**PGD003 - Post Graduate Diploma in Project Planning and Management**

**MODULE 4 – INTRODUCTION TO PROJECT**

**AND DISASTER MANAGEMENT**

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1. **What are the differences between a disaster and emergency?**

A disaster is a term describing a whole range of distress situations, both individual and communal and include fires and drowning, earthquakes and tornados, epidemics and starvation, heat and cold, rats and locusts (Kumar, 2000, p. 72). It is a collective stress situation that happens (or at least manifests itself) relatively suddenly in a particular geographic area, involves some degree of loss, interferes with ongoing social life of the community and is subject to human management (Gist and Lubin, 1989). Disasters affect a significant number of people and exposes them to extreme events to which they are vulnerable, with resulting injury and loss of life, often combined with damage to property and livelihoods. While all negative impacts of disasters cannot be neutralized, efforts can be made in order to reduce their impacts. There are different kinds of disasters: natural disasters are those caused by natural forces affecting whole populations and are defined as events (shocks) that are triggered by natural phenomena or natural hazards (such as earthquakes, hurricanes, floods); human induced disasters result from human activity including technological impacts, environmental mismanagement, and conflict; conflict induced disasters are those produced by violent struggle or threat between opposing political forces (Vakis, 2006).

Emergencies are those unexpected organizational, social and emotional disruptions and subsequent losses in people’s normal life that are triggered by the sudden occurrence of human-induced or natural disasters and with which they are unable to fully cope without outside assistance. Complex emergencies (CEs) are linked to human-induced events associated with natural disaster agents such as droughts and floods. The extensive interdependence of political, economic, and natural systems make even predominantly natural events, complex social events (Weist, Mocellin & Motsisi, 1994). Although epidemics do not commonly follow large-scale natural disasters, when large-scale epidemics do occur, they often occur during CEs of any magnitude, and to a lesser extent following natural disasters. A mass movement of people fleeing conflict, or people trapped in buildings that have collapsed due floods or poor construction give rise to emergencies to either evacuate or provide basic needs and temporary shelter for the affected persons. Often, local emergency responders and facilities may be overwhelmed by the emergency and need external assistance to cope. Emergencies are therefore the disruptions to people’s lives that are occasioned by disasters.

1. **What are the traits a leader in an emergency setting should have?**

Any emergency situation calls for an ability to act fast, to communicate amongst different actors, to mobilise teams, get different crews together and use sometimes raw data in a very fluid situation. A leader in an emergency situation therefore operates with certain time and resource pressures and must understand the scope of the emergency at hand to manage the situation.

**Communication**

In an emergency, a leader must be a good communicator and be able to share and use information effectively: collecting, collating, analyzing, and then deploying it promptly and in a useful form. For instance, in 1998 bombings of US embassies in Kenya and Tanzania killed 224 and more than 5,000 were wounded; the event was referred to as the ‘twin bombings’. It was an event that had never happened and never anticipated in both countries. To manage the situation, one needed to understand the nature of it: is it a chemical attack, gunfire, a bomb or multiple bombs, how many attackers could there possibly be; what weapons are in use; how much damage to the building and how many people in and around could be affected; which crews does one call in first – those dealing with containing the attackers if there is gunfire, evacuation of persons in and around the buildings, and what resources need to be called up? Massive collection of this data can be of little value until it is collated and combined meaningfully, and shared in a useful way. Communication and decision making in an emergency is undertaken in an uncertain environment and when this occurs, a leader must still communicate efficiently to make critical decisions in the allocation of scarce resources, and allow other service providers to make critical decisions on their involvement and resources as well. However, as a leader, one must also listen to other people during an emergency in order to make a proper assessment of the situation and also set up a feedback mechanism between those on the ground and those spread out in other areas dealing with the same emergency so it does not become worse and the plan put in place to address the situation does not lead to even more distress to those involved.

**Problem Solving**

An emergency involves various activities rapidly moving at the same time with a level of uncertainty. In the aftermath of any extreme event or disaster, the required rate of problem solving and information sharing dramatically increases (Kapucu, 2006) and a leader must think very fast through various processes. They need to identify the problem, gather information, map out a course or alternatives courses of action, make a decision, plan and implement the plan in a very short span of time with a situation that changes rapidly. For instance in the case of a fire outbreak, the authority matrix that determines how firefighting crews are called in to fight the fire can either lead to a breakdown of the system or a very quick emergency response. The leader of the response team must be quick to identify alternatives, or ways and means of getting the fire under control despite the obstacles and getting minimal authorizations if they must. To be effective at problem solving, a leader must also have a flexible model of operation and connection that can distribute the information associated with problem solving across the various actors in the emergency system and reduce the possibility of failure, which as Kapucu (2006) posits is very fundamental for the resilience of the community under uncertain emergency conditions.

1. **Stress has both advantages and disadvantages. What are the four major advantages of stress and four disadvantages of stress?**

Stress, is a condition that arises when an individual experiences a demand that exceeds his or her real or perceived abilities to successfully cope with the demand, resulting in disturbance to his or her psychological and psychological equilibrium (Colligan and Higgins, 2005). Feeling stressed can feel perfectly normal especially when there is a deadline or a pressure to accomplish a task. While stress affects everyone in different ways, there are two major types of stress: stress that’s beneficial and motivating — good stress — and stress that causes anxiety and even health problems — bad stress.

**Disadvantages**

**Reduces productivity**

Jamal and Baba (1992) collected data from blue-collar, managerial, and nursing employees that overwhelmingly showed a direct, linear, negative relationship; the greater the stress, the less productive the workforce. Stress has been shown to lower productivity, increase absenteeism, and create pervasive patterns of dysfunction. It also leads to changes in work habits, changes in personality (or social behavior), and job burnout. It is estimated that disorders related to stress annually claim nearly 10 percent of the earnings from businesses (Colligan and Higgins, 2005). Employees experiencing chronic work stress have been shown to develop unstable blood pressure, increased cholesterol levels, muscle tension, diabetes, hypertension, ulcers, headaches, substance abuse, and clinical depression. Moreover, their capacity to concentrate and retain information becomes a problem (Mccraty, Atkinson, and Tomasino, 2003).

**Increases management pressures and consumes vast amounts of management time**

Unclear work or conflicting roles and boundaries can cause stress, as can having responsibility for people. The possibilities for job development are important buffers against current stress, with under promotion, lack of training, and job insecurity being stressful. There are two other sources of stress, or buffers against stress: relationships at work, and the organisational culture. Managers who are critical, demanding, unsupportive or bullying create stress, whereas a positive social dimension of work and good team working reduces it. The impact of these symptoms on organizations is significant as these symptoms lead to hostility in the workplace, low morale, interpersonal conflict, increased benefit expenses, decreased productivity, and increased absenteeism. Management has to spend resources – material, time – to manage staff undergoing stress and it also increases employment costs.

**Affects Health and Performance**

Ill health can result if stress is prolonged or intense, with the negative effects including heart disease, back pain, gastrointestinal disturbances, anxiety and depression. The effect of stress on people’s health has several determinants: gender, ethnicity, capacity to manage psychological stressors, job satisfaction and many other variables. A study to evaluate the relation between stress and stroke found a significantly higher incidence of stroke among men reporting a higher level of stress (Spence, Barnett, Linden, Ramsden and Taenzer, 1999). Not all people deal with stress the same way and therefore health is impacted differently as well. Stress causes cardiovascular disease if not checked, hypertension, it can lead to obesity, mental health breakdown and distress. A project manager has to consider the effect of stress on the project team’s health as it has implications on resource availability, absenteeism from work and engagement with the project that could cause costly delays to the project.

**Advantages**

**Stimulating motivation and alertness**

The physical stimulation associated with stress can enhance performance to a particular level. In the case of students, experiencing negative events does not invariably mean that future goal attainment is perceived as unlikely. In fact, many students experience negative events and feel upset and stressed, but also believe that they have the ability to cope successfully and as a result become motivated to achieve their goals and greater academic stress is associated with greater problem-focused coping and emotion focused coping. (Struthers, Perry, and Menec, 2000). Under stress, students and employees alike will work to find solutions to a problem, whether as a unit or a team and will seek corrective measures more urgently to address the stress factor and to mitigate against a re-occurrence.

**Providing the incentive needed to overcome challenging situations**

Research in institutions of higher learning has intimated that college instructors who understand how students’ motivation and performance is affected by their way of coping can teach students to be more effective copers, and therefore, they will be better equipped to teach students more effectively. In addition, students who take advantage of study skills and time management courses should be able to more effectively manage many of the academic stresses that are characteristic of college life. Thus, institutions of higher education that offer such courses would appear to be serving their students well. Similarly in a workplace situation when a project causes high stress, managers will sometimes provide incentives like paying for training courses, or offering crèche service for its employees so they can increase their capacities in a certain field that can support their understanding of certain aspects going forward, and do not have to worry about the whereabouts of a young child. This would allow staff to concentrate on finding solutions to challenging situations without added on stressors.

1. **Explain any three theories of leadership.**

Leadership has been long studied but has gained new currency in the recent past with leadership academies, leadership courses and training gaining traction in universities and institutions of higher learning. Researchers usually define leadership according to their individual perspective and the aspect of the phenomenon of most interest to them. Leadership has been defined variously as a process whereby an individual influences a group of individuals to attain common goals (Northouse, 1997; and Armandi et al., 2003) and Fiedler (1965) stated that leadership is a personal relationship where one individual directs, coordinates and supervises others in performing mutual tasks (Pires da Cruz, Nunes and Pinheiro, 2011). Theories of leadership therefore abound and three in particular: Contingent leadership, the path-goal model of leadership, and the Leader-member exchange theory (LMX)

**Contingent leadership**

The theory of contingent leadership was developed by Fiedler (1967) and states that the type of leadership exercised depends to a large extent on the situation and the ability of the leader to understand it and act accordingly. This is sometimes called situational leadership. A leader can do very well in one situation but put in another, may fail miserably for various reasons: technical expertise, interest, orientation, teams, understanding of the task and many other factors. According to Fiedler (1967) leadership performance depends as much on the organization as on the leader’s own attributes. Yukl, (1989) asserts that except perhaps for the unusual case, it is simply not meaningful to speak of an effective leader or an ineffective leader: we can only speak of a leader who tends to be effective in one situation and ineffective in another. Contingency theories of leadership analyze how situational factors alter the effectiveness of behavior and the leadership style of a particular leader. The assumption is that neither leaders’ characteristics nor behavior nor styles form leaders automatically. The key is the appropriateness of leadership styles to the situations faced by leaders. Thus, a project manager in construction can fail miserably in an IT project if one’s expertise, team, or motivation do not align.

**The path-goal model**

The path goal model theory states that a leader's behavior is important for good performance as a function of its impact on subordinates' perceptions of paths to goals and the attractiveness of the goals (House and Mitchell, 1975). Leaders are effective because of their capacity to impact upon the motivation of their subordinates, and their ability to perform effectively and satisfactorily. The theory is called Path-Goal because its major concern is how the leader Influences the subordinates' perceptions of their work goals, personal goals and paths to goal attainment. The theory suggests that a leader's behavior is motivating or satisfying to the degree that the behavior increases subordinate goal attainment and clarifies the paths to these goals.

The first proposition of path-goal theory is that leader behavior is acceptable and satisfying to subordinates to the extent that the subordinates see such behavior as either an immediate source of satisfaction or as Instrumental to future satisfaction. Thus, according to House (1971), people are satisfied with their job if they think it leads to things that are highly valued, and they work hard if they believe that the effort they put in leads to things that are highly valued. The second proposition of this theory is that the leader's behavior will be motivational. In other words, the leader’s behaviour will increase effort, to the extent that (1) such behavior makes satisfaction of subordinate's needs contingent on effective performance and (2) such behavior complements the environment of subordinates by providing the coaching, guidance, support and rewards necessary for effective performance. House (1971) stated that leaders are there to define the path that should be followed by their team in order to achieve its goals. It is the leader’s job to guide and help team members to select the best paths towards achieving their own goals and those of the group. The motivational functions of the leader consist of increasing the number and kinds of personal payoffs for work-goal attainment and making paths to these payoffs easier to travel by clarifying the paths, reducing road blocks and pitfalls and increasing the opportunities for personal satisfaction along the path.

**Leader-member exchange theory (LMX)**

The leader-member exchange theory posits that the quality of the relationship that develops between a leader and a follower is predictive of outcomes at the individual, group, and organizational levels. Dienesch and Liden (1986) elaborate that the LMX approach has evolved over time and was originally called the Vertical Dyad Linkage (VDL) theory (Dansereau, Cashman, & Graen, 1973) but more recently has been renamed Leader-Member Exchange (LMX) (Graen, Novak, & Sommerkamp, 1982). The theoretical base of LMX theory is the concept of a "developed" or "negotiated" role (Dienesch and Liden, 1986) and is based on roles that members play within an organization. These roles are negotiated at entry into the organisation or during the execution of the assigned work. Within work units, different types of relationships develop between leaders and other staff of those work units characterised by physical and mental effort, material resources, information and/or emotional support exchanged between the two parties (Liden, Sparrowe, Wayne, 1997). There are those relationships that take place according to the employment contract (out-groups) and those that involve exchange of material and non-material groups that extend beyond what is in the job descriptions or employment contracts (in-groups). Leaders exercising formal authority and allocating standard benefits in return for standard job performance characterize low-quality exchanges. In high-quality LMX relationships, however, social exchange is moved to a higher level, nourished by mutual trust, respect, and obligation (Graen & Uhl-Bien, 1995). In return for exemplary performance contributions (e.g., consistently volunteering to work extra hours to meet project deadlines), followers receive special privileges (e.g., access to key personnel or information), career-enhancing opportunities (e.g., special work assignments), and increasing levels of discretion in doing their jobs. There is therefore a sense of reciprocity between the leader and the employee as task performance becomes a form of currency in the social exchange between leader and follower.

According to research, leaders form the same type of relationships with all the employees/staff/members in an organization only about 10% of the time. Some variables may affect the development of LMX such as: performance, ability, competence, upward influence, member and leader individual characteristics, work-group composition, leader’s power, organizational policies and culture. According to Wang, Law, Hackett and Wang (2005), leaders convey role expectations to their followers and provide tangible and intangible rewards to followers who satisfy these expectations. Likewise, followers hold role expectations of their leaders, with respect to how they are to be treated and the rewards they are to receive for meeting leader expectations. They can also accept or reject, embrace or renegotiate the roles prescribed by their leaders thus they are not static participants simply responding to the leader’s preferences.

1. **How large do you think teams should be and why?**

Organizations are developed in terms of units, departments, sections that define the functions of what they do. Within those units however are a set or combinations of people tasked with certain activities and who can be drawn from different departments and skill sets, in order to accomplish certain tasks. Plovnick, Fry and Rubin (1974) define a “team" as that combination of people whose coordinated inputs are necessary to accomplish a given task or set of tasks like for instance, the top team of a corporation, consisting of the vice presidents of finance, production, and marketing. Kozlowski and Bell (2001) further define teams as (a) are composed of two or more individuals, (b) who exist to perform organizationally relevant tasks, (c) share one or more common goals, (d) interact socially, (e) exhibit task interdependencies (i.e., workflow, goals, outcomes), (f) maintain and manage boundaries, and (g) are embedded in an organizational context that sets boundaries, constrains the team, and influences exchanges with other units in the broader entity.

The number of members is dependent on the purpose for which the team is set-up, the tasks or objectives of the team, the skills or competencies required, the duration the activity would take, the resources available, the level of management the team may need, the scope of the activity, and the personalities that would better blend together to deliver the project. Given projects are different and the teams needed are different, there is not one definite size for a team but when deciding team size, a size of 2 to 20 members would be advisable to keep the team manageable – big enough to accomplish the task, small enough to allow adequate interaction. Fewer individuals allows team members to work through differences and agree on a common plan of action more effectively and can have a clearer understanding of others’ roles and greater accountability to fulfill their roles.

At IDRC, there are teams ranging from 2-20 people depending on the task assigned. For the Scientific Advisory teams that include various skill sets and competencies, most programs opt for six team members of the advisory group to enable sufficient interaction. It also allows each member to have a platform to discuss the projects without having a single person dominate the discussion, and the meetings among the team members can accomplish what they are set up to do efficiently and effectively.

1. **Disasters have an impact towards development. Do you agree with the statement? Using relevant examples substantiate your answer.**

The direct economic damage from natural disasters between 1980 and 2004 is estimated at around US$1 trillion (Stromberg, 2004). Disasters have largely been acts of nature – floods, cyclones, hurricanes, wildfires, tsunamis, earthquakes, volcanic eruptions, and droughts. Some have, however, been caused by human activity through conflicts or disregard for the environment. In a letter to Voltaire dated August 18, 1756, Jean-Jacques Rousseau noted that while the earthquake of 1755 that devastated Lisbon was an act of nature, previous human acts, like housing construction and urban residence patterns, set the stage for the high death toll. Rousseau wrote: “Without departing from your subject of Lisbon, admit, for example, that nature did not construct twenty thousand houses of six to seven stories there, and that if the inhabitants of this great city had been more equally spread out and more lightly lodged, the damage would have been much less and perhaps of no account.”

An already vulnerable population suffering a disaster further impedes the capacity of people to provide even the most basic needs for themselves. The devastation could mean that land that was once arable is now under volcanic ash or water or sunk by an earthquake, water supply has been cut off that would lead to further health hazards. Stephenson and Dufrane, (2002) classify the damage sustained from an event into four categories: (1) Loss of resources; (2) Interruption of programs and switching of crucial resources to other, shorter-term needs; (3) Negative impacts upon investment climates; and/or (4) Disruption of the non-formal sector (local businesses). Disasters have a particularly destructive economic impact in areas in which there are few alternatives for assets that are destroyed or in areas in which the resources already are at critical levels (Stephenson and Dufrane, 2002). Development processes can both increase and/or decrease the vulnerability of a society to hazards.

Cyclone Kina hit Fiji in December of 1992 and became the second-costliest storm to ever hit Fiji, only after Cyclone Winston of 2016. Total losses from Kina were estimated at about $150 million. Suva, the capital of Fiji and its surroundings suffered widespread damage along the coastal area. There was no electrical power, the telephone system was affected, there were water problems, including water contamination due to heavy flooding, which also caused the collapse of two bridges on the road from the city to the international airport, which was then closed. Before Kina settled, another cyclone was on its way to the northern part of the Fiji islands, in the span of 24 - 36 hours (UN Department of Humanitarian Affairs, 1993).

The government declared the cyclone a disaster in most parts of Fiji. Villages were totally submerged and numerous houses washed away. The most adversely affected was the agricultural sector, which had implications for food production for local consumption and export crops. The main crop and livestock producing zones on Viti Levu, which supported over 60 percent of entire population, were most affected and it would take a length of time for crops and livestock to recover fully. This raises the cost of living, manufacturing, and livelihoods are retarded as agriculture forms the greater base of the economy in the most affected areas. Add to the loss of infrastructure, Fijians had to take some steps backward first to fix what was broken and restore access to electricity, telecommunication, bridges, airport infrastructure and the road network in agricultural zones, drain the water off soils and ensure that the flooding did not bring an even greater disaster of a health epidemic that would also affect the population’s capacity to recover. Fiji being an Island, tourism has a big impact on the economy and this also took time to recover as those areas were submerged in water therefore the country incurred losses that cannot be recovered, and all they could do is count their losses and start to rebuild. Fiji had to stop any agenda it may have had for two years to try and rebuild and bring it up to where it was before the cyclone hit and this pushed back the development agenda.

A magnitude 7.5 earthquake struck Indonesia’s Central Sulawesi province on Sept. 28, 2018, triggering a tsunami and landslides that caused widespread destruction and loss of life. More than 2,000 people are known to have died and at least 2,500 seriously injured, according to the Indonesia disaster management agency. About 1.5 million people in Central Sulawesi were likely affected, 65,000 houses damaged or destroyed, more than 330,000 people rendered homeless or without adequate shelter (World Vision, 2018).

Indonesia is an archipelago that includes thousands of volcanic islands. The Indonesian government and humanitarian organizations worked together to ensure protection for children to prevent trafficking and exploitation. Like their adult caregivers, they needed shelter, clean water and sanitation, and access to medical care, but they also needed support to return to play, education, and a sense of security.

The government, with the help of a Multi Donor Fund, concentrated its efforts on rebuilding infrastructure in Indonesia, so the basic essential resources could be accessed. It also worked to repair or rebuild roads to hospitals and schools so they could continue in their duties of caring for and educating the populace. Unfortunately, this 2018 earthquake only slowed the efforts made by Indonesia at eliminating its poverty-related problems. Then there was the possible hit to the budget from reconstruction costs and to the country’s tourism industry, as well as its currency that had already been under pressure from an emerging market currency sell-off (Salna, Rusmana, and Rahadiana, 2018). It became difficult for Indonesia to recover given the precipitation of all these issues and in the midst of them, the poverty reduction agenda had to be put on hold to recover from the earthquake.

1. **Communication is an important attribute of leaders in project management. Citing relevant examples explain your view of the statement above.**

Communication can be viewed as a metaphorical ‘pipeline’ along which information is transferred from one person to another (Axley, 1984). It is the lifeblood of any system of human interaction as without it, no meaningful or coherent activity can take place (Thomason, 1988). A project leader needs to be able to communicate with the stakeholders in a project, be they the sponsors of the project, those undertaking the day to day implementation, communities or clients. Information on a project must be on time, in the correct format, to the correct audience, in a language that is understood, through an acceptable means, or there can be miscommunication and misunderstanding and reputations damaged. Zerjav and Ceric (2009) posit that communication also significantly depends on local business practices, informal channels of interaction between project participants such as building trust and maintaining control in organisational hierarchies, technologies employed for that purpose, and many other factors. The goal should be to achieve more efficient mechanisms of communication.

Communication happens on different levels with different stakeholders. A project manager has to communicate, not just with the sponsors of the project or the community where the project will take place but also the clients that are targeted, especially in large manufacturing or production projects and programs like delivering an aircraft for various airline companies. The 787 Dreamliner aircraft became the fastest selling plane in aviation history. The Dreamliner program involved dramatic shifts in supply chain strategy from traditional methods used in the aerospace industry. Boeing utilised novel manufacturing techniques but had ongoing issues with meeting delivery deadlines as a direct result of its decision to make drastic changes in the design, the development process, and the supply chain associated with the Dreamliner program simultaneously.

Once the project managers at Boeing recognized the risks associated with innovative product development, proactive customer relationship management should have been a critical cog to help customers set proper expectations when placing their orders for the aircraft. Communication with customers throughout the development process could have enabled the company to manage customers' perceptions throughout the entire product development process. Setting proper expectations and communicating about the delivery schedules could have encouraged the airlines to manage their aircraft replacement schedule differently, like order more 737s and 747s and fewer 787s (Denning, 2013). Through continuous engagement and open communication about the challenges and Boeing's contingency plans, it would have been plausible for Boeing to manage its customers' perception and its reputation better. By maintain open and honest communication with its customers regarding the actual progress, technical challenges, and corrective measures, customer trust, which would have improved their loyalty in the long run would have been gained.

In addition to the communication breakdown with clients, rather than plan for face-to-face communications and on-site communications in the complex production chain on which the company settled, Boeing introduced a web-based communications tool called Exostar in which suppliers were supposed to input up-to-date information about the progress of their work. The tool was meant to provide supply chain visibility, improve control and integration of critical business processes, and reduce development time and cost. Instead of people communicating with people face-to-face, the computer itself was supposed to flag problems in real time. Suppliers did not input accurate and timely information, in part due to cultural differences and lack of trust. As a result, neither suppliers nor Boeing itself became aware of problems in a timely fashion. The result of this failure to have a communications strategy was having disgruntled customers. A project manager must have a handle on communication with and from all stakeholders and regularly check progress indicated against actual deliverables and be able to communicate them effectively.

In construction management, project participants communicate according to their roles during the project lifecycle. Many of the problems that develop in construction projects are a result of both the temporary and inter-disciplinary nature of project teams. This complicates an already problematic communication environment in which technical language, an adversarial culture and noise/distraction all combine to prevent straightforward information flow from one party to another (Dainty, Moore and Murray, 2006).For instance, an architect and a project manager concentrate on how a particular design detail should be. The two communicate as they seek to achieve a consensus on the implications of the detail for the production process, and also of any necessary changes to the detail. This consensus-reaching process may be facilitated by a variety of communication-enhancing tools and forms of information, such as a visual representation of the design detail. The communication process involves two specialists utilising their common understanding of industry-specific terminology and concepts through verbal and non-verbal channels. This common understanding will have taken both parties several years to achieve as they moved from novice to expert status through their experience of working in the industry. Leading on projects therefore requires a good listener and a technical understanding of the work at hand so a leader can make sound decisions from information gathered from the experts that allows the project to move forward.

1. **Discuss the techniques that leaders use to reduce or alleviate stress in places of project management**

Project management occurs in environments with many constraints and teams have to navigate through those constraints and changes to projects that must be accommodated, personalities that could clash, skills that need to be employed that the teams have not had any training on, health issues among team members and requirements that can from time to time be unrealistic. These issues and challenges can be causes of stress for project managers and project teams and can lead to failure of a project if not well managed. Moderate levels of stress improve our performance but high levels reduce our efficiency; hence, as project managers, being able to moderate stress levels is crucial to achieving high levels of performance (Steven, 2010). There are several tools a leader can employ to help themselves and their team overcome stress.

**Humour**

It is said that "laughter is the best medicine". Laughter is one of the best tools available for stress relief and has a similar effect to an antidepressant as it releases endorphins in the brain, helps form bonds, fosters brain connectivity, protects the heart. Humour also gets your brain thinking and working in a different way - it distracts you from having a stressed mindset. Taking some time out to laugh with team members can greatly reduce stress. A leader can for example share their own humorous stories or add a joke into a meeting agenda but keeping it clean and non-offensive.

**Brisk Walk and rehydrate**

Short of doing some vigorous exercise, a brisk walk also offers the same benefits for stress relief as laughter. A brisk walk, especially on trails, forest, green spaces relaxes the mind as it wanders through nature. It provides some needed distraction, and helps improve moods. A quick walk outside is all that is needed to help get team members away from the stress briefly - and getting out of the office into natural light and the fresh air helps as well (Alexander, 2017). In the course of the walk, carrying a bottle of water or taking water before or after would also help to refresh one’s mind and body and allow for some relaxation.

**Quick nap or get Coffee or tea**

Taking breaks throughout the day helps teams reduce stress and strengthen minds and hearts. The key though is to completely remove yourself from thinking about and doing work. Taking a nap or breaking for some tea or coffee gets one away from work-related things. A leader should encourage project team members to get up from their desks and do something that is relaxing like get coffee, and talk about non-work topics with other colleagues. During a team meeting in which one is extremely frustrated by seeing wasted time or the personal posturing of a team member, allow mental “check out” of the meeting as much as is appropriate but, obviously, this approach is to be used selectively and discretely (Steven, 2010).

1. **Discuss any five effective leadership principles that should be adopted in project management**

Leadership is complex, regardless of the organization or the people. Great leaders help build an organization’s human capital, then motivate individuals to take concerted action. Uhl-Bien, Marion, McKelvey (2007) argue that leadership should be seen not only as position and authority but also as an emergent, interactive dynamic—a complex interplay from which a collective impetus for action and change emerges when heterogeneous agents interact in networks in ways that produce new patterns of behavior or new modes of operating. Being a leader is about getting things done through, and with others according to Nahavandi (2015). To encourage and reward performance, organizations need to reward the leadership activities that will lead to effectiveness. There are principles to which leaders should adhere in order to be effective.

**Know yourself and seek self-improvement**

The Greek philosopher Socrates is most remembered for the phrase, ‘know thyself.’ Knowing oneself means they understand their weak points, strengths, needs, and drives. Those who know themselves are neither very critical of themselves or others but they are honest with themselves and others. In knowing oneself, a leader knows what areas of themselves they need to work on and recognise how their attitudes and behaviours affect them and those around them. They also seek to strengthen their strong points and find ways to navigate around their weak points whether through extra formal schooling, networking with those with the qualities they desire to have and taking steps to ensure that they become better people because the jobs and lives of others may very well depend on their skills and capabilities as leaders.

**Be technically proficient**

A leader must know their work, the objectives of what they do, how they will do it, what teams they will need, where to find information, how to disseminate it and how to relate to people to deliver the end product. Technical proficiency infers very task specific skills and covers expertise in a specific field, for example, Information Technology, finance, human resource, public relations, accounting and marketing. However, not all technically proficient persons make good leaders. Leaders must be able to combine their technical know-how across a range of activities for them to be good leaders but also have the depth required for the core task or objective to which they are aiming.

**Make sound and timely decisions**

Leaders find themselves making many decisions on an ongoing basis. Some are quite easy to deal with. However, some decisions require a lot of consultation. Leaders should be good at problem solving in terms of identifying the issue, challenge or problem and developing solutions to address them. This allows team members to have confidence in their leader’s capabilities. Problem solving for leaders may cut across technical, human, conceptual or political skills, and they may also need to deal with issues of motivation and discipline, such as determining why a particular employee's performance is dipping and how to improve it. According to PMI (2017), before a leader makes a decision, there should be a comprehensible strategy identified containing rules, regulations and directions. When decisions are taken in this manner, even the person occupying the smallest position in the organization will comprehend the choices and judgments made by a leader.

**Know your people and look out for their well-being**

Leadership is ultimately about people. A leader has to be in a sense very well-tuned to human psychology in understanding they types of people with whom they work. Nahavandi (2015) posits that leaders alone can accomplish nothing. It is the strength of their followers that moves history. It is the army of foot soldiers that achieves victory. It is the hard work of employees that turns a profit in a faltering company. It is the initiative of volunteers that achieves an institution’s goals. Even though attention to internal process issues, such as the emotional state of staff or project team members, has always been considered a factor in leadership, it is increasingly seen as one of the main functions. This function is particularly critical to maintaining positive outlook in uncertain and ambiguous situations. Project members or staff observe their leader’s emotional reactions and take their cue from them to determine appropriate reactions.

**Keep your workers informed**

Leaders should have the capability to convert ideas into words and performance, and must be able to listen and ask questions, have good presentation skills both in written and detailed formats. Keeping employees and other managers informed reduces doubts, conspiracy theories, and creates a mutual respect in a working environment especially where a team is working on a project. Changes to be undertaken should be communicated to those working on the project in a timely manner otherwise a lot of undercurrent information can split the team and make the leader less effective in directing the project team. Keeping workers informed also implies that the leader is cognisant of the fact that the employees also have other responsibilities and need to plan around changes to work schedules and demands to manage their lives. Abrupt, ad hoc requests and changes that disrupt their lives can be causes of stress for workers who would not be able to meet what is demanded of them if they are not properly and adequately informed in good time.

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