

Questionnaire Reliability

Questionnaire Reliability was measured through Cronbach Alpha. Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. It is considered to be a measure of scale reliability. A reliability coefficient of .70 or higher is considered "acceptable" in most social science research situations

Reliability Statistics

Constructs	Cronbach's Alpha	No of Items
Empowerment	0.71	4
Transformational Leadership	0.76	5
Teamwork	0.83	6
Work Environment	0.78	7
Employee Performance	0.87	8

The objectives and corresponding hypothesis are analyzed below.

Objective 1: To examine the relationship between empowerment and employee performance of lower level in select hotels of Mussoorie, Uttarakhand

Corresponding Hypothesis:

H₁₀: Empowerment (E) has no significant impact on Employee Performance (P) of lower level staff in hotels selected for this study.

Empowerment (E) was considered as independent variable while Employee Performance (P) is considered as a dependent variable in analysis of this hypothesis. As done in most of the studies, this study also investigated the effects of predictor variables on a dependent variable by applying correlation and linear regression techniques.

Correlation Matrix

	<i>P</i>	<i>E</i>
<i>P</i>	1	0.5
<i>E</i>	0.5	1

Regression Output

Residuals:

Min	1Q	Median	3Q	Max
-9.7007	-2.7647	-0.0147	2.6712	12.4730

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	20.24626	0.98645	20.524	< 2e-16 ***
E	0.31404	0.07866	3.992	8.25e-05 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 4.029 on 298 degrees of freedom

Multiple R-squared: 0.06077, Adjusted R-squared: 0.05758

F-statistic: 15.94 on 1 and 298 DF, p-value: 8.248e-05

The R-squared statistic provides a measure of how well the model is fitting the actual data. It takes the form of a proportion of variance. R square is a measure of the linear relationship between our predictor variable (speed) and our response / target variable. In multiple regression settings, the R square will always increase as more variables are included in the model. That's why the adjusted R square is the preferred measure as it adjusts for the number of variables considered.

Standard Error. It is another goodness-of-fit measure that shows the precision of your regression analysis - the smaller the number, the more certain you can be about your regression equation.

The **Significance F** value gives an idea of how reliable (statistically significant) the model is. If Significance F (p value for F-statistic) is less than 0.05 (5%), which is true in our case, this means the model arrived at is statistically significant.

The regression equation with above output can be written as follows.

$$P=0.31404 * E + 20.24626$$

The above analysis leads to rejection of Null Hypothesis (p value of F is less than 0.05) and hence indicates that there is a significant impact of Empowerment (E) on Employee Performance (P) of lower level staff in hotels selected for this study.

Objective 2: To examine the relationship between transformational leadership and employee performance of lower level in select hotels of Mussoorie, Uttarakhand

H2o: Transformational style of leadership has no impact on Employee Performance in lower level staff in hotels selected for this study.

Leadership style (L) was considered as independent variable while Employee Performance (P) is considered as a dependent variable in analysis of this hypothesis. As done in most of the studies, this study also investigated the effects of predictor variables on a dependent variable by applying correlation and linear regression techniques.

Correlation Matrix

	<i>SMS</i>	<i>PPSM</i>
<i>SMS</i>	1	0.12

PPSM	0.12	1
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Regression Output

Residuals:

Min	1Q	Median	3Q	Max
-10.102	- 3.052	- 0.102	2.948	14.865

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	3.80860	1.15173	3.307	0.00106**
L	1.19027	0.07573	15.717	< 2e-16 ***

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 3.263 on 298 degrees of freedom

Multiple R-squared: 0.4532, Adjusted R-squared: 0.4514

F-statistic: 247 on 1 and 298 DF, p-value: < 2.2e-16

The **Significance F** value gives an idea of how reliable (statistically significant) the model is. If Significance F (p value for F-statistic) is less than 0.05 (5%), which is true in our case, this means the model arrived at is statistically significant.

The regression equation with above output can be written as follows.

$$P = 1.19027 * L + 3.80860$$

The above analysis leads to rejection of Null Hypothesis and hence indicates that there is significant impact of Leadership (L) on Employee Performance (P) of lower level staff in hotels selected for this study.

Objective 3: To examine the relationship between teamwork and employee performance of lower level in selected hotels of Mussoorie, Uttarakhand

H3o: Teamwork has no impact on Employee Performance of lower level staff in hotels selected for this study.

Teamwork (T) was considered as independent variable while Employee Performance (P) is considered as a dependent variable in analysis of this hypothesis. As done in most of the studies, this study also investigated the effects of predictor variables on a dependent variable by applying correlation and linear regression techniques.

Correlation Matrix

	<i>P</i>	<i>T</i>
P	1	0.32
T	0.32	1

Regression Output

Residuals:

Min	1Q	Median	3Q	Max
-10.3162	-2.8564	-0.1562	2.7638	15.3236

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	3.84281	0.40248	9.548	<2e-16 ***
T	1.28637	0.02247	57.260	<2e-16 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.275 on 298 degrees of freedom

Multiple R-squared: 0.9167, Adjusted R-squared: 0.9164

F-statistic: 3279 on 1 and 298 DF, p-value: < 2.2e-16

The **Significance F** value gives an idea of how reliable (statistically significant) the model is. If Significance F (p value for F-statistic) is less than 0.05 (5%), which is true in our case, this means the model arrived at is statistically significant.

The regression equation with above output can be written as follows.

$$P = 1.28637 * T + 3.84281$$

The above analysis leads to rejection of Null Hypothesis (p value of F is less than 0.05) and hence indicates that there is significant impact of Teamwork (T) on Employee Performance (P) of lower level staff in hotels selected for this study.

Objective 4: To examine the relationship between work environment and employee performance of lower level in select hotel s of Mussoorie, Uttarakhand

H4o: Work environment has no impact on Employee Performance of lower level staff in hotels selected for this study.

Work environment (W) was considered as independent variable while Employee Performance (P) is considered as a dependent variable in analysis of this hypothesis. As done in previous

objectives the effects of predictor variables on a dependent variable is analyzed by applying correlation and linear regression techniques.

Correlation Matrix

	<i>P</i>	<i>W</i>
<i>P</i>	1	0.4
<i>W</i>	0.4	1

Regression Output

Residuals:

Min	1Q	Median	3Q	Max
-10.2565	-3.0104	-0.0924	2.9258	15.1081

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	-1.2934	0.2004	-6.455	4.39e-10 ***
<i>W</i>	1.9735	0.0106	186.158	< 2e-16 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.7495 on 298 degrees of freedom

Multiple R-squared: 0.9915, Adjusted R-squared: 0.9914

F-statistic: 3.465e+04 on 1 and 298 DF, p-value: < 2.2e-16

The **Significance F** value gives an idea of how reliable (statistically significant) the model is. If Significance F (p value for F-statistic) is less than 0.05 (5%), which is true in our case, this means the model arrived at is statistically significant.

The regression equation with above output can be written as follows.

$$P = 1.9735 * W + (-1.2934)$$

The above analysis leads to rejection of Null Hypothesis (p value of F is less than 0.05) and hence indicates that there is significant impact of Work environment (*W*) on Employee Performance (*P*) of lower level staff in hotels selected for this study.

Objective 5: To analyze the impact of empowerment, transformational leadership, teamwork, and work environment on employee performance of lower level in select hotel s of Mussoorie, Uttarakhand

Ho5: Empowerment (E), transformational leadership (L), teamwork (T) and Work environment (W) has no impact on Employee Performance (P) of lower level staff in hotels selected for this study.

Multiple linear regression (MLR) was applied to find the impact of multiple independent variables on single independent variable. MLR is a statistical technique that uses several explanatory variables to predict the outcome of a response variable. The goal of multiple linear regression (MLR) is to model the linear relationship between the explanatory (independent) variables and response (dependent) variable. The equation will look, something as follows.

$$P = \beta_0 + \beta_1E + \beta_2L + \beta_3T + \beta_4W + \epsilon$$

The null hypothesis means that beta1 to beta 4, are all zeros.

Following output was obtained when MLR was applied on the data.

Residuals:

Min	1Q	Median	3Q	Max
-10.1321	-2.6469	-0.0565	2.5699	12.5973

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	17.57153	1.46752	11.974	< 2e-16 ***
E	0.32393	0.07812	4.147	4.41e-05 ***
W	0.13839	0.05659	2.445	0.0151 *

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 3.996 on 297 degrees of freedom

Multiple R-squared: 0.0695, Adjusted R-squared: 0.06323

F-statistic: 11.09 on 2 and 297 DF, p-value: 2.261e-05

It was found that when all independent variables were taken together, only Empowerment and Work Environment was found to have significant on Performance.

	Df	Sum Sq	Mean Sq	F value	Pr(>F)	PctExp
E	1	258.73381	258.73381	16.204329	7.223823e-05	5.076809
W	1	95.46685	95.46685	5.979026	1.505775e-02	1.873226
Res	297	4742.18600	15.96696	NA	NA	93.049965

The above table depicts that the Empowerment and Work Environment, together explains around 6% of the variation in employee performance.