

Yet another role for team building and work motivation - enabler of knowledge creation and knowledge sharing

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Abstract

This paper reports on the methodologies used and the findings of the research conducted by the Enterprise Social Learning Architecture (ESLA) Task into learning processes occurring in a strategic headquarters within the Australian Defence Organisation (ADO). The research focused on identifying processes and strategies that enable social learning in view of the socio-technical environment within which people work and learn. It is recognised that people are indeed essential components of the ADO's capability; this 'people' capability is dependent on effective force structure and the forces' level of preparedness. Similarly, effective social learning capability is also dependent on satisfactory force structure and in itself is a form of 'people' preparedness. Therefore, the identified social learning enablers have been assigned to three categories: Force Structure, Capability and Preparedness. In particular, the paper focuses on teambuilding strategies that facilitate knowledge generation and sharing. The enabling processes and strategies discussed are: team leadership, communication climate, impact of recognition and reward on team building as well as team socialising, and finally, goal alignment. The findings strongly suggest that there is a closely coupled relationship between effectiveness of these enablers and knowledge sharing and generation.

Introduction and Research Context

The management literature of the 1990s reflects profound and continuous changes in the business climate due to uncertainty. In this world of uncertainty, organisations need to continually renew, reinvent and reinvigorate themselves in order to respond creatively to market forces. This process of reinvigorating requires shifts in organisational structures and processes. Organisational knowledge, or rather, how the organisational knowledge is put into practice, is a critical issue for organisations and for business activity.

According to the White Paper (the White Paper outlines the strategic issues for the Australian Defence Force (ADF) and presents the government's defence policy for the next decade and beyond) (Defence White Paper 2000) people are capability, and the strength of Australia's military forces has always been the quality of its people. Effective organisational learning (social learning) is a capability that can enhance the Australian Defence Organisation's (ADO) ability to acquire, develop and generate knowledge.

In today's business climate of continuous changes and uncertainty, organizations need to respond creatively to market forces, and so organizational knowledge, and its effective incorporation into the organization's practice, has become a critical issue for business activity. Additionally, employees no longer remain in one organisation for the majority of their working lives, and so organisational knowledge literally 'walks out the door' into that of competing organizations. Many organizations address these issues by investing heavily in information technology, but often without substantial success. Too little regard for the ways in which people in organizations go about creating and acquiring,

sharing, and making use of information is one reason for this lack of success (Bednar 2000); (Davenport 1994); (Vandeville 2000). Gaining the *knowledge edge* requires an understanding of elements that foster the creation, sharing, and management of knowledge within and between organisational groups. One of these elements is that of employees' *motivation* to come up with new and better ways of working, their *willingness* to voice and discuss innovative ideas, and their willingness, generally, to share information and corporate knowledge with their organisational colleagues.

Enterprise Social Learning Architectures Task

The Enterprise Social Learning Architectures (ESLA) task is a four-year research study investigating, within the Australian Defence Organization (ADO), the procedures that facilitate generative learning – learning that enhances the enterprise's ability to adjust to dynamic and unexpected situations and to react creatively to them, and how it is transmitted across posting cycles, different work situations and time. The term 'social' learning has been used to reflect that organisations, organisational units, and work groups are social clusters, as are study groups and task groups, and thus learning occurs in a social context. The study's long term aim is to develop architectures to support the development of organizational and information systems that enhance organizational learning and facilitate knowledge management. The study has undertaken research in three settings: a tactical headquarters, a joint services strategic headquarters, and most recently a single service strategic headquarters. At ICCRTS of 2000, the ESLA team reported on progress to date and focused on elements of workplace culture that foster generative learning within organisational teams. This paper updates the ESLA findings by reporting both qualitative and quantitative results from the single service strategic HQ, with specific emphasis on the role of team building and morale on employee motivation and willingness to share knowledge and voice their ideas.

Research Methodology

Quantitative surveys were used in both joint service and single service strategic HQs. In both settings the total population was surveyed and the response rate in the joint HQ was 96.7% and in the single service HQ, 71%. Ethnographic techniques in the form of fieldwork were also used in all of the settings because of the importance of context and the social aspects of the process of learning. Observations were made of the work taking place in different settings, and where possible, directed questioning was used to clarify issues. Extensive unstructured interviews were also undertaken with a sample of personnel from the joint and single service strategic HQ. A stratified sampling technique was used to ensure an adequate representation was achieved. The specific characteristics that were of interest were: branch and directorate (sub-branch) affiliation, gender, rank, whether military or civilian, work location, and duration of placement. The main advantage of this type of sampling was that it ensured that the relevant variables were represented. In total 48 interviews were conducted in the single service strategic headquarters that is the subject of this paper.

All research data, therefore, is triangulated by methods of data collection, by researcher (a multidisciplinary team) and by each study's functional role (each study has taken place in different locations as well as in functionally different sections of the ADO).

Findings

While people are indeed essential components of the ADO's capability, this 'people' capability is dependent on effective force structure and the forces' level of preparedness. Similarly, effective social learning capability is also dependent on satisfactory force structure and in itself is a form of 'people' preparedness.

Therefore, the identified social learning enablers have been assigned to three categories: Force Structure, Capability and Preparedness. Within the *Force Structure* category, the enablers have been grouped under two social learning constructs: Organisational Culture, and Job Satisfaction and Morale, as these are essential components of the force structure in terms of recruitment, retention, motivation for, and sustainability of social learning.

Within the *Capability* category, there is a single, but pivotal, social learning construct – Knowledge Management. Knowledge Management facilitates the acquisition, construction, generation transfer, and sharing of knowledge among members of an organisation, and as such, is a vital ADO capability and a fundamental requirement for effective social learning. Finally, within the *Preparedness* category, the enablers have been grouped under two social learning constructs: Team Building, and Professional Development, as both of these constructs are considered essential for a force appropriately prepared for operations in terms of social learning readiness and sustainability.

Just as *Force Structure*, *Capability* and *Preparedness* impact on each other in cyclical, recursive and iterative ways, so the identified social learning enabling processes or strategies can appear in more than one category as they can play a role in supporting a number of social learning constructs. In some cases, the same enabler can be effectively applied within an organisation to support one of the social learning constructs, but may only be partially effective, or even ineffective, in supporting another social learning construct.

The five basic constructs: Organisational Culture, Job satisfaction & Morale, Knowledge Management, Team Building and Professional Development of Individuals constitute enabling strategies and processes to facilitate social learning (see Figure 1). These are referred to as *Enablers*. A sixth enabler, Communication, has been referred to in earlier reports of the ESLA findings; however, communication processes are inherent rather than separate from the other social learning enablers and so have been incorporated into them.

The elements in Figure 1 overlap in order to represent the interrelationship between all the enablers. Further details of these social learning enablers, and of the findings on the role of trust and organisational cultural elements in the social learning process occur elsewhere (Ali, Pascoe et al. 2002).

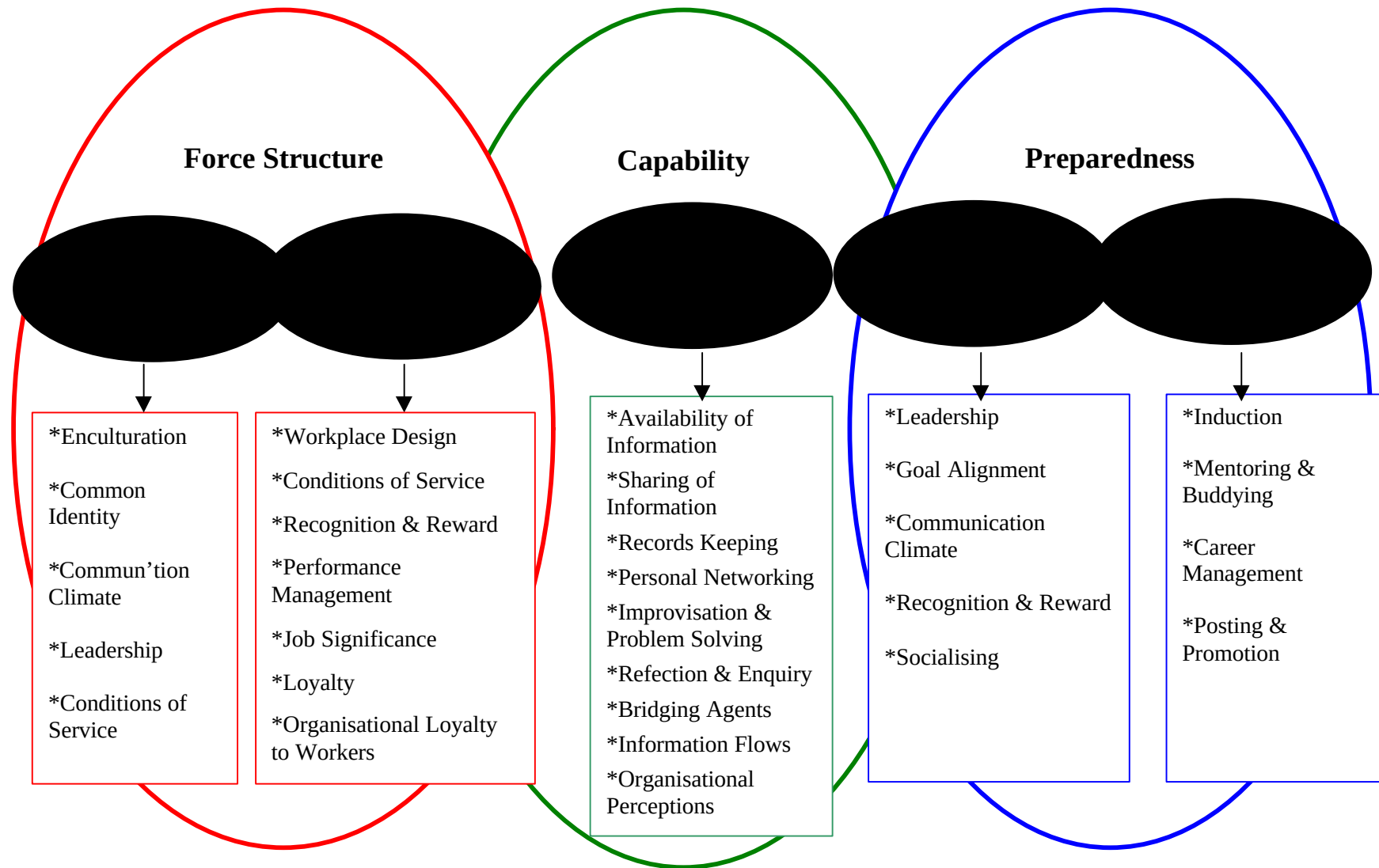
Findings have resulted in the following set of overarching values that facilitate effective social learning:

- Empowerment;

- Trust;
- Forgiveness (forgiving mistakes and facilitating knowledge construction on the basis of lessons learnt);
- Cultural cohesiveness;
- Commitment (which includes a mutual commitment and loyalty between the employee and the organization)
- Openness of the decision making process; and
- A culture of information sharing.

Discussion of the role of these overarching organizational values in nurturing learning processes and strategies can be found elsewhere (Ali, 2001).

Figure 1 Enablers Contributing to Effective Social Learning



The impact of team building on knowledge management and generation of new knowledge.

Working together is essential for organisational success, for effective social learning, and for successful problem solving. Within this context, it is useful to understand the difference between the terms ‘team’ and ‘teamwork’, and to recognise that the concepts captured by both terms are prerequisites for productive collaborative work. ‘Teamwork’ means an individual is accountable, it means sharing information, and working better together. On the other hand, in a ‘team’ everybody holds themselves and each other accountable and performance is measured against collective output. In this relationship of interdependencies, communication and trust play vital roles (Drucker, 1999).

As a result of observing work teams in the three HQ settings a number of specific processes and strategies were found to comprise Team Building. These are: Leadership, Communication Climate, Recognition and Rewards, Socialising, and Goal Alignment.

The term ‘Team Building’ for this process of social learning has been used to represent the behaviours that occur within teams that bring members together into a cohesive whole. The specific processes and strategies that comprise Team Building are discussed below. However, we first provide an overview of results from the interview and survey data, as well as from the ESLA team observations that demonstrate the overall strong team coherence, team spirit and associated attitudes prevalent within this HQ. Figure 2 below depicts this data:

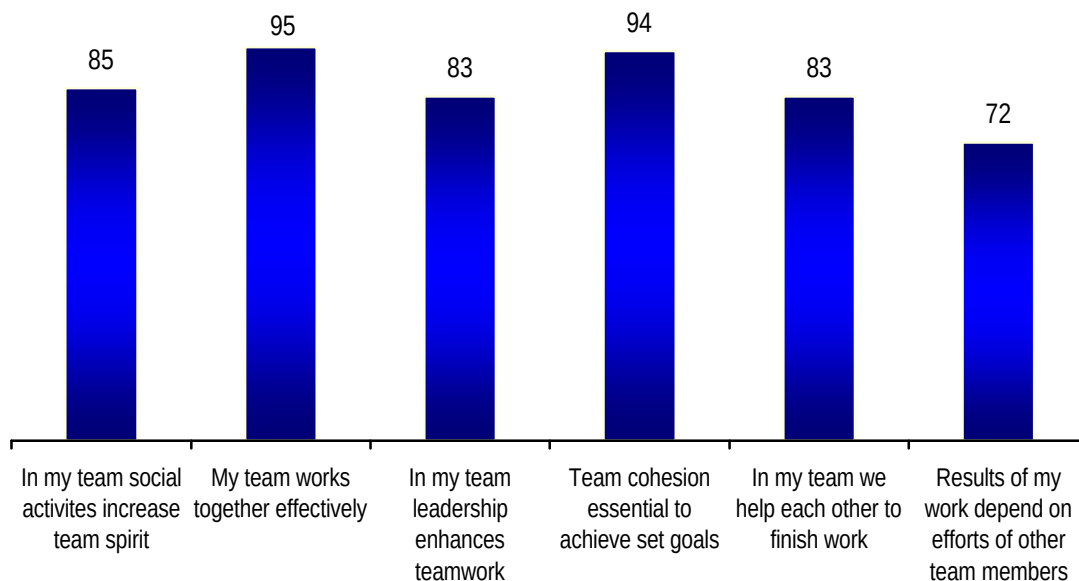


Figure 2

The ESLA researchers observed that when demanding tasks needed to be finished within a short time frame, this gave rise to mutual support, encouragement and a desire to help the team to succeed. Further, as team members participated to achieve the set objectives

and were successful, their motivation increased. For instance, the ESLA team was often told that team motivation was the highest when they delivered results in spite of difficulties, and when the tasks generated personal challenge. The survey results also strongly support our observation with 94% agreeing that team cohesion is effective in achieving set goals.

Leadership

The ESLA team observed that the qualities of certain leaders and the team cultures these leaders created were associated with high levels of trust within those teams, and a generally positive attitude toward collaboration and teamwork. For instance, in teams characterised by cohesiveness and strong team spirit, the leaders took on the role of a facilitator rather than a traditional command-control role, thus allowing people to shape their work themselves. These leaders empowered people to go and seek out their own solutions rather than mandating actions, and they positioned people in ways as to leverage their unique strengths, to make their own decisions and have their own responsibilities. Moreover, these leaders used frequent two-way feedback to convey their expectations, as well as asking the staff to provide feedback on their own performance. The ESLA team was told that this type of leadership also gave the staff a tremendous opportunity to explore, improvise and learn.

The ESLA researchers were given examples of team leaders who motivated people by providing every opportunity for their personal and professional development by sending them to conferences and training, regardless of whether they are about to go on extended leave or not. These leaders were able to motivate people in order to bring the best out of team members and to achieve results. Additional methods of team motivation that were observed included celebrating individual and team achievements, and always looking for something positive to say about each team member.

Leaders of successful teams were able to set realistic expectations of their team. Numerous staff interviewed said that knowing what their leaders are expecting of them is one of the most important factors for successful teamwork because it allowed the team to have achievable goals. Furthermore, staff were constantly kept informed and in the loop by emails, drop-ins and meetings. In many cases, at the onset of a new posting, leaders were forthcoming with their vision and expectations of the team, as is indicated by the following:

“...the first day he started, he sat us all down in a big meeting for about two and a half hours and he said this is what I expect of you and he had the white-board out and then we could let him know what we expected of him and it was a good way to start.”

However, this practice was not prevalent throughout all the directorates in the HQ. The survey data points out that 58% of respondents felt that their supervisors do not communicate their expectations of day-to-day work requirements well. The interview data and the survey data clearly indicate that good communication skills were considered to be the most valued factors of effective leadership, as stated by one of the informants,

“...if I pick on three things, I’d say communication skills, observation skills, you know your ability to observe and to take in data, and then also a bit of a brain on your head so you can make sensible decisions, on the basis of that.”

In most instances staff spoke very highly about their leaders and 83% felt that in their team good leadership enhances teamwork; however, the ESLA team was made aware that “...some of the people we have in positions of authority don’t have a schmick about manpower management, they really don’t. Some are good, I mean it’s not a manual skill, it’s an emotional skill.”

Organisational communication climate

The overall culture or climate of a team is greatly influenced by the communication behaviours that occur within that team. Organisational climate can be described as a measurement of organisational attributes that include shared perceptions and sets of conditions. Overall, it can be described as the “internal social psychological environment” or the “shared, holistic, collectively defined social context” that has emerged within the organisation over time (Denison, 1996). There is evidence that the more favourably perceived the climate is, the higher will be levels of organisational commitment (that is, a strong belief in and acceptance of the organisation’s goals and values; a willingness to exert considerable effort on behalf of the organisation; and a strong desire to maintain membership in the organisation (Mowday, 1979); (Guzley, 1992).

Observations of meetings in the HQ indicated generally positive climates. There was use of inclusive language and other types of behaviours that were generally supportive of other team and organisational members. There was a relative lack of attempts at control or misuse of power, and indifference or disinterest in what others said. The collegial and cooperative type of interaction observed at meetings suggests the presence of trust. Moreover, this type of interaction would further engender trust, given the relative lack of conflict, competitiveness, and misuse of power.

The ESLA team regularly observed the use of humour, verbals and nonverbals indicating genuine interest in the issues under discussion. Meeting participants also offered helpful suggestions, and there was relatively free dialogue and use of questions. Communication strategies were used to accommodate rather than suppress fellow team members. For instance, participants generally listened to others without interruption, avoided judgmental language in responding to others, and offered their opinions and ideas. It was evident from these behaviours that the overall HQ issues at hand, rather than personal issues, mostly dominated proceedings.

The quantitative data supports this with 96% of respondents saying they felt free to ask work-related questions of other team fellows without fear of being judged.

“The newer people are less confident to speak, and so you have give them more exposure to do that, and also reassure them that ... their view as a younger member of the team is actually very important”

A large percentage of respondents (96%) indicated that the use of humour was mostly a positive aspect of how their team operated. This positive sense of humour allowed them to plough through the many issues they faced on the path toward goal achievement. (Miller 1996), advocates that teams need to establish the ground rules or norms about acceptable joking and teasing. What may seem funny to one may be incredibly painful to another. Our survey data indicates that 25% of respondents felt that in their team humour was used to ridicule other team members, "...because everybody is so relaxed, you just ask questions and you get answers. And of course they'll take the mickey out of you. You expect that, because we do it all the time. We're always throwing jokes at each other". Peter Alsop, a psychologist, cited in (Miller 1996), says that ridicule is somewhat socially acceptable way of controlling people. It provides a release of laughter, but it also inhibits trust. Sarcasm, on the other hand, is anger disguised as humour with no positive intent and teams that are attempting to collaborate in creating an empowered and trusting environment need not to use sarcasm or ridicule.

Many teams the ESLA researchers observed engaged in activities that allowed them not only to get to know each other better, but more importantly, to reflect on their mode of operation, goals and strategic decisions. Moreover, these activities were carried out in the spirit of genuine collaboration and respect for team members. The following quotes from the interviews describe it well:

"...by involving as many of the relevant players as I can, because I don't profess to be able to learn the right answer, or provide the right answer, so I try and get people to bounce off it, and then either let them drive me, or me drive them, such that as an organisation or as a team, we learn things"

"...he was king of stupid questions. And we loved him because he was not afraid to come in and say, 'Look, I don't understand this. It might be stupid, but I don't get it.' And a lot of times he'd come in and say, 'Here's my stupid question.' And you'd go, 'Actually, that's a good question and we didn't think of it', you know, which is exactly why you encourage it. And that's how this sort of area works..."

This process of questioning and brainstorming reflects a positive communication climate and facilitates team learning through expression of diverse viewpoints, opinions and discussion of conceptual differences. On such occasions humour was used to diffuse tension and it paved the way for creative problem solving through better collaboration amongst team members.

The methods team members use to deal with workplace conflict can serve as an indicator of organisational communication climate. This issue was investigated in both informal interviews and through the quantitative survey. Over half of the participants (56%) felt that conflict was well managed within their teams. Some interviewees said that although there was no specific person or advisor to turn to, people themselves felt empowered

enough to deal with it on an individual basis. We were given examples of innovative and prudent strategies to deal with workplace conflict:

“...I’ll go away and I’ll talk myself out of it and I’ll have a cup of coffee or something and then I’ll try and come up with a positive way of dealing with it and it’s something that I’ve consciously tried to do over the years because I thought that was the best way to work and now it’s getting to the point where it’s becoming second nature for me, which is good...”

Feedback on one’s performance or enquiries can be another indicator of communication climate. Eighty-two percent of respondents find it relatively easy to get feedback from their supervisors when asked for information. Some of the supervisors used two-way feedback as a mechanism to motivate staff and to improve performance. As one of the supervisors said “ [I was] telling them what their strengths were all the time, working on their weaknesses... briefing, debriefing, trying to tell them what the task was and what was expected of them and then when we fell short analysing it and working together.”

Even negative feedback, if it is presented constructively, provides guidance for future work behaviour. The relevance to social learning is that constant and meaningful feedback is not just fundamental for finding new and better ways of doing work, but it also fosters trust and this further encourages staff to try out new and better ways.

Recognition and reward

One of the ingredients for building a team’s performance is the power of positive feedback, recognition and reward, and it applies not only to big tough jobs but equally to quiet, unassuming day-to-day tasks. (Mitchell, 2000) points out that making employees feel appreciated, focusing attention on their good ideas, inviting them to extend themselves and saying, ‘thank you, we know that you are a good employee, we value you and your work’, is a big factor in motivation. A positive self-image and self-confidence is one of the steps towards effective motivation. A person who feels motivated and feels good about herself/himself acts with confidence. Individuals empower themselves by receiving positive feedback and add to the empowerment of others when recognition is given freely (Katzenback 1993).

An issue that came through very strongly during the ESLA research is the lack of day-to-day recognition of one’s work. The research data indicates that recognition of one’s achievement and good work is well established in some teams; however, this practice is not widespread throughout the HQ. In some directorates the managers use recognition and praise as an empowering tool within their teams; however, the same managers are not, themselves, recognised by their superiors.

“[Recognition] it’s something that your boss says to you each day, saying, ‘Jeez, that piece of writing was really good, mate. You did a great job there.’ It’s that sort of mentality that we have to get through to our senior managers...”

Most of the respondents (86%) indicated that recognition comes foremost from their immediate team members and 62% said that their supervisors always acknowledge their

positive contribution at work (Figure 3). The researchers were told that in some teams there are special celebrations once an important piece of work is satisfactorily accomplished. Such celebrations reinforce for workers that their efforts are valuable for the team's functions and products. It is clear that the benefits of recognition and reward are flowing in two directions, on one side there is a benefit for the individual, and on the other the supervisors are gaining respect and trust from their staff. The following quote depicts this:

“...The flow on effect of that [recognition] is that the rest of group say, ‘Hey gees, you know, yeah she has done a good job. Yes and she’s been recognised for it. Yeah. It’s not such a bad group that we were working for’. And the flow on to me is they see that I care, as a supervisor, and I’m prepared to recognise good work. But culturally - culturally we don’t put the importance on this, I think, that we should...”

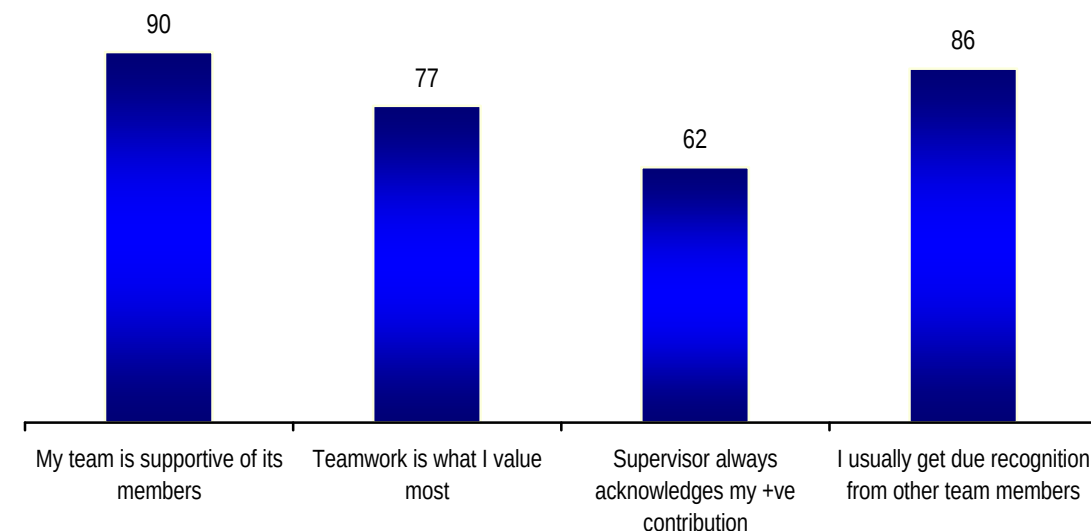


Figure 3

Socialising

The aspect of ‘feeling good’ about work colleagues is an important motivating factor and a factor contributing to building of trust amongst employees. Maslow’s theory of motivation identifies a sense of belonging to a group and getting to know each other as a vital step in the life of a team and in achieving set goals. As they get to know each other, the team members derive satisfaction from belonging to a cohesive team, but more importantly, they become aware of each other’s strengths and weaknesses, what they can or cannot do, their expertise and experience. This knowledge allows for utilising each team member to his or her full potential.

The respondents indicated that work-related social activities lead to a greater sense of team spirit (85%). These social activities are not just frivolous functions; they are core activities that are ultimately task oriented as one of the respondents put it:

“...it is important and we do, we have time out where we go for coffee and to chat, it’s team building and getting to know each other, and I think that’s really important because you need to get to know the personalities on your team....We talk about work things when we’re having coffee, but it’s joking and fun.”

Scholars use the term *social capital* to refer to human relationships that make organisations work effectively. Healthy social relationships in organisations build trust, make people learn faster and be more productive and creative (Prusak 2001). However, building successful social relationships in organisations during times of constant change, staff shortages, and pressures to deliver with fewer resources is extremely difficult.

“People in the headquarters need to let off steam, so if everybody was just working constantly five days a week with no let-up, you know, you’d start to get cracks in the organisation. So people do appreciate it, [socialising] you know, when it happens.”

The ESLA research data indicates that social activities lead to greater team cohesion and enhanced team morale. Informal social gatherings allow people to get to know each other, build trust and stronger relationships and, more importantly, share knowledge. Many informants told us that during such informal social gatherings they learn more about what is happening in other branches or directorates than through formal channels.

The researchers were given examples of social activities that promoted team building “the whole of our branch went out and did the HQ fitness test, civvies too, but it was like a morale building thing and we all passed and then we finished off with a nice barbecue, so it was good fun.” In some directorates, social occasions were also used to celebrate achievements and individual or team milestones (see also section on Recognition and Reward). Some of the branches had a ‘social secretary’ who organised functions within and outside working hours. Such functions also involved partners, and the comments that were related to the ESLA researchers about such activities were very positive, for instance “in some ways it’s good because you get to meet the people that you hear them talking about”. By organising such gatherings and involving partners the workplace spilled over, in a positive way, into non-work time of their lives.

The research data indicates that social activities organised at the Branch or Directorate level usually involved all staff and, by and large, people gladly participated in such activities. However, it was pointed out to us that HQ-wide social activities tend to be organised for the officers only, thus causing a cultural divide between ranks as the following excerpt from the interviews illustrates:

“When it comes to the social side of HQ there is, there’s a big problem.... You miss the [rank] around because of the social - when they try to organise something it’s still very officer-y, you know, and the junior [rank] not -

because there's only a couple of them, they'll go, but there's not that fun, you know."

Goal alignment

Genuinely committing to common goals, amongst other things, leads to team success. Moreover, team success itself can further promote commitment to common goals, and so the relationship between team success and goal alignment is recursive. The ELSA team observed that higher levels of goal alignment within teams were accompanied by higher levels of trust amongst team members. This was manifested by more supportive, inclusive and, generally, open communication between team members and between members and leader. This has been discussed in the above section on Communication Climate.

Leadership, Communication Climate, Recognition and Rewards, and Socialising all contribute to Goal Alignment. For instance, Leadership can promote commitment to common goals because of the very cohesive impact of certain leaders on a team's culture. Similarly, Recognition and Rewards can build motivation and thereby foster commitment to a common goal. Finally, by contributing to team cohesion, Socialising can foster a common identity and goal alignment.

The ELSA team found a high degree of goal alignment reflected by the high percentage (90%) of respondents saying that their work contributes to the overall goals of the HQ. The teams driven by a common purpose were observed to be characterised by a climate of cohesion and respect amongst members (including for their leader, and their leader for them). They worked together, and for each other, on tasks and tasks didn't seem to belong to anyone in particular but to the team as a whole. This is reflected in this comment made by one interviewee "...for teams to be cohesive there has to be regular communication across all of us as to what we're doing, and why we're doing it."

Cohesive work arrangements and commitment to a common goal were not as evident in teams further up the hierarchy. This was particularly evident when our informants talked about the changing organisational environment

"...you had a disconnect between the leaders and the managers and the followers and the workers where the leaders and managers try to go somewhere and the followers and the workers weren't given the opportunity to go there with them. Or simply wouldn't move"

"They are so far ahead of where we are we don't even know which of the horizon they went over"

During our interviews with the HQ staff we especially probed a question of what people consider are the greatest strengths of their team? The following quote best describes the importance of common goals:

■

“I think that we all have a common purpose. Most of the people on the team have the same kind of background, I suppose, from the point of view that they’ve all seen all these changes that have gone nowhere and they all have a genuine desire to get something done. And I think the whole team effort is directed at actually getting some results on the board, and we’re all of one accord as far as that goes, making sure that we all present all the case that has to be presented to get something done. And I think everybody feels the same way that this is our last chance and if we don’t get it done this time we’re not going to get it done...”

Conclusions

The implication of this study is that organizations seeking to improve information sharing and knowledge generation need to develop a greater awareness of the processes and strategies of organizational learning. Organizational knowledge is distributed across functional groups and its generation and continual existence is dependent on the effective use and implementation of enabling processes and strategies that motivate people to share and generate new knowledge. This study indicates that information sharing and subsequent knowledge generation would be successful when interactive environments are cultivated before technology based solutions are implemented. Organisations have a responsibility to create a culture in which learning occurs and that organisational culture will determine the quality of learning that takes place. A culture that minimises fear of making mistakes and exercises praise and rewards, not only for those who succeeded but also for those who tried hard and might not have achieved the desired results, is important in the learning organisation. The strength of any organisation depends on the quality of its people and in the current business environment there is a chain of interdependencies between people achieving results together as a team and the organisational goals. The findings of this research indicate that there is a correlation between team cohesiveness and team members’ willingness to share knowledge and information. The creation of cohesive, empowered teams is achieved through socialising, fostering of a positive communication climate, appropriate recognition and reward systems, and supporting leadership. The results of this research have wide application to any organisation that is embarking on the path of knowledge management and successful social learning.

Bibliography

Ali, I., Pascoe, C., Warne, L., Gori, R., Agostino, K., (2000) 'Enabling learning: A progress report on the Enterprise Social Learning Architecture Team', *5th International Command & Control Research & Technology Symposium*, Canberra, 24 - 26 October 2000, [Proceedings on CD-ROM] U.S. Department of Defence-C3I & Australian Department of Defence-DSTO.

Ali, I., Warne, L., Agostino, K., Pascoe, C. (2001) 'Working and Learning Together: Social Learning In the Australian Defence Organisation', *Informing Science Conference IS2001 - Bridging Diverse Disciplines Proceedings (CD-ROM)*, Krakow, Krakow University of Economics, Poland, June 19-22, 2001, ISSN 1535-0703.

Ali, I., Pascoe, C., Warne, L., 2002 "Interactions of organizational culture and collaboration in working and learning", *The Journal of Education Technology and Society* (in press).

Bednar, P. (2000). "A contextual integration of individual and organisational learning perspectives as part of IS analysis." *Informing Science* 3(3): 145-156.

Davenport, T. H. (1994). "Saving IT's Soul: Human-Centred Information Management." *Harvard Business Review* 72: 119-131.

Denison, D. R. (1996). "What is the Difference between Organisational Climate? A Natives Point of View on a Decade of Paradigm Wars." *Academy of Management Review* 21(3): 619.

Drucker, P. (1999). "Managing Oneself" *Harvard Business Review* March/April: 65-74

Guzley, M. (1992). "Organisational Climate and Communication Climate: Predictors of Commitment to the Organisation." *Management Communication Quarterly* 5(4): 379-402.

Katzenback, J. R., Smith, D. K. (1993). "The Discipline of Teams" *Harvard Business Review* March/April.

Miller, J. (1996). "Humour-An Empowerment Tool of the 1990's" *Empowerment in Organisations* 4(2): 16-21.

Mitchell, S (2000). "Be Bold and Discover the Power of Praise"

Mowday, R.T., Steers, R. M., Porter, L. W., (1979). "The Measurement of Organisational Commitment" *Journal of Vocational Behaviour* 14: 224-247.

Pascoe, C., Ali, I, Warne, L. (2001) Collaborative knowledge development, Dialogue, and Team Building: Findings from research into social learning in the Australian Defence Organisation, Proceedings of the 2001 Australian Conference for Knowledge Management and Intelligent Decision Support, 10-11 December 2001, Monash University, Melbourne.

Prusak, L. (2001) "Storytelling: Organisational Perspective" *Passport to the 21st Century*

Vandeville, J. V. (2000). "Organisational learning through the collection of "lessons learned"" *Informing Science* 3(3): 127-133.

White Paper (2000). "Defence 2000: Our Future Defence Force."

URL: <http://defweb.cbr.defence.gov.au/whitepaper/>