Research Report

Campus Sustainability Literacy Survey

Professor: Ivan Katchanovski TA: Laurier Roy Due: April 2, 2012 CMN 3102 C

Tamara Bouchard - 5650235 Jessica D'Aoust - 6011451 Francine Leclair - 3277340 Kyleigh Marcotte - 5674503 Stephanie Morin - 5938480 Vidya Nair - 6043346

TABLE OF CONTENTS

1.	Description of CSL Topic
	1.1 Research Question
	1.2 Research Hypothesis
	1.3 Review of Studies on Topic
2.	Description of Research Method
	2.1 Demographic Analysis
	2.2 Quantitative Analysis Methods
3.	Quantitative Analysis Results9
	3.1 Chi Square
	3.2 Correlation
	3.3 Regression
	3.4 Independent Samples T-Test
	3.5 Frequency Distributions
4.	Conclusion15
5.	References16
6.	Material Specific to CSL: Recommendations
	APPENDIXES
I.	SPSS Output Charts
	a. Chi Square
	b. Correlation
	c. Regression
	d. Independent Samples T-Test
	e. Frequency Distribution: Overall Scores
	f. Frequency Distribution: CSL Findings
	g. Frequency Distribution: Demographics
II.	Survey
III.	Individual Contributions to Assignment

1. Description of Research Topic

The researchers are collaborating with the Office of Campus Sustainability at the University of Ottawa through a Community Service Life placement to administer a Campus Sustainable Literacy Survey in English. The purpose of the survey is to determine the level of understanding University of Ottawa students possess pertaining to campus sustainability initiatives. With this survey, the Office of Campus Sustainability aims to gain a wider understanding how students can be more sustainably literate. The sustainability survey will be handed out in English to a random group of University of Ottawa students. The findings will reveal how to establish more effective methods of either further increasing the literacy, or maintain the current level of understanding students have.

1.1 Research Question

Within the study, the researchers will answer two primary research questions:

- i. What is the level of student literacy concerning campus sustainability at the University of Ottawa?
- ii. How are the literacy levels correlated to the amount of public information released by the University of Ottawa Office of Campus Sustainability?

1.2 Research Hypothesis

We hypothesize the overall student sustainability literacy level concerning campus sustainability is low at the University of Ottawa. We believe this is correlated with the amount of public information released by the Office of Campus Sustainability at the University of Ottawa.

1.3 Review of Studies on Topic¹

Literary research on the topic of sustainability on campus reveals that this is a worldwide trend. In *Definitions and Frameworks for Environmental Sustainability in Higher Education* (Wright, 2002), the author explains that universities and colleges around the world have signed sustainability accords such as the Stockholm, Tbilisi, Talloires, Halifax, Kyoto and Swansea declarations. Signing these accords is said to spread the idea of impactful participation in sustainability. Other higher education establishments have implemented environmental policies strictly tailored to their own sustainability improvements. The author of this article concludes that this approach is not conducive to making significant changes and suggests specific physical operations, sustainable academic research, campus-wide environmental literacy and development of interdisciplinary education and partnerships with governmental and non-governmental organizations to truly make changes on campus (Wright, 2002). Here in Canada, there is some concern over the lack of reporting on sustainability by universities.

In turn, this can impact the level of improvements as well. In *The State of Sustainability Reporting at Canadian Universities* (Fonseca et al., 2011), the University of Ottawa is not listed at a top level in terms of reporting to the public. However "Canada's University" is among those with previous reporting experience. The issues is in the delay and discontinuation of reporting – which remain undisclosed – as it may aid in understanding what type of information is

_

¹ Full citations available in section 5 of report titled "References"

provided to students and how institutions may better achieve literacy (Fonseca et al., 2011).

Research professors, Robert Marans and Jack Edelstein conducted a case study on the energy conservation program at the University of Michigan and discussed their findings in *The Human Dimension of Energy Conservation and Sustainability* (Marans et al., 2010).

By studying behaviours, attitudes and literacy among students and faculty, the research concluded that university staff were most concerned about conserving energy, while students were least concerned. The study also revealed that a significant amount of the respondents were unaware of previous efforts by the university to maintain sustainability. Those who were aware believed efforts were inadequate (Marans et al., 2010).

In Sustainable Development Education and Literacy (Dale et al., 2005), the authors explain that when higher education institutions design and teach sustainable development related programs an interdisciplinary approach should be incorporated, allowing for problem-based applied learning. This approach may provide solutions to create environmental awareness while educating participants. These researchers also offer the counter-argument that a curriculum for sustainable development is ineffective, ambiguous and incapable of imposing sanctions on industry and government (Dale et al., 2005).

Further issues that arise with an increasing amount of development policies to implement sustainability at university campuses, is upon graduating, students are still leaving without the necessary knowledge to ensure a path to a sustainable

future. In *Integrating Sustainability in the Learning Community* (Cortese, 2005), the author argues that the issue lies in the specialized programs of study that do not include sustainability as a default, and promote individual learning by competition rather than cooperation (Cortses, 2005).

Although it may be a challenge to attain the correct formula, the author of Developing Sustainable-literate Citizens Through Outdoor Learning (Lug, 2007), says sustainability meets the needs of the present without compromising the ability of future generations to meet their own needs. Higher education institutions are reluctant to adopt more sustainable practices for a number of reasons – the key reason being that the process is incredibly reflective and takes many years as well as large sums of money to fully achieve. There is limited evidence of coherent engagement of higher education institutions for sustainable development. Outdoor learning may have something to offer since it lends itself to holistic and experiential learning and enables integration of knowledge and skills from a range of disciplines. Research suggests that education can be significant in creating a ripple effect in the promotion of environmental sensitivity (Lugg, 2007). Overall, the research is best summed up by Cortese in *The Critical Role of Higher* Education in Creating a Sustainable Future (Cortese, 2003): higher education can serve as a model of sustainability by fully integrating all aspect of campus life. Generally, education for a just and sustainable world is not a high priority due to several structural aspects of the current system. Cortese claims higher education institutions must change their current systems by taking a leadership role in preparing students and providing the information and knowledge to achieve a just

and sustainable society. This would be accomplished through several steps including implementing principles of sustainability to education and emphasizing active, experiential based learning and real-world problem solving on the campus and in the community at large. This direction and recommendation would be beneficial to environmental and literacy practice on campus (Cortese 2003).

2. Description of Research Method

The researchers created a self-administered survey that was written and administered in English and handed to random University of Ottawa students. The survey was composed of three demographic questions as well as seven separate sections concerning sustainability that were grouped together based on thee questions' relevance. In total, the survey was composed of 44 questions. The demographic questions including biological sex and on-/off-campus living were nominal level and year of study was ordinal level. The remaining questions were interval level, with 5-point Likert scale answer options (e.g. level of agreement ranging from strongly disagree to strongly agree). The survey is classified as cross-sectional, with a purposive sample so as to ensure the data retrieved will establish representative results of the student body's overall sustainability literacy level.

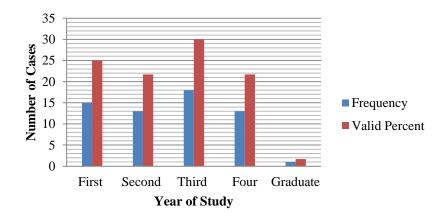
2.1 Demographic Analysis

We analyzed 60 University of Ottawa students. The respondents included both undergraduate students and graduate students. Though the surveys were given to a random and wide range of students, a larger respondent base could have yielded more representative results of the university's nearly 40,000 students. Moreover, a larger number of students who live on-campus could have been surveyed, as

well as more graduate students. A survey with more respondents would be beneficial in the future, however from the data collected with the survey at hand, the researchers can infer important results pertinent to the general sustainability literacy level of University of Ottawa students.

Biological Sex	Frequency	Valid Percent
Male	31	51.7
Female	29	48.3
Total	60	100.0

Residential	Frequency	Valid
Location		Percent
On Campus	17	28.3
Off Campus	43	71.7
Total	60	100.0



2.2 Quantitative Analysis Used

To establish reliable findings from the surveys administered, the researchers performed frequency distribution analyses and statistical methods of hypothesis were via SPSS Statistics. The researchers executed Chi-Square testing, correlation testing, regression analysis, and Independent Samples T-Test. The results of the noted tests are represented in section 3 of the report. Also included are frequency distribution tables concerning demographics (as noted in section

2.1), overall scores of each survey category, and general statistics pertinent to CSL requests for specific result findings.

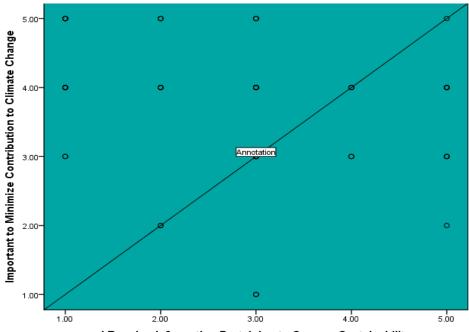
3. Quantitative Analysis Results

3.1 Chi Square

	Value	df	Significance
Pearson Chi-square	27.305	16	.038
Likelihood Ratio	16.376	16	.427
Linear by linear	.155	1	.694
association			
N of valid cases	60		

This Chi Square examines the questions "I have an excellent understanding of environmental issues" and "There is not an adequate amount of sustainability resources on campus". The significance level for this test is .038, which means there is less than .05 probability that the tested relationship occurred by chance. From these results we can accept our research hypothesis and reject the null hypothesis.

3.2 Correlation



I Receive Information Pertaining to Campus Sustainability

This correlation chart represents the relationship between receiving information from the Office of Campus Sustainability at the University of Ottawa and students' consideration of climate change. There is significant positive correlation in receiving information pertaining to campus sustainability and the importance to minimize contributions to climate change. We can therefore, forecast an increase in sustainable behaviour if information continues to be desseminated to students. However the correlation between the two variables in no way determines causation.

3.3 Regression

Based on the level of importance students place on minimizing energy usage, as well as the campus' encouragement to use sustainable transportation, the regression analysis determines a higher likelihood of positive behaviour toward environmental issues. Although this is a small-scale survey, as mentioned above, the regression test suggests heightened encouragement in sustainable transportation and minimal energy usage will lead to higher practice of sustainable behaviour among University of Ottawa students. This may suggest the University of Ottawa to lead by example as well as information. The regression chart is included in the appendixes section I(c).

3.4 T-Test

The researchers chose not to include the T-Test findings in the report, as they are not relevant to the research hypothesis. However, the chart is included in the appendixes section I(d) as it may be relevant to further studies. The tests examine the relationship between males and females pertaining to attitudes concerning sustainability.

Frequency distributions for each category in the survey:

The following table represents the mean, median and mode scores of the entire respondent population broken into the separate categories of the survey, in comparison to the perfect score possible to achieve in each.

Categories	Mean	Median	Mode	Perfect Score for each category
Understanding of Current Environmental Issues	32.2	32	34	50
Interest in Learning More About Sustainability	11.5	12	12	20
Factors at the University of Ottawa that Influence Environmental Practices and Knowledge	39.1	39	38	55
Understanding Campus Sustainability at the University of Ottawa	11.6	12	12	15
Understanding of Community and Cultural Sustainability at the University of Ottawa	9.6	9.5	9	15
Understanding of Curriculum Sustainability at the University of Ottawa	8.8	9	9	15
Medians Through Which Students Receive Sustainability Information Pertinent to the University of Ottawa	17.2	17	11	35

As demonstrated by the chart above, the survey is divided into 8 categories, 7 of which pertain to sustainable literacy. The researchers totaled the points in each category dependent on the number of questions in each and the score respondents could achieve. The "perfect score" column represents the highest level of literacy the respondent could achieve in each category. The other categories represent the

mean, median and mode of all the respondents' scores. The mean, median and mode in comparison with the perfect score demonstrate within which categories the general respondent population has less or more understanding. The closer the respondents' score is to the "perfect score" represents a higher level of understanding as "perfect" represents a full knowledge of each question within the section. A lower score in comparison to the "perfect" score represents a respondents' lack of knowledge in the category. As revealed by the "mean" column in each category in the chart above, the overall scores are low in comparison to the "perfect score", demonstrating the general student population has a low understanding of sustainability literacy. In turn, the researchers' hypothesis is further proven.

4. Conclusion

In conclusion, the researchers' hypotheses were confirmed. The first research question examined the level of student literacy pertaining to campus sustainability at the University of Ottawa, which ultimately proved to be low. Despite the low sustainability literacy level, 44.3% of students agreed they have a good understanding of general environmental issues and 51.7% of students surveyed are willing to learn more about environmental issues and sustainability. Overall, students primarily lack sustainability information pertaining to campus rather than general environmental issues. The second research question examined the literacy levels correlating with the information released by the Office of Campus Sustainability. 33.3% of students were unsure if they received information. When asked if the University of Ottawa has offered sufficient information on sustainable efforts 28.2% were unsure and 33.9% disagreed. In another question,

29.7% of students claimed that the University of Ottawa does not make students aware of their sustainable initiatives. Overall, researchers concluded that students' literacy level concerning campus sustainability is low and correlated with the lack of informational material put forth by the University of Ottawa to make students better aware of the sustainable efforts on campus.

5. References

- Cortese, Anthony D. "The Critical Role of Higher Education in Creating a Sustainable Future." *Planning for Higher Education* (2003). Association for the Advancement of Sustainability in Higher Education. Web. 1 Mar. 2012.
- Cortese, Anthony D. "Integrating Sustainability in the Learning Community." *Facilities Manager Magazine* 21.1 (2005). APPA: Leadership in Educational Facilities. Web. 2 Mar. 2012.
- Dale, Ann, and Lenore Newman. "Sustainable Development Education and Literacy." *International Journal of Sustainability in Higher Education* 6.4 (2005): 351-62. Emerald Group Publishing Ltd. Web. 1 Mar. 2012.
- Fonseca, A., Macdonald, A., Dandy, E., and Valenti, P. "The State of Sustainability Reporting at Canadian Universities." *International Journal of Sustainability reporting at Canadian Universities* 12.1 (2011): 22-40. Emerald Group Publishing Limited. Web. 2 Mar. 2012
- Lugg, Alison. "Developing Sustainable-literate Citizens Through Outdoor Learning:

 Possibilities in Higher Education." *Journal of Adventure Education and Outdoor Learning* 7.12 (2007): 97-112. Routledge Taylor & Francis Group. Web. 1 Mar. 2012.

Marans, Robert W., and Jack Y. Edelstein. "The Human Dimension of Energy Conservation and Sustainability: A Case Study of the University of Michigan's Energy Conservation Program." *International Journal of Sustainability in Higher Education* 11.1 (2010): 6-18. Emerald Group Publishing Limited. Web. 1 Mar. 2012.

Wright, Tarah S.A. "Definitions and Frameworks for Environmental Sustainability in Higher Education." *International Journal of Sustainability in Higher Education* 3.3 (2002): 203-20. Web. 1 Mar. 2012.

6. Other Materials Specific to CSL: Recommendations

As demonstrated by the research findings, the students of the University of Ottawa are seemingly aware of current environmental issues. Overall, the students did want to help the environment in some way and had interest in being more sustainably literate. However, despite a general understanding of the issues, University of Ottawa students are not aware enough of the ways in which the school community works towards sustainability. The Office of Campus Sustainability must consider new ways to reach students as most claimed they were unsure of University sustainability practices and events. Moreover, the survey revealed that the general student population does not receive information concerning sustainability initiatives from any median. When asked if there was a sufficient amount of sustainable resources on campus the majority of students said they did not know or disagreed. Combined, "unsure" and "disagree" responses for this particular question represented over 80% of respondents. Despite the University of Ottawa clearly maintaining an impressively sustainable campus, lack of advertising, student awareness, and campaigning of the issues to the student body resulted in a low overall literacy level. Through better advertising and more readily available resources,

the students will be better equipped to understand and participate in sustainable activities and initiatives. The survey results currently conclude that 50% of students were unsure and unaware as to whether University of Ottawa participates in any environmental initiatives on campus. Moreover, 40% of respondents claimed the Office of Campus Sustainability does not offer a sufficient amount of information concerning sustainability events². Consequently, the researchers' principle recommendation would the implementation of a higher degree of advertising and more explicit public awareness campaigning directed toward the entire student population.

Two forms of advertising and marketing the researchers recommend are social networking and direct e-mails. Each graduating class has a separate Facebook group. Advertising directly to these groups, either through informational or even comedic routes would allow for better communication amongst undergraduate students. Once an issue becomes mainstream on social media networks, students will begin to spread the ideas to friends and fellow colleagues as a result. Simply posting and re-posting link to the Office of Campus Sustainability website or blog would be helpful. Another way to disseminate knowledge throughout the entire student population would be direct e-mail to each uOttawa account. Every student is designated a uOttawa account, therefore it would be the most direct and implicit way to advertise events, share news concerning sustainability, and promote the achievements the University of Ottawa has realized. For instance, monthly newsletters containing new initiatives, past initiatives, and environmentally concerned events would just be a few examples of many avenues in which the Office of Campus Sustainability could spread its information.

_

² Statistics available in pie charts above

The researchers propose that if this survey was administered again that there should be more specific questions asked. For example, for some questions a Likert scale is not necessary, a simple "yes/ no" option would be suitable. Furthermore, it will be important to ask a variety of questions that focus on nominal, ordinal and interval-ratio variables. Also, in order to obtain higher accuracy in these findings, a larger number of students should be surveyed as the current results are pulled from a small portion of the university student population. The office should also consider becoming directly involved with each student association, which would increase opportunities to market and inform via student-based events. By partnering with specific student unions, the Office of Campus Sustainability will have the opportunity to share its pride in campus sustainability within more student-friendly medians while still demonstrating the essential 4 "C"s of sustainability; campus, curriculum, community, and culture. By directly targeting student communities, the respondents may gain a greater understanding of the University of Ottawa's sustainability goals and undertakings. The student associations are as follows:

Communication Students Association

- Science Students Association
- Students Association of the Faculty of Arts
- Graduate and Postdoctoral Students Association
- Engineering Students Association,
- Telfer School of Management
- School of Political Studies (PIDSSA)
- Criminology Students Association
- Faculty of Education Students Association
- Medicine Graduate Students Association
- Common Law Students Society

APPENDIXES

I. SPSS Output Charts

a. Chi Square

Crosstabs

Notes

	Notes	
Output Created		27-Mar-2012 13:22:49
Comments		
Input	Data	C:\Users\student\Desktop\Sustai
		nability SPSS CODING 3.0.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working	60
	Data File	
Missing Value	Definition of Missing	User-defined missing values are
Handling		treated as missing.
	Cases Used	Statistics for each table are
		based on all the cases with valid
		data in the specified range(s) for
		all variables in each table.
Syntax		CROSSTABS
		/TABLES=understandinga BY
		newunderstandingcommunityb
		/FORMAT=AVALUE
		TABLES
		/STATISTICS=CHISQ
		/CELLS=COUNT ROW
		COLUMN TOTAL
		/COUNT ROUND CELL.
Resources	Processor Time	00 00:00:00.000
	Elapsed Time	00 00:00:00.000
	Dimensions Requested	2
	Cells Available	174762

Case Processing Summary

	- · · · · · · · · · · · · · · · · · · ·					
		Cases				
	Va	lid	Missing		Total	
	N	Percent	N	Percent	N	Percent
Excellent	60	100.0%	0	.0%	60	100.0%
Understanding of						
Environmental Issues *						
There is an Adequate						
Amount of						
Sustainability						
Resources on Campus						

Excellent Understanding of Environmental Issues * There is an Adequate Amount of Sustainability Resources on Campus Cross-tabulation

Sus	tamabinty Kes	ources on Campus Cross-ta	สมนาสนายม	-
			There is an	Adequate
			Amount of S	ustainability
			Resources	on Campus
			Strongly	
			Disagree	Disagree
Excellent	Strongly	Count	0	1
Understanding of	Disagree	% within Excellent	.0%	33.3%
Environmental Issues		Understanding of		
		Environmental Issues		
		% within There is an	.0%	4.5%
		Adequate Amount of		
		Sustainability		
		Resources on Campus		
		% of Total	.0%	1.7%
	Disagree	Count	1	5
	-	% within Excellent	8.3%	41.7%
		Understanding of		
		Environmental Issues		
		% within There is an	33.3%	22.7%
		Adequate Amount of		
		Sustainability		
		Resources on Campus		
		% of Total	1.7%	8.3%
	Unsure	Count	1	2
		% within Excellent	10.0%	20.0%
		Understanding of		
		Environmental Issues		
		% within There is an	33.3%	9.1%
		Adequate Amount of		
		Sustainability		
		Resources on Campus		
		% of Total	1.7%	3.3%
	Agree	Count	1	10
		% within Excellent	3.7%	37.0%
		Understanding of		
		Environmental Issues		

		1	
	% within There is an Adequate Amount of	33.3%	45.5%
	Sustainability		
	Resources on Campus		
	% of Total	1.7%	16.7%
Strongly Agre	e Count	0	4
	% within Excellent	.0%	50.0%
	Understanding of Environmental Issues		
	% within There is an	.0%	18.2%
	Adequate Amount of		
	Sustainability		
	Resources on Campus		
	% of Total	.0%	6.7%

Excellent Understanding of Environmental Issues * There is an Adequate Amount of

Sustainability Resources on Campus Crosstabulation

Sub-	tumasmity ite	sources on Campus Crossta		A 1
			There is an	-
			Amount of S	-
			Resources of	on Campus
			Unsure	Agree
Excellent	Strongly	Count	1	0
Understanding of	Disagree	% within Excellent	33.3%	.0%
Environmental Issues		Understanding of		
		Environmental Issues		
		% within There is an	3.6%	.0%
		Adequate Amount of		
		Sustainability		
		Resources on Campus		
		% of Total	1.7%	.0%
	Disagree	Count	5	1
		% within Excellent	41.7%	8.3%
		Understanding of		
		Environmental Issues		
		% within There is an	17.9%	16.7%
		Adequate Amount of		
		Sustainability		
		Resources on Campus		
		% of Total	8.3%	1.7%
	Unsure	Count	7	0
		% within Excellent	70.0%	.0%
		Understanding of		
		Environmental Issues		
		% within There is an	25.0%	.0%
		Adequate Amount of		
		Sustainability		
		Resources on Campus		
		% of Total	11.7%	.0%
	Agree	Count	11	5
		% within Excellent	40.7%	18.5%
		Understanding of		
		Environmental Issues		

		i	
	% within There is an	39.3%	83.3%
	Adequate Amount of		
	Sustainability		
	Resources on Campus		
	% of Total	18.3%	8.3%
Strongly Agree	Count	4	0
	% within Excellent	50.0%	.0%
	Understanding of		
	Environmental Issues		
	% within There is an	14.3%	.0%
	Adequate Amount of		
	Sustainability		
	Resources on Campus		
	% of Total	6.7%	.0%

Excellent Understanding of Environmental Issues * There is an Adequate Amount of Sustainability Resources on Campus Crosstabulation

- Sust	amability Kesot	irces on Campus Crosstabu	nation	
			There is an	
			Adequate	
			Amount of	
			Sustainabilit	
			y Resources	
			on Campus	
			Strongly	
			Agree	Total
Excellent	Strongly	Count	1	3
Understanding of	Disagree	% within Excellent	33.3%	100.0%
Environmental Issues		Understanding of		
		Environmental Issues		
		% within There is an	100.0%	5.0%
		Adequate Amount of		
		Sustainability		
		Resources on Campus		
		% of Total	1.7%	5.0%
	Disagree	Count	0	12
		% within Excellent	.0%	100.0%
		Understanding of	.070	100.070
		Environmental Issues		
		% within There is an	.0%	20.0%
		Adequate Amount of	.070	20.070
		Sustainability		
		Resources on Campus		
		% of Total	.0%	20.0%
	Unsure	Count	0	10
	Chiare	% within Excellent	.0%	100.0%
		Understanding of	.070	100.070
		Environmental Issues		
		% within There is an	.0%	16.7%
		Adequate Amount of	.070	10.770
		Sustainability		
		Resources on Campus		
		% of Total	.0%	16.7%
	Agree	Count	0	27
	Agice	Count	U	<i>∠1</i>

		L	
	% within Excellent Understanding of Environmental Issues	.0%	100.0%
	% within There is an Adequate Amount of Sustainability Resources on Campus	.0%	45.0%
	% of Total	.0%	45.0%
Strongly Agr		0	8
	% within Excellent Understanding of Environmental Issues	.0%	100.0%
	% within There is an Adequate Amount of Sustainability Resources on Campus	.0%	13.3%
	% of Total	.0%	13.3%

Excellent Understanding of Environmental Issues * There is an Adequate Amount of Sustainability Resources on

Campus Crosstabulation

		There is an Adequate Amount of Sustainability Resources on Campus	
		Strongly	Digagraa
	~	Disagree	Disagree
Total	Count	3	22
	% within Excellent	5.0%	36.7%
	Understanding of Environmental Issues		
	% within There is an Adequate Amount of Sustainability Resources on Campus	100.0%	100.0%
	% of Total	5.0%	36.7%

Excellent Understanding of Environmental Issues * There is an Adequate Amount of Sustainability Resources on

Campus Crosstabulation

		There is an Amount of S Resources	ustainability
		Unsure	Agree
Total	Count	28	6
	% within Excellent	46.7%	10.0%
	Understanding of		
	Environmental Issues		
	% within There is an	100.0%	100.0%
	Adequate Amount of		
	Sustainability		
	Resources on Campus		
	% of Total	46.7%	10.0%

Excellent Understanding of Environmental Issues *
There is an Adequate Amount of Sustainability

Resources on Campus Crosstabulation

	•	There is an Adequate Amount of Sustainabilit y Resources	
		on Campus	
		Strongly	
		Agree	Total
Total	Count	1	60
	% within Excellent	1.7%	100.0%
	Understanding of Environmental Issues % within There is an Adequate Amount of Sustainability Resources on Campus	100.0%	100.0%
	% of Total	1.7%	100.0%

Chi-Square Tests

	37.1	10	Asymp. Sig.
	Value	df	(2-sided)
Pearson Chi-Square	27.305 ^a	16	.038
Likelihood Ratio	16.376	16	.427
Linear-by-Linear	.155	1	.694
Association			
N of Valid Cases	60		

a. 22 cells (88.0%) have expected count less than 5. The minimum expected count is .05.

b. Correlation

Correlations

		I Receive	
		Information	Important to
		Pertaining to	Minimize
		Campus	Contribution
		Sustainabilit	to Climate
		у	Change
I Receive Information	Pearson	1	259
Pertaining to Campus	Correlation		
Sustainability	Sig. (2-tailed)		.052
	N	57	57
Important to Minimize	Pearson	259	1
Contribution to Climate	Correlation		
Change	Sig. (2-tailed)	.052	
	N	57	60

Correlations

			Not
			Important to
			Use
			Recycling
			Facilities
			While at
		Important to	University of
		Recycle	Ottawa
Important to Recycle	Pearson	1	352**
	Correlation		
	Sig. (2-tailed)		.006
	N	60	60
Not Important to Use	Pearson	352**	1
Recycling Facilities	Correlation		
While at University of	Sig. (2-tailed)	.006	
Ottawa	N	60	60

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Correlations

			Important to
		Importance	Practice
		to Eat	Environment
		Organic/Loc	al
		al/Fairtrade	Sustainabilit
		Foods	y on Campus
Importance to Eat	Pearson	1	.258*
Organic/Local/Fairtrad	Correlation		
e Foods	Sig. (2-tailed)		.047
	N	60	60
Important to Practice	Pearson	.258*	1
Environmental	Correlation		
Sustainability on	Sig. (2-tailed)	.047	
Campus	N	60	60

^{*.} Correlation is significant at the 0.05 level (2-tailed).

c. Regression

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Important for the Campus to Encourage Sustainable Transportatio n, Important to Minimize Energy Usage		Enter

- a. All requested variables entered.
- b. Dependent Variable: Behaviour Reflecting Understanding of Environmental Issues

Model Summary

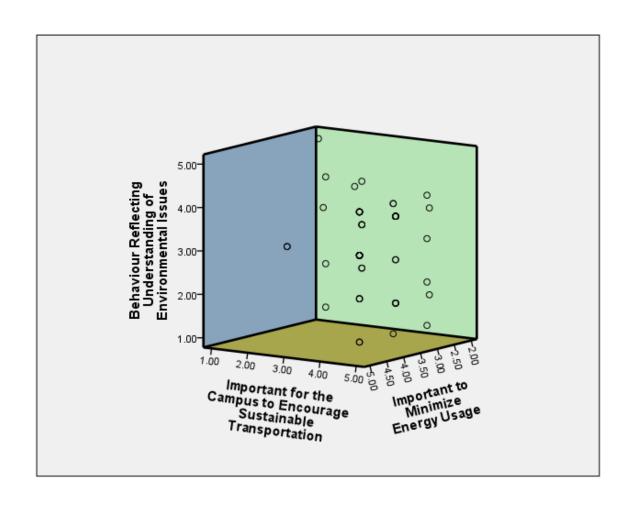
			Adjusted R	Std. Error of
Model	R	R Square	Square	the Estimate
1	.174 ^a	.030	005	1.02444

a. Predictors: (Constant), Important for the Campus to Encourage Sustainable Transportation, Important to Minimize Energy Usage

Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients		
Mod	el	В	Std. Error	Beta	t	Sig.
1	(Constant)	3.037	.802		3.787	.000
	Important to Minimize Energy Usage	.222	.184	.175	1.209	.232
	Important for the Campus to Encourage Sustainable	164	.175	136	941	.351
	Transportation					

a. Dependent Variable: Behaviour Reflecting Understanding of Environmental Issues



d. Independent Samples T-Test

T-Test

Notes

F	Notes	
Output Created		28-Mar-2012 17:32:41
Comments		
Input	Data	C:\Users\student\AppData\Local\Micr
		osoft\Windows\Temporary Internet
		Files\Content.IE5\T2V38PJK\Sustaina
		bility SPSS CODING 6.0 including
		MISSING VALUES.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data	60
	File	
Missing Value Handling	Definition of Missing	User defined missing values are
		treated as missing.
	Cases Used	Statistics for each analysis are based
		on the cases with no missing or out-of-
		range data for any variable in the
		analysis.
Syntax		T-TEST GROUPS=sex(1.00 2.00)
		/MISSING=ANALYSIS
		/VARIABLES=understandingf
		/CRITERIA=CI(.95).
Resources	Processor Time	00 00:00:00.000
1100000	Elapsed Time	00 00:00:00.014
	Erapseu Time	00 00.00.00.014

 $[DataSet1] C: \Users \to Content. App Data \Local \Microsoft \Windows \Temporary\ Internet\ Files \Content. IE5 \T2V38PJK \Sustainability\ SPSS\ CODING\ 6.0\ including\ MISSING\ VALUES.sav$

Group Statistics

	Biological Sex	N	Mean	Std. Deviation	Std. Error Mean
Important to Conserve	Male	30	3.8000	.99655	.18194
Water	Female	29	4.1034	.67320	.12501

Independent Samples Test

independent sumples rest				
		Levene's Test for Equality of Variances		
		F	Sig.	
Important to Conserve	Equal variances assumed	4.283	.043	
Water	Equal variances not assumed			

Independent Samples Test

		t-test for Equality of Means		of Means
		t	df	Sig. (2-tailed)
Important to Conserve	Equal variances assumed	-1.366	57	.177
Water	Equal variances not	-1.375	51.058	.175
	assumed			

Independent Samples Test

		t-test for Equality of Means		
		Mean	Std. Error	
		Difference	Difference	
Important to Conserve	Equal variances assumed	30345	.22218	
Water	Equal variances not	30345	.22075	
	assumed			

Independent Samples Test

independent sumples 1est				
		t-test for Equality of Means		
		95% Confidence Interval of the		
		Difference		
		Lower	Upper	
Important to Conserve	Equal variances assumed	74835	.14145	
Water	Equal variances not	74661	.13972	
	assumed			

T-TEST GROUPS=sex(1.00 2.00) /MISSING=ANALYSIS /VARIABLES=newunderstandinge /CRITERIA=CI(.95).

T-Test

Notes

	Notes	
Output Created		28-Mar-2012 17:33:33
Comments		
Input	Data	$C: \ \ \ C: \ \ \ \ \ \ \ \ \ \ \ \ \ \ $
		osoft\Windows\Temporary Internet
		$Files \label{lem:content.} IE5 \label{lem:content.} T2V38PJK \label{lem:content.} Sustaina$
		bility SPSS CODING 6.0 including
		MISSING VALUES.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data	60
	File	
Missing Value Handling	Definition of Missing	User defined missing values are
		treated as missing.
	Cases Used	Statistics for each analysis are based
		on the cases with no missing or out-of-
		range data for any variable in the
		analysis.
Syntax		T-TEST GROUPS=sex(1.00 2.00)
		/MISSING=ANALYSIS
		/VARIABLES=newunderstandinge
		/CRITERIA=CI(.95).
Resources	Processor Time	00 00:00:00.000
	Elapsed Time	00 00:00:00.016

Group Statistics

	Biological Sex	N	Mean	Std. Deviation	Std. Error Mean
Important to Minimize	Male	30	3.5667	1.27802	.23333
Waste Generated	Female	29	4.0345	.90565	.16817

macpenaent samples Test				
		Levene's Test for Equality of Variances		
		F Sig.		
Important to Minimize Waste Generated	Equal variances assumed Equal variances not	7.911	.007	
	assumed			

Independent Samples Test

		t-test for Equality of Means		
		t	df	Sig. (2-tailed)
Important to Minimize	Equal variances assumed	-1.617	57	.111
Waste Generated	Equal variances not	-1.626	52.330	.110
	assumed			

Independent Samples Test

	macken and Samples 1 est			
		t-test for Equality of Means		
		Mean Std. Erro		
		Difference Difference		
Important to Minimize	Equal variances assumed	46782	.28927	
Waste Generated	Equal variances not	46782	.28762	
	assumed			

Independent Samples Test

	macpenaent bampies re			
		t-test for Equality of Means		
		95% Confidence Interval of the		
		Difference		
		Lower	Upper	
Important to Minimize	Equal variances assumed	-1.04707	.11144	
Waste Generated	Equal variances not	-1.04489	.10926	
	assumed			

T-TEST GROUPS=sex(1.00 2.00) /MISSING=ANALYSIS /VARIABLES=understandingi /CRITERIA=CI(.95).

Notes

Output Created		28-Mar-2012 17:34:38
Comments		
Input	Data	C:\Users\student\AppData\Local\Micr
		osoft\Windows\Temporary Internet
		Files\Content.IE5\T2V38PJK\Sustaina
		bility SPSS CODING 6.0 including
		MISSING VALUES.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data	60
	File	
Missing Value Handling	Definition of Missing	User defined missing values are
		treated as missing.
	Cases Used	Statistics for each analysis are based
		on the cases with no missing or out-of-
		range data for any variable in the
		analysis.
Syntax		T-TEST GROUPS=sex(1.00 2.00)
		/MISSING=ANALYSIS
		/VARIABLES=understandingi
		/CRITERIA=CI(.95).
Resources	Processor Time	00 00:00:00.000
Resources		
	Elapsed Time	00 00:00:00.000

	Biological Sex	N	Mean	Std. Deviation	Std. Error Mean
Important to Minimize	Male	30	3.6000	.93218	.17019
Energy Usage	Female	29	4.1034	.55709	.10345

		Levene's Test for Equality of Variances		
		F Sig.		
Important to Minimize	Equal variances assumed	10.119	.002	
Energy Usage	Equal variances not			
	assumed			

Independent Samples Test

		t-test for Equality of Means		
		t	df	Sig. (2-tailed)
Important to Minimize	Equal variances assumed	-2.507	57	.015
Energy Usage	Equal variances not	-2.528	47.650	.015
	assumed			

Independent Samples Test

	-	t-test for Equality of Me		
		Mean	Std. Error	
		Difference Diffe		
Important to Minimize	Equal variances assumed	50345	.20080	
Energy Usage	Equal variances not	50345	.19917	
	assumed			

Independent Samples Test

	macpenaene sampies re			
		t-test for Equality of Means		
		95% Confidence Interval of the		
		Difference		
		Lower	Upper	
Important to Minimize	Equal variances assumed	90554	10135	
Energy Usage	Equal variances not	90397	10292	
	assumed			

T-TEST GROUPS=sex(1.00 2.00) /MISSING=ANALYSIS /VARIABLES=factorsa /CRITERIA=CI(.95).

Notes

F		
Output Created		28-Mar-2012 17:35:07
Comments		
Input	Data	C: lem:lem:lem:lem:lem:lem:lem:lem:lem:lem:
		osoft\Windows\Temporary Internet
		Files\Content.IE5\T2V38PJK\Sustaina
		bility SPSS CODING 6.0 including
		MISSING VALUES.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data	60
	File	
Missing Value Handling	Definition of Missing	User defined missing values are
		treated as missing.
	Cases Used	Statistics for each analysis are based
		on the cases with no missing or out-of-
		range data for any variable in the
		analysis.
Syntax		T-TEST GROUPS=sex(1.00 2.00)
		/MISSING=ANALYSIS
		/VARIABLES=factorsa
		/CRITERIA=CI(.95).
Resources	Processor Time	00 00:00:00.000
	Elapsed Time	00 00:00:00.015

	Biological Sex	N	Mean	Std. Deviation	Std. Error Mean
Important University Does	Male	31	2.8710	1.60711	.28865
Not Sell Bottled Water	Female	29	2.5517	1.27016	.23586

marponario samples 1 est				
		Levene's Test for Equality of Variances		
		F Sig.		
Important University Does Not Sell Bottled Water	Equal variances assumed Equal variances not	5.567	.022	
	assumed			

Independent Samples Test

macket sum play 1 and				
		t-test for Equality of Means		
		t	df	Sig. (2-tailed)
Important University Does	Equal variances assumed	.850	58	.399
Not Sell Bottled Water	Equal variances not	.856	56.465	.395
	assumed			

Independent Samples Test

macpenaent Samples Test				
t-test for Equality of		ality of Means		
		Mean	Std. Error	
		Difference Difference		
Important University Does	Equal variances assumed	.31924	.37569	
Not Sell Bottled Water	Equal variances not	.31924	.37276	
	assumed			

Independent Samples Test

mucpendent Samples Test				
		t-test for Equality of Means		
		95% Confidence Interval of the		
		Difference		
		Lower Upper		
Important University Does	Equal variances assumed	43278	1.07126	
Not Sell Bottled Water	Equal variances not	42734	1.06583	
	assumed			

T-TEST GROUPS=sex(1.00 2.00) /MISSING=ANALYSIS /VARIABLES=factorsc /CRITERIA=CI(.95).

Notes

•	Notes	
Output Created		28-Mar-2012 17:37:58
Comments		
Input	Data	C:\Users\student\AppData\Local\Micr
		osoft\Windows\Temporary Internet
		$Files \ \ Content. IE5 \ \ \ T2V38PJK \ \ \ Sustaina$
		bility SPSS CODING 6.0 including
		MISSING VALUES.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data	60
	File	
Missing Value Handling	Definition of Missing	User defined missing values are
		treated as missing.
	Cases Used	Statistics for each analysis are based
		on the cases with no missing or out-of-
		range data for any variable in the
		analysis.
Syntax		T-TEST GROUPS=sex(1.00 2.00)
		/MISSING=ANALYSIS
		/VARIABLES=factorsc
		/CRITERIA=CI(.95).
Resources	Processor Time	00 00:00:00.000
	Elapsed Time	00 00:00:00.000

	Biological Sex	N	Mean	Std. Deviation	Std. Error Mean
Important to Use Re-Usable	Male	30	3.9000	1.12495	.20539
Water Bottles	Female	29	4.1724	.46820	.08694

macpenaent Samples Test				
		Levene's Test for Equality of Variances		
		F Sig.		
Important to Use Re-Usable Water Bottles	Equal variances assumed Equal variances not	9.950	.003	
	assumed			

Independent Samples Test

		t-test for Equality of Means		
		t	df	Sig. (2-tailed)
Important to Use Re-Usable	Equal variances assumed	-1.207	57	.233
Water Bottles	Equal variances not	-1.221	39.026	.229
	assumed			

Independent Samples Test

macpenaent Sumples Test				
		t-test for Equality of Means		
		Mean Std. Error		
		Difference	Difference	
Important to Use Re-Usable	Equal variances assumed	27241	.22576	
Water Bottles	Equal variances not	27241	.22303	
	assumed			

Independent Samples Test

macpenaent Sumples Test					
		t-test for Equality of Means			
		95% Confidence Interval of the			
		Difference			
		Lower Upper			
Important to Use Re-Usable	Equal variances assumed	72449	.17966		
Water Bottles	Equal variances not	72353	.17870		
	assumed				

T-TEST GROUPS=sex(1.00 2.00) /MISSING=ANALYSIS /VARIABLES=learninga /CRITERIA=CI(.95).

Notes

Output Created		28-Mar-2012 17:38:20
Comments		
Input	Data	C:\Users\student\AppData\Local\Micr
		osoft\Windows\Temporary Internet
		Files\Content.IE5\T2V38PJK\Sustaina
		bility SPSS CODING 6.0 including
		MISSING VALUES.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data	60
	File	
Missing Value Handling	Definition of Missing	User defined missing values are
		treated as missing.
	Cases Used	Statistics for each analysis are based
		on the cases with no missing or out-of-
		range data for any variable in the
		analysis.
Syntax		T-TEST GROUPS=sex(1.00 2.00)
		/MISSING=ANALYSIS
		/VARIABLES=learninga
		/CRITERIA=CI(.95).
Resources	Processor Time	00 00:00:00.000
Resources		
	Elapsed Time	00 00:00:00.000

Group Statistics						
	Biological Sex	N	Mean	Std. Deviation	Std. Error Mean	
Would Like to Learn More	Male	31	3.1290	1.11779	.20076	
About Environmental	Female	29	3.5517	.82748	.15366	
Issues/Sustainability						

macpendent sumpres Test				
	Levene's Test fo Varian		•	
		F Sig.		
Would Like to Learn More	Equal variances assumed	4.533	.038	
About Environmental	Equal variances not			
Issues/Sustainability	assumed			

Independent Samples Test

		t-test	for Equality	of Means
		t	df	Sig. (2-tailed)
Would Like to Learn More	Equal variances assumed	-1.655	58	.103
About Environmental	Equal variances not	-1.672	55.162	.100
Issues/Sustainability	assumed			

Independent Samples Test

		t-test for Equa	ality of Means
		Mean	Std. Error
		Difference	Difference
Would Like to Learn More	Equal variances assumed	42269	.25533
About Environmental	Equal variances not	42269	.25282
Issues/Sustainability	assumed		

Independent Samples Test

independent Samples Test				
		t-test for Equality of Means		
	95% Confidence Interval of		e Interval of the	
		Diffe	rence	
		Lower	Upper	
Would Like to Learn More	Equal variances assumed	93380	.08841	
About Environmental	Equal variances not	92932	.08393	
Issues/Sustainability	assumed			

T-TEST GROUPS=sex(1.00 2.00) /MISSING=ANALYSIS /VARIABLES=learningd /CRITERIA=CI(.95).

Notes

Output Created		28-Mar-2012 17:40:45
Comments		
Input	Data	C:\Users\student\AppData\Local\Micr
		osoft\Windows\Temporary Internet
		Files\Content.IE5\T2V38PJK\Sustaina
		bility SPSS CODING 6.0 including
		MISSING VALUES.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data	60
	File	
Missing Value Handling	Definition of Missing	User defined missing values are
		treated as missing.
	Cases Used	Statistics for each analysis are based
		on the cases with no missing or out-of-
		range data for any variable in the
		analysis.
Syntax		T-TEST GROUPS=sex(1.00 2.00)
		/MISSING=ANALYSIS
		/VARIABLES=learningd
		/CRITERIA=CI(.95).
Resources	Processor Time	00 00:00:00.000
Resources		
	Elapsed Time	00 00:00:00.000

Group statistics					
	Biological Sex	N	Mean	Std. Deviation	Std. Error Mean
Would Like to Attend	Male	31	2.8387	1.29349	.23232
School Events on	Female	29	3.0345	.86531	.16068
Sustainability as Visitor					

	macpenaene Sampres 10			
		Levene's Test for Equality of Variances		
		F Sig.		
Would Like to Attend	Equal variances assumed	8.617	.005	
School Events on	Equal variances not			
Sustainability as Visitor	assumed			

Independent Samples Test

independent Samples 1 est				
		t-test for Equality of Means		
		t	df	Sig. (2-tailed)
Would Like to Attend	Equal variances assumed	684	58	.497
School Events on	Equal variances not	693	52.657	.491
Sustainability as Visitor	assumed			

Independent Samples Test

mucpendent Bampies Test				
		t-test for Equality of Means		
		Mean	Std. Error	
		Difference	Difference	
Would Like to Attend	Equal variances assumed	19577	.28615	
School Events on	Equal variances not	19577	.28247	
Sustainability as Visitor	assumed			

Independent Samples Test

	macpenaent bampies Te	.5.0	
t-test for Equality of M			ality of Means
		95% Confidence Interval of the	
		Difference	
		Lower Uppe	
Would Like to Attend	Equal variances assumed	76857	.37702
School Events on	Equal variances not	76243	.37088
Sustainability as Visitor	assumed		

ONEWAY learninga BY year /MISSING ANALYSIS.

e. Frequency Distribution: Overall Scores

Frequencies

Statistics

			Overall Score	
			for Factors at	
			the	Overall
			Univeristy of	Score for
	Overall		Ottawa that	Understandin
	Score for	Overall Score	Influence	g of Campus
	Understandin	for Interest in	Environment	Sustainabilit
	g of Current	Learning	al Practices	y at the
	Environment	More About	and	University of
	al Issues	Sustainability	Knowledge	Ottawa
N Valid	58	60	54	59
Missing	2	0	6	1
Mean	32.1552	11.5333	39.1852	11.5932
Median	32.0000	12.0000	39.0000	12.0000
Mode	34.00	12.00	38.00	12.00
Std. Deviation	4.49093	3.35204	5.56971	2.17445
Range	24.00	14.00	33.00	11.00

Statistics

	Staustic	3	
			Overall
			Score for
			Medians
			Through
	Overall		Which
	Score for	Overall	Students
	Understandin	Score for	Receive
	g of	Understandin	Sustainabilit
	Community	g of	у
	and Cultural	Cirriculum	Information
	Sustainabilit	Sustainability	Pertinent to
	y at the	at the	the
	University of	University of	University of
	Ottawa	Ottawa-	Ottawa
N Valid	60	60	57
Missing	0	0	3
Mean	9.6167	8.8000	17.2281
Median	9.5000	9.0000	17.0000
Mode	9.00	9.00	11.00
Std. Deviation	1.34154	1.76405	5.22363
Range	7.00	10.00	20.00

Frequency Table

Overall Score for Understanding of Current Environmental Issues

			155005		
				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	18.00	1	1.7	1.7	1.7
	24.00	2	3.3	3.4	5.2
	25.00	1	1.7	1.7	6.9
	26.00	2	3.3	3.4	10.3
	27.00	2	3.3	3.4	13.8
	28.00	2	3.3	3.4	17.2
	29.00	3	5.0	5.2	22.4
	30.00	6	10.0	10.3	32.8
	31.00	4	6.7	6.9	39.7
	32.00	8	13.3	13.8	53.4
	33.00	5	8.3	8.6	62.1
	34.00	9	15.0	15.5	77.6
	35.00	1	1.7	1.7	79.3
	36.00	3	5.0	5.2	84.5
	37.00	3	5.0	5.2	89.7
	38.00	1	1.7	1.7	91.4
	39.00	2	3.3	3.4	94.8
	41.00	2	3.3	3.4	98.3
	42.00	1	1.7	1.7	100.0
	Total	58	96.7	100.0	
Missing	System	2	3.3		
Total		60	100.0		

Overall Score for Interest in Learning More About Sustainability

			9	Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Agree	3	5.0	5.0	5.0
	Strongly	2	3.3	3.3	8.3
	Agree				
	6.00	2	3.3	3.3	11.7
	8.00	4	6.7	6.7	18.3
	9.00	2	3.3	3.3	21.7
	10.00	6	10.0	10.0	31.7
	11.00	7	11.7	11.7	43.3
	12.00	10	16.7	16.7	60.0
	13.00	4	6.7	6.7	66.7
	14.00	9	15.0	15.0	81.7
	15.00	5	8.3	8.3	90.0
	16.00	5	8.3	8.3	98.3
	18.00	1	1.7	1.7	100.0
	Total	60	100.0	100.0	

Overall Score for Factors at the University of Ottawa that Influence Environmental Practices and Knowledge

Influence Environmental Practices and Knowledge						
				Valid	Cumulative	
		Frequency	Percent	Percent	Percent	
Valid	18.00	1	1.7	1.9	1.9	
	30.00	1	1.7	1.9	3.7	
	32.00	1	1.7	1.9	5.6	
	33.00	3	5.0	5.6	11.1	
	34.00	5	8.3	9.3	20.4	
	35.00	2	3.3	3.7	24.1	
	36.00	3	5.0	5.6	29.6	
	37.00	3	5.0	5.6	35.2	
	38.00	6	10.0	11.1	46.3	
	39.00	5	8.3	9.3	55.6	
	40.00	2	3.3	3.7	59.3	
	41.00	2	3.3	3.7	63.0	
	42.00	3	5.0	5.6	68.5	
	43.00	5	8.3	9.3	77.8	
	44.00	5	8.3	9.3	87.0	
	45.00	1	1.7	1.9	88.9	
	46.00	2	3.3	3.7	92.6	
	47.00	1	1.7	1.9	94.4	
	48.00	1	1.7	1.9	96.3	
	49.00	1	1.7	1.9	98.1	
	51.00	1	1.7	1.9	100.0	
	Total	54	90.0	100.0		
Missing	System	6	10.0			
Total		60	100.0			

Overall Score for Understanding of Campus Sustainability at the University of Ottawa

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Agree	1	1.7	1.7	1.7
	7.00	1	1.7	1.7	3.4
	8.00	3	5.0	5.1	8.5
	9.00	2	3.3	3.4	11.9
	10.00	10	16.7	16.9	28.8
	11.00	8	13.3	13.6	42.4
	12.00	15	25.0	25.4	67.8
	13.00	10	16.7	16.9	84.7
	14.00	2	3.3	3.4	88.1
	15.00	7	11.7	11.9	100.0
	Total	59	98.3	100.0	
Missing	System	1	1.7		
Total		60	100.0		

Overall Score for Understanding of Community and Cultural Sustainability at the University of Ottawa

				Valid	Cumulative		
		Frequency	Percent	Percent	Percent		
Valid	6.00	1	1.7	1.7	1.7		
	8.00	11	18.3	18.3	20.0		
	9.00	18	30.0	30.0	50.0		
	10.00	16	26.7	26.7	76.7		
	11.00	8	13.3	13.3	90.0		
	12.00	5	8.3	8.3	98.3		
	13.00	1	1.7	1.7	100.0		
	Total	60	100.0	100.0			

Overall Score for Understanding of Curriculum Sustainability at the University of Ottawa-

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Strongly	1	1.7	1.7	1.7
	Agree				
	6.00	4	6.7	6.7	8.3
	7.00	7	11.7	11.7	20.0
	8.00	13	21.7	21.7	41.7
	9.00	20	33.3	33.3	75.0
	10.00	7	11.7	11.7	86.7
	11.00	4	6.7	6.7	93.3
	12.00	2	3.3	3.3	96.7
	13.00	1	1.7	1.7	98.3
	15.00	1	1.7	1.7	100.0
	Total	60	100.0	100.0	

Overall Score for Medians Through Which Students Receive Sustainability Information Pertinent to the University of Ottawa

Sustair	iadility in	iormation P	ertinent to	o the Universi	ty of Ottawa
				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	8.00	1	1.7	1.8	1.8
	9.00	1	1.7	1.8	3.5
	10.00	3	5.0	5.3	8.8
	11.00	8	13.3	14.0	22.8
	12.00	1	1.7	1.8	24.6
	13.00	4	6.7	7.0	31.6
	14.00	1	1.7	1.8	33.3
	15.00	2	3.3	3.5	36.8
	16.00	5	8.3	8.8	45.6
	17.00	3	5.0	5.3	50.9
	18.00	4	6.7	7.0	57.9
	19.00	2	3.3	3.5	61.4
	20.00	5	8.3	8.8	70.2
	21.00	4	6.7	7.0	77.2
	22.00	4	6.7	7.0	84.2
	23.00	3	5.0	5.3	89.5
	25.00	2	3.3	3.5	93.0
	26.00	2	3.3	3.5	96.5
	27.00	1	1.7	1.8	98.2
	28.00	1	1.7	1.8	100.0
	Total	57	95.0	100.0	
Missing	System	3	5.0		
Total		60	100.0		

f. Frequency Distribution: CSL Findings

Frequencies

Statistics

				University of		
			Would Like	Ottawa		Important for
			to Learn	Adequately		Campus to
		Excellent	More About	Makes	Important for	Address all
		Understandin	Environment	Students	All Students	Three
		g of	al	Aware of	to be	Elements of
		Environment	Issues/Sustai	Sustainability	Sustainability	Sustainabilit
		al Issues	nability	Initiatives	Literate	у
N	Valid	60	60	60	59	60
	Missing	0	0	0	1	0
Mean		3.4167	3.3333	2.6167	3.3220	3.4000

Statistics

			The		
			University	The	
			Has a	University	
		There is an	Sufficient	Has Offered	I Receive
		Adequate	Amount of	Sufficient	Information
		Amount of	Sustainable	Information	Pertaining to
		Sustainabilit	Development	on	Campus
		y Resources	Activities on	Sustainability	Sustainabilit
		on Campus	Campus	Events	y
N	Valid	60	60	60	57
	Missing	0	0	0	3
Mean		2.6667	2.9667	2.7500	3.2105

Frequency Tables

Excellent Understanding of Environmental Issues

_				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Strongly	3	5.0	5.0	5.0
	Disagree		1		
	Disagree	12	20.0	20.0	25.0
	Unsure	10	16.7	16.7	41.7
	Agree	27	45.0	45.0	86.7
	Strongly Agree	8	13.3	13.3	100.0
	Total	60	100.0	100.0	

Would Like to Learn More About Environmental Issues/Sustainability

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Strongly	3	5.0	5.0	5.0
	Disagree		11		
	Disagree	11	18.3	18.3	23.3
	Unsure	12	20.0	20.0	43.3
	Agree	31	51.7	51.7	95.0
	Strongly Agree	3	5.0	5.0	100.0
	Total	60	100.0	100.0	

University of Ottawa Adequately Makes Students Aware of Sustainability Initiatives

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly	8	13.3	13.3	13.3
	Disagree				
	Disagree	21	35.0	35.0	48.3
	Unsure	18	30.0	30.0	78.3
	Agree	12	20.0	20.0	98.3
	Strongly Agree	1	1.7	1.7	100.0
	Total	60	100.0	100.0	

Important for All Students to be Sustainability Literate

		-		Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Strongly	3	5.0	5.1	5.1
	Disagree				
	Disagree	10	16.7	16.9	22.0
	Unsure	17	28.3	28.8	50.8
	Agree	23	38.3	39.0	89.8
	Strongly Agree	6	10.0	10.2	100.0
	Total	59	98.3	100.0	
Missing	No Response	1	1.7		
Total		60	100.0		

Important for Campus to Address all Elements of Sustainability

	important for campus to read ess an Elements of Sustainability					
				Valid	Cumulative	
		Frequency	Percent	Percent	Percent	
Valid	Strongly	5	8.3	8.3	8.3	
	Disagree					
	Disagree	11	18.3	18.3	26.7	
	Unsure	10	16.7	16.7	43.3	
	Agree	23	38.3	38.3	81.7	
	Strongly Agree	11	18.3	18.3	100.0	
	Total	60	100.0	100.0		

There is an Adequate Amount of Sustainability Resources on Campus

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	5.0	5.0	5.0
	Disagree	22	36.7	36.7	41.7
	Unsure	28	46.7	46.7	88.3
	Agree	6	10.0	10.0	98.3
	Strongly Agree	1	1.7	1.7	100.0
	Total	60	100.0	100.0	

The University Has a Sufficient Amount of Sustainable Development Activities on Campus

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly	1	1.7	1.7	1.7
	Disagree				
	Disagree	16	26.7	26.7	28.3
	Unsure	30	50.0	50.0	78.3
	Agree	10	16.7	16.7	95.0
	Strongly Agree	3	5.0	5.0	100.0
	Total	60	100.0	100.0	

The University Has Offered Sufficient Information on Sustainability Events

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	5.0	5.0	5.0
	Disagree	24	40.0	40.0	45.0
	Unsure	20	33.3	33.3	78.3
	Agree	11	18.3	18.3	96.7
	Strongly Agree	2	3.3	3.3	100.0
	Total	60	100.0	100.0	

I Receive Information Pertaining to Campus Sustainability

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	10	16.7	17.5	17.5
	Almost Never	5	8.3	8.8	26.3
	Unsure	19	31.7	33.3	59.6
	Almost	9	15.0	15.8	75.4
	Always				
	Always	14	23.3	24.6	100.0
	Total	57	95.0	100.0	
Missing	No Response	3	5.0		
Total		60	100.0		

g. Frequency Distribution: Demographics

T-Test

N	01	tes

	Notes	
Output Created		28-Mar-2012 17:32:41
Comments		
Input	Data	C:\Users\student\AppData\Local\Micr
		osoft\Windows\Temporary Internet
		Files\Content.IE5\T2V38PJK\Sustaina
		bility SPSS CODING 6.0 including
		MISSING VALUES.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data	60
	File	
Missing Value Handling	Definition of Missing	User defined missing values are
		treated as missing.
	Cases Used	Statistics for each analysis are based
		on the cases with no missing or out-of-
		range data for any variable in the
		analysis.
Syntax		T-TEST GROUPS=sex(1.00 2.00)
		/MISSING=ANALYSIS
		/VARIABLES=understandingf
		/CRITERIA=CI(.95).
Resources	Processor Time	00 00:00:00.000
Resources		i l
	Elapsed Time	00 00:00:00.014

	Biological Sex	N	Mean	Std. Deviation	Std. Error Mean
Important to Conserve	Male	30	3.8000	.99655	.18194
Water	Female	29	4.1034	.67320	.12501

		Levene's Test for Equality of Variances		
		F	Sig.	
Important to Conserve	Equal variances assumed	4.283	.043	
Water	Equal variances not			
	assumed			

Independent Samples Test

		t-test	for Equality	of Means
		t	df	Sig. (2-tailed)
Important to Conserve	Equal variances assumed	-1.366	57	.177
Water	Equal variances not	-1.375	51.058	.175
	assumed			

Independent Samples Test

	t-test for Equality of Means		lity of Means	
		Mean	Std. Error	
		Difference	Difference	
Important to Conserve	Equal variances assumed	30345	.22218	
Water	Equal variances not	30345	.22075	
	assumed			

Independent Samples Test

	macpenaene samples 10		
		t-test for Equa	lity of Means
		95% Confidence Interval of th Difference	
		Lower	Upper
Important to Conserve	Equal variances assumed	74835	.14145
Water	Equal variances not	74661	.13972
	assumed		

Notes

-	Notes	
Output Created		28-Mar-2012 17:33:33
Comments		
Input	Data	$C: \ \ \ C: \ \ \ \ \ \ \ \ \ \ \ \ \ \ $
		osoft\Windows\Temporary Internet
		$Files \backslash Content. IE5 \backslash T2V38PJK \backslash Sustaina$
		bility SPSS CODING 6.0 including
		MISSING VALUES.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data	60
	File	
Missing Value Handling	Definition of Missing	User defined missing values are
		treated as missing.
	Cases Used	Statistics for each analysis are based
		on the cases with no missing or out-of-
		range data for any variable in the
		analysis.
Syntax		T-TEST GROUPS=sex(1.00 2.00)
		/MISSING=ANALYSIS
		/VARIABLES=newunderstandinge
		/CRITERIA=CI(.95).
Resources	Processor Time	00 00:00:00.000
	Elapsed Time	00 00:00:00.016

 $[DataSet1] C: \Users \to Content. IE5 \to Student \App Data \to Content. IE5 \to Student \Sustainability SPSS CODING 6.0 including MISSING VALUES. sav$

	Biological Sex	N	Mean	Std. Deviation	Std. Error Mean
Important to Minimize	Male	30	3.5667	1.27802	.23333
Waste Generated	Female	29	4.0345	.90565	.16817

		Levene's Test for Equality of Variances		
		F Sig.		
Important to Minimize Waste Generated	Equal variances assumed Equal variances not assumed	7.911	.007	

Independent Samples Test

		t-test for Equality of Means		of Means
		t	df	Sig. (2-tailed)
Important to Minimize	Equal variances assumed	-1.617	57	.111
Waste Generated	Equal variances not	-1.626	52.330	.110
	assumed			

Independent Samples Test

		t-test for Equality of Means		
		Mean	Std. Error	
		Difference	Difference	
Important to Minimize	Equal variances assumed	46782	.28927	
Waste Generated	Equal variances not	46782	.28762	
	assumed			

Independent Samples Test

independent Sumples Test				
		t-test for Equa	lity of Means	
	95% Confidence Interval of the		e Interval of the	
		Difference		
		Lower Upper		
Important to Minimize	Equal variances assumed	-1.04707	.11144	
Waste Generated	Equal variances not	-1.04489	.10926	
	assumed			

T-TEST GROUPS=sex(1.00 2.00) /MISSING=ANALYSIS /VARIABLES=understandingi /CRITERIA=CI(.95).

T-Test

Notes

Output Created		28-Mar-2012 17:34:38
Comments		
Input	Data	C:\Users\student\AppData\Local\Micr
		osoft\Windows\Temporary Internet
		$Files \ \ Content. IE5 \ \ \ T2V38PJK \ \ \ Sustaina$
		bility SPSS CODING 6.0 including
		MISSING VALUES.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data	60
	File	
Missing Value Handling	Definition of Missing	User defined missing values are
		treated as missing.
	Cases Used	Statistics for each analysis are based
		on the cases with no missing or out-of-
		range data for any variable in the
		analysis.
Syntax		T-TEST GROUPS=sex(1.00 2.00)
		/MISSING=ANALYSIS
		/VARIABLES=understandingi
		/CRITERIA=CI(.95).
Resources	Processor Time	00 00:00:00.000
	Elapsed Time	00 00:00:00.000

Group Statistics

	Biological Sex	N	Mean	Std. Deviation	Std. Error Mean
Important to Minimize	Male	30	3.6000	.93218	.17019
Energy Usage	Female	29	4.1034	.55709	.10345

Independent Samples Test

		Levene's Test for Equality of		
		Variances		
		F Sig.		
Important to Minimize	Equal variances assumed	10.119	.002	
Energy Usage	Equal variances not			
	assumed			

Independent Samples Test

made beliating 1 and 1 and 1				
		t-test for Equality of Means		of Means
		t	df	Sig. (2-tailed)
Important to Minimize	Equal variances assumed	-2.507	57	.015
Energy Usage	Equal variances not	-2.528	47.650	.015
	assumed			

Independent Samples Test

		t-test for Equality of Means	
		Mean	Std. Error
		Difference	Difference
Important to Minimize	Equal variances assumed	50345	.20080
Energy Usage	Equal variances not	50345	.19917
	assumed		

Independent Samples Test

Independent Samples Test			
		t-test for Equality of Means	
		95% Confidence Interval of the	
		Difference	
		Lower Upper	
Important to Minimize	Equal variances assumed	90554	10135
Energy Usage	Equal variances not	90397	10292
	assumed		

T-TEST GROUPS=sex(1.00 2.00)

/MISSING=ANALYSIS /VARIABLES=factorsa /CRITERIA=CI(.95).

T-Test

Notes

	Notes	
Output Created		28-Mar-2012 17:35:07
Comments		
Input	Data	$C:\ \ \ C:\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $
		osoft\Windows\Temporary Internet
		$Files \ \ Content. IE5 \ \ \ T2V38PJK \ \ \ Sustaina$
		bility SPSS CODING 6.0 including
		MISSING VALUES.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data	60
	File	
Missing Value Handling	Definition of Missing	User defined missing values are
		treated as missing.
	Cases Used	Statistics for each analysis are based
		on the cases with no missing or out-of-
		range data for any variable in the
		analysis.
Syntax		T-TEST GROUPS=sex(1.00 2.00)
		/MISSING=ANALYSIS
		/VARIABLES=factorsa
		/CRITERIA=CI(.95).
Resources	Processor Time	00 00:00:00.000
Resources		•
	Elapsed Time	00 00:00:00.015

Group Statistics					
	Biological Sex	N	Mean	Std. Deviation	Std. Error Mean
Important University Does	Male	31	2.8710	1.60711	.28865
Not Sell Bottled Water	Female	29	2.5517	1.27016	.23586

	macpenaent bampies Te			
		Levene's Test for Equality of Variances		
		F Sig.		
Important University Does Not Sell Bottled Water	Equal variances assumed Equal variances not	5.567	.022	
	assumed			

Independent Samples Test

macket sum play 1 and				
		t-test for Equality of Means		
		t	df	Sig. (2-tailed)
Important University Does	Equal variances assumed	.850	58	.399
Not Sell Bottled Water	Equal variances not	.856	56.465	.395
	assumed			

Independent Samples Test

			lity of Means
		Mean	Std. Error
		Difference Differen	
Important University Does	Equal variances assumed	.31924	.37569
Not Sell Bottled Water	Equal variances not	.31924	.37276
	assumed		

Independent Samples Test

macpenaent gampies Test				
		t-test for Equality of Means		
		95% Confidence Interval of the		
		Difference		
		Lower Upper		
Important University Does	Equal variances assumed	43278	1.07126	
Not Sell Bottled Water	Equal variances not	42734	1.06583	
	assumed			

T-TEST GROUPS=sex(1.00 2.00) /MISSING=ANALYSIS /VARIABLES=factorsc /CRITERIA=CI(.95).

Notes

F	Notes	
Output Created		28-Mar-2012 17:37:58
Comments		
Input	Data	$C: \label{lem:condition} C: \label{lem:condition} Users \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
		osoft\Windows\Temporary Internet
		Files\Content.IE5\T2V38PJK\Sustaina
		bility SPSS CODING 6.0 including
		MISSING VALUES.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data	60
	File	
Missing Value Handling	Definition of Missing	User defined missing values are
		treated as missing.
	Cases Used	Statistics for each analysis are based
		on the cases with no missing or out-of-
		range data for any variable in the
		analysis.
Syntax		T-TEST GROUPS=sex(1.00 2.00)
		/MISSING=ANALYSIS
		/VARIABLES=factorsc
		/CRITERIA=CI(.95).
Resources	Processor Time	00 00:00:00.000
	Elapsed Time	00 00:00:00.000

	Biological Sex	N	Mean	Std. Deviation	Std. Error Mean
Important to Use Re-Usable	Male	30	3.9000	1.12495	.20539
Water Bottles	Female	29	4.1724	.46820	.08694

		Levene's Test for Equality of Variances		
		F Sig.		
Important to Use Re-Usable	Equal variances assumed	9.950	.003	
Water Bottles	Equal variances not			
	assumed			

Independent Samples Test

		t-test for Equality of Means		of Means
		t	df	Sig. (2-tailed)
Important to Use Re-Usable	Equal variances assumed	-1.207	57	.233
Water Bottles	Equal variances not	-1.221	39.026	.229
	assumed			

Independent Samples Test

macpendent Sumples 1 est			
		t-test for Equality of Means	
		Mean Std. Erro Difference Differen	
Important to Use Re-Usable	Equal variances assumed	27241	.22576
Water Bottles	Equal variances not	27241	.22303
	assumed		

Independent Samples Test

	macpenaent bampies re	~ -	
		t-test for Equa	ality of Means
	95% Confidence Interval of t		e Interval of the
		Difference	
		Lower	Upper
Important to Use Re-Usable	Equal variances assumed	72449	.17966
Water Bottles	Equal variances not	72353	.17870
	assumed		

T-TEST GROUPS=sex(1.00 2.00) /MISSING=ANALYSIS /VARIABLES=learninga /CRITERIA=CI(.95).

Notes

	Notes	
Output Created		28-Mar-2012 17:38:20
Comments		
Input	Data	C:\Users\student\AppData\Local\Micr
		osoft\Windows\Temporary Internet
		Files\Content.IE5\T2V38PJK\Sustaina
		bility SPSS CODING 6.0 including
		MISSING VALUES.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data	60
	File	
Missing Value Handling	Definition of Missing	User defined missing values are
		treated as missing.
	Cases Used	Statistics for each analysis are based
		on the cases with no missing or out-of-
		range data for any variable in the
		analysis.
Syntax		T-TEST GROUPS=sex(1.00 2.00)
		/MISSING=ANALYSIS
		/VARIABLES=learninga
		/CRITERIA=CI(.95).
Resources	Processor Time	00 00:00:00.000
	Elapsed Time	00 00:00:00.000

 $[DataSet1] C: \Users \to AppData \Local \Microsoft \Windows \Temporary\ Internet\ Files \Content. IE5 \T2V38PJK \Sustainability\ SPSS\ CODING\ 6.0\ including\ MISSING\ VALUES.sav$

Group statistics					
	Biological Sex	N	Mean	Std. Deviation	Std. Error Mean
Would Like to Learn More	Male	31	3.1290	1.11779	.20076
About Environmental	Female	29	3.5517	.82748	.15366
Issues/Sustainability					

		Levene's Test for Equality of Variances F Sig.		
Would Like to Learn More	Equal variances assumed	4.533	.038	
About Environmental	Equal variances not			
Issues/Sustainability	assumed			

Independent Samples Test

		t-test for Equality of Means		
		t	df	Sig. (2-tailed)
Would Like to Learn More	Equal variances assumed	-1.655	58	.103
About Environmental	Equal variances not	-1.672	55.162	.100
Issues/Sustainability	assumed			

Independent Samples Test

macpendent Sumples 1 est			
		t-test for Equality of Means	
			Std. Error
		Difference	Difference
Would Like to Learn More	Equal variances assumed	42269	.25533
About Environmental	Equal variances not	42269	.25282
Issues/Sustainability	assumed		

Independent Samples Test

macpenaent Samples Test			
		t-test for Equa	lity of Means
		95% Confidence Interval of the	
		Difference	
		Lower	Upper
Would Like to Learn More	Equal variances assumed	93380	.08841
About Environmental	Equal variances not	92932	.08393
Issues/Sustainability	assumed		

T-TEST GROUPS=sex(1.00 2.00) /MISSING=ANALYSIS /VARIABLES=learningd /CRITERIA=CI(.95).

Notes

Output Created		28-Mar-2012 17:40:45
Comments		
Input	Data	C:\Users\student\AppData\Local\Micr osoft\Windows\Temporary Internet Files\Content.IE5\T2V38PJK\Sustaina bility SPSS CODING 6.0 including MISSING VALUES.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data	60
	File	
Missing Value Handling	Definition of Missing	User defined missing values are
		treated as missing.
	Cases Used	Statistics for each analysis are based
		on the cases with no missing or out-of-
		range data for any variable in the
		analysis.
Syntax		T-TEST GROUPS=sex(1.00 2.00)
		/MISSING=ANALYSIS
		/VARIABLES=learningd
		/CRITERIA=CI(.95).
Resources	Processor Time	00 00:00:00.000
	Elapsed Time	00 00:00:00.000

[DataSet1] C:\Users\student\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\T2V38PJK\Sustainability SPSS CODING 6.0 including MISSING VALUES.sav

	Biological Sex	N	Mean	Std. Deviation	Std. Error Mean
Would Like to Attend	Male	31	2.8387	1.29349	.23232
School Events on	Female	29	3.0345	.86531	.16068
Sustainability as Visitor					

		Levene's Test for Equality of Variances		
		F Sig.		
Would Like to Attend	Equal variances assumed	8.617	.005	
School Events on	Equal variances not			
Sustainability as Visitor	assumed			

Independent Samples Test

		t-test for Equality of Means		
		t	df	Sig. (2-tailed)
Would Like to Attend	Equal variances assumed	684	58	.497
School Events on	Equal variances not	693	52.657	.491
Sustainability as Visitor	assumed			

Independent Samples Test

		t-test for Equality of Means	
		Mean Std. Err	
		Difference	Difference
Would Like to Attend	Equal variances assumed	19577	.28615
School Events on	Equal variances not	19577	.28247
Sustainability as Visitor	assumed		

Independent Samples Test

		t-test for Equality of Means	
		95% Confidence Interval of the	
		Difference	
		Lower	Upper
Would Like to Attend	Equal variances assumed	76857	.37702
School Events on	Equal variances not	76243	.37088
Sustainability as Visitor	assumed		

ONEWAY learninga BY year /MISSING ANALYSIS.

III. Individual Contributions

a. Jessica D'Aoust - 6011451

As team leader, Jessica executed the production and completion of the final report. Jessica effectively kept the communication frequent, and open enabling efficient organization to complete the final report. Jessica was always well prepared with deadlines and informing the rest of the group what was required to complete. Jessica attended all meetings with the CSL supervisor, as well as all meetings held by our group. Jessica created the survey, as well as administered the pilot survey. Jessica contributed to the literature review as well as finalizing the proposal. Jessica made vital changes to the survey in order for us to be able to administer the final copy to the student at the University of Ottawa. Jessica administered the final surveys, and collected them in order to analyze and create the coding. Jessica coded, recoded and overlooked all parts of the data input as well as the final report. Jessica created the Chi-Square test, continued to thoroughly revise the final report as well as piece all the parts together and added in any missing details.

b. Stephanie Morin - 5938480

Stephanie attended all group meetings that were held outside of the course as well as all the meetings with the CSL supervisor. Alongside with Jessica, Stephanie used effective leadership skills and continued to keep the group organized, and continued to communicate to all members of the group to keep everyone informed, and participating. Throughout the course of this report, Stephanie has documented all the meetings, advances, and information leading up to the final

report to submit to the CSL supervisor. Stephanie contributed to the literature review for the proposal. Stephanie created the survey as well as administered the pilot survey. Stephanie also administered the final surveys to students at the University of Ottawa. Stephanie contributed to the coding, recoding and added the missing values of the data. Stephanie created the Chi-Square test, contributed to the final report, the reediting of the final report. Stephanie created numerous charts that were added to the final report such as ANOVA, T-Test, and Chi-Square. Furthermore, Stephanie fabricated the final presentation.

c. Vidya Nair - 6043346

Vidya attended all group meetings that were held outside of the course as well as the meetings with the CSL supervisor. Vidya contributed to the literature review for the proposal as well as administered the pilot survey. Vidya also administered the final surveys to students at the University of Ottawa. Vidya contributed to the coding, recoding and added the missing values of the data. Vidya calculated the overall scores, conducted the ANOVA, T-Test, and frequency distributions. Vidya exported the SPSS graphs to readable word documents. Vidya created graphs for the final report, and most importantly made sure that all documents were done correctly and were readable. Vidya's participation and dedication to the completion of this group made sure things were done correctly and effectively. Vidya wrote as well as edited the final report.

d. Kyleigh Marcotte - 5674503

Kyleigh attended all group meetings that were held outside of the course. Kyleigh contributed to the literature review for the proposal as well as administered the

pilot survey. Kyleigh administered the finalized survey to students at the University of Ottawa. Kyleigh contributed to the coding, created the correlation and regression graphs for the final report. Kyleigh participated heavily in all aspects of the report, including the surveys, coding, creating graphs and charts, and revising and editing the final report. Kyleigh was an effective group member.

e. Tamara Bouchard - 5650235

Tamara attended all group meetings that were held outside of the course. Tamara contributed to the literature review for the proposal. Tamara administered the pilot survey. Tamara administered the finalized survey to students at the University of Ottawa. Tamara created a coding scheme, conducted the T-Tests, as well as the ANOVA test. Tamara contributed to the final coding and the completion of the final report. Tamara regularly contributed in brainstorming on presentation and final report ideas. She was prompt in attending all scheduled meetings, and kept a positive attitude regularly offering her support to complete any task needed.

Tamara helped Stephanie complete the PowerPoint presentation.

f. Francine Leclair - 3277340

Frankie attended all group meetings that were held outside of the course. Frankie did research for the proposal. She contributed to the distribution of surveys.

Frankie created the correlation tables on SPSS as well as the correlation and regression graphs. Frankie contributed to the revision of the final report especially with the literature review.