

Parami Course Evaluation File



# PARAMI COURSE INTELLIGENCE AND ANALYSIS

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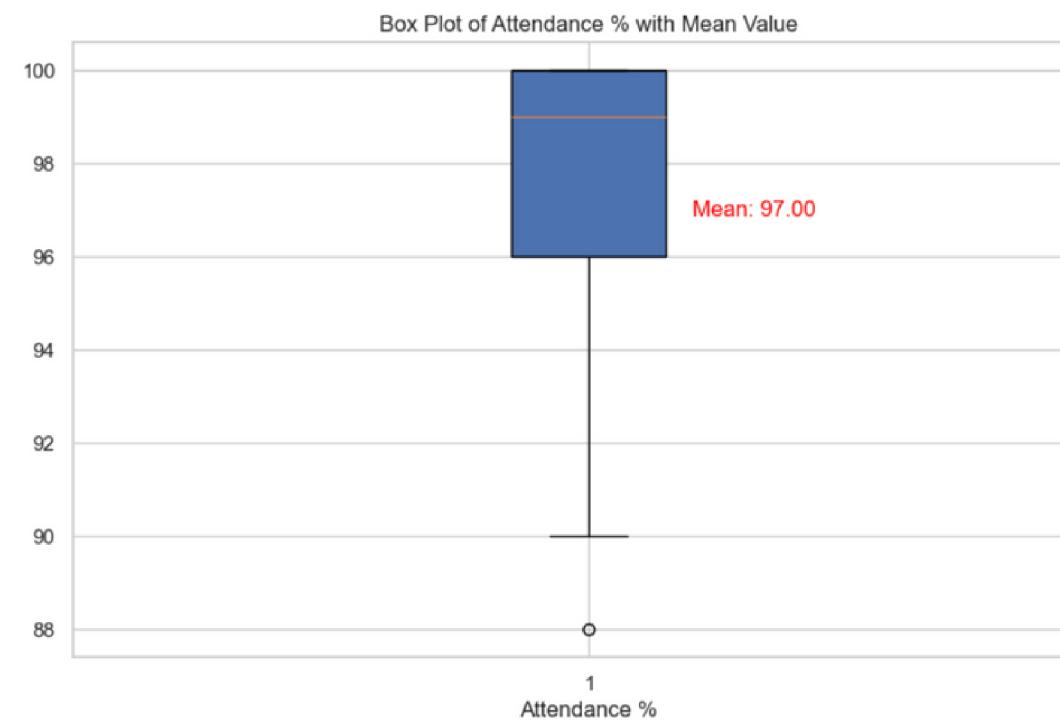
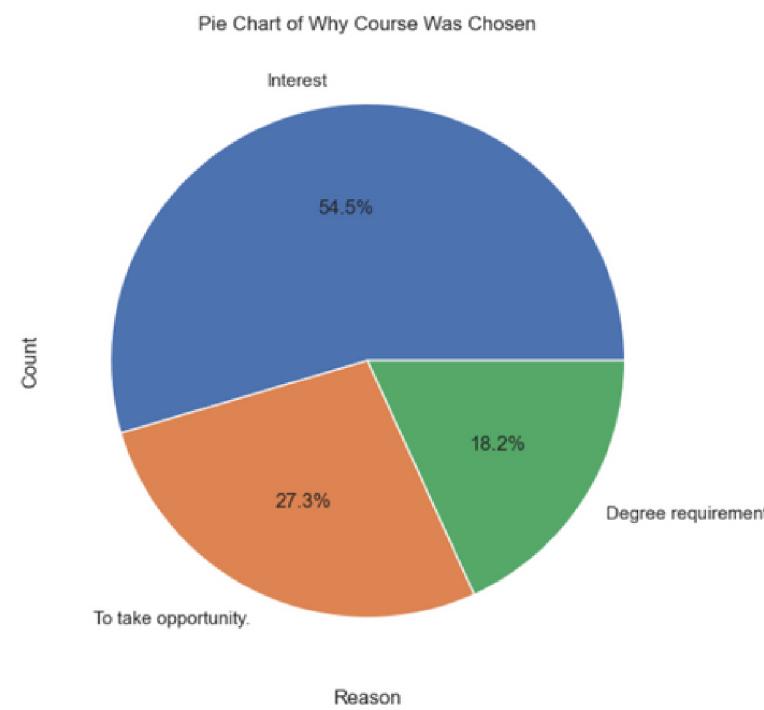
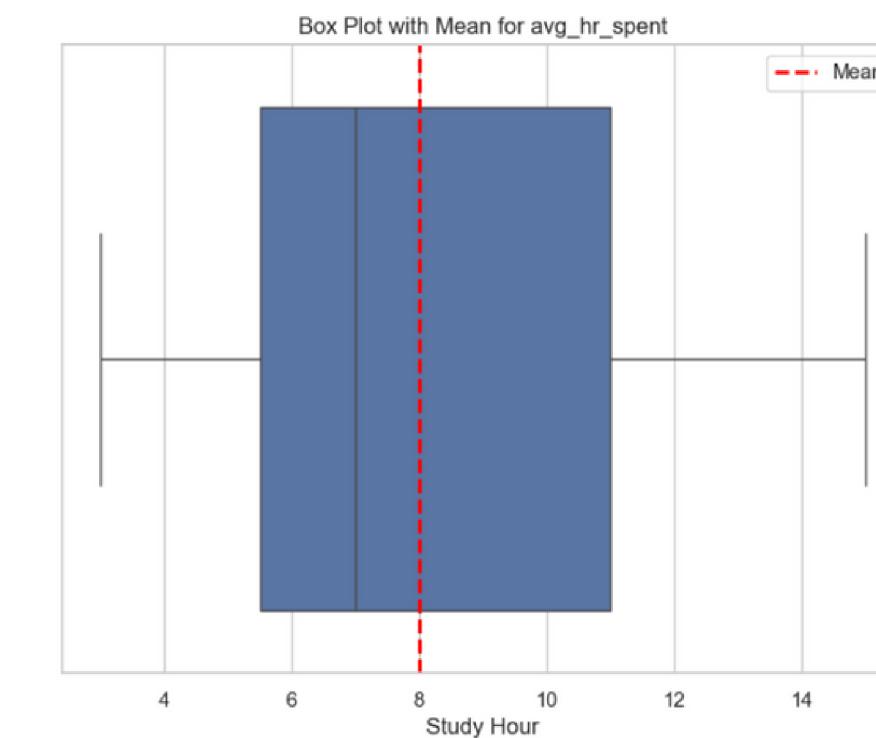
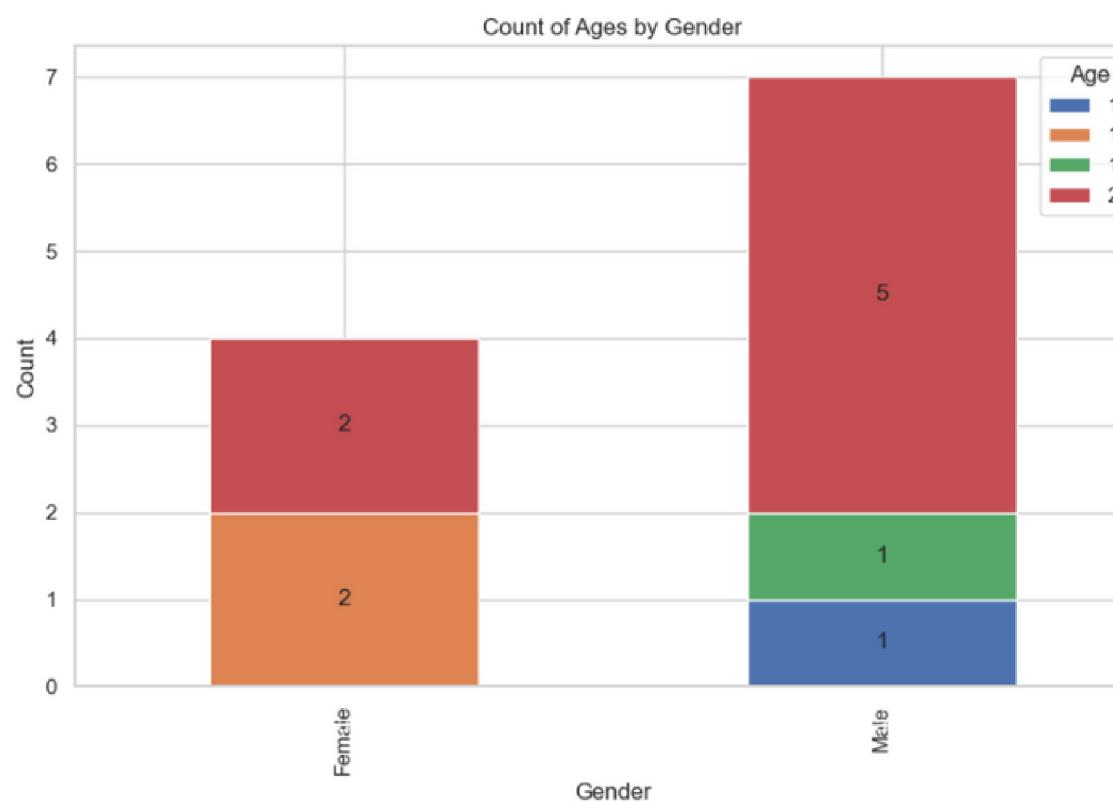
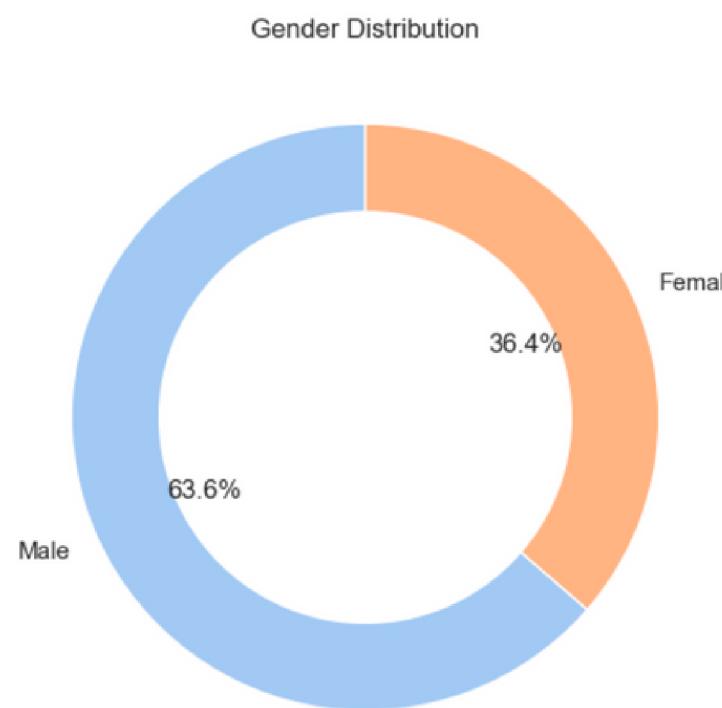
# **Limitations**

- Some data were in categorical data types and formatted into numerical data which might cause insufficient interpretation.
- Outliers were changed into proper numeric such as mean or median as appropriate.
- All Data were students' self-filled and might contain bias or inaccurate filling.
- No exam scores were provided to determine performance level.

# **Disclaimer**

- Analysis of Attendance only accounts for high Attendance rate where average is 97%, and not for every Attendance rate.
- All Analysis are strongly based on the data filled by the students themselves.
- All analysis here are strongly data-driven and calculated based on average values of each data type which accounts for the average interpretation.
- The mathematical ration used in this data analysis is ‘correlation’, which does not account for exact causing but related terms.
- In data analysis, put more efforts, studied more hours and prepared for the class are different measures.

# What is the data about?



- Data is about Parami Student evaluation.
- Total Student is 11, Males are 7 and Females are 4.
- Total average study hour is 8 hours.
- Total average Attendance is 97 %.
- 54.5% of students came with Interest in the course (6 students).

# Original Data and Cleaned Data

	time	Age	Attendance %	Gender	Student_self_evaluation[challenges]	Student_self_evaluation[putting_effort]	Student_self_evaluation[prepared]	Student_self_evaluation[teamwork]
0	2022/12/08 8:36:52 PM GMT+7	20	98	Female	Strongly Agree	Neutral	Neutral	Neutral
1	2022/12/08 8:37:19 PM GMT+7	19	100	Male	Strongly Agree	Agree	Agree	Agree
2	2022/12/08 8:37:42 PM GMT+7	20	100	Male	Strongly Agree	Agree	Agree	Agree
3	2022/12/08 8:38:02 PM GMT+7	16	100	Male	Strongly disagree	Neutral	Strongly Agree	Strongly Agree
4	2022/12/08 8:38:18 PM GMT+7	20	90	Male	Agree	Neutral	Neutral	Neutral
5	2022/12/08 8:39:37 PM GMT+7	20	96	Male	Neutral	Agree	Agree	Agree
6	2022/12/08 8:39:37 PM GMT+7	20	100	Female	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree
7	2022/12/08 8:41:40 PM GMT+7	18	96	Female	Strongly Agree	Strongly Agree	Agree	Agree
8	2022/12/08 8:43:27 PM GMT+7	36	99	Male	Strongly Agree	Agree	Strongly Agree	Strongly Agree
9	2022/12/08 9:11:01 PM GMT+7	18	100	Female	Strongly Agree	Agree	Neutral	Neutral
10	2022/12/09 7:58:31 PM GMT+7	20	88	Male	Agree	Strongly Agree	Strongly Agree	Strongly Agree

	time	Age	Attendance %	Gender	Student_self_evaluation[challenges]	Student_self_evaluation[putting_effort]	Student_self_evaluation[prepared]	Student_self_evaluation[teamwork]
0	2022/12/08 8:36:52 PM GMT+7	20	98	Female	5	3	3	3
1	2022/12/08 8:37:19 PM GMT+7	19	100	Male	5	4	4	4
2	2022/12/08 8:37:42 PM GMT+7	20	100	Male	5	4	4	4
3	2022/12/08 8:38:02 PM GMT+7	16	100	Male	1	3	5	5
4	2022/12/08 8:38:18 PM GMT+7	20	90	Male	4	3	3	3
5	2022/12/08 8:39:37 PM GMT+7	20	96	Male	3	4	4	4
6	2022/12/08 8:39:37 PM GMT+7	20	100	Female	5	5	5	5
7	2022/12/08 8:41:40 PM GMT+7	18	96	Female	5	5	4	4
8	2022/12/08 8:43:27 PM GMT+7	20	99	Male	5	4	5	5
9	2022/12/08 9:11:01 PM GMT+7	18	100	Female	5	4	3	3
10	2022/12/09 7:58:31 PM GMT+7	20	88	Male	4	5	5	5

Before cleaning

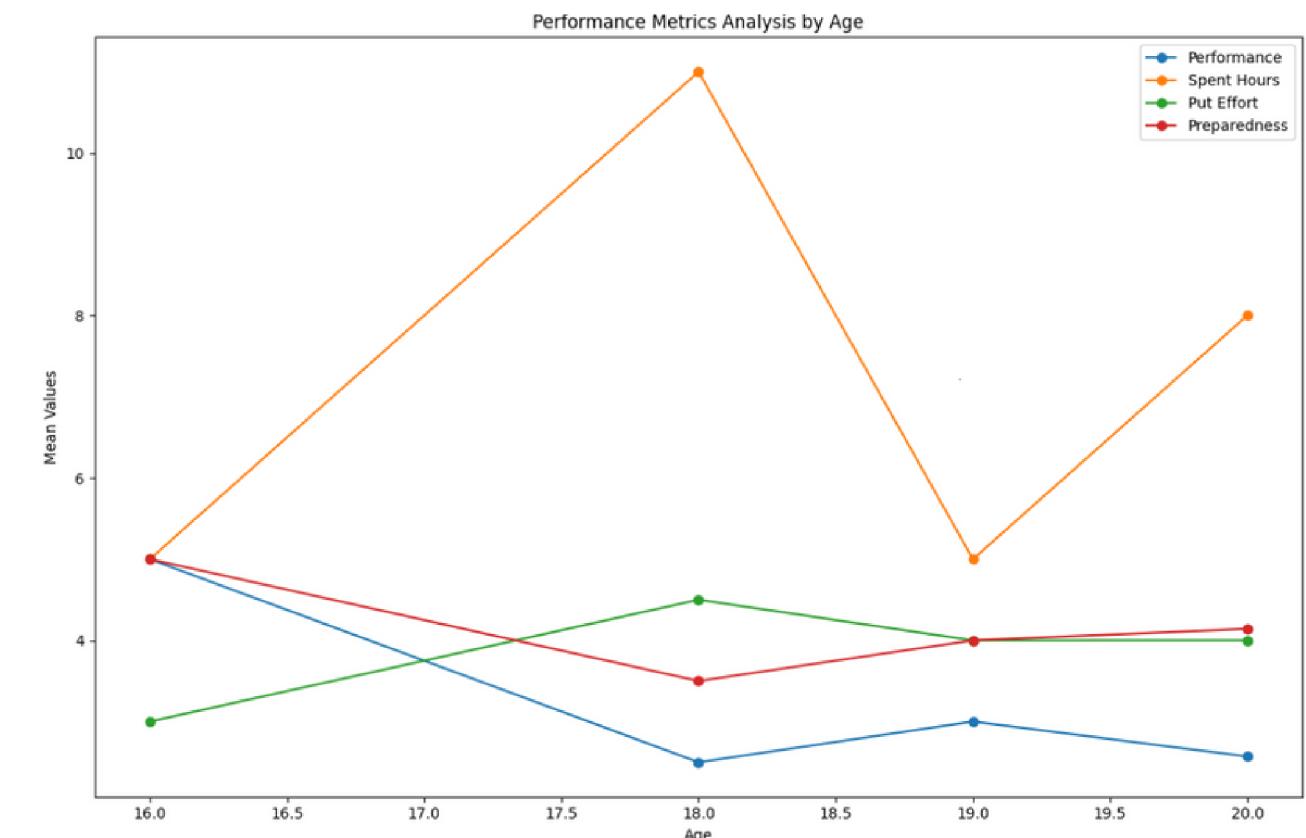
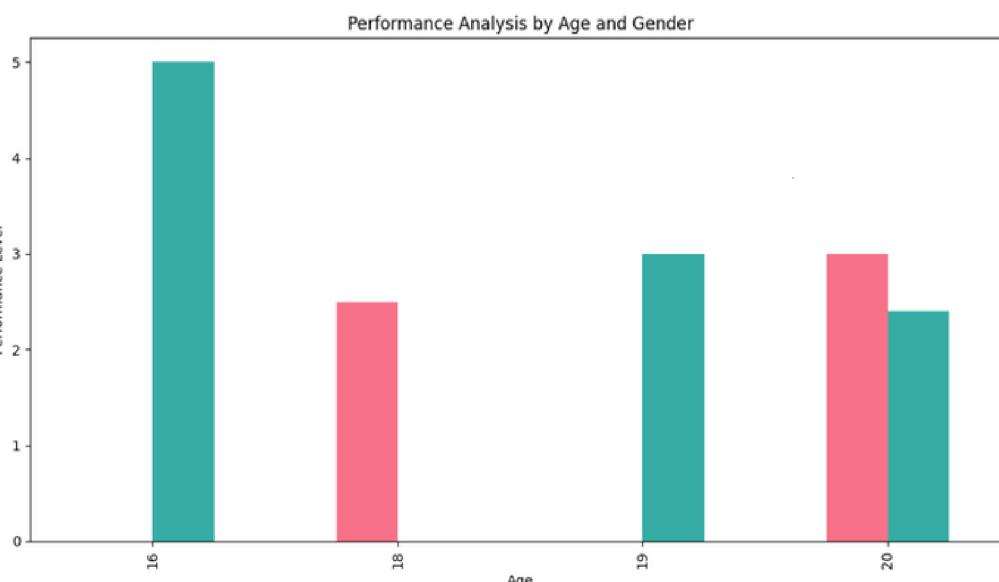
After cleaning

# Who have performed well in class?

Student_self_evaluation[performed_well]	
Student_self_evaluation[performed_well]	1.000000
avg_hr_spent	0.274511
Student_self_evaluation[prepared]	0.832766
Student_self_evaluation[challenges]	-0.398396
Student_self_evaluation[putting_effort]	0.351069
Skill_of_instructor[teaching_clear]	0.485404

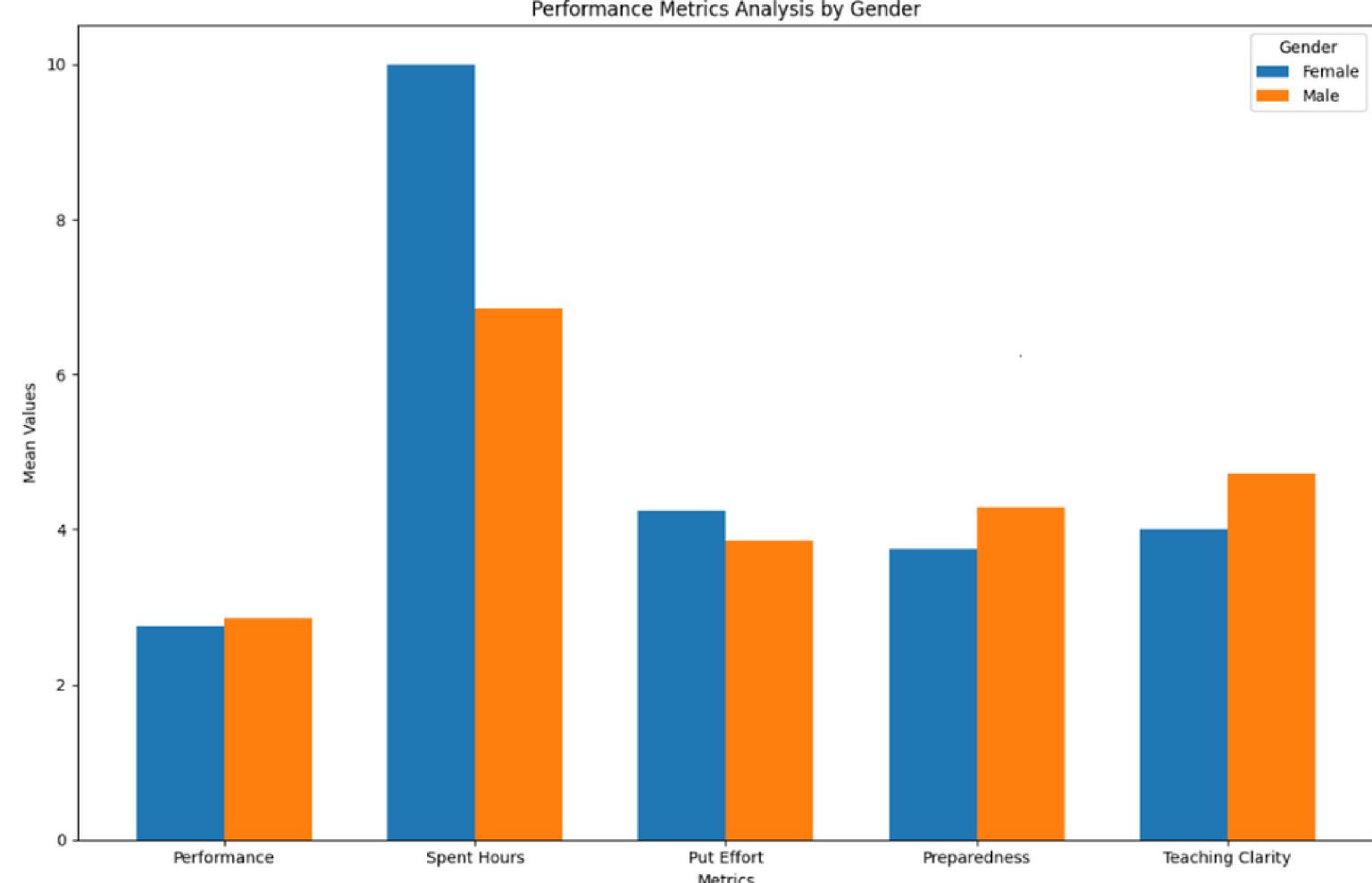
## Findings

- Students who have **prepared** for the class **performed well** in the class (83.3% correlation).
- Females spent more hours and put more efforts than males, yet performed fewer than males.
- Males performed better than females because they prepared more for the class.
- 16 age performed highest** in the class because of **highest preparedness**.
- Even **females study more** than males, they performed less than males because they have **less prepared**.
- Preparation also make males received clear teachings.

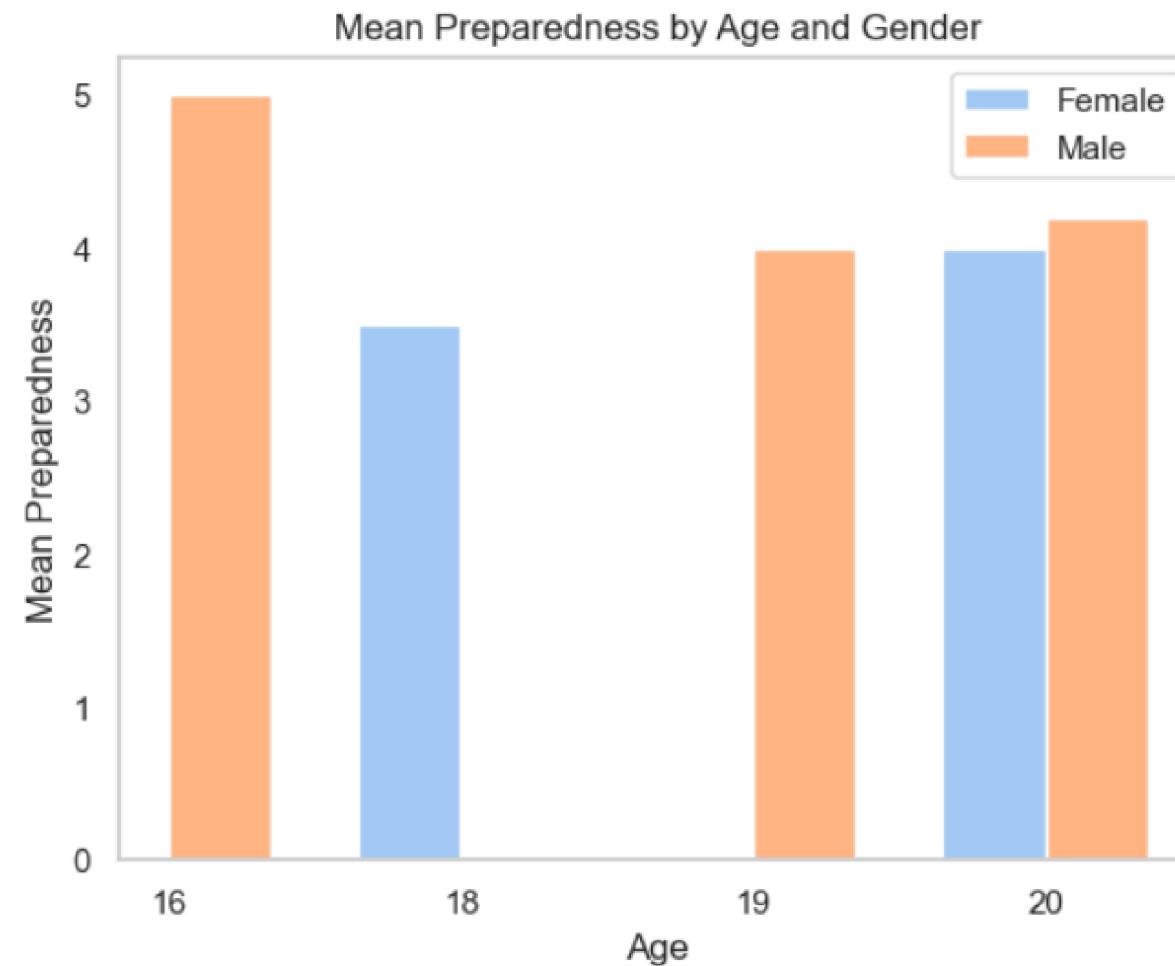
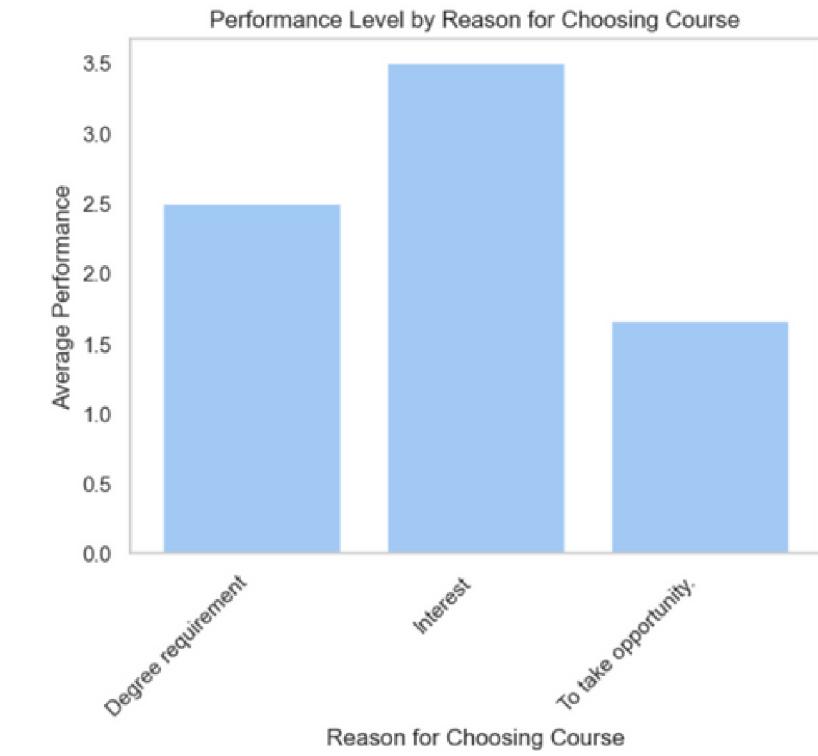
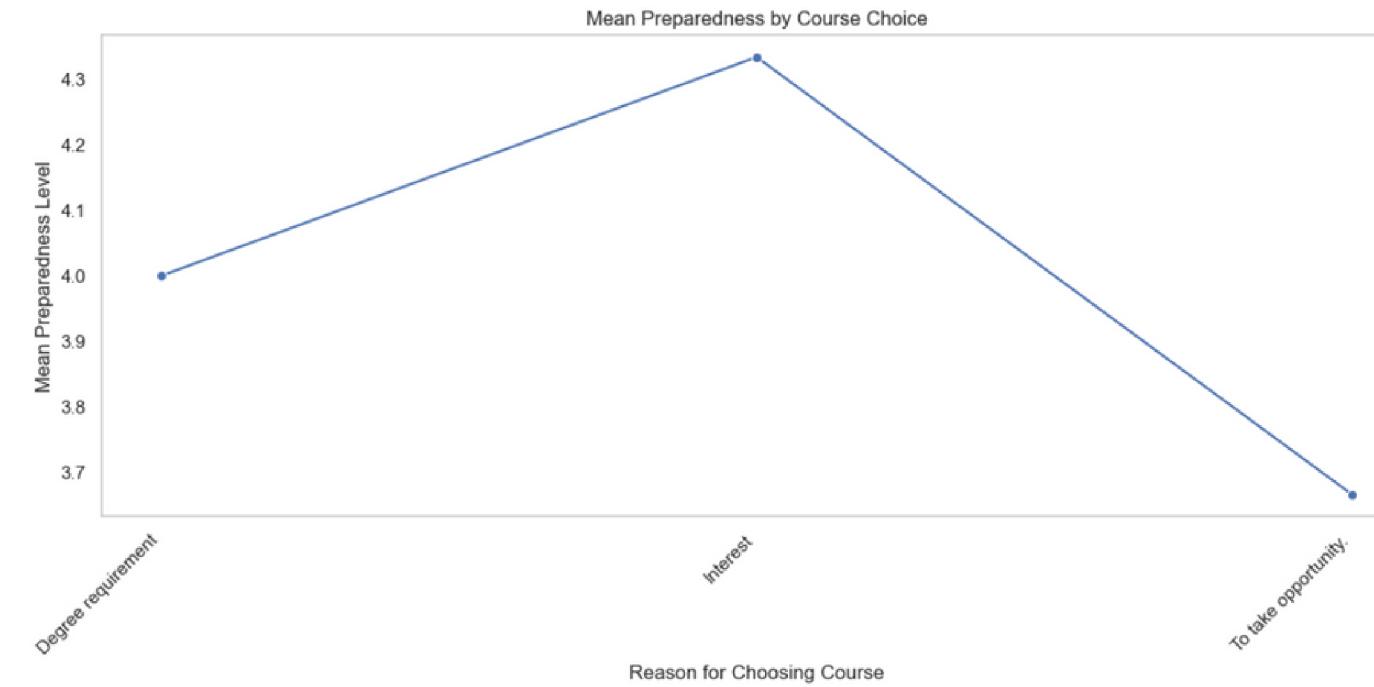
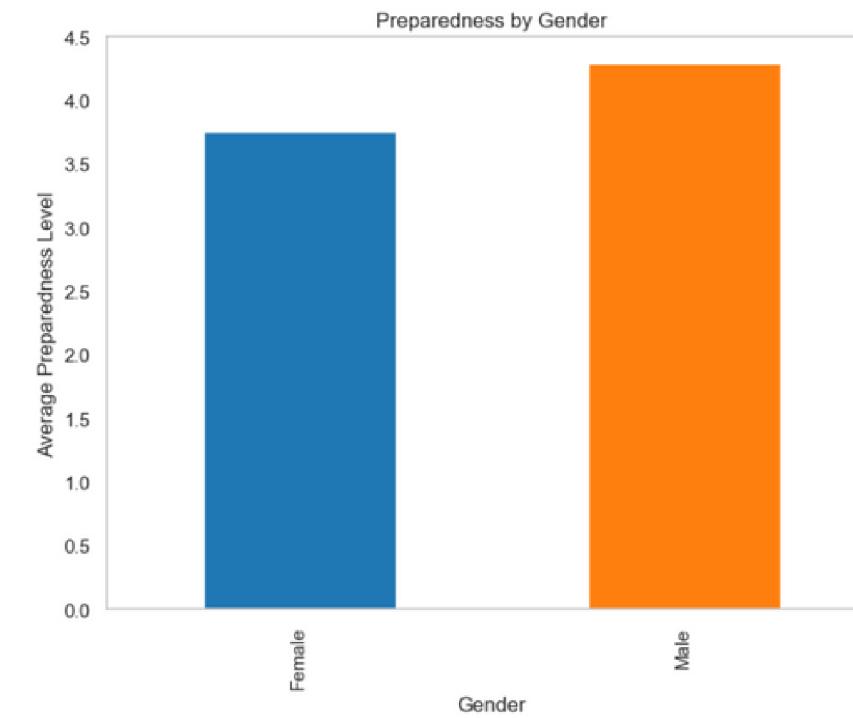


## Solutions

- The most important thing to perform well in class is **Prepare for the class**.



# Who prepared more for the class?



## Intelligence

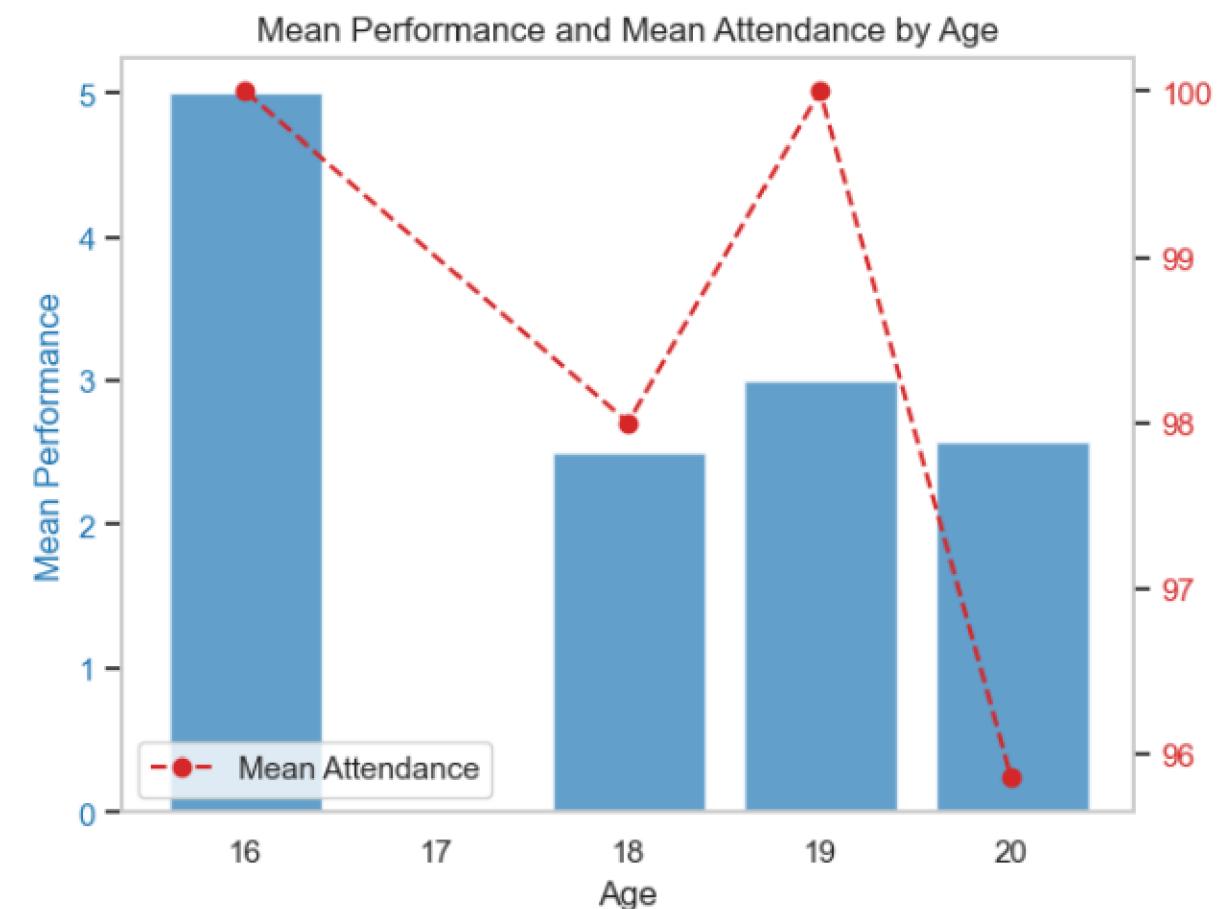
- The **Males prepared more** for the class.
- **16 age prepared more** for the class.
- Students with **Interest prepared more** for the class, hence, performing better than others.

# Is Attendance beneficial in making students performed well?

	Attendance %
Attendance %	1.000000
Student_self_evaluation[performed_well]	0.270908
Student_self_evaluation[above_avg]	0.258188
Student_self_evaluation[challenges]	0.110561
Student_self_evaluation[putting_effort]	-0.121046
Skill_of_instructor[teaching_clear]	-0.409110
Skill_of_instructor[stimu_student_interest]	-0.650444
Course_Structure[course_challenging]	-0.471728
Course_Structure[course_developed_intell_critical]	-0.477571

## Intelligence

- Out of total average **Attendance 97%**, It has **only 27% correlation with performance**, meaning **Attendance** will bring **better performance** only for **27%**.
- It is **47% correlatedly sure** that the **more Attendance** the students have, **the less challenges** they will face.



## Analysis

**High Attendance rate** with average of **97%**, stated that

- it has **reduced challenges** students faced with **47%**.
- it has also reduced **students' interests** by the instructor with **65%**, **students' development intellectual and critical skills** with **48%**, and **clearness of the instructor's teaching** with **41%**.

# Who struggled more in class?

	Age	Attendance %	Student_self_evaluation[challenges]
Age	1.000000	-0.335362	0.559658
Attendance %	-0.335362	1.000000	0.110561
Student_self_evaluation[challenges]	0.559658	0.110561	1.000000
Student_self_evaluation[putting_effort]	0.194424	-0.121046	0.405948
Student_self_evaluation[prepared]	-0.107062	0.056401	-0.309518
Student_self_evaluation[performed_well]	-0.390922	0.270908	-0.398396
Student_self_evaluation[above_avg]	-0.402137	0.258188	-0.514282
Skill_of_instructor[teaching_clear]	0.228995	-0.409110	-0.498918
Skill_of_instructor[stimu_student_interest]	0.488453	-0.650444	-0.169978
Skill_of_instructor[time_used_effectively]	-0.099563	-0.238648	-0.384583
Skill_of_instructor[available_helpful]	0.142148	-0.243374	-0.010600
Skill_of_instructor[instructor_cared_students]	-0.304604	-0.208606	-0.476999
Course_Structure[increased_my_ds]	-0.196221	-0.115183	-0.339466
Course_Structure[gave_confidence]	-0.218434	-0.059050	-0.408072
Course_Structure[believed_learning_important]	-0.148011	-0.238504	-0.281772
Course_Structure[course_challenging]	0.841881	-0.471728	0.468749
Course_Structure[course_developed_intell_critical]	0.334724	-0.477571	-0.036400
avg_hr_spent	0.060810	0.006310	0.021162
recommend_fri	0.318601	-0.375018	-0.415765

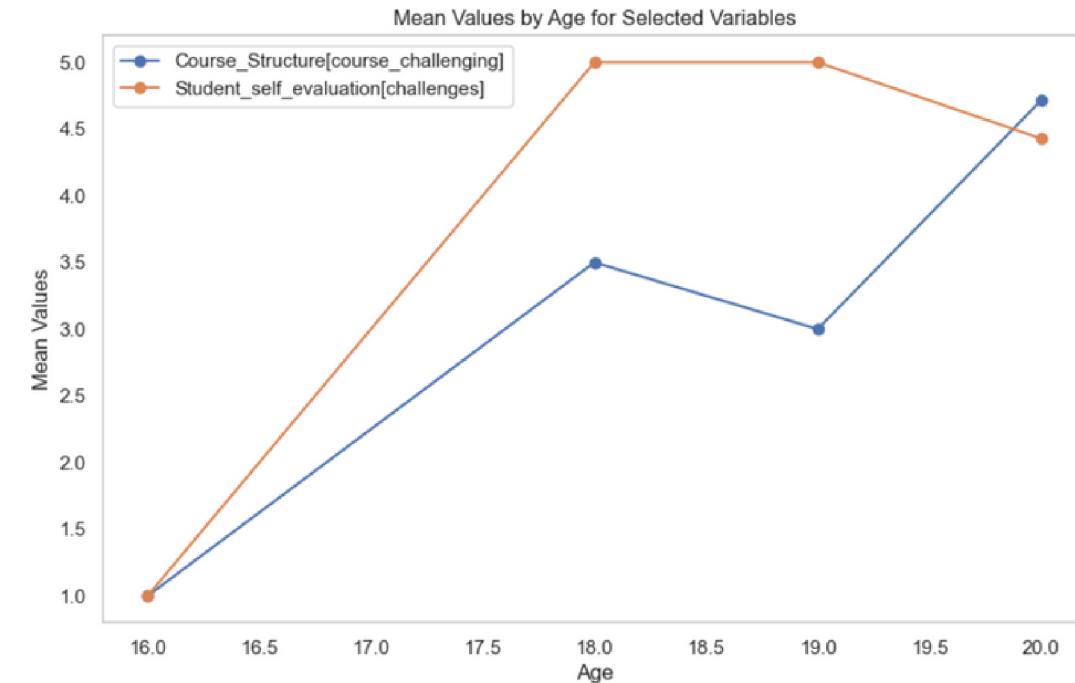
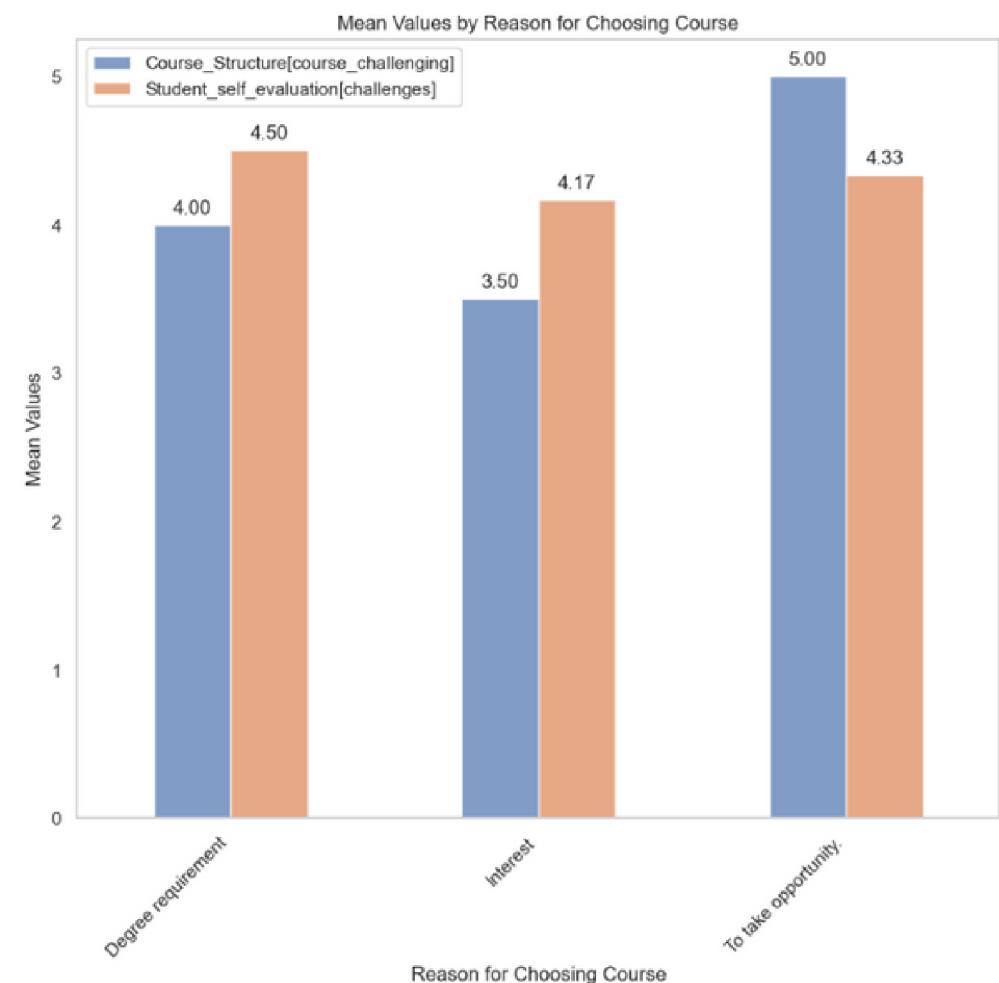
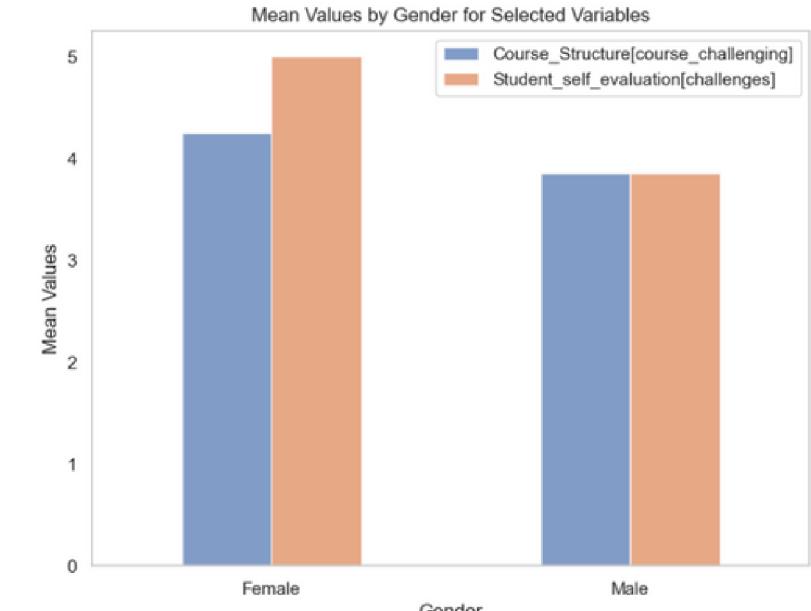
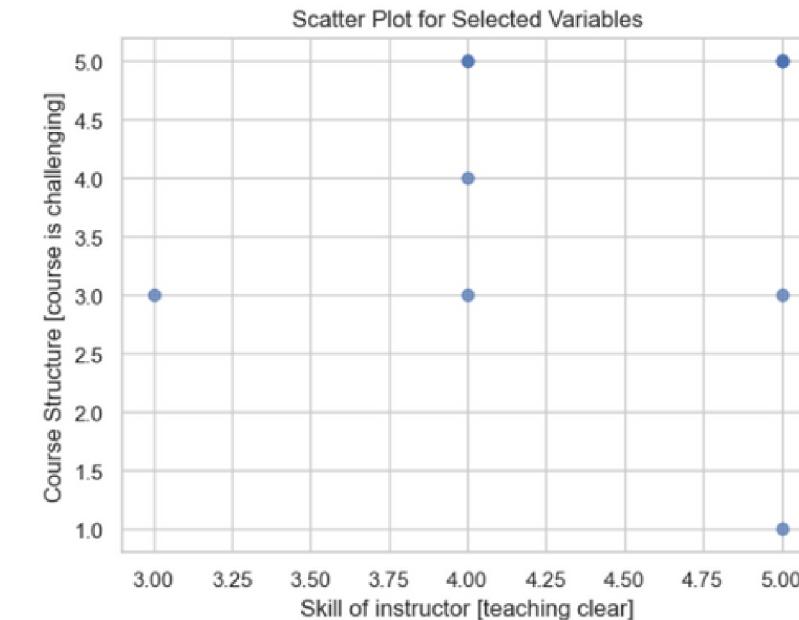
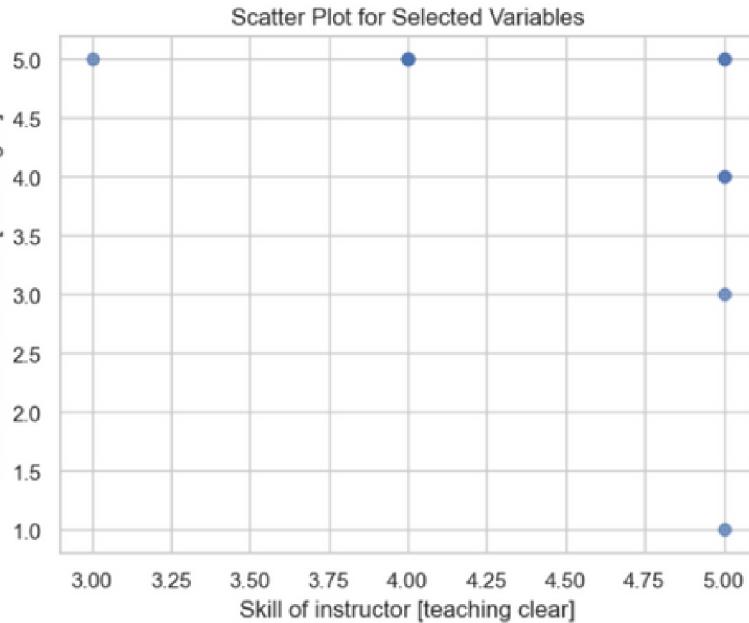
2 Metrics for challenges : **Course structures (Challenging)** and **Student self evaluation (Challenging)**.

For Student self evaluation (Challenging),

- The **older the age**, the **more challenges** the student has with **56%** correlation.
- Females face more challenges than males.
- Age 18, 19 faced more challenges than others.

For course structures (Challenging),

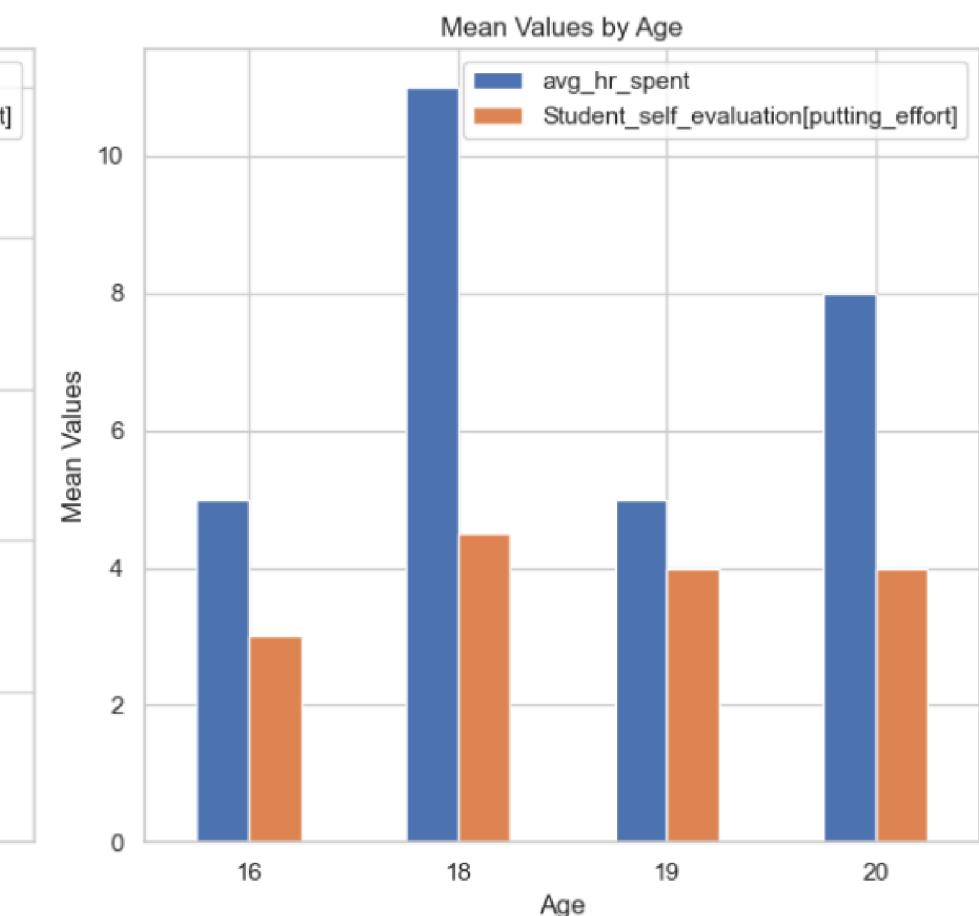
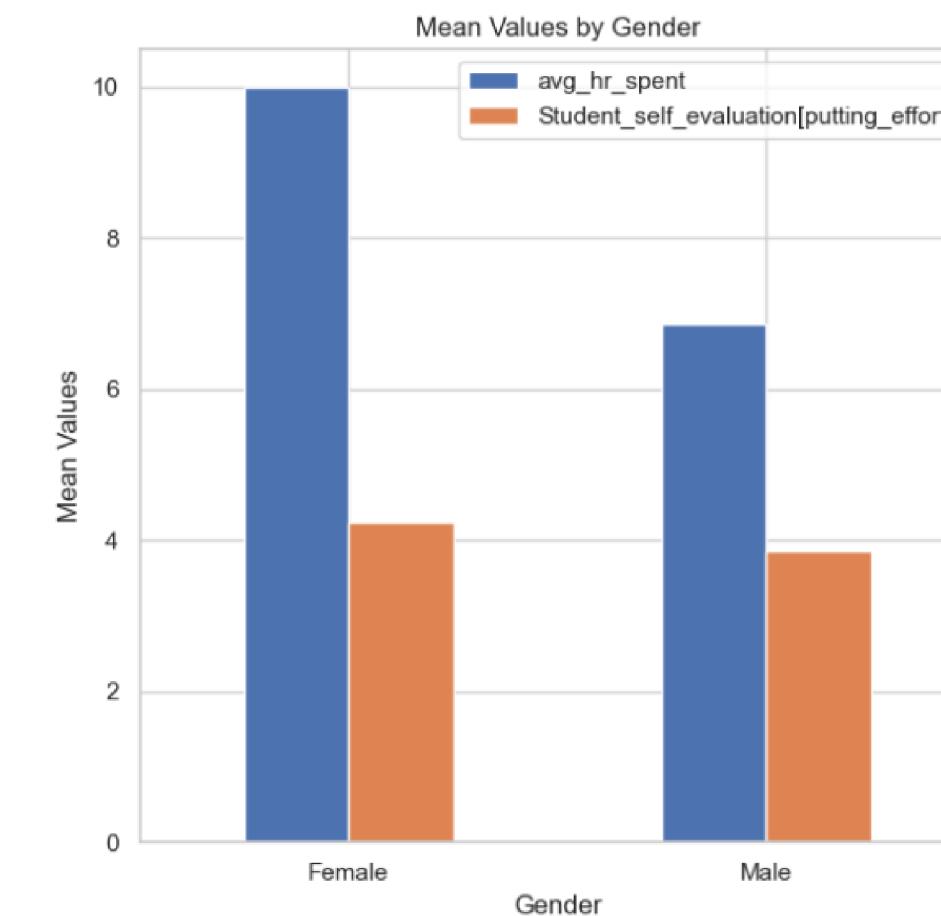
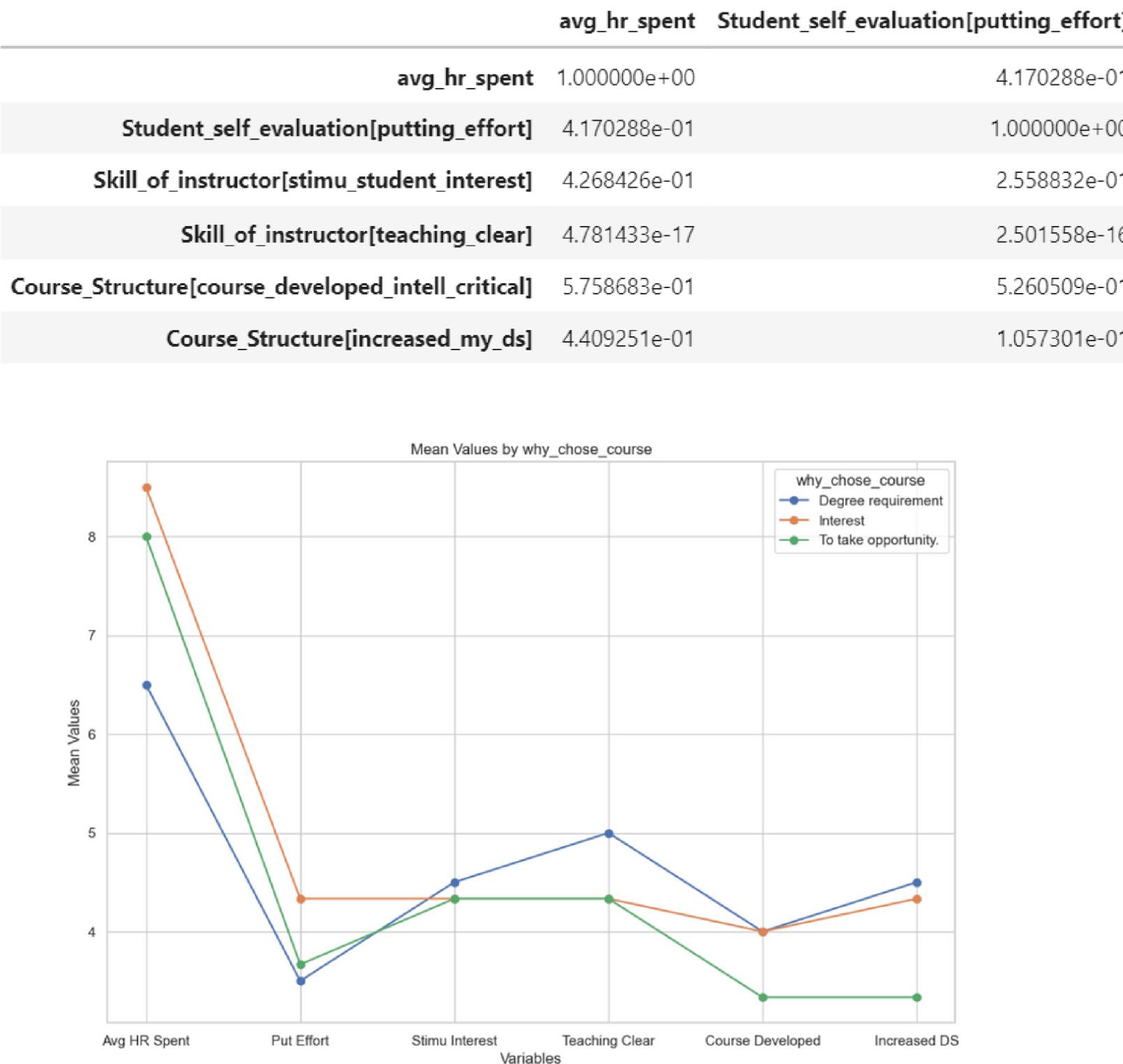
- The **older the age**, the **more challenges** the student has with **84%** correlation.
- Females face more challenges than males.
- Age 20 has more challenges.
- Those with to take opportunity have more challenges from the course structures.



analysis

- This course is challenging for older students with **56%** and **84%** to each metrics.
- The students with **interest** of reason for choosing course have **fewer challenges** than others.

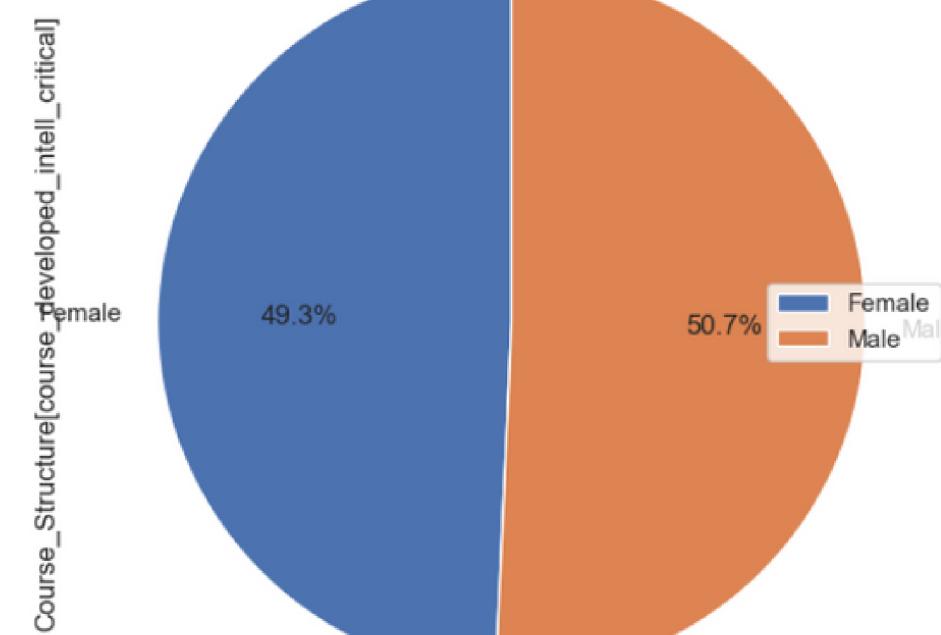
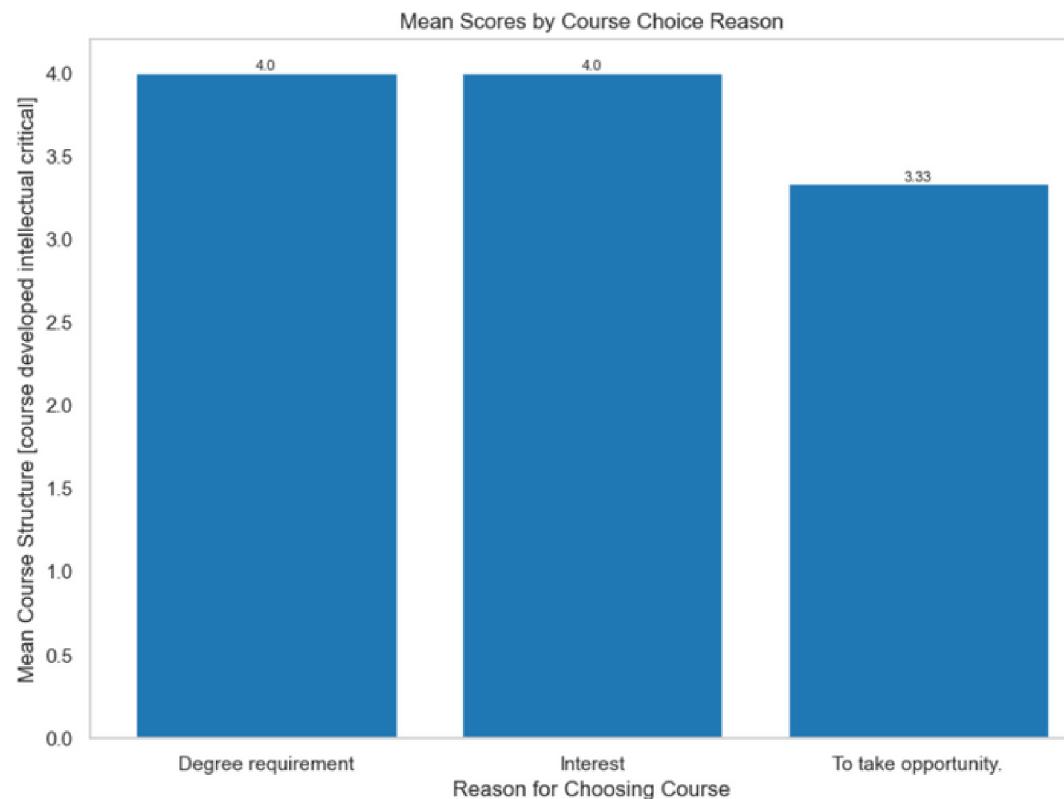
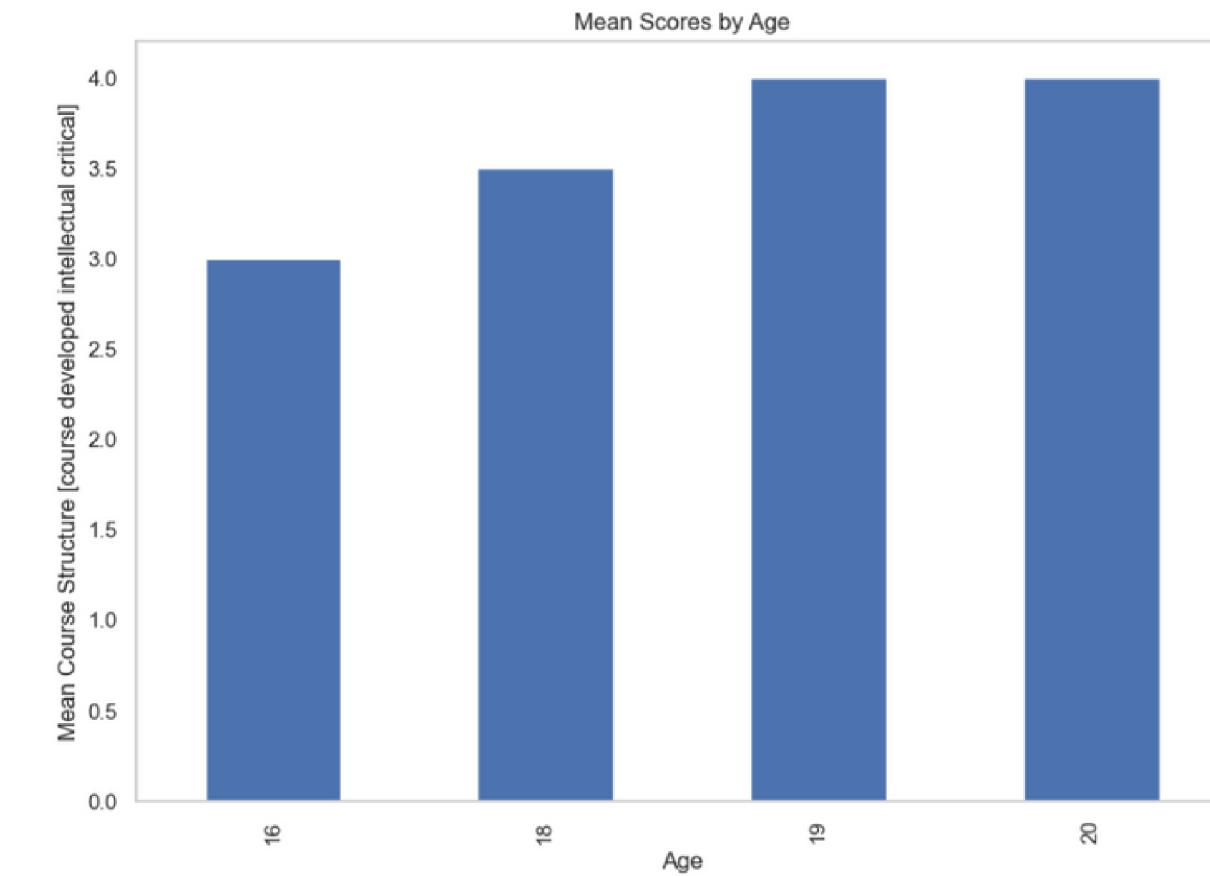
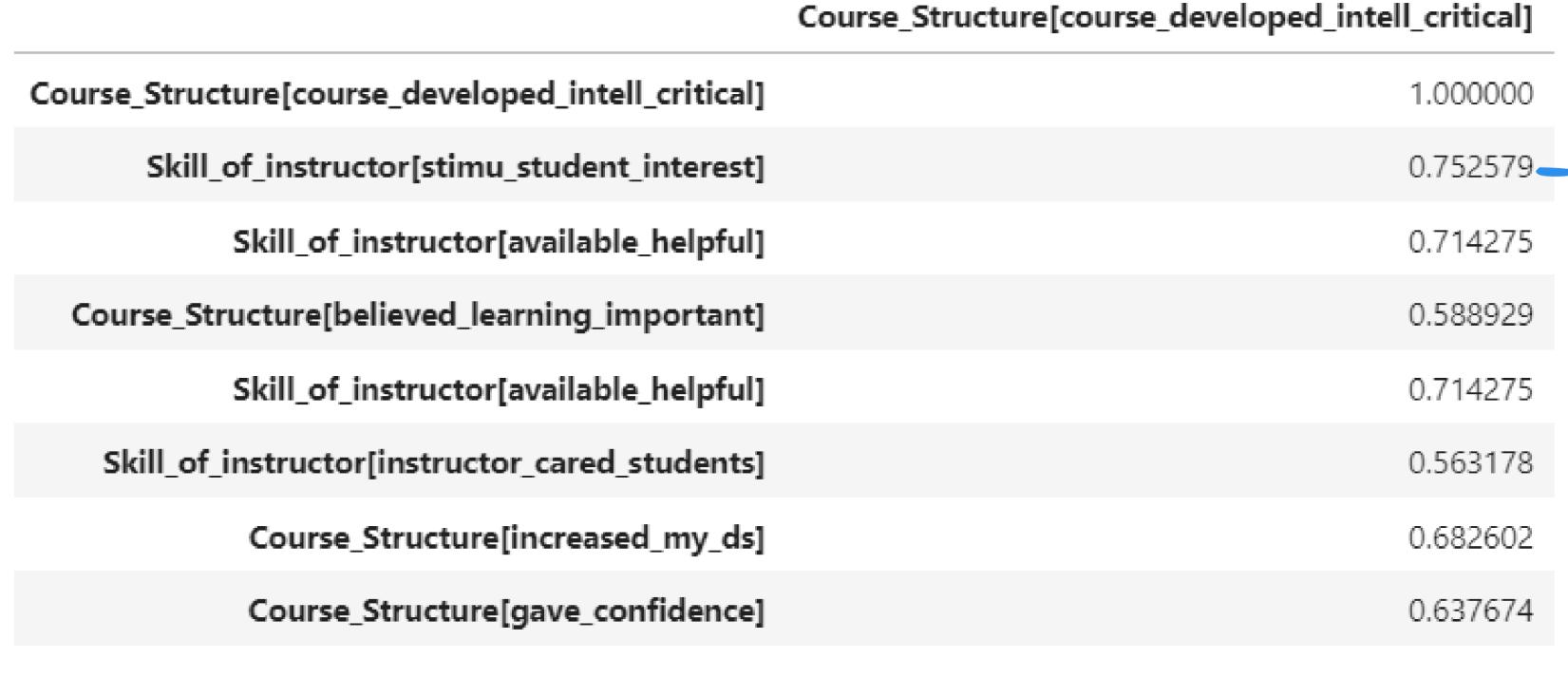
# Who study more in the class?



## Intelligence

- Students who believe **course developed their intellectual and critical skills** studied more than others with 57.6% correlation rate.
- Those who come with **Interest studied more hours and put more efforts** than others.
- **Females studied more hours and put more efforts** than males.
- Student with **age 18 studied more hours and put more efforts** than others.

# Who believed the course developed intellectual and critical thinking skills? or Who are the most studied people?



## Intelligence

- Students who believed instructor stimulated their interest believed that **the course developed intellectual and critical thinking skills** for **75% rate**.
- **Males believed 1.4% more** that course developed intellectual and critical thinking skills more than females.
- Students with **age 19 and 20** believed have the course developed intellectual and critical thinking skills more.
- Students with **interest and degree requirements** also believed have the course developed intellectual and critical thinking skills more.

# Conclusion

- The most important thing to **perform well** in class is **to Prepare** for the class.
- High Attendance is beneficial in reducing students' challenges but it can also reduce instructor's stimulants in students' interest.
- The older the students, the more challenging they have.
- Females studied more hours and put more efforts than males, yet males performed better because males prepared more for the class than females.
- Students who come with Interest prepared more for the class, hence, performing better than others.
- Students who come with Interest studied more hours and put more efforts than others.
- Students with interest and degree requirements believed that the course developed their intellectual and critical thinking skills more.

# Thank you