296). Among respondents who have a mentor, 3 out of 10 said their primary mentor is their advisor. About 25% reported that their mentor is a faculty member other than their advisor. Others found mentoring outside of the Virginia Tech community. About 12% said their mentor is a friend or family member.

Part-time students were less likely to say their advisor is helpful with course selection (67.7% vs. 76.4%) and preparing for general exams (42.1% vs. 56%), and were less likely to report they have a mentor (77% vs. 60.3%) than full-time students.

Perceptions of faculty and departmental advising differed significantly between male and female respondents, as shown in Tables 1 and 2. Women were less likely to feel the university offers sufficient resources for academic success, support for students experiencing academic difficulty, or resources to assist students dealing with stressful situations. Female graduate students who participated in the survey said they were significantly less likely to find departmental and faculty advising helpful with preparing for General Exams, research and writing, or with career planning, either within or beyond academia.

Table 2  
*Significant Gender Differences in Perceptions about Virginia Tech Community*

	Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree			Total N
	N	%	N	%	N	%	N	%		
Q3	Sufficient resources for academic success									
Men	3	0.61	30	6.12	141	28.78	311	63.47	**	485
Women	12	2.42	25	5.04	193	38.91	257	51.81		487
Q4	Support for academic difficulties									
Men	20	4.08	52	10.61	185	37.76	226	46.12	**	483
Women	30	6.05	78	15.73	206	41.53	177	35.69		491
Q5	Know where to find support in the community									
Men	23	4.69	94	19.18	199	40.61	154	31.43	*	470
Women	45	9.07	102	20.56	193	38.91	139	28.02		479
Q12	Resources available for dealing with stressful issues or situations									
Men	16	3.27	69	14.08	190	38.78	182	37.14	***	457
Women	33	6.65	88	17.74	200	40.32	143	28.83		464

\* $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$

Table 2. Significant Gender Differences in Perceptions about the Departmental Community.

	Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree			Total N
	N	%	N	%	N	%	N	%		
Q16	Supporting learning environment in the department.									
Men	18	3.67	29	5.92	149	30.41	290	59.18	*	486
Women	21	4.23	53	10.69	158	31.85	260	52.42		492
Q17	My department is inclusive.									
Men	9	1.84	17	3.47	108	22.04	342	69.80	***	476
Women	15	3.02	40	8.06	132	26.61	294	59.27		481
Q18	My department works to provide a discrimination-free environment.									
Men	11	2.24	15	3.06	112	22.86	333	67.96	*	471
Women	13	2.62	38	7.66	115	23.19	312	62.90		478
Q19	My department encourages a collegial environment among students.									
Men	10	2.04	38	7.76	126	25.71	307	62.65	*	481
Women	24	4.84	43	8.67	126	25.4	288	58.06		481
Q21	I am as socially and professionally integrated into my department/program as I would like to be.									
Men	41	8.37	85	17.35	150	30.61	208	42.45	*	484
Women	49	9.88	109	21.98	150	30.24	178	35.89		486
Q22	My department supports my personal commitments outside of graduate school (family, health, social, etc.).									
Men	34	6.94	72	14.69	149	30.41	205	41.84	*	460
Women	51	10.28	83	16.73	149	30.04	192	38.71		475

\* $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$

	Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree			Total
	N	%	N	%	N	%	N	%		
<b>Q3</b>	<b>Sufficient resources for academic success</b>									
Men	3	0.61	30	6.12	141	28.78	311	63.47	**	485
Women	12	2.42	25	5.04	193	38.91	257	51.81		487
<b>Q4</b>	<b>Support for academic difficulties</b>									
Men	20	4.08	52	10.61	185	37.76	226	46.12	**	483
Women	30	6.05	78	15.73	206	41.53	177	35.69		491
<b>Q5</b>	<b>Know where to find support in the community</b>									
Men	23	4.69	94	19.18	199	40.61	154	31.43	*	470
Women	45	9.07	102	20.56	193	38.91	139	28.02		479
<b>Q12</b>	<b>Resources available for dealing with stressful issues or situations</b>									
Men	16	3.27	69	14.08	190	38.78	182	37.14	***	457
Women	33	6.65	88	17.74	200	40.32	143	28.83		464

\* $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$

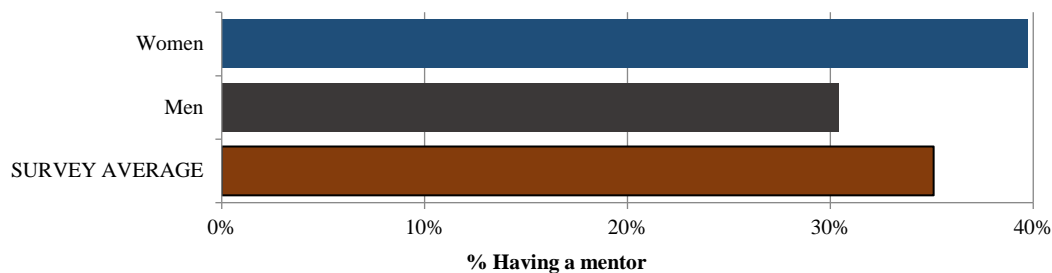
Table 2. Significant Gender Differences in Perceptions about the Departmental Community.

	Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree			Total N
	N	%	N	%	N	%	N	%		
<b>Q16</b>	<b>Supporting learning environment in the department.</b>									
Men	18	3.67	29	5.92	149	30.41	290	59.18	*	486
Women	21	4.23	53	10.69	158	31.85	260	52.42		492
<b>Q17</b>	<b>My department is inclusive.</b>									
Men	9	1.84	17	3.47	108	22.04	342	69.80	***	476
Women	15	3.02	40	8.06	132	26.61	294	59.27		481
<b>Q18</b>	<b>My department works to provide a discrimination-free environment.</b>									
Men	11	2.24	15	3.06	112	22.86	333	67.96	*	471
Women	13	2.62	38	7.66	115	23.19	312	62.90		478
<b>Q19</b>	<b>My department encourages a collegial environment among students.</b>									
Men	10	2.04	38	7.76	126	25.71	307	62.65	*	481
Women	24	4.84	43	8.67	126	25.4	288	58.06		481
<b>Q21</b>	<b>I am as socially and professionally integrated into my department/program as I would like to be.</b>									
Men	41	8.37	85	17.35	150	30.61	208	42.45	*	484
Women	49	9.88	109	21.98	150	30.24	178	35.89		486
<b>Q22</b>	<b>My department supports my personal commitments outside of graduate school (family, health, social, etc.).</b>									
Men	34	6.94	72	14.69	149	30.41	205	41.84	*	460
Women	51	10.28	83	16.73	149	30.04	192	38.71		475

\* $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$

By contrast women were significantly more likely to report they have a mentor who has been an influential part of their graduate experience (40% vs 30% of men). LGBTQ students were significantly less likely to report positive perceptions of advising and mentorship.

Figure 7.1  
*Mentorship by gender*



International students were more likely to express positive perceptions about department and faculty advising setting clear expectations, guiding student research and writing, and navigating the systems and culture of graduate education. International students were much more interested in mentoring programs than white students.

#### **D. Diversity and Inclusion (Q48-Q59)**

Diversity encompasses differences amongst students, and inclusion is the engagement of difference amongst communities. These differences are identified through the survey to understand the unique experiences of students. These data are presented in *Figure 3.8*.

While most graduate student respondents expressed positive perceptions regarding the climate for diversity and inclusion at Virginia Tech, a significant minority voiced serious concerns. Overall, 82% of respondents said they feel their identity is respected at VT, while 11% of respondents said they do not feel their identity is respected. One student shared the following concern:

*Virginia Tech talks a lot about creating inclusive environments, but I never see these things in action. VT covers up uncomfortable situations that happens on campus by talking about how great the community is, but the community is only great for the majority, not the minority. Administrators need to pay more attention to students/faculty/staff who don't look like the majority and see how uncomfortable situations affect them.*

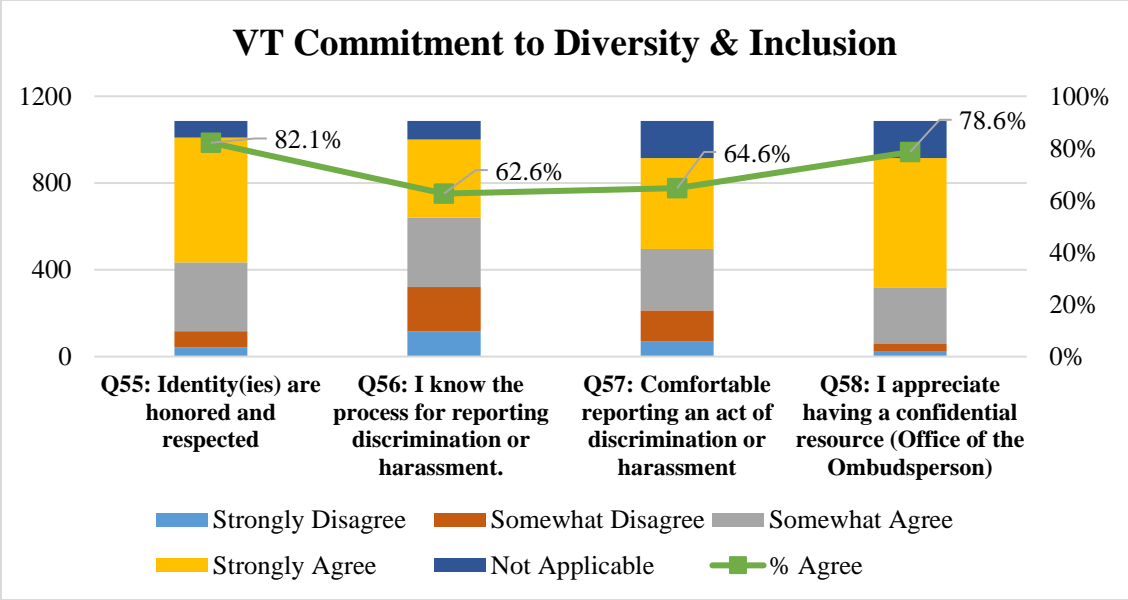
This sentiment is confirmed by research (Daniel, 2007), which showed a feeling of isolation and being an outsider by graduate students who are not part of the dominant culture.

Overall, 63% students reported they know the process and 65% said they are comfortable reporting an instance of discrimination or harassment. By contrast, almost 20% of respondents disagreed with the statement, “I am comfortable reporting an act of discrimination or harassment that I had experienced” The responses may indicate the fear that some marginalized communities feel when they speak out about harassment so they choose silence. As one student shared,

*The professors with racial bias integrate that into their pedagogy in oppressive ways. It is the norm and when you voice dissent, they immediately try to push you out. That causes many people of color alienation or what this survey considers "stress."*

Students may feel that discrimination is normalized and downplayed when it is labeled as “stress” as opposed to harassment.

Figure 8  
*Diversity and Inclusion*



Compared to White students from the U.S., international students reported they were significantly more likely to feel their identity is respected and that they know the process for reporting an instance of discrimination or harassment; non-white students from the U.S. were significantly less likely to feel their identity is respected and that they know the process for reporting an instance of discrimination or harassment. Students who chose not to identify their racial/ethnic status were significantly less likely to report they feel respected in the Virginia Tech community and less likely to report they feel comfortable reporting discrimination or harassment as shown in Table 3.

Table 3. Perceptions about Diversity and Inclusion at VT by Race/Ethnicity and Citizenship

	Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree		Total N
	N	%	N	%	N	%	N	%	
<b>Q55</b>	Personal identities honored and respected								
White	13	2.42	24	4.47	151	28.12	298	55.49	486
Non-White	12	7.14	15	8.93	61	36.31	69	41.07	157
International	7	2.75	15	5.88	78	30.59	153	60.00	*** 253
Didn't report	8	11.59	10	14.49	15	21.74	27	39.13	** 60
<b>Q56</b>	Know the process of reporting discrimination or harassment								
White	49	9.12	111	20.67	154	28.68	172	32.03	486
Non-White	31	18.45	39	23.21	43	25.60	42	25.00	* 155
International	19	7.45	35	13.73	85	33.33	110	43.14	*** 249
Didn't report	9	13.04	11	15.94	21	30.43	17	24.64	58
<b>Q57</b>	Comfortable reporting discrimination or harassment								
White	32	5.96	59	10.99	147	27.37	206	38.36	444
Non-White	15	8.93	25	14.88	38	22.62	68	40.48	146
International	10	3.92	39	15.29	70	27.45	102	40.00	221

Didn't report	6	8.70	9	13.04	20	28.99	18	26.09	*	53
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\* $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$

Meanwhile, LGBTQ students reported that they were less likely to feel their identities are honored and respected at VT and less likely to say they know the process and would feel comfortable reporting discrimination and harassment as shown in Table 4.

Table 4. Significant Differences in Perceptions of Diversity and Inclusion at VT by LGBTQ Status

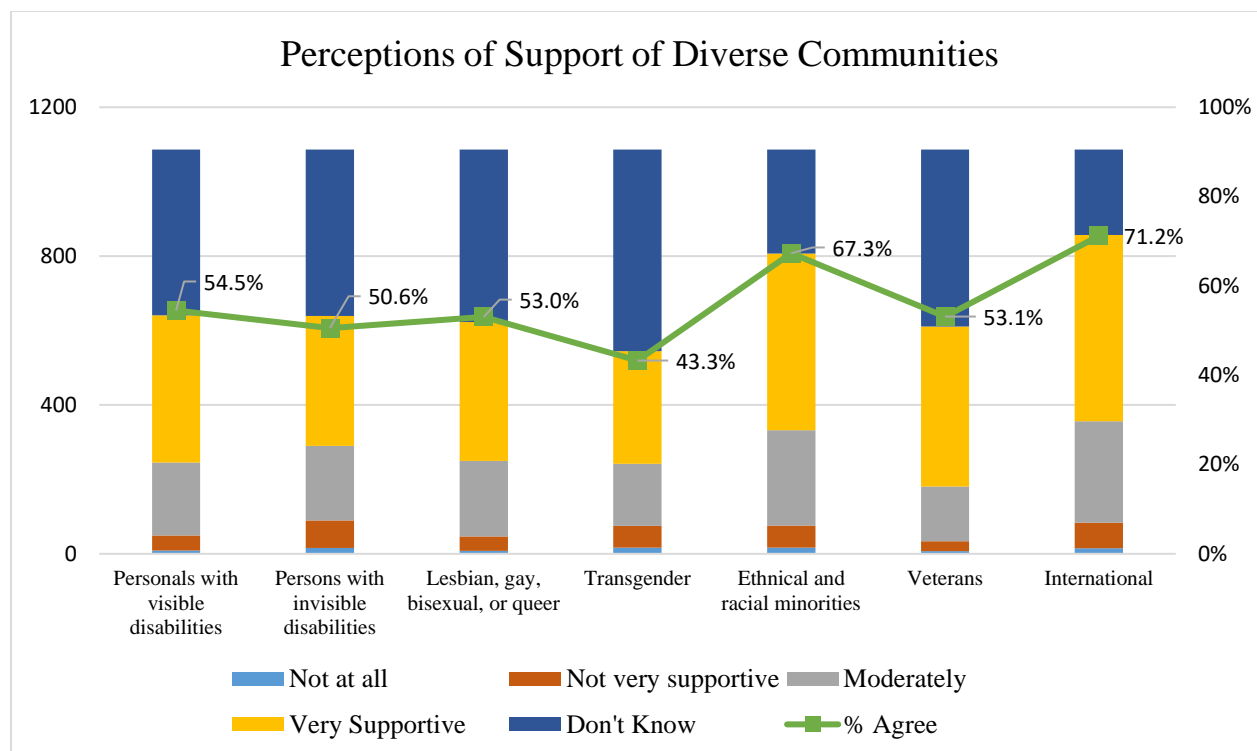
	Strongly Disagree		Somewhat Disagree		Somewhat Agree		Strongly Agree			Total N
	N	%	N	%	N	%	N	%		
Q55	Identity been honored and respected									
Non-LGBTQ	36	3.84	50	5.33	261	27.83	525	55.97	***	872
LGBTQ	2	2.78	7	9.72	40	55.56	20	27.78		69
Q56	Know the process of reporting discrimination or harassment									
Non-LGBTQ	95	10.13	161	17.16	287	30.6	321	34.22	**	864
LGBTQ	12	16.67	24	33.33	14	19.44	19	26.39		69
Q57	Comfortable reporting discrimination or harassment									
Non-LGBTQ	51	5.44	112	11.94	251	26.76	371	39.55	**	785
LGBTQ	10	13.89	15	20.83	20	27.78	22	30.56		67

\* $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$

More than 4 in 10 responded “I don’t know” to questions regarding including and affirming marginalized populations. This high rate of response indicates that many students do not have an understanding of how marginalized communities are experiencing campus. This is seen in *Figure 3.9*.

Figure 9

*Support of Diverse Communities*



Women were as likely as men to agree that VT is supportive of underrepresented communities on campus. International students had more positive perceptions about VT’s support of underrepresented communities on campus, especially about VT’s support of international students (85.5% agreed, with less 2% missing responses). However, LGBTQ students were less likely to agree that VT is supportive of underrepresented communities, particularly with regard to their own community. 18.1% (support for LGBQ) and 23.6% (support for transgender) of LGBTQ students thought VT is not supportive of the LGBTQ community, while less than 5% of non-LGBTQ students did. Although non-white students in general were as likely as white students to agree on the survey that VT is supportive of racial/ethnic minorities on campus, African-American and Hispanic students were less likely to agree that VT supports racial and ethnic minorities than white students.

One of the most important questions asked in the survey was Q71, which asks, “If you could start over again, would you enroll at Virginia Tech?” Of the 1083 respondents to this question, 895 (82.6%) responded “yes,” they would choose Virginia Tech again, while (17.4%) respondents who answered “no,” they would not choose Virginia Tech again.

Part-time students were more likely to report that they would choose Virginia Tech again (89.8% vs. 81%). Students from all campuses, except Richmond and Hampton Roads, answered “no”, with Southwest Virginia Center having the highest percentage. Those who chose not to report race or ethnicity had high levels of response to this question as not choosing to return than white students (26.1% vs. 13.8%).



## Discussion

Aligning with the best practices recommended by the Association of American Colleges & Universities' *A New Rubric for Assessing Institution-wide Diversity*, the results of this climate survey "should stimulate conversations and self-reflection that assist university leadership in advancing institutional diversity goals, thus fostering greater understanding of how different areas of the institution align and interrelate" (Kirmmse & Diaz, 2013, 3). In that context, Virginia Tech administration, faculty, and staff will need to pay special attention to the populations (20%) that seem to respond that they do not feel included, respected, and say they would not choose Virginia Tech again. When almost a third of students do not feel supported in their personal situations, the assumption is that students cannot be their whole selves while pursuing graduate work.

From those respondents, we learned that many were from the LGBTQ community, those who wish not to identify their race and ethnicity, and those who identify as having a disability. These findings are congruent with national data about student climate (Brown et.al, 2004). Non-white students had less positive perceptions about department climate in all aspects and were less likely to agree with statements that Virginia Tech is supportive and inclusive. International students were more likely to agree with all statements regarding campus climate as being inclusive and supportive.

Students who identified as older and students with dependents were vocal about their concerns that services do not meet their needs, that they feel less included in the classroom, and they have a harder time balancing work and life demands. Additional themes that emerged from open-ended responses include a general sentiment that graduate school is hard and people cope in different ways, but that the university can improve in providing services. Students need more financial and out-of-classroom support, including childcare, considerations of personal commitments, career placement, and accommodations in special circumstances.

Students who identified as having a disability also reported feeling excluded and less supported in the classroom and the community. Many comments included issues with accessibility to buildings and public spaces.

The challenge for Virginia Tech will be to consider improving the climate for students of marginalized identities, so they feel more included in campus and classroom settings; to improve the delivery of advising in areas of need; and to advertise and provide services that meet the needs of all populations.

The final point of discussion is the overall mental health of graduate students. The section about stress showed significant need for services such as counseling. The results align with studies (Hyun et al., 2006) indicating that graduate students feel isolated which can cause strain on social relationships and mental health. Only 70% of respondents indicated there are good resources to help deal with stressful issues or situations. Providing stress relieving services is vital for the mental health and success of graduate students and minimize stress inducers such as providing adequate funding opportunities and campus resources.

## Conclusion

The goal remains that Virginia Tech is an institution that strives to achieve inclusive excellence as defined by the Association American Colleges and Universities, “Toward a Model of Inclusive Excellence and Change in Postsecondary Institutions” (Williams et al., 2005), incorporating diversity as a key component. Considerations for campus policies, environments, resources, and services must take into account the internal and external factors that contribute to the experiences of our students. The data received from this survey will inform those features of Virginia Tech toward improving the conditions for all students.

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Table 6 - Student Population and Survey Sample

	Survey	Response %	Population	% Students
<b>College</b>				
Business	57	6.16%	381	5.9%
Engineering	294	31.78%	2,157	33.4%
Agriculture and Life Sciences	77	8.32%	537	8.3%
Architecture and Urban Studies	83	8.97%	509	7.9%
Science	86	9.3%	577	8.9%
Arts and Human Sciences	200	21.62%	1,083	16.8%
Natural Resources and Environment	53	5.73%	286	4.4%
Veterinary Medicine*	28	3.03%	147	2.3%
Interdisciplinary	47	5.08%	787	12.2%
<b>Degree</b>				
Doctorate	545	50.89%	2,938	45.5%
Masters	483	45.1%	3,155	48.8%
Non-Degree and Certificate**	43	4.01%	371	5.7%
<b>Enrollment Status</b>				
Full-time	822	77.77%	4,248	65.7%
Part-time	235	22.23%	2,216	34.3%
<b>Campus</b>				
Blacksburg	1055	73.06%	4,489	69.4%
Hampton Roads Center	16	1.11%	44	0.7%
National Capital Region	181	12.53%	806	12.5%
Richmond Center	21	1.45%	57	0.9%
Roanoke Center	37	2.56%	245	3.8%
Southwest Virginia Center	5	0.35%	2	0.0%
Virtual Campus	129	8.93%	821	12.7%
<b>International Students</b>				
	255	24.78%	1,979	30.6%
<b>Race/Ethnicity</b>				
African American/Black	56	5.44%	342	5.3%
American Indian/Alaska Native	3	0.29%	7	0.1%
Asian	33	3.21%	264	4.1%
Hispanic/Latino	28	2.72%	245	3.8%
Native Hawaiian/Pacific Islander	1	0.10%	2	0.0%
White	537	52.19%	3,339	51.7%
Multiracial	39	3.79%	124	1.9%
Other	8	0.78%	-	-

I prefer not to report	69	6.71%	162	2.5%
<b>Gender Identity</b>				
Female	496	47.56	2,650	41%
Male	490	46.98	3,789	58.6%
Transgender	3	0.29		
Prefer not to disclose	54	5.18	25	0.4%
<b>LGBQ</b>	72	7.13	-	-
<b>Veteran</b>	37	3.56	-	-
<b>Age</b>				
18 - 24	221	20.69%	-	-
25 - 34	590	55.24%	-	-
35 - 44	161	15.07%	-	-
45 - 54	73	6.84%	-	-
55+	23	2.16%	-	-
<b>Financial Resources</b>				
At least one financial resource	982	67.77%	-	-
Assistantship	633	43.68%	-	-
Fellowship	84	5.8%	-	-
Personal Saving	344	23.74%	-	-
Grant	89	6.14%	-	-
Loan	222	15.32%	-	-
Family	194	13.39	-	-
<b>Have dependents</b>	247	24.5%	-	-
<b>Notes</b>				
*Does not include professional VET med students				
**Other includes Certificate, Non-Degree, and Commonwealth				

Appendix A

2016 Graduate Student Climate Survey Questions

**2016 Graduate Student Climate Survey**

<b>Question # (2016)</b>	
Q1	I consent to participate in this survey:
Q2	Please indicate which campus you attend:
<b>Section 1: Support</b>	
	<b>Please indicate your level of agreement with the following statements:</b>
Q3	There are sufficient resources (e.g., library services, technology, tutoring) available through Virginia Tech to ensure my academic success.
Q4	I know where to find support if I am having academic difficulties.
Q5	I know where to find social and personal support within the community if I need it.
Q6	I feel a strong sense of community at Virginia Tech.
Q7	I feel Virginia Tech administrator's care about me.
Q8	I feel safe on campus.
Q9	The activities and resources offered by the Graduate Life Center (GLC) in Blacksburg have helped me feel more connected to the graduate community at Virginia Tech.
Q10	The GLC provides programs and services that are relevant to my particular needs and interests.
Q11	GLC staff members are approachable and able to help me when I have questions.
Q12	I believe there are good resources at Virginia Tech to help me deal with stressful issues or situations.
Q13	If you are experiencing stress, what is causing the stress? (Financial, Family, Academic, etc)
Q14	Please share with us any other thoughts you may have about University support:
<b>Section 2: Department Climate</b>	
	<b>Please indicate your level of agreement with the following statements:</b>
Q15	My department uses fair practices (i.e. fairness in assignments)?
Q16	My department provides a supportive learning environment.
Q17	My department is inclusive of individuals with diverse backgrounds.
Q18	My department works to provide a discrimination-free environment.
Q19	My department encourages a collegial environment among students.
Q20	My department encourages a collaborative environment with faculty.
Q21	I am as socially and professionally integrated into my department/program as I would like to be.
Q22	My department supports my personal commitments outside of graduate school (family, health, social, etc.).
Q23	<b>Please share with us any information regarding department climate you believe will be helpful:</b>
<b>Section 3: Advising</b>	
	<b>Please indicate your level of agreement with the following statements:</b>
Q24	My department faculty/advisor provides clear expectations.

Q25	My advisor responds to me in a timely manner (scale)
Q26	I am satisfied with the quality of advising I have received from my department.
Q27	There are adequate opportunities for me to interact with faculty in addition to my advisor.
Q28	I get support from my advisor to pursue personal research interests or professional development.
Q29	My department faculty encourages me to produce publications and present research.
Q30	My department has provided me opportunities to serve the department or university in various capacities outside of teaching or research.
Q31	I feel comfortable sharing my professional goals with my advisor.
	<b>Please rate how helpful your advisor was with the following:</b>
Q32	Course Selection
Q33	Preparation for general exams
Q34	Selection of a dissertation or thesis topic
Q35	Assistance with dissertation or thesis proposal
Q36	Your dissertation or thesis research
Q37	Advice in writing and revising the dissertation or thesis
Q38	Consideration of academic career options
Q39	Consideration of non-academic or other professional career options
Q40	Advice about current progress and next steps
Q41	Advice about navigating the systems and culture of graduate education
Q42	<b>Please share with us any additional information you may have regarding advising that you believe will be helpful:</b>

### Section 4: Mentorship

The role of a mentor is different than an advisor because it goes beyond the advice-giving to include care, watching over, and sometimes friendship.

Q43	Do you have a mentor?
Q44	If yes, who serves as your mentor?
Q45/46	If yes, please indicate how influential your mentor has been throughout your graduate school experience.
Q47	If no, would you be interested in being part of a mentoring program?

### Section 5: Inclusion and Diversity

	<b>Virginia Tech is committed to providing an inclusive and affirming environment for students. Please share how you feel Virginia Tech supports the following communities:</b>
Q48	Persons with physical disabilities
Q49	Persons with non-physical disabilities (i.e. learning disabilities)
Q50	Lesbian, gay, bisexual, or queer
Q51	Transgender
Q52	Ethnic and racial minorities
Q53	Veterans
Q54	International Students
	<b>Please indicate your level of agreement with the following statements:</b>
Q55	I feel my identity(ies) are honored and respected at Virginia Tech.
Q56	I know the process for reporting discrimination or harassment.
Q57	I am comfortable reporting an act of discrimination or harassment that I had experienced.

Q58	I appreciate having a confidential resource (Office of the Ombudsperson) to talk about discrimination or harassment in addition to formal reporting options.
Q59	<b>Please share with us any other thoughts you may have on creating an inclusive and affirming environment for graduate education</b>
<b>Section 6: About you</b>	
Q60	What is your age group?
Q61	What is your enrollment status?
Q62	In what degree level are you enrolled?
Q63	In what program are you enrolled?
Q64	Are you an international student (holding student visa)?
Q65	(If "no" to #20, not an international student) What is your race and/or ethnicity?
Q66	Are you an Active Duty member or Veteran of the US Military?
Q67	What is your gender identity?
Q68	Do you identify as lesbian, gay, bisexual, or queer?
Q69	Do you have dependents?
Q70	What are your sources of funding for your university education? (Check all that apply)
Q71	If you could start over again, would you enroll at Virginia Tech?