

Study of Learning Resistance among University Students

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Abstract: *The present study is an effort to find out the learning resistance among university students differing with regard to gender, faculty background, and grade level. The sample comprised of 160 students of University of Allahabad, Allahabad. Data was collected through multi-stage stratified random sampling technique. Learning resistance was assessed with the help of Learning Resistance Inventory (LRI) of K. S. Misra. 2x2x2 ANOVA was used to analyze the data. The findings revealed that male students exhibit more learning resistance than female students, students.*

Keywords: Learning Resistance, university, students gender, grade level, faculty, science, arts, ANOVA

Introduction

Every human being is engaged in learning. One has to strive for it. Education as imparted in higher education institutions, appears to be students face several boring obstacles that do not allow learning to happen and reach the learner. Resistance is offered by students to academic engagements. It is also directed against students' active participation in learning. Learning resistance refers to the situation in which an individual directly or indirectly refuses any engagement in a learning possibility. There occurs a general opposition to social learning conditions. For the higher education learning resistance has become a challenge. It appears at under-graduate as well as post-graduate level. It prevents students

from organizing their learning activities and fails them to apply themselves to the classroom learning tasks. It is convenient to assume that the origins of student resistance lie in classroom active-learning strategies themselves (Prince and Felder, 2007). It may be intangible and invisible, but is responsible for many incidents in the class. We need to recognize how resistance to learning may be linked with human development. Learning environment is influenced by thinking, attitude and behaviours of the learners. In Indian context learning burden due to heavy syllabi accompanied by irrelevant contexts appears to cause learning resistance teaching is being carried by less qualified and low merit teachers. The reasoning behind teachers' pedagogical choices may be unsound in higher education institutions need to be executed in such a way that they do not result in form of learning resistance among the students. The present study is an attempt to find out the learning resistance among university students differing with regard to gender, faculty background, and grade level.

Objectives

The objectives of this study are as followed:

1. To study the effect of gender on learning resistance.
2. To study the effect of faculty on learning resistance.
3. To study the effect of grade level on learning resistance.

4. To study the effect of interaction between gender and faculty on learning resistance.
5. To study the effect of interaction between gender and grade level on learning resistance.
6. To study the effect of interaction between faculty and grade level on learning resistance.
7. To study the effect of interaction between gender, faculty and grade level on learning resistance.

- H₀₅:** The effect of interaction between gender and grade level on learning resistance is not significant.
- H₀₆:** The effect of interaction between faculty and grade level on learning resistance is not significant.
- H₀₇:** The effect of interaction between gender, faculty and grade level on learning resistance is not significant.

Hypotheses

To achieve the objectives following hypotheses have been formulated and tested:

- H₀₁:** There exists no significant difference in learning resistance of male and female students.
- H₀₂:** There exists no significant difference in learning resistance of arts and science faculty students.
- H₀₃:** There exists no significant difference in learning resistance of UG and PG students.
- H₀₄:** The effect of interaction between gender and faculty on learning resistance is not significant.

Results and discussion

Methodology

Sample: The sample of this study consisted of 160 (80 males and 80 females) students of UG-PG level of arts and science faculty from University of Allahabad, Allahabad. Students were selected through multi-stage stratified random technique from eight departments of University of Allahabad, Allahabad.

Tool Used: Learning resistance was measured with the help of ‘Learning Resistance Inventory’ (LRI) developed by K. S. Misra.

Data Analysis: 2x2x2 ANOVA was used to analyze the data.

Table 1
Results of 2x2x2 ANOVA showing effect of gender, faculty and grade level on learning resistance

Source	Sum of Squares	df	Mean Square	F
Gender	1918.225	1	1918.225	4.546*
Faculty	1742.400	1	1742.400	4.129*
Grade Level	156.025	1	156.025	.370
Gender * Faculty	3.025	1	3.025	.007

Gender * Grade Level	490.000	1	490.000	1.161
Faculty * Grade Level	2387.025	1	2387.025	5.657*
Gender * Faculty * Grade Level	250.000	1	250.000	.592
Error	64139.700	152	421.972	
Total	1863762.000	160		

*Significant at .05 level

Table 2
Mean and standard deviations for male and female students

Gender	Mean	Std. Deviation	N
Male	109.3125	20.91792	80
Female	102.3875	20.92814	80

A look at table 1 shows that the value of F ratio for the effect of gender on learning resistance is 4.546. It is significant at 0.05 level. So, the null hypothesis that ‘there exists no significant difference in learning resistance of male and female students.’ can be rejected. It means that male students differ from female students on learning resistance. Table 2 shows that mean and standard deviation for male university students on learning resistance are 109.3125 and 20.91792. Mean and standard deviation for female university students on learning

resistance are 102.3875 and 20.92814. Mean for male university students is greater than that for female university students. Thus, it can be inferred that male students exhibit more learning resistance than female students. This finding draws support from the findings of Pal and Misra (2018). They found male D. El. Ed. students exhibit more learning resistance than female D. El. Ed. students. The possible reason for more learning resistance among male university students may be more active participation of male students in nonacademic activities or less learner engagement.

Table 3
Mean and standard deviations for arts and science faculty students

Faculty	Mean	Std. Deviation	N
Arts	102.5500	19.70472	80
Science	109.1500	22.12456	80

The table 1 shows that F-value for main effect of faculty on learning resistance is significant at 0.05 level. It means that the hypothesis ‘there exists no significant difference in learning resistance of arts and science faculty students.’

is rejected. It indicates that students of arts faculty differ from those of science faculty on learning resistance. Table 3 shows that mean and standard deviations for learning resistance among arts faculty students on learning resistance are 102.5500 and 19.70472. Table 3

shows that mean and standard deviations for learning resistance among science faculty students on learning resistance are 109.1500 and 22.12456 respectively. Mean for science faculty students is greater than that for arts faculty students. It can be inferred that science faculty students exhibit more learning resistance than arts faculty students. Perhaps science teachers having high level of competence in their subject provide much detail in their lessons, utilize their expertise to link a particular topic with other topics and further break down abstract subject knowledge

into simpler and more polished forms. So, they do not feel need for more self-initiated learning. In such situation science students are likely to offer more resistance to additional learning. Similar view has been expressed by Kenaz et al. (2016). Other factors promoting learning resistance may include inappropriate and improvised teaching and coverage of syllabus, use of unsuitable learning resources and improper implementation CBCS system is also curbs them to learn intensively as it is promoting surface level learning instead of depth learning.

Table 4
Mean and standard deviations for UG-PG students

Grade Level	Mean	Std. Deviation	N
UG	104.8625	19.54854	80
PG	106.8375	22.70919	80

It was hypothesized that ‘there exists no significant difference in learning resistance of UG and PG students.’ Two way ANOVA was used to test the hypothesis. Table 4 shows that means and standard deviations for UG and PG students on learning resistance are 104.8625 and 19.54854 and 106.8375 and 22.70919 respectively. Table 1 shows that the

value of F ratio is 0.370. It is not significant at 0.05 level. So, the null hypothesis can be accepted. It means UG and PG students of University of Allahabad have equal learning resistance, which indicates that grade level doesn’t influence the learning resistance. Pal and Misra (2018) also support this and found same results in their study.

Table 5
Mean and standard deviations for male and female students of arts and science faculty

Faculty	Gender	Mean	Std. Deviation	N
Arts	Male	105.8750	17.63038	40
	Female	99.2250	21.28378	40
Science	Male	112.7500	23.47912	40
	Female	105.5500	20.33936	40

It was hypothesized that ‘The effect of interaction between gender and faculty on learning resistance is not significant.’ Two way ANOVA was used to test the hypothesis. Table 5 shows that means and standard deviations for male and female students of arts and science faculty on learning resistance. Mean and standard deviations for male and female students of arts faculty are 105.8750 and 17.63038 and 99.2250 and 21.28378 respectively and mean and standard deviations

for male and female students of science faculty are 112.7500 and 23.47912 and 105.5500 and 20.33936 respectively. The calculated F ratio of the interaction between gender and faculty, shown in table 1, is 0.007, which is not significant at 0.05 level. So, the null hypothesis can be accepted. It means that effect of interaction between gender and faculty on learning resistance is not significant. Thus it can be inferred that the effect of gender on learning resistance among arts and science faculty students is the same.

Table 6
Mean and standard deviations for male and female students of UG and PG grade level

Grade level	Gender	Mean	Std. Deviation	N
UG	Male	106.5750	18.80247	40
	Female	103.1500	20.36028	40
PG	Male	112.0500	22.74716	40
	Female	101.6250	21.71339	40

It was hypothesized that ‘the effect of interaction between gender and grade level on learning resistance is not significant.’ To test the hypothesis two way ANOVA was used. Table 6 shows that means and standard deviations for male and female students of UG and PG grade level on learning resistance. Mean and standard deviations for male and female UG students are 106.5750 and 18.80247 and 103.1500 and 20.36028 respectively and mean and standard deviations for male and

female PG students are 112.0500 and 22.74716 and 101.6250 and 21.71339 respectively. The calculated F ratio, 1.161, of the interaction of gender and faculty, shown in table 1 is not significant at 0.05 level. So, the null hypothesis can be accepted. It means that effect of interaction between gender and grade level on learning resistance is not significant. Therefore, it can be inferred that the effect of gender on learning resistance among UG and PG students is same.

Table 7
Mean and standard deviations for UG and PG students of arts and science faculty

Faculty	Grade level	Mean	Std. Deviation	N
Arts	UG	105.4250	19.24323	40
	PG	99.6750	19.98126	40
Science	UG	104.3000	20.07831	40
	PG	114.0000	23.24121	40

It is evident from the table 1 that obtained F-ratio value 5.657 is found to be significant at 0.05 level on the interaction between grade level and faculty with respect to leaning resistance. Thus null hypothesis that ‘the effect of interaction between faculty and grade level on learning resistance is not significant.’ can be rejected. Table 7 shows that means and standard deviations for UG and PG students of arts and science faculty on learning resistance. Mean and standard deviations for UG students of arts faculty are 105.4250 and 19.24323. Mean and standard deviations for PG students of arts faculty are 99.6750 and 19.98126. It

indicates that the group of UG students of arts faculty is found to be significantly higher than the group of PG students of arts faculty on learning resistance. Table 7 also shows that mean and standard deviations for UG students of science faculty students are 104.3000 and 20.07831 and mean and standard deviations for PG students of science faculty students are 114.0000 and 23.24121 respectively. It means the group of PG students of science faculty is found to be significantly higher than the group of UG students of science faculty on learning resistance. Thus it can be inferred that the effect of interaction between faculty and grade level on learning resistance is significant.

Table 8
Mean and standard deviations for male and female, UG-PG students of Arts and science faculty

Faculty	Grade level	Gender	Mean	Std. Deviation	N
Arts	UG	Male	108.2500	16.37673	20
		Female	102.6000	21.79667	20
	PG	Male	103.5000	18.91950	20
		Female	95.8500	20.75490	20
Science	UG	Male	104.9000	21.25014	20
		Female	103.7000	19.36926	20
	PG	Male	120.6000	23.45746	20
		Female	107.4000	21.60507	20

Table 8 shows that means and standard deviations for male and female UG students of arts faculty are 108.2500 and 16.37673 and 102.6000 and 21.79667 respectively. Means and standard deviations for male and female PG students of arts faculty are 103.5000 and 18.91950 and 95.8500 and 20.75490 respectively. Means and standard deviations for male and female UG students of science faculty are 104.9000 and 21.25014 and 103.7000 and 19.36926 respectively. Means and standard deviations for male and female PG students of science faculty are 120.6000 and 23.45746 and 107.4000 and 21.60507 respectively. The calculated F ratio, 1.161, of the interaction of gender and faculty, shown in table 1 is not significant at 0.05 level. So, the null hypothesis that effect of interaction between gender and grade level on learning resistance is not significant can be accepted.

Conclusion

The present study reveals that learning resistance occurs frequently at the university level. Students resist learning when they don't see how or what an activity contributes to their efforts to learn. If it looks like busywork or a waste of time, students resist. In absence of motivation or because of low aspiration level and poor teaching-learning environment learner starts refusing the learning on very frequent intervals. This invisible boycott of learning is being felt among the students in class. Therefore, it can not be left at all. It should be taken seriously. Otherwise, this emerging tendency among college goers will put a question mark on their future roles and also put a question mark on the competency

acquired by them. The results of the statistical analysis and hypotheses testing discussed in the earlier sections, following conclusions can be drawn:

1. Male students exhibit more learning resistance than female students.
2. Science faculty students exhibit more learning resistance than arts faculty students.
3. UG and PG students of University of Allahabad have equal learning resistance, which indicates that grade level doesn't influence the learning resistance.
4. The effect of gender on learning resistance among arts and science faculty students is the same.
5. The effect of gender on learning resistance among UG and PG students is same.
6. The effect of interaction between faculty and grade level on learning resistance is significant. It is found that the group of UG students of arts faculty is found to be significantly higher than the group of PG students of arts faculty on learning resistance. And the group of PG students of science faculty is found to be significantly higher than the group of UG students of science faculty on learning resistance.
7. The effect of interaction between gender and grade level on learning resistance is not significant can be accepted.

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