

RESEARCH PROJECT PARTICIPANTS: STUDENTS

The ODLEP questionnaire survey collected 644 responses from University Students across six participating Universities and the results identify statistically significant differences among the personality traits of the female and male participating Students.

ODLEP SURVEY STUDENTS' GENDER AND LEARNING PREFERENCES: INDEPENDENT SAMPLES TEST

The ODLEP project is funded by I.K.Y., the Erasmus+ National Agency in Greece (**Erasmus+ Programme Cooperation Partnership in Higher Education Key Action 2, Project reference No: 2022-1-EL01-KA220-HED-000089152**). Table 1 below summarizes the learning preferences of all University Students. Values range from 0-5, and higher values indicate the greater significance of the specific learning style.

Learning Preference	Gender	Mean
I can better discern the material through watching a demonstrative presentation of the information.	FEMALE	3,67
	MALE	3,96
I can understand the material better through listening and oral teaching methods.	FEMALE	3,46
	MALE	3,63
I can better learn the teaching materials through taking notes and reading the written contexts and texts.	FEMALE	3,83
	MALE	3,62
I can better conceive the instructional material through performing the practical, experimental and object manipulation via something more of a physical process (simulated or real).	FEMALE	3,92
	MALE	4,14
I have preference for tasks, projects, and situations that require creation, formulation, planning of ideas, strategies. I like to decide what to do and how to do it, rather than to be told.	FEMALE	3,44
	MALE	3,73
I have preference for tasks, projects, and situations that provide structure, procedures, or rules to work with, and can serve as guidelines to measure progress. I often prefer to be told what to do, and I will then give it my best shot at doing it well.	FEMALE	3,45
	MALE	3,52
I have preference for tasks, projects, and situations that require evaluation, analysis, comparison – contrast, and judgment of existing ideas, strategies and projects. I tend to like evaluative essays, commenting on other people's ideas, and assessing others' strengths and weaknesses	FEMALE	3,14
	MALE	3,35
I have preference for tasks, projects, and situations that allow focusing fully on one thing or aspect at a time, and staying with that thing until it is complete.	FEMALE	3,45
	MALE	3,56
I have preference for tasks, projects, and situations that allow creation of a hierarchy of goals to fulfill. I will often make lists, and sometimes even lists of lists.	FEMALE	3,10
	MALE	3,23
I have preference for tasks, projects, and situations that allow working with competing approaches, with multiple aspects or goals that are equally important.	FEMALE	3,09
	MALE	3,39
I have preference for tasks, projects, and situations that lend themselves to great flexibility of approaches, and to trying anything when, where, and how I please (work asystematic or even antisystematic).	FEMALE	3,19
	MALE	3,50
I have preference for tasks, projects, and situations that require engagement with specific, concrete details. I tend to enjoy tasks that require to keep track of details and to focus on concrete specifics of a situation.	FEMALE	3,26
	MALE	3,42
I have a preference for tasks, projects, and situations that require engagement with large, global, abstract ideas. I like to deal with big ideas, but sometimes I can lose touch with the details.	FEMALE	2,86
	MALE	2,97
I have a preference for tasks, projects, and situations that allow me to work independently of others.	FEMALE	3,56
	MALE	3,64
I have a preference for tasks, projects, and situations that allow working with others in a group or interacting with others at different stages of progress. I do not enjoy working alone.	FEMALE	2,85
	MALE	3,20
I have a preference for tasks, projects, and situations that involve unfamiliarity, going beyond existing rules or procedures, and maximization of change. I like new challenges and I thrive on ambiguity.	FEMALE	2,98
	MALE	3,18
I have a preference for tasks, projects, and situations that require adherence to and observance of existing rules and procedures. I like to minimize change and avoid ambiguity.	FEMALE	3,06
	MALE	3,29

Table 1. Average Scores of Female and Male Students Regarding Learning Preferences

There is only one case where the average score of female students is greater than males. More specifically, the learning preference with the higher score assigned by female students in comparison to the scores provided by male students is “I can better learn the teaching materials through taking notes and reading the written contexts and texts.” An independent-samples t-test was conducted to compare learning preferences scores for students based on scores assigned by female and male survey-participants. The results are presented in detail in the following Tables 2 and 3. Firstly, mean and standard deviation among male and female participants per personality trait attributes are presented. Then follows, data relevant to: “Learning Preferences”, “t value”, “Degrees of Freedom”, and the value of “p” (2-tailed significance). Levene’s test for equality of variances has taken place, in order to choose the appropriate data to interpret, based on the validity of the assumption of equal variances.

Learning Preferences	Equal Variances	Levene's Test for		t-test for Equality of Means		
		F	Sig.	t	df	Significance Two - Sided
I can better discern the material through watching a demonstrative presentation of the information.	Assumed	18,860	0,000	-3,645	642	0,000
	Not Assumed			-3,627	611,340	0,000
I can understand the material better through listening and oral teaching methods.	Assumed	11,141	0,001	-2,073	642	0,039
	Not Assumed			-2,065	619,436	0,039
I can better learn the teaching materials through taking notes and reading the written contexts and texts.	Assumed	0,278	0,598	2,539	642	0,011
	Not Assumed			2,539	639,552	0,011
I can better conceive the instructional material through performing the practical, experimental and object manipulation via something more of a physical process (simulated or real).	Assumed	2,273	0,132	-2,811	642	0,005
	Not Assumed			-2,806	633,194	0,005
I have preference for tasks, projects, and situations that require creation, formulation, planning of ideas, strategies. I like to decide what to do and how to do it, rather than to be told.	Assumed	0,035	0,852	-3,269	642	0,001
	Not Assumed			-3,270	640,406	0,001
I have preference for tasks, projects, and situations that provide structure, procedures, or rules to work with, and can serve as guidelines to measure progress. I often prefer to be told what to do, and I will then give it my best shot at doing it well.	Assumed	0,585	0,444	-0,957	642	0,339
	Not Assumed			-0,956	635,349	0,339

Table 2. Independent Samples Test Part A

Learning Preferences	Equal Variances	Levene's Test		t-test for Equality of	
		F	Sig.	t	Significance Two - Sided
I have preference for tasks, projects, and situations that:					
Require evaluation, analysis, comparison–contrast, and judgment of existing ideas, strategies and projects. I tend to like evaluative essays, commenting on other people’s ideas, and assessing others’ strengths and weaknesses	Assumed	0,003	0,960	-2,418	0,016
	Not Assumed			-2,416	0,016
Allow focusing fully on one thing or aspect at a time, and staying with that thing until it is complete.	Assumed	2,813	0,094	-1,366	0,173
	Not Assumed			-1,362	0,174
Allow creation of a hierarchy of goals to fulfill. I will often make lists, and sometimes even lists of lists.	Assumed	0,474	0,491	-1,345	0,179
	Not Assumed			-1,342	0,180
Allow working with competing approaches, with multiple aspects or goals that are equally important.	Assumed	0,541	0,462	-3,582	0,000
	Not Assumed			-3,577	0,000
Lend themselves to great flexibility of approaches, and to trying anything when, where, and how I please (work asystematic or even antisystematic).	Assumed	1,189	0,276	-3,413	0,001
	Not Assumed			-3,403	0,001
Require engagement with specific, concrete details. I tend to enjoy tasks that require to keep track of details and to focus on concrete specifics of a situation.	Assumed	0,802	0,371	-1,959	0,051
	Not Assumed			-1,956	0,051
Require engagement with large, global, abstract ideas. I like to deal with big ideas, but sometimes I can lose touch with the details.	Assumed	0,762	0,383	-1,136	0,257
	Not Assumed			-1,135	0,257
Allow me to work independently of others.	Assumed	2,713	0,100	-0,907	0,365
	Not Assumed			-0,905	0,366
Allow working with others in a group or interacting with others at different stages of progress. I do not enjoy working alone.	Assumed	2,350	0,126	-3,759	0,000
	Not Assumed			-3,750	0,000
Involve unfamiliarity, going beyond existing rules or procedures, and maximization of change. I like new challenges, and I thrive on ambiguity.	Assumed	0,996	0,319	-2,255	0,024
	Not Assumed			-2,250	0,025
Require adherence to and observance of existing rules and procedures. I like to minimize change and avoid ambiguity.	Assumed	7,298	0,007	-2,531	0,012
	Not Assumed			-2,518	0,012

Table 3. Independent Samples Test Part B

It is very interesting to note that the majority of the learning preferences exhibit statistically significant differences (learning preferences and numbers in bold) except for a very few of them.