Factors Influencing
Computer Information Systems Majors
Whether to Join AITP

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Abstract

The Association of Information Technology Professionals (AITP) offers students, especially those majoring in Computer Information Systems (CIS), a number of opportunities and benefits. Even though it seems that most if not all CIS majors would join AITP, we have discovered that a majority of CIS majors at our university have not joined our local student chapter. To better understand why some students have not joined AITP, we first conducted interviews with CIS majors, both AITP members and non-AITP members, to elicit their perceptions, thoughts, and opinions about AITP. Based upon the findings from the interviews, we then surveyed fifty students at our institution. We tested for significant differences between AITP members and non-AITP members. We discovered that some students have misperceptions about AITP. We also found that certain peer influences are important in encouraging students to join the organization. In addition, we discovered that several factors, such as time and money, may prevent students from joining AITP. We also found that some students have strong feelings, both positive and negative, about how AITP is run at our university. Future researchers and stakeholders can use our study's results to focus on the factors which influence CIS and related majors whether to join their local AITP student chapter.

Keywords: AITP, CIS majors, peer influences, perceptions, theory of planned behavior

1. INTRODUCTION

It seems intuitive that all information systems majors (CIS, MIS, BIS, etc.) would join their respective Association of Information Technology Professionals (AITP) student chapter, especially since AITP provides a number of opportunities and benefits to its members. The AITP National Collegiate Conference is one of many ways that AITP brings together those students interested in

technology with hiring managers, relevant speakers, and computer-related competitions.

However, we were quite surprised to find out that a majority of the CIS majors at our university have not joined our local AITP student chapter. After one of my co-authors (a student in our CIS program) discovered that some of her CIS classmates did not attend our first AITP meeting this semester, she asked me (the AITP Faculty Advisor at our university) for more details about our club.

We discovered that only 28% (62 out of 220) of the CIS majors at our university had joined AITP after the second week of classes this semester. Hoping that this was an isolated incident, we gathered information about other AITP student chapters in our area. Unfortunately, we found that other schools also have a relatively low percentage of CIS majors who have joined AITP.

The mission of AITP is to offer opportunities for Information Technology (IT) leadership and education through partnerships with industry, government and academia. AITP provides quality IT related education, information on relevant IT issues and forums for networking with experienced peers and other IT professionals. AITP's vision is to be recognized as the Information Technology professional organization of choice for providing leadership opportunities, professional development and personal growth (http://www.aitp.org).

Our question is: If AITP provides all of these benefits for its members, why aren't more students, especially CIS majors, joining AITP, and how can we influence them to join? Since the numbers of CIS majors who are also AITP members is relatively low for our university and other schools in our area, we decided to try to find out what factors encourage or discourage students from joining their local AITP chapter.

We started out by researching the Internet and various online research databases for reasons people join clubs or organizations. Unfortunately, we found little information on the topic, which led us to conduct interviews with our university's students on the factors that influence them to join or not join AITP.

2. LITERATURE REVIEW

A small set of widely applied theories is commonly used to investigate intentions and behaviors. These include the theory of reasoned action (TRA) (Ajzen & Fishbein, 1980) and the theory of planned behavior (TPB) (Ajzen, 1991).

Theory of Reasoned Action

The theory of reasoned action (TRA) was introduced in 1967 and underwent multiple modifications and tests (Fishbein & Ajzen, 1975) before reaching its current form. The TRA has been applied to analyze a variety of situations and behaviors. According to the TRA, an individual's performance of a specific behavior is determined by his or her behavioral intention (BI) to perform it, which is determined by the individual's attitude (A) and the subjective norm (SN) about the behavior. Subjective norm refers to the person's perception of the social pressures associated with performing the behavior.

The usage of TRA is restricted to volitional behaviors, those in which a person can decide at will whether to perform or not perform them (Sheppard, Hartwick, & Warshaw, 1988). Performance of behaviors under incomplete volitional control may depend on availability of opportunities and resources, including time, money, skills, and others' cooperation (Isak Ajzen, 1991).

Theory of Planned Behavior

The theory of planned behavior (TPB), is an extension of the TRA that includes an additional antecedent of intention: the degree of perceived behavioral control (Isak Ajzen, 1991). Perceived behavioral control (PBC) refers to a person's perceptions of "… the presence or absence of requisite resources and opportunities" (Icek Ajzen & Madden, 1986). It is derived from Bandura's (Bandura, 1977) concept of self-efficacy – "the conviction that one can successfully execute (a given) behavior" (Eagly & Chaiken, 1993).

In the TPB, behavioral intention is the weighted sum of attitude, subjective norms, and PBC. Behavior is the weighted sum of intention and PBC. TPB has been used in many studies to predict intention and behavior (Icek Ajzen, 2001; Armitage & Conner, 2000; Ingram, Cope, Harju, & Wuensch, 2000; Sutton, 1998). A review of studies using TPB found that prediction of behavior

was improved by adding PBC as a predictor (Isak Ajzen, 1991).

Measures of PBC have often been found to improve prediction of behavior above and beyond attitude and subjective norm (Icek Ajzen & Fishbein, in press). Meta-analyses have discovered that, on average, PBC explains a significant increase of an additional two percent of the variance in behavior and an additional six percent of the variance in intentions (Icek Ajzen & Fishbein, in press; Armitage & Conner, 2001).

3.   METHODOLOGY

In order to begin conducting our research on how to encourage more CIS majors to join AITP, we thought the best way to do it was by interviewing some of our students (see Appendix for interview protocol). One of my co-authors, a student at our institution, randomly selected ten CIS majors and asked each of them thirteen questions on their thoughts about AITP. She interviewed both CIS majors who are currently members of AITP, as well as CIS majors who have not joined AITP. The thirteen questions were geared towards finding out more information on what students think about AITP and to elicit suggestions on how to improve AITP to encourage more non-members to join. We used the theory of planned behavior (Ajzen 1991) to guide our interview questions, as we plan to use this theory to capture quantitative data for future analysis.

Using structured interviews (see Appendix A), we asked questions to investigate CIS majors' beliefs, thoughts, and attitudes about AITP at our institution. All interviews were audio-taped and transcribed to ensure that we properly recorded each student's responses. We categorized the responses for each question to allow us to determine the most popular answers for each. We used thematic analysis (Aronson, 1994; Boyatzis, 1998), going back through the data repeatedly to identify patterns among the students' responses.

Based upon the findings from the interviews, we created an online survey using Survey-Monkey (www.surveymonkey.com). We integrated the findings from the interviews with the theory of planned behavior constructs (attitude, subjective norms, and perceived behavioral control) to begin empiri-

cally analyzing CIS majors' intentions to become an AITP member. We emailed 200 Computer Information Systems majors at our university, asking them to complete the online survey. To encourage them to participate, we informed them that we would randomly select three participants and present each of them a $10 Staples gift card. Fifty students completed the survey, a response rate of 25%.

Forty-eight percent of the respondents were current members of AITP when they completed the survey, while 52% had not joined AITP. Seniors and juniors each comprised 36% of the respondents, followed by sophomores (22%) and freshmen (6%).

The survey instrument and descriptive statistics are provided in Appendix B.

4.   FINDINGS

We have integrated the findings from the thematic analysis of the interviews and our final survey results. Under each subheading, we first present quotes from interviews, followed by descriptive statistics from the survey results. The subheadings indicate the most common themes from the interviews.

Overall Perceptions of AITP

In order to get a better understanding of students' perceptions about AITP, we asked students several questions to get them to voice their opinions. Students were assured confidentiality in order to get their honest opinions concerning AITP. One of the interview questions asked students, "What perceptions do you have of AITP?" Most of the students she interviewed said they like the direction that my club is heading and thought the club was worthwhile. Another one of the students she interviewed held a different perception on the club. The interviewee stated that, "The club is worthwhile joining; however, I think that it needs to be distanced from the CIS department now that we have non-majors joining. I believe that 25% of our department (CIS) can and will join; others will look at the membership fee and think about other things more worthwhile they could spend their money on." About 80% of the other interviewees said that the club is worthwhile because you are exposed to different employers, it provides great networking opportunities and you are

able to get a cheaper rate for computer certifications. One student's perception on the club was that they like the free pizza and having guest speakers come from various companies.

Most survey respondents held favorable perceptions about AITP. Table 1 shows the combined breakdown of students who strongly agreed, agreed, or somewhat agreed with the statements they were provided about becoming or remaining a member of the AITP student chapter. Students were asked to rate each statement ranging from Strongly Agree (1) to Strongly Disagree (7).

Table 1 also shows the average response for both AITP members and non-AITP members, as well as the F-test statistic comparing the two groups.

Each question in Table 1 was proceeded with, "In my opinion, becoming (or remaining) a member of the AITP student chapter:".

Statement	% in Agreement	AITP Avg	Non-AITP Avg	F-test
Would be worthwhile to me.	88%	1.58	2.13	0.08
Would give me more opportunities to network with hiring managers.	92%	1.54	2.04	0.28
Would give me greater access to guest speakers.	92%	1.79	2.17	0.13
Would expose me to employers.	92%	1.63	2.21	**0.04**
Would allow me to save money on certification exams.	86%	1.29	2.08	**0.00**
Would be helpful for my career.	90%	1.54	2.08	**0.01**

Table 1. Student perceptions of AITP

Influence of Others

Of the ten students we interviewed, all but one said they have encountered positive influences to join AITP. The one interviewee that held a different opinion on positive influences stated that "My influence of not being a member basically stems from how the club is run. There is no separation of department and club. The department chair believes that it is his club and everything CIS related should go through it. While I can understand and agree with a particular level of exclusivity within the club, I feel that all announcements should go directly through the club president/vice president, and that although they are busy, the advisor should only be used as a primary contact in desperate times." All of the interviewees said that CIS professors influenced them to join. About 90% of the said that classmates/friends encouraged them to join too. One of the interviewees said that their parents influenced them to join because it would look good on their resume. A couple of the students said that they "influenced themselves" to join because they knew it would look good to add on their resume and they also wanted to gain better networking opportunities with students and employers.

Table 2 shows the combined breakdown of students who strongly agreed, agreed, or somewhat agreed with the statements they were provided about whether certain groups think they should join or remain a member of AITP. Students were asked to rate each statement ranging from Strongly Agree (1) to Strongly Disagree (7).

Table 2 also shows the average response for both AITP members and non-AITP members, as well as the F-test statistic comparing the two groups.

Each question in Table 2 was proceeded with, "_____ think I should become (or remain) a member of the AITP student chapter.

Statement	% in Agree-ment	AITP Avg	Non-AITP Avg	F-test
My CIS professors	94%	1.38	1.71	**0.05**
My classmates / friends	56%	2.33	3.33	0.59
My parents	50%	2.63	3.38	0.62
Job employers	68%	2.04	2.54	0.95
Other people important to me	42%	2.54	3.25	0.71

Table 2. Referent groups' opinions about AITP

Limiting Factors

From the ten interviews, we discovered that some students encounter factors that *discourage* them from joining. After combining the interview results, we found that there are three main limiting factors that may prevent students from joining AITP.

The first limiting factor is free time. Some students do not have enough free time to attend the meetings. About 50% of the interviewees said they did not have enough available time due to jobs, school work and other university activities such as clubs or sports.

We also found that money is a limiting factor for students to join. The fees to join AITP at our university are $20/semester or $30/year. Several students stated that they do not have enough money to pay this fee, and can join other clubs for free or for a lower cost.

Another limiting factor is that some students do not possess enough knowledge about AITP. 50% of the interviewed students said that they do not know enough about the benefits of the club to join. Some even said that they have heard that the club does not follow through with their promises, which also makes them unwilling to join.

Table 3 shows the combined breakdown of students who strongly agreed, agreed, or somewhat agreed with the statements they were provided about whether certain limiting factors restrict them from joining or remain-

ing a member of AITP. Students were asked to rate each statement ranging from Strongly Agree (1) to Strongly Disagree (7).

Table 3 also shows the average response for both AITP members and non-AITP members, as well as the F-test statistic comparing the two groups.

Each question in Table 3 was proceeded with, "I _____ to become (or remain) a member of the AITP student chapter.

Statement	% in Agree-ment	AITP Avg	Non-AITP Avg	F-test
Have the time	70%	1.79	2.88	**0.00**
Know enough about AITP whether	76%	1.63	3.04	**0.00**
Have the money	82%	1.63	2.38	**0.00**

Table 3. Factors limiting students from joining AITP

Feelings about AITP

During each interview, each student was asked how they personally *feel* about AITP. We wanted to know if they are excited about upcoming AITP trips or if they are bored with AITP in general. A few responses we got are as follows: "I like what AITP is doing although I don't really feel like going on trips is worth my money. I do like how AITP gets employers such as Wachovia to come to [our university] and speak though." Another student stated, "The organization itself outside of [our university] is great but within [our university] it's not as clear cut/not enough support." Someone else said, "I'd feel better if we could bring more employers to campus instead of traveling." Another student said, "It's true that there is no reason that every major should want to join AITP, but to make them want to is a quite a different story…."

Table 4 shows the breakdown of students who felt certain ways about AITP.

Table 4 also shows the average response for both AITP members and non-AITP members, as well as the F-test statistic comparing the two groups.

Each question in Table 4 was proceeded with, "I would _____ to become (or remain) a member of the AITP student chapter.

Statement	% in Agreement	AITP Avg	Non-AITP Avg	F-test
Be excited / somewhat excited	82%	1.38	1.88	**0.03**
Be satisfied / somewhat satisfied	86%	1.17	1.71	**0.00**
Be happy / somewhat happy	84%	1.21	1.63	**0.03**
Like / somewhat like	86%	1.08	1.67	**0.00**

Table 4. Students' feelings about AITP

5.   DISCUSSION

After examining the interview transcripts, we found that most members of AITP are satisfied with the club. However, we also discovered things that we did not expect some of the interviewees to say, such as how some students felt that the club had over promised things. We found it interesting that one student felt like the club should be run solely by the AITP president and not by the department chair.

We expected that certain peers would be influential in encouraging students to join AITP. One of the co-authors (who is also a student) was encouraged by many CIS professors and classmates to join the AITP. We also expected that the majority of students think that being a member is worth their time because of the potential benefits like cheaper certifications, trips, and networking opportunities with different companies.

Even though fifty students completed the online survey, twenty-four of these students were already members of AITP. This may have positively skewed the results of the survey since a disproportionate number of our CIS majors completing the survey had already joined the club. Sixty-one (61%) percent of the students who had already joined AITP completed the online survey, while only 16% of the non-members com-

pleted the survey. Therefore, we used F-tests to test for significant differences between the two groups: AITP members and non-AITP members.

We discovered significant differences between the AITP members and non-AITP members for several beliefs / perceptions. Members expressed stronger agreement that believed AITP would provide them exposure to employers (p = .04), save them money on certification exams (p < .01), and help them for their careers (p = .01). The results suggest that non-members lack an understanding of the benefits of AITP membership in our student chapter. Even though our AITP chapter offers certification exam discounts and other benefits to members, it seems that non-members are not aware of these things.

The findings in Table 3 provide strong evidence that several limiting factors may prevent non-members from joining AITP. We discovered significant differences for all three factors from the survey: lack of time (p < .01), knowledge (p < .01), and money (p < .01). These findings suggest that we need to do a better job at scheduling meetings so more students can attend. We also need to better inform our IS-related majors about AITP.

We also found significant differences in students' feelings about AITP. Current members are more excited (p = .03), satisfied (p < .01), and happy (p = .03) about AITP. They also like (p < .01) AITP significantly more than non-members.

The results of the interviews and survey leave us with more questions than answers. How do we influence **MORE** CIS majors to join AITP? How can we change their perceptions about AITP? How can we better inform students about the opportunities provided by AITP membership?

We plan to address these questions in future research in which we will use a survey to be distributed to all CIS majors at multiple universities across the US. This survey will be based upon the theory of planned behavior. The theory of planned behavior (Ajzen, 1991) has been used in many fields, including Information Systems, to help researchers to understand why people intend to behave in a certain manner. The theory measures a person's attitude, subjective

norms, and perceived behavioral control. Subjective norms are defined as the influence that other people who are important to a person have on him or her (Ajzen, 1991). Perceived behavioral control refers to a person's perceptions of "… the presence or absence of requisite resources and opportunities" (Ajzen et al., 1986). The theory of planned behavior suggests that attitude, subjective norm, and perceived behavioral control influence a person's intention to do something. Previous studies have found a strong relationship between a person's intention and their actual behavior.

The results of the survey will provide us additional support to better understand which factors are most important in influencing a CIS major's decision whether to join AITP.

6.   CONCLUSION

Through the interviews, we have found a number of useful suggestions on how to encourage more students to join AITP. With the results we've gathered, we now can conduct more structured interviews at our university AND other universities to see if their answers are consistent with the results we have gathered from our university on why CIS majors join or do not join AITP. We can also conduct online surveys using the theory of planned behavior as the theoretical underpinning. The survey results will be very useful for the future to find out which reasons are the most important in influencing CIS majors to join AITP.

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APPENDIX A

AITP Interview Questions

(First, make sure that student is a CIS Major and find out whether they're a Freshman, Sophomore, Junior, or Senior).

BEFORE BEGINNING THE INTERVIEW, EXPLAIN TO THE STUDENT THAT ONLY I WILL KNOW WHAT THEY SAID. (THEIR RESPONSES WILL BE KEPT ANONYMOUS)

1. Have you ever heard of a club called AITP?

    a. *(If they have heard of AITP)* - Are you currently a member of AITP?

        i. *(If they're currently an AITP member*) – When did you join AITP?

            1. I'm wanting to find out the most important reasons that CIS majors join (or do not join) AITP. Could you tell me some of the most important reasons that you joined AITP? *(Ask the student to be completely honest; let them know that do not have to give the type of answer that they think I would want to hear, and remind them that their responses will be anonymous – no other students or professors will know who said what).*

            2. Are there other reasons that you joined AITP? (Try to get the student to elaborate).

     ii. (*If they're currently NOT an AITP member*) - I'm wanting to find out the most important reasons that CIS majors join (or do not join) AITP. Could you tell me some of the reasons why you have NOT decided to join AITP? *(Ask the student to be completely honest; let them know that do not have to give the type of answer that they think I would want to hear, and remind them that their responses will be anonymous – no other students or professors will know who said what).*   (get their responses)   Are there other reasons why you haven't joined AITP? (Try to get the student to elaborate).

    b. (*If student hasn't heard of AITP*, then this is probably a good reason why they're not a member ☺) – in this case, explain to them the purpose of AITP.

2. Do you think employers would look highly upon you being a member of a club associated with your major such as AITP? Why / why not?

3. Do you think that being a member of AITP would differentiate you from non-AITP members when applying for jobs? Why / why not?

4. What perceptions do you have (if any) of AITP? (let them give their thoughts)   For instance, do you think that it would be worthwhile for CIS majors to join it? Why / why not?

5. Do you think that being an AITP member would give you more opportunities to meet with or network with hiring managers?

6. Do you think it is worthwhile for CIS majors to join AITP? Why / why not?

7. Has anyone encouraged you to join AITP or did they influence you to join? (let them respond)   Have your CIS professors encouraged you to join AITP? (let them respond)   Have your friends who are CIS majors encouraged you to join AITP?   (let them respond)   Are there any other people or groups important to you that believe you should be an AITP member?

8. Has anyone influenced you NOT to join AITP? If so, how?

9. There may be factors outside a student's control that prevents them from joining AITP, such as having enough free time, money, or overall knowledge about AITP.

    a. I realize that some students also work, or may take an overload of classes. Do you personally have enough free time to join AITP and go to meetings?

    b. Before we began talking today, did you know enough about AITP to decide whether to join the organization? (did you have enough background knowledge about AITP?)
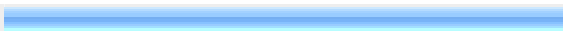
    c. The fees for AITP are $20/semester or $30/year. Does the cost of AITP membership discourage you from joining? If so, elaborate.

    d.   Are there any other factors you can think of that may prevent students from

        joining AITP?

10. How do you FEEL about AITP? For instance, are you excited about the things it is do-
ing this semester, such as going to Detroit, or do you think AITP is a boring club? Are
you happy about the direction of AITP? Do you have any other feelings about AITP,
either good or bad?

11. About what percentage of your CIS professors have encouraged you to join AITP this
semester?

12. Are you a member of any clubs at ASU? If so, which ones? What are the main rea-
sons that you decided to join these clubs?

13. What do you think would encourage MORE CIS majors to join AITP? (try to get them
to elaborate)

APPENDIX B – Survey Instrument

1. My current major is _____. (type UNDECIDED if you have not yet chosen a major)

	Response Count
	100
answered question	**100**
skipped question	**0**

2. If you are a double-major, please list your second major:

	Response Count
	30
answered question	**30**
skipped question	**70**

3. What is your class?

	Response Percent	Response Count
Freshman	9.0%	9
Sophomore	20.0%	20
Junior	33.0%	33
Senior	**35.0%**	35
Other (please specify)	3.0%	3
answered question		**100**
skipped question		**0**

4. Majoring or double-majoring in Computer Information Systems before graduating from college:

	Strongly Agree	Agree	Some-what Agree	Neu-tral	Dis-agree Some-what	Dis-agree	Strongly Dis-agree	Rat-ing Aver-age	Response Count
Would enable me get a good paying job upon graduation from college.	20.0% (20)	**40.0% (40)**	20.0% (20)	11.0% (11)	3.0% (3)	5.0% (5)	1.0% (1)	2.56	100
Would be considered "nerdy."	0.0% (0)	1.0% (1)	13.0% (13)	14.0% (14)	12.0% (12)	**37.0% (37)**	23.0% (23)	5.40	100
Would provide me a number of job opportunities upon graduation from college.	24.0% (24)	**41.0% (41)**	23.0% (23)	9.0% (9)	1.0% (1)	2.0% (2)	0.0% (0)	2.28	100
Would be worthwhile to me.	3.0% (3)	24.0% (24)	**31.0% (31)**	19.0% (19)	14.0% (14)	8.0% (8)	1.0% (1)	3.45	100
Is not a good choice for me as a fe-male because CIS is mainly for males.	0.0% (0)	0.0% (0)	4.0% (4)	9.0% (9)	10.0% (10)	31.0% (31)	**46.0% (46)**	6.06	100
Would be difficult for me.	20.0% (20)	**28.0% (28)**	16.0% (16)	14.0% (14)	10.0% (10)	9.0% (9)	3.0% (3)	3.05	100
							answered question		100
							skipped question		0

5. _____ think I should major or double-major in Computer Information Systems before graduating from college:

	Strongly	Agree	Some-	Neu-	Dis-	Dis-	Strongly	**Rat-**	**Response**

	Agree		what Agree	tral	agree Some-what	agree	Dis-agree	ing Av-erage	Count
My parents	3.0% (3)	6.0% (6)	8.0% (8)	**40.0% (40)**	8.0% (8)	24.0% (24)	11.0% (11)	4.60	100
My friends	3.0% (3)	2.0% (2)	1.0% (1)	**46.0% (46)**	6.0% (6)	32.0% (32)	10.0% (10)	4.86	100
My professors	3.0% (3)	9.0% (9)	11.0% (11)	**40.0% (40)**	4.0% (4)	24.0% (24)	9.0% (9)	4.41	100
Other people important to me	1.0% (1)	3.0% (3)	10.0% (10)	**43.0% (43)**	7.0% (7)	27.0% (27)	9.0% (9)	4.69	100
No one important to me	5.0% (5)	13.0% (13)	3.0% (3)	**44.0% (44)**	5.0% (5)	23.0% (23)	7.0% (7)	4.28	100
						answered question			100
						skipped question			0

6. I _____ to major or double-major in Computer Information Systems before graduating from college.

	Strongly Agree	Agree	Some-what Agree	Neu-tral	Dis-agree Some-what	Dis-agree	Strongly Dis-agree	Rat-ing Aver-age	Re-sponse Count
Have the ability to choose whether	19.0% (19)	**37.0% (37)**	18.0% (18)	9.0% (9)	5.0% (5)	7.0% (7)	5.0% (5)	2.85	100
Possess enough knowledge about the CIS major to decide whether	4.0% (4)	**26.0% (26)**	14.0% (14)	16.0% (16)	19.0% (19)	16.0% (16)	5.0% (5)	3.88	100
Have the resources	8.0% (8)	**34.0% (34)**	18.0% (18)	19.0% (19)	4.0% (4)	11.0% (11)	6.0% (6)	3.34	100
Have the time	1.0% (1)	7.0% (7)	12.0% (12)	8.0% (8)	22.0% (22)	**25.0% (25)**	**25.0% (25)**	5.18	100

7. _____ become a major or double-major in Computer Information Systems before graduating from college.

	Strongly Agree	Agree	Some-what Agree	Neu-tral	Dis-agree Some-what	Dis-agree	Strongly Dis-agree	Rat-ing Aver-age	Response Count
I intend to	4.0% (4)	0.0% (0)	1.0% (1)	5.0% (5)	9.0% (9)	34.0% (34)	**47.0% (47)**	6.05	100

If possible, I will	3.0% (3)	2.0% (2)	3.0% (3)	7.0% (7)	11.0% (11)	33.0% (33)	**41.0% (41)**	5.84	100
I plan to	4.0% (4)	0.0% (0)	1.0% (1)	4.0% (4)	8.0% (8)	36.0% (36)	**47.0% (47)**	6.08	100
							answered question		100
							skipped question		0

8. Generally speaking, I do what _____ think I should do.

	Strongly Agree	Agree	Some-what Agree	Neu-tral	Dis-agree Some-what	Dis-agree	Strongly Dis-agree	**Rat-ing Aver-age**	**Response Count**
My parents	10.0% (10)	29.0% (29)	**31.0% (31)**	13.0% (13)	7.0% (7)	8.0% (8)	2.0% (2)	3.10	100
My friends	0.0% (0)	7.0% (7)	**30.0% (30)**	17.0% (17)	11.0% (11)	22.0% (22)	13.0% (13)	4.50	100
My professors	2.0% (2)	17.0% (17)	**27.0% (27)**	17.0% (17)	9.0% (9)	19.0% (19)	9.0% (9)	4.07	100
Other people important to me	3.0% (3)	19.0% (19)	**33.0% (33)**	10.0% (10)	12.0% (12)	14.0% (14)	9.0% (9)	3.87	100
No one important to me	0.0% (0)	1.0% (1)	0.0% (0)	28.0% (28)	9.0% (9)	**34.0% (34)**	28.0% (28)	5.59	100
							answered question		100
							skipped question		0

9. Having the _____to become a Computer Information Systems major or double-major would make it [much easier----------much more difficult] for me when deciding upon my emphasis in college.

	Much Easier	Easier	Some-what Easier	Neu-tral	Some-what More Difficult	More Diffi-cult	Much More Diffi-cult	**Rat-ing Aver-age**	**Response Count**
Ability	17.0% (17)	22.0% (22)	24.0% (24)	**31.0% (31)**	2.0% (2)	4.0% (4)	0.0% (0)	2.91	100
Background Knowledge (about CIS)	17.0% (17)	**30.0% (30)**	21.0% (21)	27.0% (27)	2.0% (2)	3.0% (3)	0.0% (0)	2.76	100
Resources	9.0% (9)	22.0% (22)	29.0% (29)	**35.0% (35)**	4.0% (4)	1.0% (1)	0.0% (0)	3.06	100

Time	25.0% (25)	28.0% (28)	22.0% (22)	18.0% (18)	3.0% (3)	3.0% (3)	1.0% (1)	2.59	100
							answered question		100
							skipped question		0

10. Becoming a major or double-major in Computer Information Systems before I graduate from college is a _____ idea.

	Response Percent	Response Count
Very Good	6.0%	6
Good	23.0%	23
Somewhat Good	**24.0%**	24
Neutral	18.0%	18
Somewhat Bad	11.0%	11
Bad	12.0%	12
Very Bad	6.0%	6
answered question		100
skipped question		0

11. Becoming a major or double-major in Computer Information Systems before I graduate from college is a _____ idea.

	Response Percent	Response Count
Very Positive	8.0%	8
Positive	**31.0%**	31
Somewhat Positive	20.0%	20
Neutral	20.0%	20
Somewhat Negative	4.0%	4
Negative	13.0%	13
Very Negative	4.0%	4
answered question		100

	skipped question	**0**

12. Becoming a major or double-major in Computer Information Systems before I graduate from college is a _____ idea.

		Response Percent	**Response Count**
Very Helpful		6.0%	6
Helpful		**25.0%**	25
Somewhat Helpful		24.0%	24
Neutral		**25.0%**	25
Somewhat Unhelpful		5.0%	5
Unhelpful		9.0%	9
Very Unhelpful		6.0%	6
	answered question		100
	skipped question		0

13. Please rate the following statements on a scale from Very Undesirable to Very Desirable.

	Very Desirable	Desirable	Somewhat Desirable	Neutral	Somewhat Undesirable	Undesirable	Very Undesirable	Rating Average	Response Count
Getting a good paying job upon graduation from college is	**72.0% (72)**	21.0% (21)	5.0% (5)	2.0% (2)	0.0% (0)	0.0% (0)	0.0% (0)	1.37	100
Being considered "nerdy" is	0.0% (0)	6.0% (6)	18.0% (18)	**46.0% (46)**	21.0% (21)	7.0% (7)	2.0% (2)	4.11	100
Having a number of job opportunities upon graduation from college is	**74.0% (74)**	21.0% (21)	3.0% (3)	2.0% (2)	0.0% (0)	0.0% (0)	0.0% (0)	1.33	100
Doing something worthwhile to me is	**68.0% (68)**	27.0% (27)	3.0% (3)	2.0% (2)	0.0% (0)	0.0% (0)	0.0% (0)	1.39	100
As a female, choosing a major which	7.0%	18.0%	20.0%	**46.0%**	7.0%	2.0%	0.0%	3.34	100

consists mainly of males is	(7)	(18)	(20)	**(46)**	(7)	(2)	(0)		
Doing something difficult is	8.0% (8)	25.0% (25)	**37.0%** **(37)**	15.0% (15)	12.0% (12)	3.0% (3)	0.0% (0)	3.07	100
						answered question			100
						skipped question			0

14. I would _____ becoming a Computer Information Systems major or double-major before I graduate from college.

		Re- sponse Percent	Re- spons Coun
Love		6.0%	
Somewhat Love		15.0%	1
Be Neutral		**44.0%**	4
Somewhat Hate		17.0%	1
Hate		18.0%	1
		answered question	10

15. I would _____ becoming a Computer Information Systems major or double-major before I graduate from college.

	Re- sponse Percent	Response Count
Be Excited About	9.0%	9
Be Somewhat Excited About	22.0%	22
Be Neutral About	**31.0%**	31
Be Somewhat Bored About	19.0%	19
Be Bored About	19.0%	19
answered question		100
skipped question		0

16. I would _____ becoming a Computer Information Systems major or double-major before I graduate from college.

	Re- sponse	Response Count

	Percent	
Be Happy	11.0%	11
Be Somewhat Happy	26.0%	26
Be Neutral About	**33.0%**	33
Be Somewhat Unhappy	9.0%	9
Be Unhappy	21.0%	21
	answered question	**100**
	skipped question	**0**

17. I would _____ becoming a Computer Information Systems major or double-major before I graduate from

	Response Percent	
Be Stressed	**49.0%**	
Be Somewhat Stressed	26.0%	
Be Neither Stressed nor Relaxed	23.0%	
Be Somewhat Relaxed	1.0%	
Be Relaxed	1.0%	
	answered question	
	skipped question	