THE PROJECT BOUNDARY AND OCCUPATIONAL STRESS

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Despite advances in project management practices and profession, projects continue to have an unacceptably high failure rate, which may be influenced by project manager being highly stressed and their decision-making capabilities becoming narrowed. The project manager's role necessitates that they occupy the boundary between sponsoring organisation, clients, and other actors involved in the project environment, where they are often subjected to time pressures, project uncertainties, conflicting demands, complex and often dynamic social structure involved in the project environment. In this social constructionist study thirty six senior executives participants were interviewed. It was observed that when discussing the person-environment fit and competencies of a project manager, occupational stress and stress management were overlooked by executive project sponsors as a possible contributing factor for poor project manager performance and poor project outcomes. Despite the growing body of research evidence that has identified occupational stress across many different professions as having an adverse impact on an individual's performance and health, there has been little recognition within project management literature of the impacts of stress or coping strategies for managing stressors within the project environment. This strongly suggests that additional research on stress focused on the project environment is warranted, and that both project sponsors and project managers need to be made aware of the antecedents to stress and consequences of stress both in the personal and business sense.

Keywords: Workplace stress, Project manager, Job performance, Decision making.

1 INTRODUCTION

A project manager commences a project with an underlying belief that with human endeavour, a combination of a supportive sponsor, skilled resources, coupled with suitable prescriptions and process, the planned results can be achieved (Gaddis 1997, Hamel and Prahalad 2013). Nevertheless, due to unexpected events, poor planning, inexperience, and a variety of other reasons, many projects fail to achieve the expected outcomes. In response to the dilemma of high failure rates, industry and academia have been focused on the technocratic and rationalistic aspects of project management, namely the development of prescriptive books and education processes that articulate the hard skills of managing a project (Atkinson *et al.* 2006). However, the prescriptions and process are ineffective at facilitating stakeholder "sense-making" within a project environment, failing to address many of the conflicting issues facing the project manager within the project environment.

Project environments are 'human systems' operating in socially complex environments where a decision or action from one individual or group may affect related individuals and groups. While hard skills may be essential in managing a project, it is the soft skills such as management of the interface boundary between the project, the organisation, suppliers, and the clients that provides the most important contribution that a project manager brings to a project

(Langer *et al.* 2008). In this role the project manager faces countless conflicting and ambiguous pressures as internal and external, and formal and informal interfaces make demands on the project manager which results in the project environment becoming unpredictable and uncontrollable, generating conflict, tension, and workplace stress for the project manager.

2   RESEARCH METHOD

This research is premised on Appreciative Inquiry (Whitney and Trosten-Bloom 2003) and explores the project manager from the perspective of executive management. Appreciative inquiry is an alternative approach to traditional problem solving centred or inquisitional research style of uncovering "what went wrong and who is at fault", it instead seeks "what can be done to make things better". The study is qualitative and based on postmodern social constructionist / interpretivist philosophy (Gergen 1978, Gergen 2009, Lewis *et al.* 2008). The author interviewed thirty-six senior executives who sponsor strategic projects within their respective organisations, the organisations range from telcos, utility providers, postal services, ICT providers, and other large organisations. The executives were selected through a purposive sampling approach (Miles *et al.* 2013) to ensure that the selected participants came from a broad range of industries and thereby enabling the opportunity to 'generalise' the study outcomes to other situations (Lincoln and Guba 1985, Saldaña 2015).

3   LITERATURE REVIEW

Stress in the workplace can impact an organisation's productivity through absenteeism and poor employee productivity, it can negatively impact an individual's mood states and health. Occupational stress can be viewed as the individuals' reactions to the characteristics of the workplace which appear threatening (Kahn *et al.* 1964). It points to a poor "person-environment" fit between an individuals' capabilities, competencies, and the workplace environment, or that the individual is not fully equipped to handle a particular work situation with the "misfit" between the individual and the environment being the basis for an individual's adverse behavioral and psychological reactions (French 1963, Bussing and Glaser 1999).

Since the early 1970s there has been considerable research into occupational stress in professions that are thought to be subjected to dynamic working environments, such as nursing, teaching, and law enforcement. Reseach by organisational behavioural scientists has provided a growing body of evidence that suggests stress is linked to an individual's physical and mental health (Cobb 1976, Morris and Snyder 1979) to coronary heart disease (House 1974, Matteson and Ivancevich 1979); to absenteeism (Margolis *et al.* 1974, Gupta and Beehr 1979); to staff turnover (Porter *et al.* 1974, Gupta and Beehr 1979); and to job dissatisfaction (Lyons 1971, Miles 1975, Beehr 1976). Although project management is a dynamic working environment there has been little research into the implications of stress within the project environment.

Dr. Hans Selye postulated in the 1930s that stress is a non-specific response of human body to any demand on it (Selye 1959, Selye 1976, Selye, 1993). This is supported by more recent research that postulates stress occurs whenever a demand exceeds the regulatory capacity of an individual (Dickerson and Kemeny 2004). The project environment is often unpredictable, resulting in perplexing problems for the project manager and making them susceptible to conflict, tension, and stress which results in many decisions being made under stressful conditions. The decision making of an individual who works under stressful situations is more rigid, simplistic, and superficial (Friend 1982, Cherrington 1994) and research has shown that decisions made under stressful conditions tend to be less well-thought out and much more irrational (Keinan *et al.* 1987, Lazarus 2000, Starcke *et al.* 2008, Galvan and Rahdar 2013) thus indicating that stress has a negative impact on an individual's performance.

A project manager's role spans the boundary between the sponsoring organisation, the clients, and other actors involved in the project environment. This spanning role exacerbates the project manager's tendency to experience incompatible demands and conflicting

expectations from people involved in the project environment resulting in decision making under stressful conditions. Research has demonstrated that an individual under stress will not fully consider the situation and all of the possible options, tending to make decisions in a rushed and unsystematic manner (Janis and Mann 1977, Mather and Lighthall 2012, Galvan and Rahdar 2013) leading to a number of undesirable consequences, including a restriction or narrowing of attention, increased distraction, increases in reaction time, and deficits in the individual's working memory (Driskell *et al.* 1999) and a tendency to develop poor interpersonal relationships (Leung *et al.* 2005). This is supported by researchers who have investigated the impacts of stress on the performance of a variety of groups including: managers (Joiner 2001), police officers (Tang and Hammontree 1992, Collins and Gibbs 2003), students (Wolk and Bloom 1978), nurses (Dailey *et al.* 1986), teachers (Byosiere 1987, De Heus and Diekstra 1999), and human service workers (Wieclaw *et al.* 2006).

4   DISCUSSION

Project management literature is de-personalised and primarily focused on processes and prescriptions and as a consequence information into the impact of stress on the performance of project managers is sadly lacking. Project managers are often confronted with complex organisational and project environments. The complexity of the project environments and its associated occupational stressors, surprisingly was directly addressed by a single participant when they acknowledged that "we've got to be very careful that we don't burn them out". Several other participants obliquely referred to the drivers and impacts of occupational stress by employing expression like "it can be quite bullish at times" and "the job is demanding" when discussing the project environment within their respective organisations. Previous studies of stress have indicated that there is an optimal amount of occupational stress in terms of its effects on an individual's performance (Anderson 1976).

Stress that is higher or lower than the optimal amount results in steadily decreasing performance of the project manager and consequently an increasing risk of a poor project outcome. Performance under stress follows an inverted-U-shaped function known as the Yerkes-Dodson law (Anderson 1976). Figure 1 shows the inverted U-shape function of the Yerkes-Dodson law's curvilinear relationship between the amount of stress felt by workers and their level of performance. Nearly two thirds of the participants were anxious about various aspects of the project manager's person-job fit attributes and their ability, as described in different ways by several participants, 'to get stuff done'. Many of the participants were keen on increasing the job demands on the project manager by introducing more challenges, constraints, and a need to drive creative solutions to resolve problems within the project, there was no recognition that these additional demands may result in additional stressors. The Yerkes-Dobson curve suggests that increasing the demand will tend to increase the project manager's performance as they experience eustress up to a certain level of stress which corresponds to a range of stress for optimal performance.

Increasing the level of stress beyond this point, the project manager's performance will begin to deteriorate. Anecdotal evidence from project managers suggest that this happens quite often when a project sponsor has unreasonable expectations and imposes unrealistic budget, time, and other constraints on the project. The level of motivation to solve a problem under high levels of stress becomes so high that the project manager's perception narrows to only obvious cues, and he/she ignores relevant information and may focus on reducing anxiety rather than performing project management tasks. When experiencing excessive levels of stress, the project manager experiences distress and may become agitated, or emotionally upset, or experience health problems, thus causing a significant reduction in their level of performance and also have negative impacts on their health. At this point the project manager will switch from class 1 problem solving behaviours and focus on class 2 behaviours which emphasise

emotional and defensive coping mechanisms leading to a reduction of task (project management) performance.
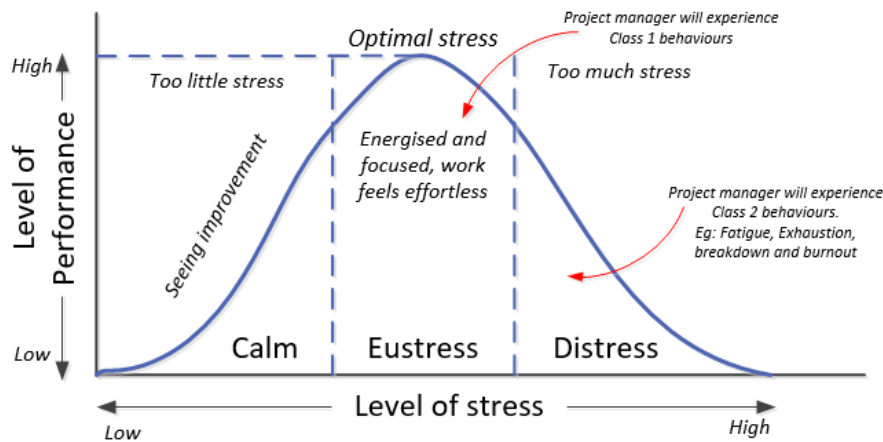

Figure 1. Shows the typical relationship between an individual's performance and stress. Yerkes-Dobson's curve, adapted from Anderson (1976).

Increasing the job demands on a project manager, as suggested by the Yerkes-Dobson curve, tends to increase the project manager's performance as they experience eustress up to a certain level of stress which corresponds to a range of stress for optimal performance. If the level of stress increases beyond this point, the project manager's performance will begin to deteriorate. As previously noted, the level of motivation to solve a problem under high levels of stress becomes so high that the project manager's perception narrows to only obvious cues, and he/she ignores relevant information and may focus on reducing anxiety rather than performing project management tasks.

5 CONCLUDING REMARKS

All participants are project sponsors and it was not clear that they appreciated the relationship between the project and the project manager's performance and occupational stress. It is disturbing that only one participant considered that the welfare of the project manager to be a factor in their description of a competent project manager. It is a little reassuring that several other participants obliquely addressed stress, but it is difficult to explain why virtually every participant overlooked workplace stress. It is possible that they overlooked stress due the organisational cultural factors, perhaps they consider stress to be a normal element within the workplace, or perhaps the topic is taboo, or perhaps the lines of communication between the participants and the project managers are not open and the signs of stress are missed

The project environment is essentially a complex social environment and considering the complexity of project environments, it is surprising that little attention has been given to work-induced stress within the project management industry although there are many studies in other disciplines on stress that have produced a long list of possible antecedents of burnout, the theoretical progress within the project environment has been limited. This lack of acknowledgement strongly suggests that additional research on stress focused on the project environment is warranted and that both project sponsors and project managers need to be made aware of the antecedents to stress and the consequences of stress both in the personal and business sense. In recognising that stress is unavoidable within the project environment, a logical extension of this study will be to investigate the project manager's response to various stress inducers, their resilence, and their ability to regulate their emotions.

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