



## A COMPARITIVE STUDY BETWEEN RISK TAKING BEHAVIOUR IN GOVERNMENT DOCTORS AND NURSES

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**Abstract:** The present study is been conducted to assess the level of risk taking behavior in government doctors and nurses. For this purpose, a sample of 50 subjects – 25 doctors and 25 nurses from government hospitals and all the subjects involve in the study were males and age from 25-40 years, the risk-taking questionnaire administered on all subjects individually. The data analyzed after individual scoring of each answer sheet according to manual of the test. After scoring mean, SD & 't' value of test calculated to determine the significance of mean differences between the doctors and nurses on risk taking behavior. The higher score on factor of risk taking behavior indicates that the level of risk taking behavior is high in doctors. The 't' value were found significant at level on the level of risk taking behavior, which means that there is difference in the level of risk taking behavior among doctors and nurses. The level of risk taking behavior of doctors is more as compared to nurses.

**Index Terms:** Risk taking behaviour, government doctors, government nurses.

### INTRODUCTION

Risk is pervasive and seemingly inescapable in contemporary life. Moreover, the positive and negative consequences of people's actions in the presence of risk are often dramatic. "Risk-Taking Behavior" is an examination of the psychological foundations and ramifications of this activity. This research focused on Health Care Workers and analysis of their risk-taking propensity. The intention of this research is to establish the importance of the roles of risk propensity, perception and preference, which can be referred to as Health Care Worker's risk philosophy, and the implications this can have on the behavior and decision making in the work place.

According to Adams (1995), Risk propensity, defined as a person's desire either to avoid or to take risks; risk preference, the perceived level of risk and uncertainty a person is willing to accept in a given situation; and risk perception, the subjective view of the perceived risk associated with a hazard.

According to Reber (1985), Risk defined as "an action that jeopardizes something of value. The object that is threatened may be a physical object, or a socially or culturally valued psychological entity, such as self-esteem.

Risk is the potential of gaining or losing something of value. Values (such as physical health, social status, emotional well-being or financial wealth) can be gained or lost when taking risk resulting from a given action or inaction, foreseen or unforeseen. Risk can also be defined as the intentional interaction with uncertainty. Uncertainty is a potential, unpredictable, and uncontrollable outcome; risk is a consequence of action taken in spite of uncertainty.

### Types of risk

There are two types of risk: subjective and objective. Subjective risk takes into account perception of a situation by the individual himself or herself. Risk assessment is been greatly affected by emotions. Fear, for instance, may result in perceiving a risk as higher than it actually is, while euphoria reduces the perceived threat level – the riskiness of possible actions. (Llewellyn, D.J. & Sanchez, X. ,2008).

Slovic, P (2004) proposed distinguishing between two types of risk: risk as analysis and risk as feelings. Terms suggested by P. Slovic are a mere simplification as risk itself is not an emotion, but may serve to bring about strong emotional arousal. The regulation of emotional processes was been traditionally seen as hedonistically oriented. The human being usually takes specific actions to counteract negative emotions and maintain or even intensify positive ones.

There may be two different motives behind risk taking:

1. Pleasure (**stimulating risk**),
2. Achieving an important goal (**instrumental risk**).

Stimulating risk occurs when the aim of risky behavior is to experience pleasant physiological arousal, pleasure (e.g. sex, drugs, and extreme sports). That kind of risk is to give a thrill. Taking such a risk mainly influenced by the need for stimulation and not preceded by analyzing possible losses.

The concept of this questionnaire draws directly on numerous theories concerning the so-called optimum stimulation (or activation) level, claiming that one's achievement of such an optimum level determines a specific motivational impulse to take an action or refrain from it, which depends, on one hand, on the sum of experienced sensations and, on the other hand, on the specific, individual need for stimulation (Zuckerman, 2000, 2005, 2007; Llewellyn & Sanchez, 2008; Strelau, 2008; Zawadzki & Strelau, 2010; Strelau & Zawadzki, 2011).

Stimulating risk taking is impulsive and characterized by low self-control. The individual does not focus on potential gains – it is of no importance that he or she will lose money or take the last place in a sports competition. What counts is the very participation in a risky situation. Stimulating risk taking entails domination of the emotional information processing system. It is a desire to experience positive emotions that makes the individual take a risk.

### **Cause of Risk-**

Certain acts of behavior will produce aversive or "negative" feedback. This feedback can take a number of forms: physical, social, moral etc. For example, if we drive too fast, the road noise or vibration may increase to a point where it becomes aversive, so we slow down to avoid this physical irritant. We may think of the consequences to ourselves or others of our behavior and the possibility of being caught by the police, snapped by a speed camera, or injuring someone in a collision. Alternatively, reminds our parents or friends attitude towards excessive speed and this social influence may have the same effect of making us slow down.

These factors cause a heightened state of arousal that we find unpleasant or aversive to varying degrees. Ordinarily, we will take steps to reduce this aversive feedback, usually by ceasing to engage in the behavior that produces it. However, Risk Homeostasis theory has increasingly become a buzzword amongst theorists and researchers. The theory suggests that everyone has an optimal or "target" level of risk, which we attempt to maintain, dependent upon changes in the environment. One of the problematic aspects of such a theory is that it is hard to associate the concept of "risk", in any meaningful way, with the world in which we live. How do we assess "risk" in order that we may maintain a set level?

Perhaps a better way of approaching this idea is to take it a step back in terms of the human processes involved, and consider how we interpret our environment. Some physical states or activities, such as falling, will cause certain chemicals released by our central nervous system, and these chemicals will create the feelings of intense arousal. The reason for this is probably the body's way of alerting us to a potentially dangerous situation, which may present a threat to our well-being. It has been shown that when we experience nervous arousal, we look to our environment to interpret that arousal. In other words, the same release of chemicals and consequent feelings of arousal experienced as euphoria or terror, elation or fury, depending on our assessment of what is happening to us at the time. A large number of factors, but principally by our beliefs, attitudes and preferences; that is, our likes and dislikes determines interpretation of our environment. One way of predicting an individual's likes and dislikes is by assessing the factors that together make up their personality.

Some people find the heightened state of arousal pleasant eg: horror film fans, roller-coaster fanatics, and other types of "adrenalin junkie". Indeed, some people enjoy a level of arousal that would be aversive to others. These people will engage in particular risky behaviors in order to satisfy the needs arising from their fundamental biological and psychological make-up.

### **Benefits of Risk-Taking**

While some risky behaviors might not be worth their potential consequences, risk-taking in small doses is almost universally beneficial for your brain and mental health. Novel experiences can help to ward off depression and reinvigorate a stale relationship. Risk-taking is often a prerequisite for starting a new business or launching a new career, and the excitement associated with uncertainty can be a powerful antidote to boredom and even depression. Because dopamine produces a natural high, risk-taking behaviors can help you get a positive mood and a new perspective without the risks associated with drug use.

Bergman,(2001) conducted a research study named Youth Surveys of the British Household Panel Study to examine the Risk taking behavior of young adolescents. He conceptualized wellbeing as a multi-dimensional construct and developed test models of gender and age differences. Using confirmatory factor analysis, he found clear gender differences in risk taking efficacy. He confirmed that wellbeing and some health-risk behaviors linked. He examined how family structure, father's occupation, tenure, and household income, affect adolescent risk taking propensity. While socio-economic factors affect health-risk behaviors and adolescents' reported worries, they have little impact on other aspects of youth wellbeing.

A research study of Managerial Perspectives on Risk and Risk Taking was done by ZurShapira (2008). This study explores the relation between decision theoretic conceptions of risk and the conceptions held by executives. It considers recent studies of risk attitudes and behavior among managers against the background of conceptions of risk derived from theories of choice. We conclude that managers take risks and exhibit risk preferences, but the processes that generate those observables are somewhat removed from the classical processes of choosing from among alternative actions in terms of the mean (expected value) and

variance (risk) of the probability distributions over possible outcomes. We identify three major ways in which the conceptions of risk and risk taking held by these managers lead to orientations to risk that are different from what might be expected from a decision theory perspective: Managers are quite insensitive to estimates of the probabilities of possible outcomes; their decisions are particularly affected by the way their attention is focused on critical performance targets; and they make a sharp distinction between taking risks and gambling. These differences, along with closely related observations drawn from other studies of individual and organizational choice, indicate that the behavioral phenomenon of risk taking in organizational settings will be imperfectly understood within a classical conception of risk.

Byrnes, James P.; Miller, David C.; Schafer (May 1999) conducted a research study on Gender differences in risk taking. The authors conducted a meta-analysis of 150 studies in which the risk-taking tendencies of male and female participants were compared. Studies were coded with respect to type of task (e.g., self-reported behaviors vs. observed behaviors), task content (e.g., smoking vs. sex), and 5 age levels. Results showed that the average effects for 14 out of 16 types of risk taking were significantly larger than 0 (indicating greater risk taking in male participants) and that nearly half of the effects were greater than .20. However, certain topics (e.g., intellectual risk taking and physical skills) produced larger gender differences than others (e.g., smoking). In addition, the authors found that (a) there were significant shifts in the size of the gender gap between successive age levels, and (b) the gender gap seems to be growing smaller over time. The discussion focuses on the meaning of the results for theories of risk taking and the need for additional studies to clarify age trends.

### Objectives

- To assess the level of risk taking behavior in government doctors and nurses.
- To compare the level of risk taking behavior in government doctors and nurses.

### Hypothesis of the study

- There will be high level of risk taking behavior in government doctors as compared to government nurses.
- There will be high level of risk taking behavior in government nurses as compared to government doctors.
- There will be difference between the level of risk taking behavior among government doctors and nurses.

### Variables

Independent Variables- Government doctors and nurses

Dependent variable- Risk- taking behavior.

## MATERIALS AND METHODS

### Sample

The present study was conducted on an incidental purposive of 50 subjects: 25 doctors and 25 nurses from government hospitals in Jodhpur District. All the employees have been in the age group of 25 to 40 with service experience ranges between 5 to 15 years.

### Tools

The tool used for the present study is- Risk taking questionnaire (RTQ) by Dr. Virendra Sinha & Dr. Prem Nath Arora.

### Statistical Analysis

After scoring each data was analyzed in terms of significant of mean differences using 't' test between government doctors and nurses.

## RESULT AND DISCUSSION

**Table 1:** shows Mean, SD and 't' of risk taking behavior in government doctors and nurses.

Groups	N	Mean	SD	t	P
Govt. Doctors	25	147.4	24.90	55.24**	0.01
Govt. Nurses	25	135.8	27.06		

\*\*P<0.01

\*P<0.05

The table-1 reveals that the doctors in government hospitals (N=25) has the mean score of risk taking behaviour variable is M=147.4 with the standard deviation of SD=24.90 and the nurses in government hospitals (N=25) has the mean score of risk taking behaviour variable is M=135.8 with the standard deviation of SD=27.06. The t-value of government doctors and nurses is t=55.24 (significant at 0.01 level) on the aspect of risk taking behaviour.

The present research is been conducted a comparative study between the risk taking behavior in government doctors and nurses. The findings of the study have been present in the result table, showing comparison between the government doctors and nurses with their risk taking behavior. The mean difference of government doctors was 147.4 and mean difference of government nurses was 135.8, the 'SD' for government doctors was 24.90 and for government nurses 'SD' was 27.06. The 't' value obtained 55.24 is

found greater than table at 0.01 level, it can be said that there is highly significant difference between government doctors and nurses with their level of risk taking behavior. This proved the hypothesis that, “There will be difference between the level of risk taking behavior in government doctors and nurses.”

The above table shows comparison made between government doctors and nurses with their level of risk taking behavior. It is been observed that mean difference of government doctors (14.74) is greater/higher than the mean difference of nurses (135.8). This proved the hypothesis that, “There will be high level of risk taking behavior in government doctors as compared to government nurses.” This is because as tendency of risk taking behaviors probably affected by many factors such as socio economic status, education and environment influence. In one of the study, indicate an association between risk taking and medical specialization could be due to an effect of work experience on the physician. Alternatively, risk- taking tendency may affect the selection of medical discipline. Mc. Greey J, Wiebe D.A. (2002) in their study found that risk-taking scores were higher for surgeons and anesthesiologists than for physician of other disciplines.

From above explanation we noticed that second alternative hypothesis is been rejected that “There will be high level of risk taking behavior in government nurses as compared to government doctors.” This is because research suggests that it is nurse’s lack of access to critical information and important relation that limits their influence in the work environment. Over time, being unable to influence patient and policy work decisions leads to nurses experiencing powerlessness and the resulting behaviors of low motivation, decreased investment, lack of risk taking, decreased self-esteem and burnout. (Chandler, 1991, Lasehinger, Finegan & Shamian, 2001).

## CONCLUSION

The present study is been conducted to assess the level of risk taking behavior in government doctors and nurses. For this purpose, a sample of 50 subjects – 25 doctors and 25 nurses from government hospitals and all the subjects involve in the study were males and age from 25-40 years, the risk-taking questionnaire administered on all subjects individually. The data analyzed after individual scoring of each answer sheet according to manual of the test. After scoring mean, SD & ‘t’ value of test calculated to determine the significance of mean differences between the doctors and nurses on risk taking behavior. The independent variable is type of profession (government doctors and nurses) and the dependent variable is level of risk taking behavior of the subjects. The higher score on factor of risk taking behavior indicates that the level of risk taking behavior is high in doctors. The ‘t’ value were found significant at level on the level of risk taking behavior, which means that there is difference in the level of risk taking behavior among doctors and nurses. The level of risk taking behavior of doctors is more as compared to nurses. The reasons behind these results may be factors affecting risk taking behavior namely payment, promotions, colleagues and the superiors.

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