

# Analysis of the Determinants of Initial Trust on a Virtual Leader

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## INTRODUCTION

In order to tackle constant changes in circumstances, organisations are modifying their working structures, making them more flexible and efficient (Cervantes, 2005). These organisations aim to optimise the human factor, since in recent decades it has become a major source of competitiveness (De la Rosa & Carmona, 2010). Among these factors are certain psychological aspects of the employees that can have a significant effect on the team's performance. One of the most interesting factors is stress (Elizondo, 2005) since it can reduce the competitiveness of the team. In this respect, the International Labour Organization (ILO) states that the cost of stress, among other factors, accounts for 3 per cent of the European Union's GDP (International Labour Organization, 2000). This article focuses its attention on two types of stress that may have significant influence on team performances that have not been examined in sufficient depth in previous literature: (1) stress derived from working in a team (Akgün, Byrne, Lynn & Keskin, 2007) and (2) stress derived from the intensive use of ICT tools (Bozionelos, 2001).

In addition, more and more companies are running projects in virtual work surroundings. Virtual work teams present a new organisational form in which their members are spread geographically and communication is developed electronically (Jarvenpaa & Leidner, 1999). It should be pointed out that stress may be observed in virtual teams as well, since they usually perform high added value tasks, meaning that high standards are expected of them (Sarker & Sahay, 2002).

Another key element in team management is the role of the leader, particularly in virtual teams, where the figure of the manager is considered indispensable

for generating satisfactory results (Schepers, de Jong, de Ruyter & Wetzels, 2011). Furthermore, team leadership is closely linked to the development of trust. Kayworth & Leidner (2000) suggest that the leader plays a basic role in the construction of a scenario in which group socialisation and cohesion are fostered as a means of developing trust and establishing relationships between the members. This definition does not reveal in detail the behavioural aspects that may derive from a greater or lesser degree, in our case, of trust in the team leader. That is why we analyse in this research the possible influence of stress regarding the team leader selection intention variable.

It is also important to discover the aspects that may influence the risk levels that team members perceive in projects to be undertaken (Knight, Durham & Locke, 2001), since a high perceived risk may have a negative effect on the team's results (Miller, 1992). In this research we shall value to what extent perceived risk is affected by the degree of stress.

Finally, we should point out that this research refers to the early stages in the life of a team, when the leader and the subordinates are introduced, having had no relationship previously. This is the moment when the first type of trust (initial trust) which the subordinates place in the leader is produced, as the necessary first step for the group's activities to begin (Hung, Dennis & Robert, 2004). In this respect, the literature recognises the possible existence of high levels of trust in the early stages of the relationship (e.g. Kramer, 1994; Jarvenpaa & Leidner, 1999).

Thus the aim of this article is to study the effect of a subordinate's stress in two of its most important aspects: stress in team work and stress in the use of ICT tools, within a purely virtual working environment, and to analyse their influence on:

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- The generation of initial trust in the team leader.
- The risk perceived by the subordinate in team work.
- Leader selection intention.

To conduct this research we developed an experimental design with hypothetical work teams. The results of this study are useful for the Information Science and Technology field since virtual work teams need information technology for their performance (Cascio, 2000). Thus, we analyse some aspects of work team management that have already been analysed in the context of a face-to-face working environment, but have yet to be considered in a purely virtual environment.

## BACKGROUND

### Initial Trust

One of the standard definitions of trust to be found in the literature is the one provided by Mayer, Davis & Shoorman (1995, p. 712), which states that trust is 'the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party'. The concept of initial trust was proposed by Meyerson, Weik & Kramer (1996) for temporary teams set up to meet a certain objective within a specific length of time. Jarvenpaa & Leidner (1998) used the concept of initial trust to examine virtual work teams; in their study they proposed a set of compartments and actions that needed to be used at an early stage in order to foster trust in the team.

### Perceived Risk

Risk has been defined as the perception of the likelihood of gains or losses to be obtained in an exchange (Mayer *et al.*, 1995). When risk is perceived, trust arises as a mechanism that can mitigate any uncertainty and facilitate exchanges (Corritore, Kracher & Wiedenbeck, 2003; Jarvenpaa, Tractinsky & Vitale, 2000). Cunningham (1967) notes the presence of two basic components in perceived risk. Firstly, uncertainty, defined as being the subjective feeling of an individual with regard to the

possibility that the consequences of a particular choice may not be favourable. Secondly, the consequences, defined as being the set of resources invested that may be lost if the final result is not satisfactory.

## Stress

Stress may be defined as an emotional response in an individual faced with situations perceived as being threatening or dangerous, and it is gaining greater relevance as a consequence of the fact that is a growing phenomenon, particularly in high added value work teams (Akgün, Lynn & Byrne, 2006). In the context of work teams, stress reduces the ability of the team members to evaluate alternatives, procedures and tools, as well as to interpret new information impartially (Mandler, 1982).

## FORMULATION OF HYPOTHESES

### Effects of Stress Arising from Team Work

The leadership of a team has a clear influence on the final result obtained (Hambley, O'Neill & Kline, 2007) and is linked to the development of trust (Kayworth & Leidner, 2000). Thus, in situations where the employees display high levels of stress when working in a team, the figure of the leader acquires great importance, as he or she plays a key role in the creation of a positive team spirit and in motivating trust between the members (Ernst, 2002). In this respect, Bion (1959) found that the group members were looking for a type of 'Messiah' to help them undergo the pressure of crisis and stress. Since stress causes emotional discomfort and mental fatigue in workers, they frequently look for moral support, emotional stability and security rather than material incentives (Voyer *et al.*, 1997). This feeling of support increases self-esteem and trust in oneself, as well as fostering flexibility to deal with stress.

Therefore, individuals with a high degree of stress when working in a team will have more need of a leader figure to guide them and they deposit a higher level of trust in this figure. This argument leads us to our first working hypothesis:

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