

# Reduction and Management

# Jet Roy B. Diaz\*

College of Development Management, University of Southeastern Philippines, Davao, Philippines

Abstract: This study was conducted to determine which domain of resilience at work best predicts employees' level of work engagement in Local Disaster Risk Reduction and Management Office. This was conducted to 100 respondents who were nonplantilla personnel. The data were gathered in March 2025. The statistical tools used in the study were Mean, Person-r and Linear Regression. The study found out that the level of resilience at work of non-plantilla Local DRRM personnel is high and the level of work engagement is also high. There is a significant relationship between resilience at work and work engagement of local DRRM non-plantilla personnel. Building social connection as an indicator of resilience at work best predicts work engagement of nonplantilla local DRRM personnel.

Keywords: Resilience at Work, Work Engagement.

### 1. Introduction

Work engagement is a critical factor in employee performance and organizational success. However, many workers face significant challenges that hinder their engagement, including excessive workloads, emotional exhaustion, and lack of job resources. Studies indicate that high job demands can lead to burnout and decreased motivation, ultimately reducing work engagement (Naswall & Kuntz, 2021). Employees who are disengaged often exhibit lower enthusiasm, reduced work performance, and an increased likelihood of burnout, ultimately affecting organizational success. Addressing the factors that influence work engagement is crucial in fostering a thriving and resilient workforce (Kuok & Taormina, 2017).

Engaged employees are more likely to demonstrate dedication, enthusiasm, and persistence in their roles, contributing to overall workplace efficiency. Particularly in high-pressure industries, maintaining work engagement ensures that employees remain motivated and productive despite workplace challenges (Kuok & Taormina, 2017).

One of the critical factors influencing work engagement is resilience at work. Resilient employees are better equipped to handle workplace stressors, adapt to changing environments, and sustain their commitment to their roles (Malik & Garg, 2018). The Conservation of Resources (COR) Theory (Hobfoll, 1989) explains that resilience serves as a psychological Similarly, the Job Demands-Resources (JD-R) Model (Demerouti et al., 2021) suggests that resilience acts as a job resource that helps employees cope with demanding work environments, ultimately enhancing engagement (Schaufeli, 2022). Studies have consistently shown a positive correlation between resilience and work engagement, particularly in high-risk professions such as healthcare services (Khusanova et al., 2021).

Davao Occidental recently experienced severe flooding on December 26, 2024, affecting a total population of 41,800 caused by easterlies (Office of the Civil Defense, 2024), highlighting the increasing vulnerability of the province to natural disasters. These events place immense pressure on local Disaster Risk Reduction and Management (DRRM) personnel, who are expected to respond swiftly and effectively despite challenging working conditions, limited resources, and high physical and emotional demands. While resilience is recognized as a crucial factor in sustaining motivation, wellbeing, and job performance (Molino et al., 2020), limited research has explored its direct impact on work engagement among DRRM personnel, particularly in disaster-prone areas like Davao Occidental.

This study aims to bridge this gap by providing empirical evidence on the relationship between resilience at work and work engagement among local DRRM personnel, contributing to workforce development strategies that enhance disaster preparedness and response effectiveness.

The Sustainable Development Goals (SDGs), particularly SDG 8 (Decent Work and Economic Growth) and SDG 3 (Good Health and Well-being), emphasize the importance of resilience at work in promoting sustainable workplaces and enhancing employee well-being.

This study aims to examine the relationship between resilience at work and work engagement of local DRRM personnel. Specifically, it sought answers to the following questions:

resource that helps individuals sustain engagement by preventing burnout and stress-related exhaustion (Ibrahim & Hussein, 2024).

- 1. What is the level of resilience at work in terms of
  - 1.1 living authentically;
  - 1.2 finding your calling;
  - 1.3 Maintaining perspective;
  - 1.4 Managing stress;
  - 1.5 Building social connections; and
  - 1.6 Staying healthy?
- 2. What is the level of work engagement in terms of
  - 2.1 Cognitive work engagement;
  - 2.2 emotional work engagement
  - 2.3 Physical work engagement?

3. Is there a significant relationship between resilience at work and work engagement?

4. Which domain of resilience at work best predict work engagement of local DRRM personnel?

## 2. Methods

The researcher used Quantitative non-experimental research design, utilizing correlation and regression analyses to determine the relationship between the resilience at work and work engagement of local DRRM personnel. Initially, a linearcorrelation analysis was conducted to determine the presence and strength of linear associations between the resilience at work and work engagement. Pearson Correlation Coefficient used as the statistical tool to identify direct linear relationships (McCombes, 2019).

After finding the linearity of the relationship among the variables, a simple linear regression analysis was employed to assess the degree of influence each predictor variable (resilience at work) has on the dependent variable (work engagement). This analysis provided a clearer understanding of which specific resiliency whether related to living authentically, finding your calling, maintaining perspective, managing stress, building social connections and staying healthy significantly influence the work engagement.

This study gathered primary data of 100 non-plantilla local

Disaster Risk Reduction and Management (DRRM) personnel in Davao Occidental to examine their resilience at work and work engagement. The data comes from survey responses using a research instrument adapted from Malik and Garg (2018) and Kuok and Taormina (2017). The researcher used a complete enumeration sampling technique to ensure all non-plantilla DRRM personnel were included in the study

This study utilized a structured survey questionnaire as the primary data-gathering instrument to assess the resilience at work and work engagement of local Disaster Risk Reduction and Management (DRRM) personnel in Davao Occidental. The questionnaire is adapted from the validated instruments of Malik and Garg (2018) and Kuok and Taormina (2017), ensuring reliability and relevance to the study's objectives.

# 3. Results

# A. Level of Resilience at Work

Presented in Table 1 is the level of resilience at work of nonplantilla personnel of local disaster risk reduction and management. The result shows a high level of resilience, with an overall mean rating of 4.14. This means that despite the challenges they face such as job insecurity, unpredictable workloads, and exposure to risk, non plantilla DRRM personnel demonstrate a strong adaptability, emotional stability, and perseverance in their work.

A high level of resilience means that these personnel are capable of managing workplace stress, maintaining perspective, and sustaining motivation even under pressure. This aligns with the Conservation of Resources (COR) Theory (Hobfoll, 1989), which suggests that individuals with strong psychological and social resources can better cope with demanding work environments. Furthermore, Malik and Garg (2018) emphasized that resilience.

# B. Level of Work Engagement

Presented in Table 2 is the level of work engagement of non-

Table 1

Level of resilience at work of non-plantilla personnel of local disaster risk reduction and management				
Resilience at Work	SD	Mean	Descriptive Level	
Living Authentically	.73	4.35	High	
I have important core values that I hold fast to in my work life.	.80	4.43	High	
I know my personal strengths and make sure I use them regularly in my work.	.78	4.42	High	
I am able to change my mood at work when I need to.	.93	4.19	High	
Finding Your Calling	.80	4.30	High	
The work that I do helps to fulfill my sense of purpose in life.	.89	4.29	High	
My workplace is somewhere where I feel that I belong.	1.0	4.26	High	
Generally, I appreciate what I have in my work environment.	.77	4.38	High	
Maintaining Perspective	.91	4.08	High	
My work rarely 'fazes me' for long.	.98	4.05	High	
Negative people at work rarely affect my morale or feelings.	1.0	4.12	High	
Managing Stress	.80	4.28	High	
I make sure I take breaks to maintain my strength and energy when I am working hard.	1.0	4.30	High	
I have developed some reliable ways to relax when I am under pressure at work.	.82	4.26	High	
I have developed some reliable ways to deal with the stress of challenging events at work.	.96	4.25	High	
I am careful to ensure my work does not dominate my personal life.	.90	4.33	High	
Building Social Connections	.80	4.10	High	
I often ask for feedback so that I can improve my work performance.	.88	4.00	High	
I have friends at work I can rely on to support me when I need it.	.93	4.20	High	
I have a strong and reliable network of supportive colleagues at work.	.97	4.10	High	
Staying Healthy	.92	3.75	High	
I have a good level of physical fitness.	1.0	3.79	High	
I am careful about eating well and healthy.	.98	3.71	High	
Overall	.60	4.14	High	

Level of work engagement of local DRRM personnel				
Work Engagement	SD	Mean	Descriptive Level	
Cognitive Work Engagement	.81	3.76	High	
My mind is often full of ideas about my work.	.99	3.66	High	
Wherever I am, things happen that often remind me of my work.	.87	3.76	High	
My mind is fully engaged with my work,	1.0	3.71	High	
I rarely think about time when I am working.	.83	3.70	High	
My thoughts are fully focused when thinking about my work	.89	3.87	High	
I give a lot of mental attention to my work.	.97	3.88	High	
Emotional Work Engagement	.91	3.82	High	
I feel very delighted about what I am doing whenever I am working.	1.0	3.79	High	
I am very eager to do my work.	.96	3.92	High	
I feel very happy when I am carrying out my responsibilities at work.	.98	3.91	High	
I feel very good about the work that I do.	1.0	3.81	High	
I feel strong enthusiasm towards my work.	1.0	3.74	High	
I feel a sense of gratification with my work performance.	.93	3.78	High	
Physical Work Engagement	.94	3.72	High	
I have a great deal of stamina for my work.	.98	3.74	High	
I have a lot of energy for my work.	.96	3.83	High	
I am physically driven by my work.	1.0	3.69	High	
I am frequently energized by my work.	1.0	3.67	High	
I find my work to be physically invigorating.	.97	3.73	High	
Overall	.86	3.76	High	

Table 2 Level of work engagement of local DRRM personnel

	Significant relationshi	p between resilience at work and work engagement
-	 	

<b>Resilience at Work</b>	Work Engagement			
	Cognitive	Emotional	Physical	Overall
Living Authentically	.424** (.000)	.437** (.000)	.451** (.000)	.452** (.000)
Finding your Calling	.420** (.000)	.451** (.000)	.532** (.000)	.485** (.000)
Maintaining Perspective	.301** (.001)	.307** (.002)	.318** (.002)	.318** (.001)
Managing Stress	.398** (.000)	.391** (.000)	.420** (.000)	.416** (.000)
Building Social Connections	.671** (.000)	.713** (.000)	.726** (.000)	.727** (.000)
Staying Healthy	.595** (.000)	.654** (.000)	.706** (.000)	.737** (.000)
Overall	.644** (.000)	.672* (.000)	.717** (.000)	.701** (.000)

plantilla personnel of the local disaster risk reduction and management. The result shows a high level of work engagement, with an overall mean rating of 3.76. This means that despite the lack of permanent employment status, these personnel demonstrate a strong sens of involvement, energy, and dedication in their roles.

This finding is supported by the Job Demands-Resources (JD-R) Theory of Bakker and Demerouti (2007), which posits that work engagement is positive, fulfilling state of mind. Characterized by vigor, dedication, and absorption, particularly when employees have sufficient personal and job-related resources. In the case of DRRM personnel, their sense of purpose, teamwork, and resilience serve as internal resources that help them remain committed and engaged, even in the absence of job security.

# C. Significant Relationship Between Resilience at Work and Work Engagement

Presented in Table 3 is the significant relationship between resilience at work and work engagement of non-plantilla personnel of the local disaster risk reduction and management in Davao Occidental. Result revealed positive relationship as shown in the r-value of .701 and the p-value of .000 which is lesser than 0.05 level of significance, hence the rejection of null hypothesis. This implies that resilience at work has to do with work engagement of non-plantilla personnel. This implies further that work engagement is dependent on resilience at work. Employees who demonstrate greater adaptability, emotional stability, and stress management are more likely committed and actively engaged in their task.

This finding is supported by the Job Demands–Resources (JD-R) Theory by Bakker and Demerouti (2007), which posits that personal resources such as resilience play a critical role in determining employee engagement. According to this theory, when individuals possess sufficient internal resources (e.g., emotional regulation, problem-solving skills, and coping mechanisms), they are better able to handle job demands, thus leading to higher engagement levels.

D. Domain of Resilience at Work Best Predicts Work Engagement of Personnel

	Table 4				
Domain of resilience at work best predicts work engagement					
<b>Resilience at Work</b>	Work Engagement				
	В	Beta	t-value	p-value	
Living Authentically	044	038	436	.664	
Finding your Calling	044	012	129	.897	
Maintaining Perspective	.118	.125	1.79	.077	
Managing Stress	074	069	818	.415	
Building Social Connections	.564	.528	4.74	.000	
Staying Healthy	.332	.356	4.04	.000	
R	.783				
R Square	.613				
F Value	24.530				
P-value	.000				

Presented in table 4 is the domain of resilience at work that best predicts work engagement of Local DRRM personnel. Among the six indicators of resilience at work, it was found out that building social connection best predicts the work engagement of local DRRM personnel as reflected in the tvalue of 4.74 with p-value of .000 which is lesser than .05 level of significance. Staying healthy is also influential to the work engagement as reflected in the t-value of 4.04 with a p-value of .000 which is less than .05 level of significance. Other domains of resilience at work such as living authentically, finding your calling, maintaining perspective, and managing stress have no significant influence with work engagement.

The R-value is .783 with the r-square value .613 which is equivalent of 61.3% implies that resilience at work influence work engagement of non-plantilla local DRRM personnel by 61.3%. The variance of 38.7% is attributed to other factors not covered in this study. This likewise means that there are other variables that are influential to the work engagement which is under the research area.

Resilience at work has significant influence with the work engagements as reflected in the F-value of 24.530 with p-value of .000 which is lesser than .05 level of significance. This implies that resilience at work can influence the work engagement of non-plantilla local DRRM personnel, moreover, work engagement of non-plantilla local DRRM personnel can be regressed by resilience at work. This study is anchored on the Conservation of Resources (COR) Theory developed by Hobfoll (1989), which emphasizes that individuals strive to obtain, retain, and protect valuable resources such as energy, emotional stability, and social support in order to cope with stress and remain productive. In the context of disaster risk reduction and management (DRRM), resilience at work serves as a critical personal resource that helps employees withstand high-pressure situations, recover from adversity, and maintain consistent performance. According to COR theory, when individuals possess strong internal resources like resilience, they are more likely to manage workplace demands effectively, avoid burnout, and stay engaged in their tasks. Thus, this theory supports the assumption that resilience is not only protective in nature but also a predictive factor of positive work outcomes, such as higher work engagement. As such, this framework provides a solid foundation for examining the link between resilience at work and work engagement among non-plantilla local DRRM personnel.

## 4. Summary

This study was conducted to determine which domain of resilience at work best predicts employees' level of work engagement in local DRRM. This was conducted to 100 respondents who were non-plantilla personnel. The data were gathered in March 2025. The statistical tools used in the study were Mean, Person-r and Linear Regression.

The study found out that the level of resilience at work of non-plantilla Local DRRM personnel is high and the level of work engagement is also high. There is a significant relationship between resilience at work and work engagement of local DRRM non-plantilla personnel. Building social connection as an indicator of resilience at work best predicts work engagement of non-plantilla local DRRM personnel.

### 5. Conclusion

Based on the findings of the study, it is concluded that the level of resilience at work and work engagements of nonplantilla personnel of local DRRM is high. Moreover, there is a significant relationship between resilience at work and work engagement of local DRRM non-plantilla personnel. Conversely, building social connection is a domain of resilience at work which best predicts work engagement of local DRRM non-plantilla personnel.

## 6. Recommendations

Based on the findings and conclusions, the following are recommended:

The Office of the Civil Defense (OCD) may implement resilience training programs focused on stress management, emotional well-being, and physical endurance to help personnel cope with the demands of disaster response. Regular monitoring and evaluation may also be conducted to assess their well-being and engagement levels.

The Local Government Unit (LGU) may establish policies promoting work-life balance, career development, and employee recognition, ensuring that DRRM personnel feel valued and motivated. LGUs may also pass local ordinances granting hazard pay for DRRM personnel, recognizing the risks they face in disaster response and ensuring they receive fair compensation for their work.

Provincial, City, and Municipal DRRM Offices (P/C/MDRRMO), strengthening peer support programs and professional growth opportunities will enhance their commitment and performance. Advocating for the regularization of long-serving non-plantilla personnel or offering better employment benefits will also improve job security and retention.

Policymakers may prioritize the passage of the Magna Carta for DRRM Personnel to ensure fair compensation, security of tenure, and improved working conditions.

Finally, future researchers may explore the long-term impact of resilience on work engagement and identify organizational factors that affect motivation and performance. Further studies on mental health support, leadership influence, and policy interventions will help create a more engaged, resilient, and high-performing DRRM workforce.

### References

- Bakker, A. B., & Van Wingerden, J. (2021). Do Personal Resources and Strengths Use Increase Work Engagement? The Role of Personality. *Journal of Occupational and Organizational Psychology*, 94(1), 92-114.
- [2] Demerouti, E., Bakker, A. B., & Gevers, J. M. P. (2018). Job Crafting and Extra-Role Behavior: The Role of Work Engagement and Flourishing. *Journal of Vocational Behavior*, 104, 98-107.
- [3] Hobfoll, S. E. (1989). Conservation Of Resources: A New Attempt at Conceptualizing Stress. *American Psychologist*, 44(3), 513- 524.
- [4] International Labour Organization. (2019). Workplace Stress: A Collective Challenge. <u>https://www.ilo.org/global/topics/safety-and-health-at-work/lang--en/index.htm</u>
- [5] Ibrahim, H., & Hussein, M. (2024). Occupational Well-Being and Engagement in the Emergency Sector: A Resilience Framework. *Journal* of Public Sector Management.

- [6] Khusanova, G., Van Gils, S., & Parker, S. (2021). Leadership Support and Employee Engagement in the Public Sector: The Role of Work Autonomy. *Public Administration Review*, 81(4), 634-648.
- [7] Kuok, A. C. H., & Taormina, R. J. (2017). Work Engagement: Evolution of the Concept and a New Inventory. *Psychological Thought*, 10(2), 262–287.
- [8] Kasparkova, D., Vaculik, M., Prochazka, J., & Schaufeli, W. B. (2018). Why Resilient Workers Perform Better: The Role of Work Engagement. *Journal of Work and Organizational Psychology*, 34(2), 89–97.
- [9] Malik, P., & Garg, P. (2018). Psychometric Testing of The Resilience at Work Scale Using Indian Sample. Vision: The Journal of Business Perspective, 22(2), 185–195.
- [10] Maslach, C., & Leiter, M. P. (2017). Understanding The Burnout Experience: Recent Research and its Implications for Psychiatry. World Psychiatry, 15(2), 103–111.
- [11] Molino, M., Cortese, C. G., & Ghislieri, C. (2020). The Role of Work Engagement in Reducing Job Stress: A Study on Emergency Response Personnel. Occupational Health Science, 4(2), 89-108.

- [12] Mostafa, A. M. S., & Abed El-Motalib, E. A. (2020). Public Service Motivation and Work Engagement: The Role of Ethical Leadership. *Public Administration*, 98(2), 313-328.
- [13] Naswall, K., & Kuntz, J. (2021). Thriving Under Pressure: Resilience and Engagement in Crisis Response Roles. *Scandinavian Journal of Work and Organizational Psychology*, 6(1), 1–10.
- [14] Sanhokwe, H., & Takawira, S. (2022). Appreciating Resilience at Work: Psychometric Assessment, Measurement, and Practical Implications. *Cogent Psychology*, 9(1), 2052620.
- [15] Schaufeli, W. B., & Bakker, A. B. (2004). Job Demands, Job Resources, and Their Relationship with Burnout and Engagement: A Multi-Sample Study. *Journal of Organizational Behavior*, 25(3), 293– 315.
- [16] United Nations. (2015). Transforming Our World: The 2030 Agenda for Sustainable Development. <u>https://sdgs.un.org/2030agenda</u>
- [17] Wiroko, E. A., & Sugiharti, E. (2022). Resilience and Work Engagement Among Emergency Workers During Covid-19 Pandemic. *Journal of Health and Social Sciences*, 7(4), 295–304.