

Organizational Security Preparedness in Hostile Environments

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Abstract: Key purpose of this paper is to evaluate such factors which are responsible for an organization's security preparedness against potential environmental threats and also intends to determine employees' preferences on such factors that determine an organization's preparedness.

Design/Methodology: Exploratory study was used to identify the most critical factors in ensuring an organization's preparedness in hostile environment against potential threats. Simple Random Sampling was used to select the respondents from various Indian organizations. A total of 180 questionnaires were distributed and mailed, out of which 144 valid responses were collected, resulting in an 80 per cent response rate.

Findings: It has been found that physical security is the most demanded of all security forms in any organization, which mainly includes basic housekeeping, security passes (for both employees and visitors), baggage screening, bulletproof glasses, alarm systems and so on. It was also found that security expectations do not differ with respect to gender or work experience of employees.

Implications: In order to make its employees feel safe and protected, every organization must strive to ensure security preparedness up to some extent. No organization can expect continuous employee engagement in case of uncertainty amongst its employees related to their security and well-being. Therefore it becomes imperative for organizations to ensure organizational security through best in-class measures.

Keywords: Organizational security preparedness, Hostile environments.

1. INTRODUCTION

Since 9/11 catastrophe in United States of America, the whole world has accepted the uncertainty of life regardless of where you are at, home or workplace. Today every individual, in almost all parts of the world, lives with this uncertainty and apprehension of life thus making it the most critical demand of human population in current times. Right from the moment an individual steps out of his/her house, he/she constantly feels a rush of thoughts pertaining to such insecurity and hostility.

This insecurity has affected all spheres of our lives, ranging from personal (home location, tourist spots, religious association and so on) to professional (work location, industry, job nature and so on). Every individual is looking towards a combination of such personal and professional options that maximizes his/her security in today's hostile environment.

This paper intends to evaluate such factors which are responsible for an organization's security preparedness against potential environmental threats and also intends to determine employees' preferences on such factors that determine an organization's preparedness.

2. LITERATURE REVIEW

Till the end of twentieth century, terrorism was considered to be a phenomena of local turbulence restricted to certain regions of the globe that usually affected local businesses as compared to global ventures. Though business executives have always been on hit list of terrorist outfits (Snitch, 1982), but the scale of such attacks was way too smaller, which could be managed through emphasizing avoidance and hedging (Wells, 1998). But the conventional view of utilizing

resources for revenue generation rather than defending the business against any such attacks (Harvey, 1993), came to halt with the 9/11 attacks on United States of America.

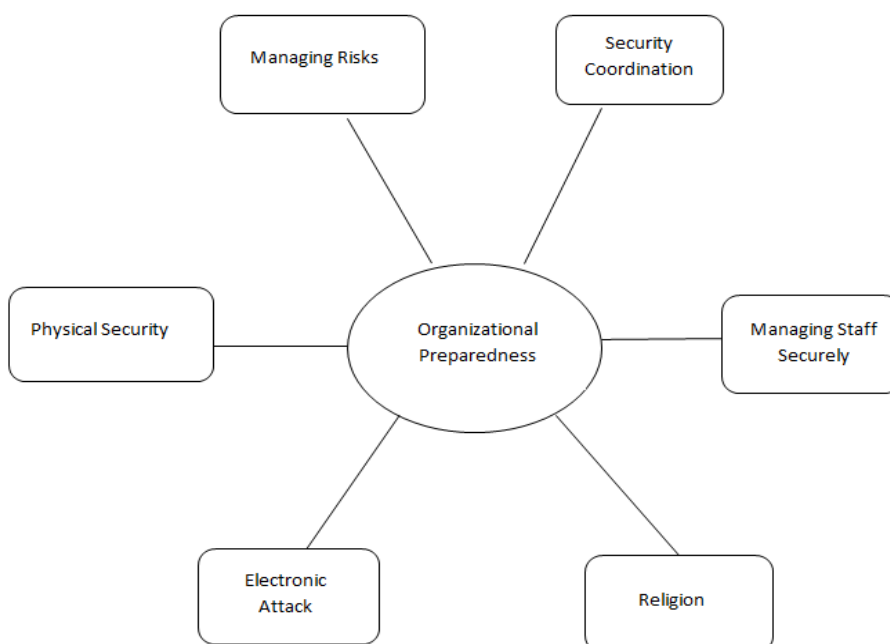
It would be an anomaly if we say that no substantial work was done by IB researchers prior to 9/11 attacks, since issues such as organization's preparedness against terrorism (Barton, 1993; Kuhne & Schmitt, 1979), crisis response strategies (Gladwin & Walter, 1980), and the terrorism's impact perceptions on the movement of managers between headquarters and overseas subsidiaries (Maddox, 1990), were amongst few notable works of that era. But post 9/11 era of international business has been flooded with the studies of various scholars that can be broadly classified into 2 categories: empirical and conceptual.

Empirical studies, mainly conducted by economists and political scientists, tend to investigate the impact of terrorism on international business at macro (impact on global and national economic environment) and micro level (impact on industry and supply chains). Conceptual studies, on the other end, have been conducted by management, marketing and strategy scholars that focus on three levels viz. macro, micro and primary (influence on firms and individuals). While empirical studies are analytical rather than prescriptive; conceptual studies have proved to be both analytical and prescriptive.

Enderwick (2001), weeks after 9/11 tragedy, came up with the concept of concentric bands, through which he tried to measure the immediate as well as long term impact of brutal attacks on Washington and New York. Four separate classes of bands were postulated for different categories of possible impacts. Innermost band (first) comprised of the sectors with primary impacts, such as global tourism and airline sector, which were predicted to be worst affected as terrorists used aircrafts as primary weapons for 9/11 attacks. Second band, which comprised of sectors such as transportation, investment, intelligence and insurance, was supposed to experience both negative (eg. high payouts to policy holders) and positive (high demand for security related products and services). Third and fourth bands, titled "response-generated impacts" and "long term issues" respectively, emphasize on policy-related issues and prevention of terrorism, rather than industry-specific impacts.

As examined by Czinkota, Knight, Liesch, & Steen (2005), though MNEs are not under a 'direct' threat but there is a high degree of 'indirect' threat of any terrorist attack on such firms, especially those with global supply chains. Managers at such firms aim to reduce such impacts through inventory management, supply chain adjustments and contingency planning.

According to a study conducted by National Counter Terrorism Security Office, UK an organization can ensure its security against any kind of terrorist attacks by keeping a note of factors such as managing risks, security coordination, physical security, managing staff securely, electronic attack, and religion specific contingencies.



3. OBJECTIVE

a) To identify the most critical form of security that impacts employees' state of being and working for an organization.

Though there are various forms of security that have been found crucial and included in this research as well, but it would be interesting to find whether physical security tops the rank.

H0: Physical security is placed above all forms of security mechanisms in an organization

H1: Physical security is not placed significantly above other security mechanisms in an organization

b) To identify whether there is any difference in the expectations of male and female employees across various organizations, with respect to the organization's security preparedness for hostile environments

H0: Gender has no impact on employee perception of organizational preparedness in hostile environments

H1: Gender has significant impact on employee perception of organizational preparedness in hostile environments

c) To identify whether there is any difference in the expectations of freshers and work experienced employees across various organizations, with respect to the organization's security preparedness for hostile environments

H0: Work experience has no impact on employee perception of organizational preparedness in hostile environments

H1: Work experience has significant impact on employee perception of organizational preparedness in hostile environments

4. METHODOLOGY

Instrument Development:

A survey questionnaire was developed with six primary factors viz. Managing Risks, Security Co-ordination, Physical Security, Managing Staff Securely, Electronic Attack, and Religion. All these factors contained some sub-factors which were required to be ranked by the respondents, as per their preference. At the final stage of the questionnaire, respondents were also asked to rank all 6 primary factors as per their preference on security perception that gave us a clear picture of the most critical and least critical factors in our questionnaire.

1. Managing Risks:

In order to ensure organizational security in hostile environments, risk management activities, ranging from identifying potential risks to a formal risk management cycle, need to be put in place.

Kindly rate the following items from 1 (most critical) to 5 (least critical):

- Address issues like identification of threat
- Identify companies vulnerability and what is to be protected
- Identify measures to reduce risk
- Incorporate risk management cycle
- Review security measures and rehearse security plans

2. Security Co-ordination:

To stay uptight against any form of physical or electronic attack, an organization needs to draft and execute thorough security arrangements.

Kindly rate the following items from 1 (most critical) to 6 (least critical):

- Generating a security plan
- Formulating contingency plan dealing with threat packages, possible evacuation, bomb threats and so on
- Arranging staff training and mock drills
- Conducting regular review of security procedures

- Presence of security coordinator or security executive
- Liaising with police and other emergency services, and local authorities

3. Physical Security:

More than any form of loss, physical damage to property or human life, puts a huge question mark on the security measures of any organization or nation.

Kindly rate the following items from 1 (most critical) to 7 (least critical):

- Basic housekeeping such as locking unoccupied offices, rooms and cupboards, and taking care of surveillance
- Security passes for employees (with electronic or biometric verification)
- Passes for visitors after submitting their government approved identification card with photograph on entry
- Screening visitors and baggage (through metal detectors and x-rays)
- Traffic and parking controls
- Doors and windows - bulletproof glass, alarm system
- Integrated security systems - intruder alarms, CCTV cameras and adequate lighting

4. Managing staff securely:

Besides ensuring physical and data security of an organization, it is also crucial to guard the employee's and visitor's activities in the premises.

Kindly rate the following items from 1 (most critical) to 5 (least critical):

- Detailed and exhaustive verification of employee, employee's reference and all related documents
- Shredding, incineration of important and sensitive documents
- Watching for unusual behavior at/around the premises
- Guarding against unexpected visitors
- Keeping a check on employees coming in usually early or staying late

5. Electronic attack:

Since the entire organizational data-related transactions are carried out through electronic medium, so data security becomes very critical, in order to protect organizations from any electronic attack.

Kindly rate the following items from 1 (most critical) to 5 (least critical):

- Protection against hackers, malicious software, malicious modification of hardware
- Antivirus, firewall and encryption in place
- Data back-up at another secure location
- Granting access through password protection
- No entrance and exit with disk drives/flash drives without proper authorization

6. Religion:

Since religion is often associated with terrorism, kindly rate the following items on the basis of your comfort level with respect to given aspects, from 1 (most uncomfortable) to 4 (least uncomfortable):

- Working with someone from a specific religious community makes me uncomfortable
- Working at a client location, situated in a religion-centric country, makes me uncomfortable
- People exhibiting their religious beliefs at workplace make me uncomfortable

- Some informal talks or comments on certain religious norms makes me uncomfortable

Sampling and Data Collection:

As the reliability coefficients are statistically significant, the instrument was used for main data collection. Simple Random Sampling was used for collecting data from employees working across various organizations. A total of 180 questionnaires were distributed and mailed, out of which 144 valid responses were collected, resulting in an 80 per cent response rate.

5. ANALYSIS

In order to analyze the collected data, we used step-wise linear regression technique to reach at certain effective conclusion.

		Managing_Risk	Security	Phy_Sec	Managing_Staff	Electronic_Attack	Religion
Pearson Correlation	Managing_Risk	1.000	-.133	-.428	-.049	-.280	-.305
	Security	-.133	1.000	.004	-.333	-.402	-.184
	Phy_Sec	-.428	.004	1.000	-.302	-.076	-.167
	Managing_Staff	-.049	-.333	-.302	1.000	-.191	-.014
	Electronic_Attack	-.280	-.402	-.076	-.191	1.000	-.092
	Religion	-.305	-.184	-.167	-.014	-.092	1.000
Sig. (1-tailed)	Managing_Risk	.	.056	.000	.279	.000	.000
	Security	.056	.	.480	.000	.000	.014
	Phy_Sec	.000	.480	.	.000	.184	.023
	Managing_Staff	.279	.000	.000	.	.011	.436
	Electronic_Attack	.000	.000	.184	.011	.	.137
	Religion	.000	.014	.023	.436	.137	.
N	Managing_Risk	144	144	144	144	144	144
	Security	144	144	144	144	144	144
	Phy_Sec	144	144	144	144	144	144
	Managing_Staff	144	144	144	144	144	144
	Electronic_Attack	144	144	144	144	144	144
	Religion	144	144	144	144	144	144

Pearson Correlation coefficient shows the relationship between our dependent variable (Managing Risk) and all other independent variables (Security Co-ordination, Physical Security, Managing Staff, Electronic Attack and Religion). A strongly negative relationship exists between Managing Risks and Physical security variables as can be seen from the table, where correlation coefficient shows the value of -0.428.

This strong negative correlation shows that employees working in organizations with high security preparedness in hostile environments tend to be less threatened for their physical security or in other words, feel more secure while working in such organization.

Model Summary^f

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.428 ^a	.183	.178	1.380
2	.573 ^b	.329	.319	1.256
3	.675 ^c	.455	.444	1.135
4	.784 ^d	.614	.603	.959
5	.995 ^e	.991	.991	.147

a. Predictors: (Constant), Phy_Sec

b. Predictors: (Constant), Phy_Sec, Religion

c. Predictors: (Constant), Phy_Sec, Religion, Electronic_Attack

d. Predictors: (Constant), Phy_Sec, Religion, Electronic_Attack, Security

e. Predictors: (Constant), Phy_Sec, Religion, Electronic_Attack, Security, Managing_Staff

f. Dependent Variable: Managing_Risk

Value of R² (co-efficient of determination) for the collected dataset comes out to be 0.991, which shows that our data is pretty closely fitted to the regression line.

Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	Housekeeping	.075	.055	.139	1.356	.177	.757	.115	.062
	Security_Passes	.214	.077	.268	2.790	.006	.746	.232	.128
	Visitor_Passes	-.062	.091	-.081	-.687	.493	.743	-.059	-.032
	Screeing_Baggages	.061	.098	.078	.628	.531	.769	.054	.029
	Parking_Controls	.073	.066	.138	1.112	.268	.783	.095	.051
	Alarm_Systems	.157	.074	.302	2.136	.034	.795	.179	.098
	Integrated_Security_Systems	.050	.053	.081	.937	.350	.714	.080	.043

a. Dependent Variable: Managing_Risk

b. Linear Regression through the Origin

On analyzing the individual sub-factors of Physical Security, which emerges as the most critical variable in ensuring an organization’s security preparedness in hostile environments, we found that ensuring proper alarm systems along with bulletproof glasses and windows emerged to be the most significant for the respondents, as can be seen from the value of beta coefficient (0.302) that is highest amongst all other sub-factors of physical security.

Model Summary

Model	R	R Square ^b	Adjusted R Square	Std. Error of the Estimate
1	.844 ^a	.712	.697	1.525

R² value of the sub-factors of Physical Security variable turns out to be 0.712 which also shows that our data is pretty closely fitted to the regression line.

Tests of Between-Subjects Effects

Managing_Risk

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2.722 ^a	6	.454	.189	.979
Intercept	284.478	1	284.478	118.611	.000
Gender	.633	2	.316	.132	.877
Work_Experience	1.989	2	.994	.415	.661
Gender * Work_Experience	1.135	2	.568	.237	.790
Error	328.584	137	2.398		
Total	1106.000	144			
Corrected Total	331.306	143			

a. R Squared = .808 (Adjusted R Squared = .785)

We applied 2-way ANOVA technique to our dataset, in order to test the hypothesis mentioned in research objective section.

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Above result shows that gender has no impact on employee perception of organizational preparedness in hostile environments as significance value of 'gender' variable comes out to be 0.877, which made us to retain our null hypothesis at 5% level of significance. Moreover work experience of the respondents did not seem to be having any impact on employee perception of organizational preparedness in hostile environments as significance value of 'work experience' variable comes out to be 0.661, which made us retain our null hypothesis.

In addition to it, gender-work experience combination also seems to be having no impact on employee perception of organizational preparedness in hostile environments as significance value of 'gender*work_experience' variable comes out to be 0.790.

6. RECOMMENDATIONS

First and foremost finding of the study is that employees working in organizations with high security preparedness tend to feel safer against any sort of physical security threat. This finding is very much in relation to a general known fact that any group, society or enterprise, if prepares itself well for any unforeseen future event, then it would instill a sense of belief and confidence amongst its members for a better chance of survival. Therefore if an organization wants its employees to have a better sense of protection while being associated with it, it must focus on security mechanisms such as proper alarm systems, security passes for employees, screening visitors and their baggage, and so on.

Physical security emerges as the most critical variable in ensuring an organization's security preparedness in hostile environments. Since physical security is negatively correlated to our dependent variable managing risks, we tried to find out the most critical sub-factor. It was found that ensuring proper alarm systems along with bulletproof glasses and windows emerged to be the most significant for the respondents. Therefore organizations must ensure updated physical security in form of these systems as they provide a sense of protection to the employees working for them.

It has also been found that factors such as gender and work experience of employees do not impact their security preferences in their organizations. Therefore organizations must work towards their security preparedness irrespective of the male-female or fresher-experienced ratio. Every employee, irrespective of gender or work experience, equally demands safety and security at workplace which should be respected and taken care by the organization.

7. LIMITATIONS

This study can be conducted on a broader scale through a larger sample size as the current sample size is not a big number to conduct a research of this kind. Moreover this study can be conducted across various regions and nationalities to understand the employees' preferences and expectations towards organizational preparedness in hostile environments.

8. FUTURE SCOPE

This study can be extended to a larger set of sample, in order to obtain a better view of the employees' preferences and expectations towards organizational preparedness in hostile environments.

Since the sample for this study were mainly collected from organizations in North Indian region, this study can be extended to the rest of the country and across the globe as well, to obtain clear insight of the employees' preferences and expectations towards organizational preparedness in hostile environments.

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