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# THE CONTINGENCY THEORY OF WORKER'S MOTIVATION IN AIR SAFETY PERFORMANCE: A STUDY OF NIGERIAN AVIATION SECTOR

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## ABSTRACT

The quest to understand the interplay between transportation use and society has developed a unique discourse, the sociology of transport. The relationship between transportation and society are numerous, deep, varied, ancient, and complex. Everyone has had extensive personal experience using transportation. Transportation has influenced each of our choices about where to live, spend vacations, shop, or work. So inescapable is the tie between transportation and society, that, like gravity, we take it for granted and cannot imagine a world without it. Modern aviation as a means of transport has become an extremely complex global system of interaction between human beings and machines, a system for transporting passengers and cargo around the world. The contingency theory of motivation as applied in this study shows that training is key to air safety performance. The study further reveal that identified and the prioritization involved with the individual's explanation of these elements. The study recommend that training is the key to air safety performance.

**Keywords:** *Worker Motivation, Air Safety Performance, Mishap, contingency Theory, Training, Aviation Sector.*

## INTRODUCTION

This theory is based on the assumption that management effectiveness is contingent, or dependent, upon the inter play between the application of management behaviours and specific situations. In other words, the way you manage should change depending on the circumstances. One size does not fit all. This quest to understand the contingency approach to management finds its foundation in the contingency theory of leadership effectiveness, developed by the fieldler. Theory states that leadership

effectiveness as it related to group effectiveness are a component of two factors;

i. Task motivation
ii. Relation motivation and circumstances.

You measure task motivation or relation motivation by the least preferred co-worker (LPC) scale. The LPC scale asks the manager to thing of the person they least like working with and then rate that persons on a set of questions, each involving and 5 – point scale, for instance I n the aviation industry, training a score would be uncooperative, and a score of eight would be cooperative. Fielder believed that people with a higher LPC score try to maintain harmony in their work relationships, while people with a lower LPC score are motivated to focus on task accomplishment.
The theory states that task or relations motivation is contingent upon whether the manager is able to both control and effect he group's situational favorability or outcome.

According to the theory, you can assess situational favorability by three factors;

1. **Leader –** Member relation: This factor addresses the managers perception of his cooperative relations with his subordinates in other words, it is the cooperation between you and your employees good or bad?
2. **Task structure:** This factor relates to whether the structure of the work task in highly structured, subject to standardized and assess, such as the operation of an assembly line.
3. **Position power:** This fact asks if the manger's level of authority is based on punishing or rewarding behavior, for example, does the manager derive his authority from providing bonuses for meeting sales goals, or terminating employees for failure to meet the goals.

There is little or no on-the job training and workers' salaries are poor compared to the risk of job. These affect workers efforts on their jobs, which invariably affect safety performances in the industry.
Other problems facing airlines are multiple entries granted to well funded and efficiently managed international airlines by the Federal Government through the Ministry of Aviation, poor management, lack of adequate aircrafts in their fleet to operate their scheduled routes, lack of maintenance facilities in the country where domestic airlines can carry out major checks such as C and D, instead of taking their aircraft abroad,

which impacts on their business overtime. Inability to access funds for expansion of their airlines, double digit interest rate paid on loans from financial institutions, lack of feasibility study before embarking on airline

## Statement of the Problem

Domestic Airlines in the country have been facing a lot of challenges in the course of their operations and these include high indebtedness to banks, aviation agencies and other entities, payment of charges to the businesses, lack of financial discipline, management indiscipline, introducing charges that cannot be explained and government policies, which often times, somersault, thereby affecting operations of airlines. These problems are choking and have made Nigerians to set up airline businesses and aviation school in neighboring Ghana.A major problem of air mishaps in Nigeria is being caused by the lack of qualified meteorologist to forecast the weather conditions before the takeoff and landing of aeroplanes. Again, many airlines barely exit, prompting unwillingness on the part of their operators to train even their critical personnel; pilots, engineers, safety practitioners, etc, that would oversee all the safety needs of their organizations. We cannot therefore but be on right track when we turn our focus on Crew Resource Management (CRM) Human Factors. It is a known fact that about 70 percent of incidents/accidents are traceable to human error. Indeed, a popular adage in aviation is what is commonly referred to as "Murphy's Law" which is a statement of the fact that, "if it can happen, one day it will", that is to say, if anything can possibly go wrong, it will go wrong!! Being human hence not infallible, "human factors will one way or the other, impact on everything we do. It is unfortunate however that it took a lot of accident for the industry's attention to be drawn globally to the human factor problems and their likely solutions. Efforts in this regard soon brought about the development of the concept of Crew Resource Management (CRM) to address the deficiencies of human behavior in the cockpit. Similarly, "human factors" is now an integral part of aircraft maintenance engineering training. It is evidently clear that training is the key to achieving the above objectives and even more". Odutola, (2006;2-3).

However, in Nigeria, air mishaps are a recurring decimal owing largely to human factors. Again, Amba and Danladi (2003) have identified high cost of operation and maintenance, insufficient financial resource, absence of transparency, manifested in corruption and poor managerial ability, stagnation and poor response to emergency due to sudden air mishap.

From the identification of key difficult areas, it could be deduced that insufficient financial resources in the sector could lead to poor motivation. From the foregoing, the gap in literature is to look at contingency theory of motivation could be used to enhance safety performance.

## Objectives of the Study

General objective is to evaluate the contingency theory of worker motivation and air safety performance in selected airlines in the Nigerian aviation industry.

Specific objectives include;

1. To examine the impact of training on air safety performance in the Nigeria aviation industry.
2. To examine how lack of workers motivation on the part of Aviation employers affect employee job performance.

## Research Questions

The following questions will help guide the study:

1. What is the impact of training on air safety performance in the Nigeria aviation industry?
2. To what extent does lack of workers motivation on the part of aviation employers affects employee job performance?

## Hypotheses

1. There is a significant relationship between training and air safety performance.
2. There is a significant relationship between air mishap and poor workers motivation.

## Significance of the Study

The significance of the study can be analyzed from the points of view of its practical utility, theoretical contribution and methodological relevance. Practically, this study will produce evidences to show the poor performance in the Nigeria aviation sector. Our suggestions help to reduce the incidence of air crashes in the aviation. Any study that can help solve the problem is important and it is from this point of view that the practical utility of this study lies. The study therefore would expose the problems in Nigeria aviation industry which has led to wanton destruction of properties, airlines and the lives of members of society.

Theoretically, the study enables us to test the Contingency theory and adaptability in the aviation industry. The result is revealing, as it add to the existing body of knowledge. For its policy implications, it would make the government to live up to her responsibilities in the aviation sector. As Dalrymple et al (2004) puts it, that performance is behavior evaluated in terms of its contributions to goals of the organization.

Methodologically, the study will enable us to use the survey method, interview techniques and questionnaire. The use of several methods of data collection techniques in our study is important in that they enable the researcher to determine the reliability of the data by directing attention to whether or not data from the various sources are consistent or not.

**Operationalization of variables**

For prescriptive clarity, the following terms should be understood this;

1. **Training:**
   a. The act, process, or method of one that trains.
   b. The skill, knowledge, or experience acquired by one that trains.
   c. The state of being trained
2. **Air Safety Performance:**

This can be defined as the freedom of unacceptable risk, were risk is a combination of the probability of occurrence of harm and the severity of the harm. According to this definition, safety is subjective because what is acceptable to one group of people. Safety also has a probabilistic aspect, and this one of the reasons why it is a difficult subject to measure, since absence of harm does not necessarily indicate the absence of risk. Therefore, aviation safety performance indicators should provide an indication of the probability of an accident.

3. **Motivation:** For the purpose of this work, motivation should be operationally understood as a cycle in which thoughts influence behaviours, behaviours drive performance, performance impacts thoughts, and the cycle begins again. Each stage of the cycle is composed of many dimensions including attitudes, beliefs, intentions, effort, and withdrawal which can all affect the motivation that an individual experiences.

**Research Design**

Baridam, (2001:51) posits that research design is the framework or plan that is used as a guide in collecting and analyzing the data for a study. The

study is descriptive research and requires the quasi-experimental design because the elements of the research interest are not under the researcher's control. Thus, the survey method is adopted because it investigates a chosen proportion of a particular population at a particular point in time.

**Population of Study / Sample Procedure**

The population of the study will generally be composed of aviation staff of the selected air lines. The total population of employees is given at (159,000) One Hundred and Fifty Nine Thousand (NCAA, 2015). In order to select samples for this study, he stratified random sampling technique will be adopted since the population of the study consists of sub-groups (foreign and local employees of air lines), stratified random sampling becomes necessary here, in that an equal representation and chance is given to each. Thus, this technique ensures an unbiased selection of samples in stratum or sub-groups.

**Samples Size Determination**

Samples, according to Ofo, (1994), are sub-groups known from the population, this means a sample should not be taken to be quite inferior to a population. Therefore, a sample size is a subset of the universe. However, given the employee strength of Aviation industry at 159,000, (this includes both foreign Airlines and local Airlines). The Taro-Yamane formula will be used to ascertain the sample size using the formular.

$$n \frac{N}{1 + N\ (e)^2}$$

Where;

n = Sample sought

N = Total population

e = Level of significance at 0.05%

Substituting the values of n = 159,000 and e = 0.05 we have;

$$n = \frac{159{,}000}{1+159{,}000\ (0.05)^2} = \frac{159{,}000}{200}$$

$$= 199$$

It follows that the sample size of the study is 200 respondents.

## TEST OF HYPOTHESIS

**There is a significant relationship between training and air safety performance.**

**Table showing computation of questionnaire**

| Questions | Agreed | Disagreed | Undecided | Total |
|---|---|---|---|---|
| | 35 (37) | 30 (27) | (6) 3.2 | 71 |
| | 20 (37) | 10 (27) | 4 3.2 | 34 |
| | **55** | **40** | **10** | **105** |

$$Fe = \frac{Row\ total\ x\ Column\ total}{Grand\ total}$$

$$\frac{55\ x\ 71}{105}\ x\ \frac{40\ x\ 71}{105}\ x\ \frac{10\ x\ 34}{105}$$

(37) (27) (3.2)

| Cell | Fo | Fe | Fo-fe | $(fo-fe)^2$ | $(Fo - Fe)^2$ |
|---|---|---|---|---|---|
| | 35 | 37 | -2 | -4 | 0.1 |
| | 30 | 27 | -3 | -6 | 0.2 |
| | 6 | 3 | 3 | 6 | 2 |
| | 20 | 37 | -17 | 289 | 7.8 |
| | 10 | 27 | -17 | 289 | 7.8 |
| | 4 | 3 | 1 | 1 | 1 |
| | | | | | $X^2 = 18.9$ |

Degree of freedom of 2 at 0.05
Significance level = 5.99
Calculated $x^2$ = 18.9
Therefore $H_o$ = Rejected
$H_1$ = Accepted

It follows that there is a positive relationship between training and air safety performance.

## TEST OF HYPOTHESES 2

There is a significant relationship between air mishap and workers motivation.

| Cell | Fo | Fe | Fo-fe | $(fo-fe)^2$ | $(Fo - Fe)^2$ |
|---|---|---|---|---|---|
| | 40 | 37 | 3 | 9 | 0.24 |
| | 20 | 21 | -1 | 1 | 1 |
| | 5 | 4 | -1 | 1 | 1 |
| | 20 | 37 | -7 | 49 | 2.45 |
| | 15 | 21 | -6 | 36 | 2.4 |
| | 5 | 4 | -1 | 1 | 1 |
| | | | | | $\varepsilon x$ = 8.09 |

Degree of freedom (df) = (r-I) (C-1)
= (2-1) (3-1)
= 2.

Df at 2 = 0.05
Significance level = 5.99
Calculated $x^2$ = 8.09
Therefore, $H_o$is rejected and $H_1$ is accepted.

## DISCUSSION AND FINDINGS

The aviation industry is also faced with huge maintenance costs, to keep all the existing facilities in operational condition. Since the government, United Nations Development Programme (UNDP) and the International Civil Aviation Organization (ICAO) have invested heavily in the college during the three stages to the college development; it therefore becomes necessary to get the adequate funds to maintain and to keep the equipment operational. But the cash-flow of funds has been a cause of concern for the management of the college as the annual subvention to the college either remains constant or reduced despite the expansions and the depreciation of the naira value. Lloeje, (1991).

From the finding of hypothesis one, constraint of the aviation is the issue of getting regular and accurate information from both airline and government agencies about their training needs for he college to plan. Most programmes are carried out in ad-hoc and short-term basis. Responses are very poor on data collection and attempts to get organizations to plan their activities in the industry are faced with great resistance. The mentality of turn key projects and purchase on manufacture specifications rather than project execution based on proper feasibility studies and co-ordinate sector implementation is yet to be

accepted by all concerned. It is within this ambit that an acceptable level of safety standards in our aviation industry, both in terms of compliance by operators and enforcement by the regularity authority is needed Odutola, (2013:474).

In a study conducted by Bichara (2014 collaborate with findings of study that on the Role of training in Air Tariff management (ATM) and Air Traffic Control (ATC), the study reveals that competency based training will lead to high, common and uniform levels of Air Traffic Service provision and therefore, safety. The study shows training reveal the identification and prioritization of element. In the test of hypothesis two, our study revealed that employee performance, the researcher differentiated between good working condition/environment, on the job training, condition of service, job security, pay rise, promotion and employee participation in decision making processes as well as job enrichment". The 8.9 level of significance is response to emerging due to sudden air mishap.

**Policy Statement/Conclusion**

In a study by Aron (1998) on motivation and workers performance, shows that workers are motivated by training, facilities and availability of equipment and that this situation, impact on the workers performance or quality of work. Idong (1996) revealed that working in a poorly equipped establishment can be frustrating as the workers become handicapped in the performance of their jobs since there is a limit to what materials can be improvised. Zeb-Obipi, (2007), revealed that the Nigerian workers are poorly paid and sometimes cannot asset themselves. Career development of workers is one of the factors that can actually motivate workers. Careers development is important because it provide more incentives for the workers as well as contributes to the quality of performance. It is indeed the wish for every employee to grow in his/her chosen career or profession. It is in line with thus that Zeb-Obipi (2007) observes that promotion has a high working effect since it activates an individual's knowledge and skills. In the same vein, Steers and Porter, (1999), also stated that promotion encourages effective job performance through positive reinforcement of the staff. They assert that in the Nigerian aviation industry, it was not different. Workers suffer on poor motivation processes, which invariably affect the safety performance of the pilots, engineers and service workers.

## REFERENCES

Aaron, A (1998) Assessing Human Motivation. New York General Learning Press (115).

Aham, SA (2000) Work and Motivation New York. Wiley (160).

Barry, PA (2002) Branding Labour-Intensive services; Business strategy Review 15 (1) 18.

Cambell, O and Pritchard, N (1994) Professional Persons in Public Organization. Educational and ministration, quarterly 1 (210).

Civil Aviation Authority of United Kingdom (CAA UK), 2008. Safety Management System: Guidance

Civil Aviation. Authority of United Kingdom (CAA UK), 2002. Safety Management Systems.

Decci, M (2001) Factors contributing to job satisfaction and job dissatisfaction in occupational groups had human performance 2 (143).

Baridam D, (2001) Management Spring field publishers

FAA AC, 2010. Safety Management systems for aviation Service Providers. FAA Advisory Circular 120-92A. Retrieved from: wwwfaa.gov Regulations & Policies.

Gill, GL and G.S. Shergill, 2004. Perceptions of safety management and safety culture in the aviation industry in New Zealand J. Air Transport Manag., 10: 233-239.

ICAO (2009b) Safety Management manual 2nd Edu. ICAO Doc 9859-AN 474.

ICAO, 200%, Safety Management Manual. 2ndEdn., ICAO Doc 985 9-AN/474. ICAO, 201 (Operation of Aircraft, Part I: International Commercial Air Transport.

Kozak,. O (2012) from intangibility to tangibility on service quality perceptions: A comprise study between consumers and service providers in aviation industry 12 (5) 292.

Kruglanski, A Alon, O and Lewis, P.A (2000) Service quality to service Loyalty: A relationship which goes beyond customer service 9 (6) 431.

Mackenzie, W. (2003) Central administration in Britain. London Longman is Green (205).

McClelland, D.C. (2001) Personality. New York Press (201).

Murdick, R. (1990) Service Operation Management Boston Allyn and Bacon (480) Oduh, M and Ekocha, P. C (2012) The Impact of Consumer Confidence and Expectation on Consumption in Nigeria, Evidence from Panel Data European Journal of Business and Management 4 (9) 86;

O' Brien, JA (2002) Management Information System, the (fifth edition); New York McGraw Hill Hwin (480).

Odutola (2006:2-3), Aviation Training Issues: Challenges in Nigeria the Conference on Crew Resource Management (CRM)/Human Factors; 10th August 2006.

Odutola(2006:474), Aviation Training Issues: Challenges in Nigeria the Conference on Crew Resource Management (CRM)/Human Factors; 10th august 2006.

Odutola (2013, xxii), The Big Conspiracy. The travails of the progressive Safety Regulator in a not – so – Progressive Aviation Industry. Published by author house 05/01/2013.

Uhuegho, OK (2010) Safety Management System Implementation in an Approved Maintainable Organization. A case study of Nigerian Airlines M.Sc UniLondon (101).

Zeb – Obipi, 1 (2007) Worker Competence Management and Corporate Productivity Performance: A Ph.D thesis of Rivers State University of Science and Technology (48).