**Correlation Attrition Assignment**

**Abstract:**

Attrition column correlated with all columns of General\_data.csv file but while correlating for columns (over18, Standard hours, and Employment count) output which I was get is **warning.** For remaining all columns it showing error of unsupported operand type as shown below.

[63]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.YearsWithCurrManager)

print(stats,p)

output:

TypeError Traceback (most recent call last)

[<ipython-input-73-31e2bea56005>](https://localhost:8080/) in <module>()

**1** from scipy.stats import pearsonr

----> 2 stats,p=pearsonr(dataset.Attrition,dataset.Age)

**3** print(stats,p)

[/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py](https://localhost:8080/) in pearsonr(x, y)

**3512** # that the data type is at least 64 bit floating point. It might have

**3513** # more precision if the input is, for example, np.longdouble.

-> 3514 dtype = type(1.0 + x[0] + y[0])

**3515**

**3516** if n == 2:

TypeError: unsupported operand type(s) for +: 'float' and 'str'

[62]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.YearsSinceLastPromotion)

print(stats,p)

output:

TypeError Traceback (most recent call last)

[<ipython-input-73-31e2bea56005>](https://localhost:8080/) in <module>()

**1** from scipy.stats import pearsonr

----> 2 stats,p=pearsonr(dataset.Attrition,dataset.Age)

**3** print(stats,p)

[/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py](https://localhost:8080/) in pearsonr(x, y)

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-> 3514 dtype = type(1.0 + x[0] + y[0])

**3515**

**3516** if n == 2:

TypeError: unsupported operand type(s) for +: 'float' and 'str'

[61]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.YearsAtCompany)

print(stats,p)

output:

TypeError Traceback (most recent call last)

[<ipython-input-73-31e2bea56005>](https://localhost:8080/) in <module>()

**1** from scipy.stats import pearsonr

----> 2 stats,p=pearsonr(dataset.Attrition,dataset.Age)

**3** print(stats,p)

[/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py](https://localhost:8080/) in pearsonr(x, y)

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-> 3514 dtype = type(1.0 + x[0] + y[0])

**3515**

**3516** if n == 2:

TypeError: unsupported operand type(s) for +: 'float' and 'str'

[60]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.TrainingTimesLastYear)

print(stats,p)

output:

TypeError Traceback (most recent call last)

[<ipython-input-73-31e2bea56005>](https://localhost:8080/) in <module>()

**1** from scipy.stats import pearsonr

----> 2 stats,p=pearsonr(dataset.Attrition,dataset.Age)

**3** print(stats,p)

[/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py](https://localhost:8080/) in pearsonr(x, y)

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**3513** # more precision if the input is, for example, np.longdouble.

-> 3514 dtype = type(1.0 + x[0] + y[0])

**3515**

**3516** if n == 2:

TypeError: unsupported operand type(s) for +: 'float' and 'str'

[59]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.TotalWorkingYears)

print(stats,p)

output:

TypeError Traceback (most recent call last)

[<ipython-input-73-31e2bea56005>](https://localhost:8080/) in <module>()

**1** from scipy.stats import pearsonr

----> 2 stats,p=pearsonr(dataset.Attrition,dataset.Age)

**3** print(stats,p)

[/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py](https://localhost:8080/) in pearsonr(x, y)

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**3515**

**3516** if n == 2:

TypeError: unsupported operand type(s) for +: 'float' and 'str'

[58]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.StockOptionLevel)

print(stats,p)

output:

TypeError Traceback (most recent call last)

[<ipython-input-73-31e2bea56005>](https://localhost:8080/) in <module>()

**1** from scipy.stats import pearsonr

----> 2 stats,p=pearsonr(dataset.Attrition,dataset.Age)

**3** print(stats,p)

[/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py](https://localhost:8080/) in pearsonr(x, y)

**3512** # that the data type is at least 64 bit floating point. It might have

**3513** # more precision if the input is, for example, np.longdouble.

-> 3514 dtype = type(1.0 + x[0] + y[0])

**3515**

**3516** if n == 2:

TypeError: unsupported operand type(s) for +: 'float' and 'str'

[57]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.StandardHours)

print(stats,p)

output:

nan nan

/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py:3508: PearsonRConstantInputWarning: An input array is constant; the correlation coefficent is not defined.

warnings.warn(PearsonRConstantInputWarning())

[56]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.PercentSalaryHike)

print(stats,p)

output:

TypeError Traceback (most recent call last)

[<ipython-input-73-31e2bea56005>](https://localhost:8080/) in <module>()

**1** from scipy.stats import pearsonr

----> 2 stats,p=pearsonr(dataset.Attrition,dataset.Age)

**3** print(stats,p)

[/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py](https://localhost:8080/) in pearsonr(x, y)

**3512** # that the data type is at least 64 bit floating point. It might have

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**3515**

**3516** if n == 2:

TypeError: unsupported operand type(s) for +: 'float' and 'str'

[55]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.Over18)

print(stats,p)

output:

nan nan

/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py:3508: PearsonRConstantInputWarning: An input array is constant; the correlation coefficent is not defined.

warnings.warn(PearsonRConstantInputWarning())

[54]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.NumCompaniesWorked)

print(stats,p)

output:

TypeError Traceback (most recent call last)

[<ipython-input-73-31e2bea56005>](https://localhost:8080/) in <module>()

**1** from scipy.stats import pearsonr

----> 2 stats,p=pearsonr(dataset.Attrition,dataset.Age)

**3** print(stats,p)

[/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py](https://localhost:8080/) in pearsonr(x, y)

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**3515**

**3516** if n == 2:

TypeError: unsupported operand type(s) for +: 'float' and 'str'

[53]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.MonthlyIncome)

print(stats,p)

output:

TypeError Traceback (most recent call last)

[<ipython-input-73-31e2bea56005>](https://localhost:8080/) in <module>()

**1** from scipy.stats import pearsonr

----> 2 stats,p=pearsonr(dataset.Attrition,dataset.Age)

**3** print(stats,p)

[/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py](https://localhost:8080/) in pearsonr(x, y)

**3512** # that the data type is at least 64 bit floating point. It might have

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**3515**

**3516** if n == 2:

TypeError: unsupported operand type(s) for +: 'float' and 'str'

[52]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.MaritalStatus)

print(stats,p)

output:

TypeError Traceback (most recent call last)

[<ipython-input-73-31e2bea56005>](https://localhost:8080/) in <module>()

**1** from scipy.stats import pearsonr

----> 2 stats,p=pearsonr(dataset.Attrition,dataset.Age)

**3** print(stats,p)

[/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py](https://localhost:8080/) in pearsonr(x, y)

**3512** # that the data type is at least 64 bit floating point. It might have

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-> 3514 dtype = type(1.0 + x[0] + y[0])

**3515**

**3516** if n == 2:

TypeError: unsupported operand type(s) for +: 'float' and 'str'

[51]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.JobRole)

print(stats,p)

output:

TypeError Traceback (most recent call last)

[<ipython-input-73-31e2bea56005>](https://localhost:8080/) in <module>()

**1** from scipy.stats import pearsonr

----> 2 stats,p=pearsonr(dataset.Attrition,dataset.Age)

**3** print(stats,p)

[/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py](https://localhost:8080/) in pearsonr(x, y)

**3512** # that the data type is at least 64 bit floating point. It might have

**3513** # more precision if the input is, for example, np.longdouble.

-> 3514 dtype = type(1.0 + x[0] + y[0])

**3515**

**3516** if n == 2:

TypeError: unsupported operand type(s) for +: 'float' and 'str'

[50]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.JobLevel)

print(stats,p)

output:

TypeError Traceback (most recent call last)

[<ipython-input-73-31e2bea56005>](https://localhost:8080/) in <module>()

**1** from scipy.stats import pearsonr

----> 2 stats,p=pearsonr(dataset.Attrition,dataset.Age)

**3** print(stats,p)

[/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py](https://localhost:8080/) in pearsonr(x, y)

**3512** # that the data type is at least 64 bit floating point. It might have

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**3515**

**3516** if n == 2:

TypeError: unsupported operand type(s) for +: 'float' and 'str'

[49]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.Gender)

print(stats,p)

output:

TypeError Traceback (most recent call last)

[<ipython-input-73-31e2bea56005>](https://localhost:8080/) in <module>()

**1** from scipy.stats import pearsonr

----> 2 stats,p=pearsonr(dataset.Attrition,dataset.Age)

**3** print(stats,p)

[/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py](https://localhost:8080/) in pearsonr(x, y)

**3512** # that the data type is at least 64 bit floating point. It might have

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**3515**

**3516** if n == 2:

TypeError: unsupported operand type(s) for +: 'float' and 'str'

[48]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.EmployeeID)

print(stats,p)

output:

TypeError Traceback (most recent call last)

[<ipython-input-73-31e2bea56005>](https://localhost:8080/) in <module>()

**1** from scipy.stats import pearsonr

----> 2 stats,p=pearsonr(dataset.Attrition,dataset.Age)

**3** print(stats,p)

[/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py](https://localhost:8080/) in pearsonr(x, y)

**3512** # that the data type is at least 64 bit floating point. It might have

**3513** # more precision if the input is, for example, np.longdouble.

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**3515**

**3516** if n == 2:

TypeError: unsupported operand type(s) for +: 'float' and 'str'

[47]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.EmployeeCount)

print(stats,p)

output:

nan nan

/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py:3508: PearsonRConstantInputWarning: An input array is constant; the correlation coefficent is not defined.

warnings.warn(PearsonRConstantInputWarning())

[46]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.EducationField)

print(stats,p)

output:

TypeError Traceback (most recent call last)

[<ipython-input-73-31e2bea56005>](https://localhost:8080/) in <module>()

**1** from scipy.stats import pearsonr

----> 2 stats,p=pearsonr(dataset.Attrition,dataset.Age)

**3** print(stats,p)

[/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py](https://localhost:8080/) in pearsonr(x, y)

**3512** # that the data type is at least 64 bit floating point. It might have

**3513** # more precision if the input is, for example, np.longdouble.

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**3515**

**3516** if n == 2:

TypeError: unsupported operand type(s) for +: 'float' and 'str'

[45]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.Education)

print(stats,p)

output:

TypeError Traceback (most recent call last)

[<ipython-input-73-31e2bea56005>](https://localhost:8080/) in <module>()

**1** from scipy.stats import pearsonr

----> 2 stats,p=pearsonr(dataset.Attrition,dataset.Age)

**3** print(stats,p)

[/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py](https://localhost:8080/) in pearsonr(x, y)

**3512** # that the data type is at least 64 bit floating point. It might have

**3513** # more precision if the input is, for example, np.longdouble.

-> 3514 dtype = type(1.0 + x[0] + y[0])

**3515**

**3516** if n == 2:

TypeError: unsupported operand type(s) for +: 'float' and 'str'

[44]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.DistanceFromHome)

print(stats,p)

output:

TypeError Traceback (most recent call last)

[<ipython-input-73-31e2bea56005>](https://localhost:8080/) in <module>()

**1** from scipy.stats import pearsonr

----> 2 stats,p=pearsonr(dataset.Attrition,dataset.Age)

**3** print(stats,p)

[/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py](https://localhost:8080/) in pearsonr(x, y)

**3512** # that the data type is at least 64 bit floating point. It might have

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**3515**

**3516** if n == 2:

TypeError: unsupported operand type(s) for +: 'float' and 'str'

[43]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.Department)

print(stats,p)

output:

TypeError Traceback (most recent call last)

[<ipython-input-73-31e2bea56005>](https://localhost:8080/) in <module>()

**1** from scipy.stats import pearsonr

----> 2 stats,p=pearsonr(dataset.Attrition,dataset.Age)

**3** print(stats,p)

[/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py](https://localhost:8080/) in pearsonr(x, y)

**3512** # that the data type is at least 64 bit floating point. It might have

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**3515**

**3516** if n == 2:

TypeError: unsupported operand type(s) for +: 'float' and 'str'

[42]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.BusinessTravel)

print(stats,p)

output:

TypeError Traceback (most recent call last)

[<ipython-input-73-31e2bea56005>](https://localhost:8080/) in <module>()

**1** from scipy.stats import pearsonr

----> 2 stats,p=pearsonr(dataset.Attrition,dataset.Age)

**3** print(stats,p)

[/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py](https://localhost:8080/) in pearsonr(x, y)

**3512** # that the data type is at least 64 bit floating point. It might have

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**3515**

**3516** if n == 2:

TypeError: unsupported operand type(s) for +: 'float' and 'str'

[41]

from scipy.stats import pearsonr

stats,p=pearsonr(dataset.Attrition,dataset.Age)

print(stats,p)

output:

TypeError Traceback (most recent call last)

[<ipython-input-73-31e2bea56005>](https://localhost:8080/) in <module>()

**1** from scipy.stats import pearsonr

----> 2 stats,p=pearsonr(dataset.Attrition,dataset.Age)

**3** print(stats,p)

[/usr/local/lib/python3.6/dist-packages/scipy/stats/stats.py](https://localhost:8080/) in pearsonr(x, y)

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TypeError: unsupported operand type(s) for +: 'float' and 'str'