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Exploring Antifragility in the Workplace: Insights from HRM Practices and Employee Behavior

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Abstract: **This study investigates antifragile workers, employees who grow stronger under stress as a sustainable workforce strategy in Human Resource Management (HRM). Antifragility offers an evolution beyond resilience by enabling workers to adapt and thrive in an everchanging environment. Primary data was collected through a survey of 33 professionals across sectors and a focus group with staff from Evercare Hospital. 74% of respondents identified as antifragile to some extent. Key traits included adaptability to change (69.7%), and learning from failure (66.7%). Focus group participants cited experiences such as COVID-19 and hospital rebranding as catalysts for antifragile development. Workplace practices fostering antifragility included mentorship programs (33.3%), and failure-friendly cultures (21.2%). These approaches align with global sustainability trends emphasizing psychological safety, continuous learning, and decentralized decision-making. The findings suggest antifragility is a learnable trait that can be cultivated through HR strategies. This research contributes to emerging trends in sustainable HRM and highlights antifragility as a key competency for future-focused organizations.**

Keywords: **Adaptability, Antifragile workers, Continuous learning, Decentralized decision making, Failure-friendly culture, Human Resource Management, Psychological safety, Resilience, Sustainability, Sustainable workforce strategy.**

I.INTRODUCTION

Nassim Nicholas Taleb established the term "antifragility" to define systems that not only survive unexpected events, uncertainty, and disruption, but also gain strength and resilience from them. An antifragile system thrives in dynamic and unpredictable situations by adapting and improving in response to stresses, uncertainty, and disruption, in contrast to robust or resilient systems that only resist damage and return to their prior state.

In today's workplace, when businesses deal with ongoing turmoil resulting from globalization, rapid technology innovation, economic uncertainty, and unanticipated events like the COVID-19 outbreak, the concept of antifragility is extremely crucial. Antifragile procedures promote businesses and workers to develop their skills, adapt, and grow stronger from difficulties, in contrast to traditional management systems that prioritize control and stability. This viewpoint is particularly important in human resource management since working methods, organizational culture, and employee behavior all have a direct impact on how well a company handles unpredictability. Studying antifragility in this specific context may provide fresh perspectives on creating workforces that are not just adaptable but also able to turn hardship into opportunity.

The problem originates from the fact that many firms continue to function with a resilience-only mentality, hoping to merely "bounce back" from setbacks rather than using them to their advantage. Because of this, businesses frequently pass up chances to innovate, improve staff skills, or reconsider outdated HR procedures. Without adaptable systems, the stress of continuous change can cause employee burnout, discouragement, increased resignations and loss of productivity. Without antifragile methods, firms become vulnerable and less competitive in rapidly evolving areas like technology, healthcare, and finance. Examining antifragility in the workplace thus fills a gap by highlighting the ways in which HRM practices, including performance management, leadership style, talent development, and employee well-being, may be crafted to transform instability into an advantage for both organizational and individual development.

The ultimate objective is to further the knowledge of antifragility in the workplace on both a theoretical and practical level by highlighting how HR processes and employee behavior may turn obstacles into opportunities for development. By doing this, the study hopes to provide firms with tactics for developing workforces that are sustainable and prepared for the future.

This study uses a relational and exploratory approach, combining qualitative findings from focus group interviews with survey data. An experimental or

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causal study would be premature at this point because antifragility is still a relatively understudied topic in the domains of organizational behavior and human resource management. The qualitative component offers in depth context and personal insight, whereas the selected approach focuses on finding correlations between HRM practices and employee behaviors. When combined, these approaches help the study to identify trends, attitudes, and behaviors that support antifragility in the workplace.

A wide range of workers from various industries are represented among the study's participants. Male and female professionals with experience levels ranging from 0–5 years to 20+ years, and ages ranging from 20–25 years to 50 and beyond, participated in the survey. They had a diverse range of professional experiences, including management, data analytics, healthcare, airlines, and the creative sectors. This diversity includes viewpoints from experienced professionals and beginners in technical, knowledge-intensive, and service-oriented fields.

Staff members from Evercare Hospital, one of the top private healthcare facilities in Bangladesh, participated in a focus group discussion to supplement this. In addition to placing the results within the framework of a vital service sector, this qualitative element offers deep insights into how antifragility is perceived and promoted in real-world settings, especially in high-stakes settings like healthcare.

Two major types of variables are examined in this study. It looks at behaviors and mindsets including flexibility, learning from mistakes, being open to criticism, proactive learning, and perseverance in the face of setbacks at the employee level. It focuses on HRM-related activities at the organizational level, such as failure-tolerant cultures, crisis simulations, mentorship programs, open feedback systems, and encouragement of lifelong learning.

This study contains limitations, just like any other research. First, there were 67 total survey responses. This sample is still quite small and might not accurately reflect the larger workforce, even though the participants come from a variety of age groups, occupations, and experience levels.Secondly, the research was carried out at a specific time. However, the idea of antifragility changes as people and organizations encounter repeated difficulties. To see how these practices and behaviors evolve over time, a long-term study would be required. Thirdly, while the focus group with Evercare Hospital staff added valuable practical insights, the findings are strongly tied to the healthcare context as well. The findings should be applied cautiously when considering other businesses because antifragility in the healthcare sector could not appear the same as it does in the technology, creative, or aviation sectors antifragile behaviors, but we cannot claim they directly cause those behaviors without further testing.

This study will benefit organizations by showing which HR practices help employees grow stronger through challenges. It will assist HR managers in creating more effective methods for support, feedback, and training. Workers can also learn which habits make them more antifragile, such as flexibility and ongoing education. Lastly, it provides scholars with valuable information as well.

II.LITERATURE REVIEW

Scholars are starting to look at how [4]concept of antifragility relates to employee behavior and organizational systems. For instance, [1] examined antifragility from the standpoint of organizational design. They maintained that socio-technical systems that prioritize flexibility, decentralization, redundancy, and ongoing learning are better suited to survive in unpredictable situations. Their work serves as an example of how antifragility may be established in businesses through structural practices.

In their investigation of antifragility in the hospitality industry, [3] discovered that antifragile workers, those who develop and learn from difficulties, showed greater workplace engagement and more stronger senses of belonging. In a similar field, [2]showed how leaders who are entrepreneurs may encourage antifragility in employees, which encourages creative behavior. Additionally, they discovered that this link is strengthened by job autonomy, indicating that workplace arrangements can be quite important in promoting antifragile behaviors.

Strategies for creating antifragile workplaces, including encouraging innovation, accepting failure, and promoting feedback and ongoing learning, have been emphasized in practitioner-oriented discussion outside of academic literature [4]. These suggestions are in line with human resources management practices aimed at helping businesses to develop and adapt in times of change.

III.RESEARCH METHODOLOGY

An exploratory and descriptive research method is used in this study. Since antifragility is a relatively new idea in HRM; the study is exploratory in nature and aims to find new trends between employee behavior and HRM methods. Because it examines employee traits, behaviors,

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and workplace practices using data gathered, it is also descriptive in nature.

67 individuals with a range of professional backgrounds, including those in the healthcare, aviation, management, data analytics, and creative industries, participated in the survey as responders. A diverse range of age groups (20–25 years to 50+ years) and work experience levels (0–5 years to 20+ years) were represented among the participants. There were both male and female participants.

Because respondents were chosen based on their accessibility and desire to participate in the survey, non-probability convenience sampling was the sampling technique chosen. To get more in-depth qualitative perspectives from the healthcare industry, a focus group interview was held with Evercare Hospital Dhaka employees in addition to the survey.

A structured survey questionnaire with both closed-ended and open-ended questions was used to gather data. Demographic data, awareness of antifragility, opinion of antifragile behavior, response to workplace difficulties, and opinions on HRM practices that promote antifragility were all recorded in the survey. A semi-structured interview was the focus group's guide and encouraged participants to share their experiences with improvement/development, flexibility, and resilience in the workplace.

Respondents from a variety of professional backgrounds were able to participate in the survey because it was distributed online. Employees from the Quality Assurance department participated in the focus group session, which was held in person at Evercare Hospital Dhaka.

Descriptive statistics, such as percentages and frequencies, were used to examine survey data in order to compile the demographics and replies of the respondents. Thematic analysis of qualitative answers to open-ended questions and focus group interviews identified repeated themes and patterns relating to HRM practices and antifragile behaviors.

IV. Presentation of Data and Critical Discussion of Results

According to the questionnaire that was circulated, the total number of respondents were 67 and 59.7% of the respondents were male and the remaining 40.3% female.

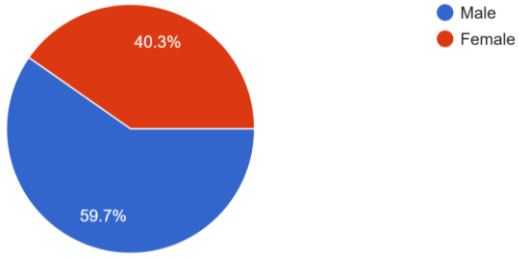

Fig 4.1: Gender Count

70.1% of the respondents had not heard of the term ‘Anti Fragility’ before according to the survey done and is shown in the figure below.

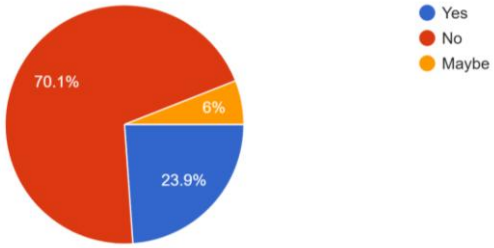

Fig: 4.2 Heard of the term Antifragile before

However according to this Figure 4.3, 81.5% of the respondents do find themselves to be antifragile at the very least.

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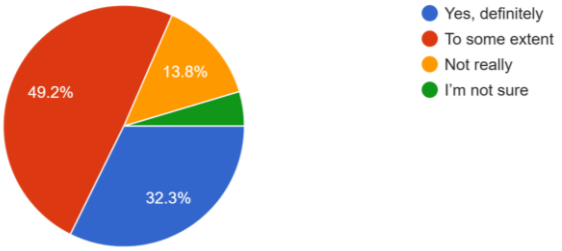

Fig 4.3: Respondents considering themselves as antifragile

The average age distribution of the respondents is bimodal as it is concentrated among the youngest group (20–25) and the oldest group (50+), followed by the ages of 41- 45 years as shown in figure 4.4.

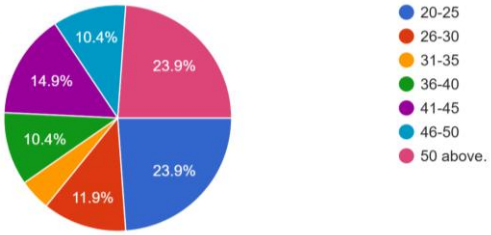

Fig 4.4: Age distribution of the respondents

As the age distribution is bimodal, this can be reflected in the years of professional experience of the respondents.

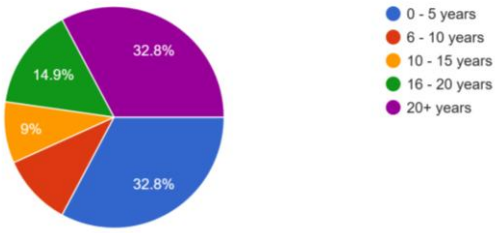

Fig 4.5: Years of professional experience of the respondents.

As the sample size of the survey is 67, this means that the occupations of the respondents vary thoroughly. For easier data calculation, this chart was made by categorizing the occupations in a more generic manner.

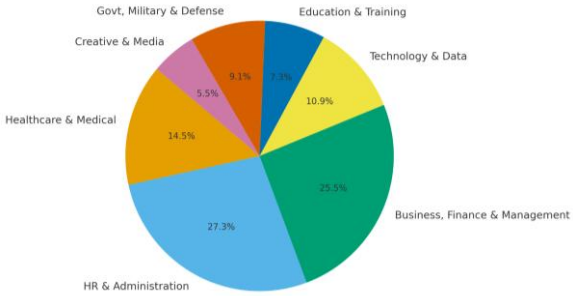

Fig 4.6: Respondent's occupations

When asked about what the respondents think makes a worker antifragile, they picked these options from the checkbox.

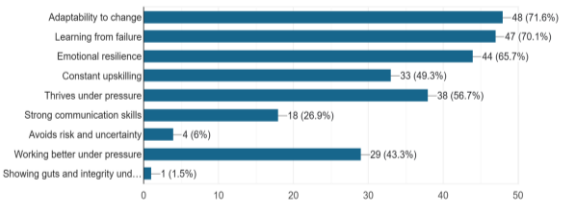

Fig 4.7: Characteristics of an antifragile worker

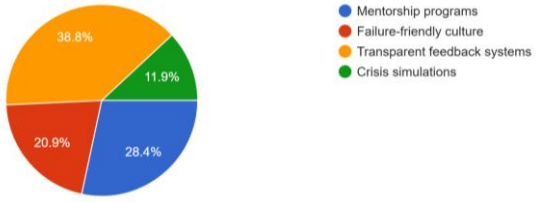

Fig 4.8: Workplace practices that help build antifragility

The figure above explores what the respondents consider workplace practices which support the theme of antifragility.

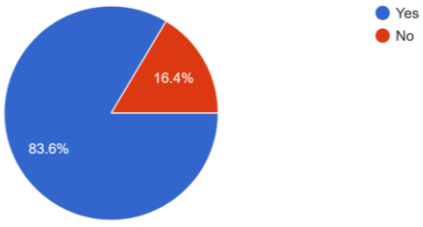

Fig 4.9: Respondents taking proactive steps to improve adaptability and skills

The figure shows that 83.6% of the respondents are cautious about improving their adaptability and skills as they take proactive steps regarding it.

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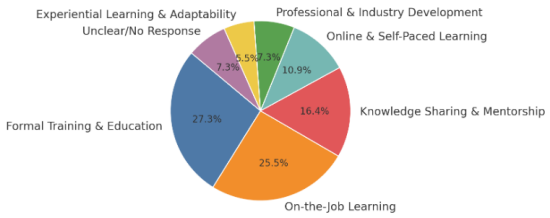

Fig 4.10: Proactive measure for improvement

This figure shows how respondents take actions to improve their skills and adaptability.

Category	Examples	Count
Formal Training Programs	Recurrent trainings, refresher trainings, workshops, job rotation, 1-on-1 sessions	15
Educational Support & Reimbursement	Courses, certifications, college reimbursements, educational visits	10
On-the-Job Learning & Feedback	Feedback sessions, sprints, case studies, learning from mistakes, retrospectives	14
Knowledge Sharing & Collaboration	Learning from coworkers, shadowing, mentoring, posting culture	9
Online Learning & Self-Paced Programs	LMS, eFront portal, online learning platforms, self-paced courses	6
Industry & Professional Development	Conferences, CME/CNE, keeping updated with latest information	4
Experiential / Other Practices	Psychological support, facing challenges, innovation, new roles	3
Unclear / No Response	N/A, not sure, no	4

Table 4.1: Respondents' workplaces' continuous learning methods

The table breaks down 65 responses into 8 different categories along with examples as to the answers given by the respondents in table 4.

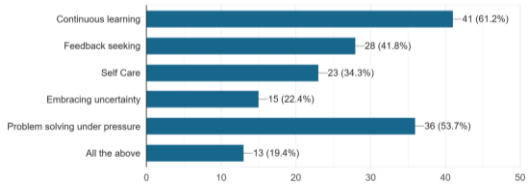

Fig: 4.11 : Practices done by the respondents

The respondents do these practices which can be defined as antifragile practices.



Figure: 4.12: Response to criticism

36.5% of the respondents accept and try to learn from it followed by 33.3% feeling uncomfortable yet reflect on it.

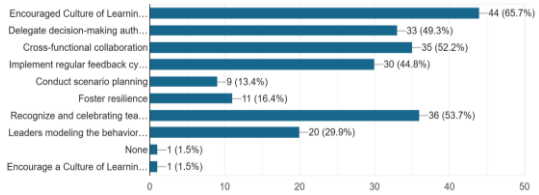

Fig 4.13: Noticed anti fragile activities in the workplace

These are the antifragile activities which the respondents have noticed in their workplaces

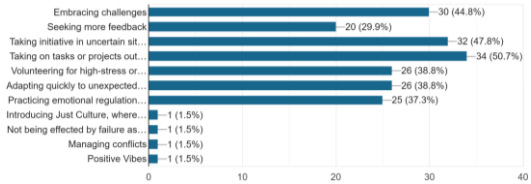

Fig 4.14: Changes in workplace behavior to become more antifragile

The figure above shows what the respondents said that would help them become antifragile if they were to implement these behaviours.

Critical Discussion of Results

The survey results reveal several important insights into the understanding and practice of antifragility in the workplace. While 70.1% of respondents had never heard of the term "antifragility", a significant majority (81.5%) considered themselves antifragile. This suggests that antifragility, as a concept, may be implicitly practiced even without being aware of the right terminology. The gap presents an opportunity for organizational training and awareness-building.

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The age distribution was bimodal, with peaks at the 20–25 and 50+ groups. This is mirrored in years of professional experience, implying that antifragility may be interpreted differently by early-career versus late-career professionals. Younger respondents may equate antifragility with adaptability and skill acquisition, while older professionals might associate it with resilience, and accumulated experience.

In terms of occupations, the variation suggests that antifragility is not industry-specific but broadly applicable.

As for characteristics of antifragile workers and workplace practices that encourage antifragility, respondents highlighted adaptability, proactive learning, and resilience which reflects a strong individual initiative. However, organizational responsibility was less emphasized which may point antifragility to being individualistic rather than collective, organisation wise.

Table 4.1 provided further insights, as respondents identified diverse continuous learning methods such as training, workshops, and mentorship. While this demonstrates organizational support, the fact that practices varied significantly indicates inconsistent institutionalization of antifragility across workplaces.

The findings in response to criticism were particularly telling: only 36.5% fully embraced criticism as a learning opportunity, while one-third felt uncomfortable but still reflected on it. This suggests a mixed cultural readiness for antifragility, as emotional discomfort may hinder growth despite rational acknowledgment of its value, unrelated to age.

Finally, workplace behavioral changes seen in figure 4.14 illustrates that employees recognize specific changes that could make them more antifragile.

VI. SUMMARY, CONCLUSION AND RECOMMENDATION

The findings indicate that awareness of antifragility as a concept is relatively low, as most respondents were unfamiliar with the term. However, many already demonstrate behaviors and mindsets aligned with antifragility, suggesting that while the terminology is not widely known, the practices are recognized and enacted.

The results also show that antifragility is being developed more at the individual level than collectively within organizations. Employees are proactively taking steps to enhance adaptability and resilience, but organizations lag behind in providing consistent support. A generational divide is visible: younger employees emphasize continuous learning and skill-building, while older professionals tend to focus more on resilience and accumulated experience.

An overview of the results:

The results from the survey show a number of significant trends:

A. Awareness of: Most of the respondents are unfamiliar with the term antifragile worker, although they described it in terms of adaptability, learning from failure, as well as

5 on a scale of 1 to 5, indicating that they frequently look for chances to learn from setbacks. Similarly, 18 respondents (27%) agreed and 29 respondents (43%) strongly agreed that adversity or failure makes them stronger than before.

E. Skills and Adaptability: 56 respondents (84%) said

practices considered to encourage antifragility.

I. Continuous Learning: Many workplaces encouraged continuous learning through seminars, conferences, or professional courses, though a significant minority felt opportunities were lacking.

J. Behavioral Changes: In order to become more antifragile, employees recognized behaviors such as stepping outside of their comfort zones, accepting

B. development under stress.

C. Criticism at Work: The majority of participants responded positively to criticism; 34% said they "accept and try to learn from it," while 22% said they were seeking out feedback to do better.

D. Growth from Setbacks: More than 57% of respondents gave themselves a rating of 4 or

F. they had taken proactive measures to enhance their skills and adaptability.

G. Practices: Some respondents said "all of the above," with the most popular regular practices being ongoing learning, requesting feedback, and solving problems under pressure.

H. Workplace Practices: Mentorship programs (19 respondents, 28%), failure-friendly cultures (14 respondents, 21%), and transparent feedback systems (26 respondents, 39%) were the top workplace

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challenges, volunteering for high-stress jobs, asking for feedback, and fast adapting.

K. Focus Group Insights (Evercare Hospital): The hospital personnel highlighted the value of teamwork, training, and psychological safety in managing uncertainty, emphasizing the critical role that antifragility plays in high-stakes settings such as healthcare.

Conclusion:

Because this is a harvested trait rather than a genetic one, more research on this topic may help and develop workers who have the potential to become antifragile. In this exploratory study, we discovered that the respondents are not familiar with the term but find themselves relating to it. They also mentioned practices and activities that help them become antifragile.

Recommendation for future research:

1-Involve more people: Results will be more reliable and trustworthy if there is a larger sample drawn from a variety of industries.

2-Research spanning time: Future studies can track employees over months or years to observe how their actions evolve, as antifragility increases when people encounter repeated difficulties.

3-Examine several countries and industries. Antifragility might show up differently in the fields of education, technology, and healthcare, and culture may also be involved. A broader perspective would result from comparing across industries and nations.

4-Test cause-and-effect: To determine whether particular HR procedures (such as training or mentoring) directly make employees more antifragile, future study can apply case studies or experiments.

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1.Age*

20-25
26-30
31-35
36-40
41-45
46-50
50 above.

2.Gender *
-Male
-Female
-Other:

3.Years of professional experience
0 - 5 years
6 - 10 years
10 - 15 years
16 - 20 years
20+ years

4.Current Occupation*

5.Have you heard of the term "Antifragile Worker" before this survey? If your answer is no, Antifragility refers to the ability to grow stronger through stress, adversity, and challenges—not just surviving or recovering, but improving as a result *
-Yes
-No
-Maybe

6.How would you define an "antifragile worker"? *

7. In your opinion, what characteristics make a worker antifragile? *

- Adaptability to change
- Learning from failure
- Emotional resilience
- Constant upskilling
- Thrives under pressure
- Strong communication skills
- Avoids risk and uncertainty
- Working better under pressure
- Other:

8.How do you typically feel when you receive criticism at work?

- I take it personally and feel discouraged
- I feel uncomfortable, but try to reflect on it
- I accept it and try to learn from it
- I actively seek it out to improve
- I feel energized by constructive criticism

9.How often do you seek opportunities to grow from setbacks? *
Never
1
2
3
4
5

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Always

10. Do you feel that failure or hardship makes you stronger in your job or life? *
No
1
2
3
4
5
Yes

11.Do you take proactive steps to improve your adaptability and skills? *
-Yes
-No

12.If your answer is yes, please elaborate.

13.Which of the following do you regularly practice? *
- Continuous learning
- Feedback seeking
- Self Care
- Embracing uncertainty
- Problem solving under pressure
- All the above

14.Which workplace practices do you believe help build antifragility?
- Mentorship programs
- Failure-friendly culture
- Transparent feedback systems
- Crisis simulations

15. Do you consider yourself anti fragile? *
-Yes, definitely
-To some extent
-Not really
-I'm not sure

16.Does your workplace encourage continuous learning? If yes, name the practices *

17.Select the anti fragile activities that you noticed in your workplace*
Encouraged Culture of Learning and Adaptability
Delegate decision-making authorit
Cross-functional collaboration
Implement regular feedback cycles
Conduct scenario planning
Foster resilience
Recognize and celebrate team members' successes
Leaders modeling the behaviors and attitudes that they want to see in their teams.
Other:

18.What specific changes in your workplace behavior do you believe would help you become a more antifragile worker?*
- Embracing challenges
- Seeking more feedback
- Taking initiative in uncertain situations
- Taking on tasks or projects outside my comfort zone
- Volunteering for high-stress or uncertain assignments
- Adapting quickly to unexpected changes
- Practicing emotional regulation under pressure
- Other

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