

Research Exercise #2:
Developing a Research Plan with T-test Design
Research methodology, Fall 2022



**WORKPLACE BULLYING AND HARASSMENT:
IMPACT ON THE PERFORMANCE OF
EMPLOYEES**

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1. RESEARCH PROBLEM

The research problem statement was created following a thorough evaluation of the literature and an in-depth examination of previous research and studies on workplace bullying and harassment.

1.1 Context

Workplace bullying is defined as the recurrent maltreatment of one employee by one or more workers using a malicious combination of humiliation, intimidation, and performance sabotage (Margaret, 2007). It involves being mocked in front of other colleagues, being lied about to others, feeling constantly on guard, being unable to focus on work responsibilities, losing self-confidence on the job, and experiencing out-of-control anxiety.

Workplace bullying can cause anxiety and job discontent among coworkers (Hoel & Cooper, 2004). Workplace bullying causes psychological and physical harm to victims, as well as increased turnover rates and lower organizational performance (Einarsen & Hoel, 2001; Hutchinson et al., 2008).

Following a thorough evaluation of the literature on the effects of workplace bullying and harassment, the study problem “*Workplace Bullying and Harassment: Impact on The Employees Performance*” has been picked.

2. RESEARCH QUESTION

The research topic created for this project is:

- * *How does workplace bullying and harassment affect employee performance?*

3. VARIABLES

- * **Performance** is the **dependent variable**. The numerals 1 and 2 are used to assess performance. "1" denotes "high performance level," whereas "2" denotes "poor performance level."
- * The key **independent variable** in my study is "**anxiety**" caused by bullying. Anxiety is measured using values ranging from 1 to 7. 1 to 3.5 signifies "low anxiety," 3.5 to 4.5 indicates "mid anxiety," and 4.5 to 7 symbolizes "high anxiety."

4. HYPOTHESIS

Null Hypothesis (H0): Bullying and harassment (anxiety) do not have any significant impact on employees' work performance.

Hypothesis (H1): Bullying and harassment (anxiety) have a significant impact on employees' work performance.

5. POPULATION AND SAMPLE

The population is 40 employees, and it has been split into two samples of 20 people each. Employees with low anxiety are in the first category, which means they are less likely to be impacted by work performance than employees in the second group, who have high anxiety levels. *Table 1* below presents group statistics:

Table 1. Group statistics

Group Statistics					
	Performance	N	Mean	Std. Deviation	Std. Error Mean
Anxiety	1.00	20	3.5215	.69344	.15506
	2.00	20	5.5025	.85575	.19135

6. DATA COLLECTION AND ANALYSIS PLAN

- * Dummy data was employed with the assumption that survey data was obtained from an organization's employees.
- * SPSS will be used to explore the correlation between work performance and anxiety.
- * Because no survey or questionnaire has been developed at this point in the research, a T-test was performed on hypothetical data.
- * In the current study, an independent sample t-test was performed on two samples.
- * For each sample, the mean, standard deviation, and standard deviation error were determined.
- * The P values for the two samples were identified by running the test.

7. STATISTICAL METHOD

As previously stated, an **independent sample t-test** was used. *Table 2* displays the SPSS-generated input data table:

Table 2. Variables

<i>Anxiety</i>	<i>Performance</i>
3.00	1.00
3.50	1.00
3.60	1.00
4.10	1.00
4.20	1.00
4.50	1.00
2.80	1.00
5.90	2.00
6.10	2.00
6.20	2.00
6.70	2.00
3.70	1.00
4.60	1.00
5.30	2.00
5.60	2.00
5.75	2.00
4.11	1.00
4.40	1.00
4.80	2.00
2.80	1.00
6.00	2.00
5.40	2.00
5.30	2.00
4.30	1.00
3.45	2.00
3.67	2.00
4.89	2.00
6.30	2.00
5.90	2.00
6.10	2.00
2.30	1.00
2.90	1.00
3.10	1.00
3.30	1.00
3.45	1.00
2.55	1.00
3.22	1.00
4.59	2.00
5.90	2.00
6.20	2.00

As indicated in *Table 2*, anxiety levels caused by bullying and harassment were gathered from a broad sample of an organization and were chosen as the independent variable for my research. The dependent variable in the second column is the performance level scores.

As shown in *Table 3*, the p value obtained after conducting the independent samples t-test is

much lower than the predefined significance level, i.e., 0.05. As a result, the null hypothesis that bullying and harassment (anxiety) do not have any significant effect on employees' work performance has been invalidated.

Table 3. Independent Samples t-test

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Anxiety	Equal variances assumed	.326	.571	-8.043	38	.000	-1.98100	.24629	-2.47959	-1.48241
	Equal variances not assumed			-8.043	36.435	.000	-1.98100	.24629	-2.48029	-1.48171

8. SIGNIFICANCE LEVEL AND CRITICAL VALUE

- * It has been preset a confidence interval of 95% which implies that the significance level is 5% or 0.05.
- * The confidence interval has been set at 95%, implying that the significance level is 5%, or 0.05. The t_{critical} for 38 degree of freedoms and 0.05 significance level is 2.0588.
- * The t value is negative because the second sample mean is greater than the first sample mean(see *Table 1*).
- * So, ignoring the negative sign, as $t = 8.043 > t_{\text{critical}} = 2.0588$, hence the null hypothesis has been rejected. Another reason for rejecting the null hypothesis is that $p = 9.99 \times 10^{-10}$ and $p = 3.3 \times 10^{-9}$ is lower than significance level= 0.05.

9. JUSTIFICATION

The independent sample t-test entails conducting statistical analysis on two independent samples.

a. Reasons for choosing a specific type of t-test:

- * Because we had two samples of an independent variable and one sample of a dependent variable, it was the best choice to conduct statistical analysis on the input data and provide t and p values.

- * A 95% confidence interval was present, implying that the significance level was 5%.
- * The p values came out to be 9.99×10^{-10} and 3.3×10^{-9} which is lower than 0.05.
- * Therefore, the **null hypothesis (H0):** Bullying and harassment (anxiety) do not have any significant impact on employees' work performance has been rejected.
- * **The hypothesis (H1):** Bullying and harassment (anxiety) have significant impact on employees' work performance has been proved to be true.

b. Conclusion:

The hypothesis (H1): Bullying and harassment (anxiety) have significant impact on employees' work performance is true.

REFERENCES:

1. Carbo, J., & Hughes, A. (2010). Workplace bullying: Developing a human rights definition from the perspective and experiences of targets. *WorkingUSA*, 13(3), 387-403.
2. Cornoiu, T. S., & Gyorgy, M. (2013). Mobbing in organizations. Benefits of identifying the phenomenon. *Procedia-Social and Behavioral Sciences*, 78, 708-712.
3. Davenport, T. H. (2005). *Thinking for a living: how to get better performances and results from knowledge workers*. Harvard Business Press.
4. Einarsen, S. (2001). The Negative Acts Questionnaire: Development, validation and revision of a measure of bullying at work. In *Proceedings of the 10th European Congress on Work and Organisational Psychology, Prague, May 2001*.
5. Einarsen, S. V., Hoel, H., Zapf, D., & Cooper, C. L. (2020). The concept of bullying and harassment at work: The European tradition. In *Bullying and harassment in the workplace* (pp. 3-53). CRC press.
6. Einarsen, S., Hoel, H., & Cooper, C. (Eds.). (2002). *Bullying and emotional abuse in the workplace: International perspectives in research and practice*. CRC press.
7. Griffin, R. W., & Lopez, Y. P. (2005). "Bad behavior" in organizations: A review and typology for future research. *Journal of management*, 31(6), 988-1005.
8. Hoel, H., & Cooper, C. L. (2000). *Destructive conflict and bullying at work*. Manchester: Manchester School of Management, UMIST.
9. Hutchinson, M., Jackson, D., Wilkes, L., & Vickers, M. H. (2008). A new model of bullying in the nursing workplace: Organizational characteristics as critical antecedents. *Advances in Nursing Science*, 31(2), E60-E71.
10. Keim, J., & McDermott, J. C. (2010, March). Mobbing: Workplace violence in the academy. In *The Educational Forum* (Vol. 74, No. 2, pp. 167-173). Taylor & Francis Group.
11. Kohut, M. R. (2007). *The complete guide to understanding, controlling, and stopping bullies & bullying: A complete guide for teachers & parents*. Atlantic Publishing Company.
12. Montalbán, F. M., & Durán, M. A. (2005, June). Mobbing: A cultural approach of conflict in work organizations. In *IACM 18th Annual Conference*.
13. Namie, G. (2021). WBI Workplace Bullying Survey.
14. Parzefall, M. R., & Salin, D. M. (2010). Perceptions of and reactions to workplace bullying: A social exchange perspective. *Human relations*, 63(6), 761-780.
15. Phelps, C. E. (2017). *Health economics*. Routledge.
16. Rayner, C., & Keashly, L. (2005). *Bullying at Work: A Perspective From Britain and North America*.

17. Rayner, C., & Lewis, D. (2020). Managing workplace bullying: The role of policies. In *Bullying and harassment in the workplace* (pp. 497-519). CRC Press.
18. Robinson, B. (2019). New Study Says Workplace Bullying on Rise: What You Can Do during National Bullying Prevention Month. *Forbes*. Oct, 15.
19. Salin, D. (2003). Ways of explaining workplace bullying: A review of enabling, motivating and precipitating structures and processes in the work environment. *Human relations*, 56(10), 1213-1232.
20. Sansone, R. A., & Sansone, L. A. (2015). Workplace bullying: a tale of adverse consequences. *Innovations in clinical neuroscience*, 12(1-2), 32.
21. Schat, A. C., Frone, M. R., & Kelloway, E. K. (2006). Prevalence of Workplace Aggression in the US Workforce: Findings From a National Study.
22. Seiner, J. A. (2021). Time, Equity, and Sexual Harassment. *UC Irvine L. Rev.*, 12, 573.
23. Van Fleet, D. D., & Van Fleet, E. W. (2022). *Bullying and harassment at work: An innovative approach to understanding and prevention*. Edward Elgar Publishing.
24. Vardi, Y., & Weitz, E. (2016). *Misbehavior in organizations: A dynamic approach*. Routledge.
25. Woolf, M. (2021). Workplace bullying is on the rise (2021 study).