

Enhancing Organisational Creativity
A Literature Review

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Introduction

The need for organisations to be more competitive has sparked the interest of researchers and practitioners to better understand creativity in organisations.

Some researchers have tried to portray the relationship between individual creativity and organisational creativity and innovation (Amabile, 1996, (Mumford et al., 2002).) as well as demonstrate the relationship between individual, team and organisational aspects of creativity (Woodman et al., 1993).

To encourage creativity organisations need to create a climate that supports and enables the creative thinking of employees (Amabile, 1988). In other words, organisations must try to remove barriers that might impede creativity and enhance the factors that enable creativity.

Andriopolous (2001) identified five major organisational dimensions under which sit characteristics and behaviours that enhance or inhibit creativity in a work environment. Those dimensions are organisational climate, organisational culture, organisational structure and systems, leadership style and resources and skills. This paper will review the literature under each of those dimension headings and attempt to identify the characteristics and behaviours required in each to enhance organisational creativity.

Definitions

Before moving into the body of the literature review it is useful to define the terms creativity and organisational creativity.

The Encyclopaedia Britannica defines creativity as

“the ability to produce something new through imaginative skill, whether a new solution to a problem, a new method or device, or a new artistic object or form”.

At an individual level, Amabile’s (1997) extensive body of research suggests that individual creativity essentially requires expertise (knowledge, proficiencies and abilities of people to make creative contributions to their fields), creative-thinking skills (cognitive styles, cognitive strategies and personality variables), and intrinsic task motivation (the desire to work on something because it is interesting, involving, challenging and rewarding). Her studies confirm that the higher the level that each of these three components, the higher and better the creativity.

The Wikipedia definition of creativity -

“the ability of a person to be creative, participate in creating or be useful in a creative network of other people”

- is a useful one that is both simple and broad enough to encompass both individuals and organisations.

Current views on organisational creativity appear to focus largely on outcomes or creative products – goods and services. A creative product has been defined as one that is both novel and original and potentially useful or appropriate to the organisation (Amabile, 1996, Mumford and Gustafson, 1998). Various factors contribute to the generation of creative products both at the individual and organisational levels (Mumford and Gustafson, 1998). In organisations including businesses, creativity is the process through which new ideas that make innovation possible are developed (Paulus & Nijstad, 2003). Additionally, at least for business organisations, creative ideas must have utility. They must constitute an appropriate response to fill a gap in the production, marketing or administrative processes of the organisation.

Thus, individual creativity is concerned with the generation of ideas while team and organisational creativity is concerned with both the generation of ideas and the implementation of these ideas.

Another term, innovation, is often used interchangeably with creativity. A convenient definition of innovation from an organisational perspective is given by Luecke and Katz (2003), who wrote:

“Innovation . . . is generally understood as the introduction of a new thing or method . . . Innovation is the embodiment, combination, or synthesis of knowledge in original, relevant, valued new products, processes, or services”.
(p. 2)

Innovation, it seems, typically involves creativity, but is not identical to it: innovation involves acting on the creative ideas to make some specific and tangible difference in the domain in which the innovation occurs. For example, Amabile et al (1996) suggest:

“All innovation begins with creative ideas . . . We define innovation as the successful implementation of creative ideas within an organization. In this view, creativity by individuals and teams is a starting point for innovation; the first is necessary but not sufficient condition for the second”. (p. 1154-1155).

For innovation to occur, something more than the generation of a creative idea or insight is required: the insight must be put into action to make a genuine difference,

resulting for example in new or altered business processes within the organisation, or changes in the products and services provided.

For the purposes of this paper the following definitions will be used:

Creativity:

“the ability of a person to be creative, participate in creating or be useful in a creative network of other people” Wikipedia

Organisational creativity:

“the creation of a valuable, useful new product, service, idea, procedure or process by individuals working within a complex social organisation”.
Woodman (1995, p.61)

For the purposes of this paper the terms organisational creativity and innovation will be used interchangeably.

Organisational climate

It is important to distinguish between organisational climate and culture. An organisation's culture concerns the values, beliefs, history and traditions reflecting the foundations of the organisation. Culture is long standing, deeply rooted and often slow to change. An organisation's climate, however, refers to the recurring patterns of behaviour exhibited in the day to day environment of the organisation, as experienced, understood, and interpreted by the individuals within that organisation.

Climate, then, may be defined as:

“ the recurring patterns of behaviour, attitudes, and feelings that characterise life in an organisation.” (Isaksen et al. 2000. p172)

It is people's perception of these behaviours, attitudes and feelings that influence their attitudes at and to work as well as their levels of performance, their creativity and resulting productivity. At the individual level the concept is called the psychological climate. When aggregated the concept at the team level might be called the team climate and at the bigger picture level, the organisational climate.

Goran Ekvall, a Swedish industrial psychologist, observed the differences in how the working atmosphere of different companies affected the degree of participation in idea suggestion schemes. From this he developed the Creative Climate Questionnaire. (now titled the Situational Outlook Questionnaire). In this he identifies 9 dimensions organisational climate necessary to enhance creativity..

These dimensions are challenge and involvement (the degree to which people are involved in daily operations, long term goals, and visions), freedom (the independence in behaviours exerted by the people in the organisation), trust/openness (the emotional safety in relationships), idea time (the amount of time people can use - and do use - for elaborating new ideas), playfulness/humour (the spontaneity and ease displayed in the workplace), conflict (the presence of personal and emotional tensions – in contrast to idea tensions in the debates dimension – in the organisation), idea support (the way new ideas are treated), debate (the occurrence of encounters and disagreements between viewpoints, ideas, and differing experiences and knowledge) and risk taking (tolerance of uncertainty and ambiguity exposed in the workplace). (Ekvall et al, 2000).

All of these dimensions are positively associated with creativity, innovation and change except one – conflict. Working environments that have high levels of conflict are less likely to sustain creativity, innovation and the commercial success that can come with them. The validation evidence from this survey (Ekvall et al. 2000) suggests that a high score on 8 of the dimensions and a low score on one – conflict – would enhance creativity in an organisation.

As Dr. Ekvall states:

“Climate affects organisational and psychological processes such as communication, problem solving, decision making, conflict handling, learning and motivation, and thus exerts influence on the efficiency and productivity of the organisation, on its ability to innovate, and on the job satisfaction and the well being that its members can enjoy. The individual organisation member is affected by the climate as whole, by the general psychological atmosphere, which is relatively stable over time. No single separate event produces this more lasting influence on behaviours and feelings; it is the daily exposure to a particular psychological atmosphere.” (Ekvall et al. 2000)

Organisational climate can be enhanced at three levels – individual, team and organisation (Ekvall et al. 2000). There appears to be a considerable body of work written on individual creativity, a lesser amount on organisational creativity and an even lesser amount on team based creativity. One such study was carried out by psychologists in the UK in the 1990s (West et al, 1990). It examined in some detail organisational climate, team effectiveness and innovation at work. From this research four factors were identified as being central in determining effective team functioning and propensity to innovation / creativity: (1) participative safety; (2) support for innovation; (3) team vision; and (4) task orientation.

Briefly described, participative safety refers to the extent to which the climate of the team is psychologically safe and subsequently through this safeness encourages the participation of each member of the team. Support for innovation is concerned with the support provided by the team for innovative ideas. This requires both articulated support (expressed support – both verbal and written) and enacted support (practical support and the availability of resources). Team vision is concerned with the extent to which the team has clearly defined goals and objectives. It is suggested that when individuals work as part of a team, they do so because they believe that by working with other people, they will become more successful in achieving their desired outcome (West, et al. 1990). Task orientation is concerned with the extent to which the team strives for excellence in completing its tasks and targets.

It is suggested that a high positive presence of these team dimensions is essential if the team is to function effectively and creatively. Of these four team climate factors participative safety and support for innovation will largely determine the quantity of the creativity, while vision and task orientation will largely determine the quality of the creativity / innovation.

In summary, the literature suggests that the climate required for enhancing creativity in the workplace is that which promotes the generation, consideration and use of new products, services and ways of working. This climate supports the development, assimilation and utilisation of new and different approaches and concepts (Isaksen et al, 2000). To enable such a climate consideration must be given to participative safety, support, appropriateness of vision and the establishment of performance standards (West, et al. 1990) and Ekvall's (2002) dimensions of challenge and involvement, freedom, trust/openness, idea time, playfulness/humour, conflict, idea support, debate and risk taking. Although dimensions may vary by name and description there exists a commonality among the researchers of the climate requirements that will support and enable organisational creativity.

Organisational culture

To encourage creativity in organisations a key challenge is to create an culture which nourishes it. Organisational culture, as stated previously, concerns the values, beliefs, history, traditions etc reflecting the foundations of the organisation. An organisation's culture is long standing, deeply rooted and often slow to change.

Organisational culture reflects the things people value, the way people within the organisation generally relate to one another, share ideas and work together on a daily basis to get things done. It includes the shared view of directions and values, priorities, commitments and feelings of loyalty and personal worth within an organisation. Organisational climate, on the other hand, refers to the recurring patterns of behaviour exhibited in the day to day environment of the organisation, as experienced, understood, and interpreted by the individuals within that organisation. It is an important differentiation although there is often an overlap between the two. A positive organisational culture is essential for an organisation to be successful. It also provides personal work satisfaction, supports emotional and physical well-being and generates high morale as well as positive perceptions by others.

In order to understand culture and its impact on creativity Schein (1984) offers a useful starting point. Schein suggests that organisational culture is what a group learns over a period of time as the group solves its problems of survival. He argues that a culture is a pattern of basic assumptions that have been that have been evolved, discovered or developed by a given group as it learns to cope with its problems of external adaptation and internal integration. He proposes that:

“ Culture is a pattern of shared basic assumptions . . . that has worked well enough to be considered valid and therefore to be taught to new members as the correct way to perceive , think, and feel in relation to those problems”. (1992. p.12)

His model exists at three levels – artefacts, values and basic assumptions. Artefacts are the visible organisational structure and processes. Values are the social principles, goals and standards held within the culture to have intrinsic worth and underlying assumptions are beliefs and habits of perception, thought and feeling that are taken for granted. He also observes that:

“Culture matters because it is a powerful, latent, and often unconscious set of forces that determine both our individual and collective behaviour, ways of perceiving, thought patterns and values. Organisational culture in particular matters because cultural elements determine strategy, goals and modes of operating”. (1999. p.15)

Culture is good or bad depending on how it supports the achievement of organisational goals. It is ‘good’ if it enables the organisation to achieve its objectives and goals or adapt appropriately to its external environment. If an organisation needs

to be creative and innovative it must design its culture accordingly. The question of how one does that still remains.

A sensible starting point would be identifying the current perceptions of the existing culture. Plesk and Bevan (2003) have developed an assessment tool that identifies seven dimensions of organisational culture that impact upon the speed and frequency of innovation / organisational creativity. The dimensions are:

1. Risk taking – the degree to which there is psychological support for individuals and teams to want to try something new;
2. Resources – the availability of money, protected time, information, and authority to act;
3. Widely shared knowledge – the degree to which tacit and explicit knowledge is widely gathered (both from within and outside the organisation), easily available, rapidly transmitted, and honestly communicated throughout the organisation;
4. Specific targets – the degree to which the formal leaders make it clear that innovation / creativity is highly desired in certain specific areas that are strategically or operationally important to the organisation;
5. Tool and techniques – the degree to which the organisation supports a conscious process and method for innovation that is not so restrictive as to stifle creativity;
6. Reward systems – the degree to which the organisation rewards the efforts of creative / innovative individuals and teams that gives these people things they really value;
7. Rapidly formed relationships – the degree to which the organisation easily forms high-performing teams and networks of intrinsically motivated individuals.

A score ranging from 0 (our skills, systems and experiences on this dimension have no real impact; neither hamper nor support innovation / creativity) to +5 (we have outstanding positive skills, systems and experiences and experiences on this dimension: supporting innovation / creativity) gives an indication of the culture required to enhance organisational creativity.

The purpose of using an assessment tool such as this is to use the understandings identified by it to create and implement plans to improve an organisation's climate for innovation, creativity and change. It must be remembered that assessment tools

such as this provide a 'snapshot' of people's perceptions of the working climate. These perceptions may then be compared to measures of innovation and productivity at the organisational level. It is also possible to compare people's perceptions of the climate with a variety of other factors including creative orientation, perceptions of the products / services produced and the characteristics of thinking processes used when identifying and developing innovations.

It can be concluded from the literature that certain organisational cultures inhibit creativity and innovation whilst others foster it. Some organisations are better at identifying problems, generating and selecting valuable ideas and developing and commercialising them. The literature gives quite clear guidance as to the cultural factors that enable organisational creativity as identified in this section. An organisational culture, which supports creativity, needs to nourish creative ways of representing problems and finding solutions and regard creativity as both desirable and normal and must consider innovators as role models within the organisation.

Organisational structure and systems

Organisational structure and systems might best be described as the framework around, and the systems that support, the work being done in an organisation.

Some researchers have commented on the impact of an organisational structure on creativity. Woodman notes that:

“. . . in general, adaptive organisational forms (e.g. matrix, networks, collateral or parallel structures) increase the odds for creativity. Bureaucratic, mechanistic, or rigid structures decrease the probability of organisational creativity.” (1995, p.64)

An adaptive organisational form is one that is flexible enough to adapt to the changing needs and developmental stages of an organisation. Adaptive organisations adjust operations quickly and smoothly to meet rapid changes in the market, the introduction of new technologies, and shifting business priorities - a necessary trait in today's rapidly changing business environment.

An organisation's environment not only influences its design and structure but may be, in itself, a source of creativity. As McMaster explains:

“. . . innovation and creativity occur where information from the chaotic world meets the structured information of the internal world. Creativity is the process of making new meanings in the combining of these two domains.” (1996, p.128)

Csikszentmihalyi and Sawyer (1995) suggest that the challenge for organisations is to create cultures that direct internal creativity (i.e. technology, structures, staff and individuals) towards external creativity (which includes customers, competitors, suppliers and governments) resulting in increased market share and customer satisfaction. They suggest that although creativity at the internal level is no guarantee of business success, it is a prerequisite.

According to Damanpour (1995)

“Most research on creativity fails to recognise the importance of distinguishing between different organisational contexts when studying determinants of creativity and innovation. For instance, members of organisations that employ complex, intensive or customised technologies that operate in very competitive environments must engage continually in the generation of new ideas and creative problem solving. Consequently, such organisations require both a flexible structure and a climate conducive to innovation; self and peer controls replace hierarchical control.” (p.129)

In practice this means that the leadership in each organisation must be clear about the requirement for creativity and the types of creativity that best suits organisational goals.

Kanter (1996) supports Damanpour’s view by suggesting that innovation is uncertain, knowledge intensive, controversial, and crosses boundaries, therefore it is most likely to flourish:

“ . . . where conditions allow flexibility, quick action, intensive care, coalition formation and connectedness. It is most likely to grow in organisations that have integrative structures and cultures emphasising diversity, multiple structural linkages both inside and outside the organisation, intersecting territories, collective pride and faith in people’s talents, collaboration and teamwork.” (p.95)

Amabile (1998) writes that creativity is truly enhanced when an entire organisation supports it. Senior people, therefore, must put in place appropriate structures and systems which emphasise that creative effort is a top priority within the organisation. She proposes that organisations that aim to support creativity should consistently reward it, taking care to avoid using money to pay people to come up with innovative ideas. Amabile also suggests that organisational leaders need to minimise infighting, politicking, and gossip as they are particularly damaging to creativity. She argues that this sort of negativity can have severe consequences for creative contribution.

Amabile (1998) also proposed a model of small team creativity consisting of 3 components – the person’s expertise, their creative thinking skills and motivation. She suggests that a manager can influence all three but the greatest impact is to be had from affecting intrinsic motivation. She suggests six management practices that might influence the level of intrinsic motivation – providing challenges, greater freedom, adequate resources, support, encouragement, and paying attention to team design. To be effective across an organisation these behaviours must be imbedded in the structure and systems of an organisation.

Csikszentmihaly(1998) proposed a systems view of creativity that has applicability in an organisational context. He believes that it is not possible to separate creativity from its social and historical contexts. He starts by asking ‘where’ creativity is rather than the traditional ‘what’ creativity is. His model describes three interacting and interdependent components. These are the field (which he describes as a set of social institutions that select and idea or product); a stable cultural domain that will preserve and transmit the selected ideas to the following generations; and the individual who brings about some change in the domain. In an organisational setting creativity emerges from the interactions between an staff member (the individual) and their department / team (the domain) and the wider community of managers, leaders, customers and other stakeholders (the field).

Robinson and Stern (1997) make a further contribution to the understanding of creativity in organisations when they say, in relation to creative acts,:

“Nobody can predict who will be involved in them, what they will be, when they will occur, or how they will occur.” (p.12)

They do, however, suggest six actions that are likely to increase the probability of creativity occurring. They are:

1. alignment to the organisation’s key goals
2. opportunity for self initiated activity – people are able to select a problem they are interested in solving
3. opportunity / support for unofficial activity
4. serendipity
5. diverse stimuli
6. lots of communication

When an organisation's structure and systems supports behaviours such as those described in this section creativity is likely to be enhanced. These actions are likely to impact positively on people's motivation to be creative.

Theresa Amabile has comprehensively researched the impact of motivation on creativity. Her on-going research into the area into creativity suggests that of the two types of motivation – extrinsic and intrinsic – the latter is far more essential for creativity. She suggests that:

“Intrinsic motivation is conducive to creativity. Controlling extrinsic motivation is detrimental to creativity, but informational or enabling extrinsic motivation can be conducive, particularly if initial levels of intrinsic motivation are high.” (1997 p.46)

A summary of the literature suggests that employees will be most creative when the organisational structure and systems support people to feel motivated primarily by the interest, satisfaction and challenge of the work itself. The structures established can make a big difference in fostering creativity. Setting up work groups so that people will stimulate each other and learn from each other, so that they're not homogenous in terms of their backgrounds and training is important. Assignments to projects can make a big difference, too. To encourage creativity people need work that they're going to find appropriately challenging — not so far out of their skill range that they just can't do anything, but certainly something that's going to get them to operate at the top of their skill level, allowing them to really stretch and grow. That level of challenge is very important for intrinsic motivation.

The overall organisation atmosphere needs be open to creativity, from the highest levels. A collaborative atmosphere where people are continually sharing ideas and helping each other with their work, rather than competing with each other is necessary. Whatever reward systems are in place should reward and recognize creative work. Recognising the value of creativity in that way sends a powerful message of support — and helps people stay passionate about their work, whatever it may be.

Leadership style

The literature as reviewed by others (Mumford et al. 2002) has clearly documented the importance of perceived leader support for team member creativity. Studies have

also demonstrated that team member's collective view of support from their leader is directly linked to the team's success in creative endeavours (Amabile et al., 1996). Leadership, though, can be more or less creative in different ways (Sternberg et al, 2003). According to Sternberg and his colleagues what type of creativity will emerge in an organisation depends in part on the leaders but also in part on the organisational environment. They have proposed eight different ways in which to exert creative leadership suggesting that if one looks at leaders who are creative, they lead creatively in one of eight different ways. It is not the purpose of this paper to detail those ways but what follows is a brief summary of the eight differing ways under three broad categories.

Firstly, there are the types of creative leaders who accept current paradigms. Under this category are the *replicators* who do what others have done in the past; the *redefiners* who do what others have done but find a new rationale for doing it; and the *forward incrementers* who move on one or more steps beyond where others have gone. The second category are those who reject current paradigms. The *redirectors* steer an organisation in a new direction; the *reconstructive redirectors* who move in a new direction but use the past rather than the present as a starting point; and the *reinitiators* who virtually start from scratch. The third category suggested by Sternberg and colleagues are those who synthesise various current paradigms. *Synthesisers* take what they believe are the best ideas from different paradigms and put them together.

Some organisations are more susceptible and favourable to change than others and may require leaders to be 'creative' in different ways. According to Sternberg and colleagues an organisation that resists change is more likely to have kinds of creative leadership that accept existing paradigms (replication, redefinition and forward incrementation). Other kinds of leaders are likely to be fired or resign. An organisation that welcomes change, however, is more likely to welcome creative leadership that rejects existing paradigms (redirection, reconstruction, and reinitiation) or synthesises them (synthesis). Organisations that are failing may have little choice but to choose the paradigm-rejecting kinds of creative leadership given their existing structures have failed. Organisations that are successful may choose less radical types of creative leadership, but if the environment changes, they may have to change as well, regardless of past successes.

So we have a version of the situational leadership model with creativity as its foundation.

Schein (1992) also goes some way in supporting the notion that leadership can be more or less creative in different ways. He highlights six primary mechanisms that leaders use to embed a culture in an organisation:

1. what leaders pay attention to, measure and control
2. how leaders react to critical incidents
3. how leaders allocate scarce resources
4. how leaders provide role modelling, teaching and coaching
5. how leaders allocate reward and status
6. how leaders select, promote and/or excommunicate employees

Further adding to the leadership mix, Amabile (1998) wrote about six managerial practices that enhance creativity. Her practices include:

1. Challenge. Matching the right person with the right job to play into their expertise and creative thinking skills.
2. Freedom. Intrinsic motivation and ownership is enhanced when people are free to approach their work in a way they choose.
3. Resources.
4. Work group features. Managers must create teams with a diversity of perspectives and backgrounds.
5. Supervisory encouragement. To sustain passion, people need to feel their work matters and is important.
6. Organisational support. Creativity is truly enhanced when the entire organisation supports it.

Leonard and Swap (1999) build on Amabile's practices with their own. They stress that a creative leader's primary role is to design and maintain a supportive, safe psychological environment. To achieve this they suggest:

- a tolerance for risk taking
- intelligent failures
- interactive communication
- promoting passion
- autonomy
- time for personal projects
- optimism

- encouraging serendipity, and
- a tolerance for paradoxes

A study by Tierney, Farmer and Graen suggests that employees with a creative orientation:

“work best under conditions that permit risk taking, operational autonomy, and the freedom to deviate from the status quo . . . Leader expression of enthusiasm or acceptance for innovation is one of the noted factors necessary for employees motivation to be creative.” (Tierney et al. 1999 p.594-5)

Tierney, Farmer and Graen conclude that there are particular leadership characteristics which are important in facilitating creativity. The leader, in their view, must be open to different approaches and be positive about risk taking and difference. In addition, highly developed people skills are necessary to provide the skill base for encouraging creativity in others. Ekvall (1996) also suggests that people who are innovative or creative often have a low tolerance of rules and routine work, but have a high tolerance of ambiguity and lack of structure. This would suggest that leaders or managers of creative people need to adopt a style of leadership that ‘allows’ rather than ‘directs’ if they want to achieve creative outcomes.

In summary, the literature supports the view that leadership is neither creative nor not creative. Rather, it can be more or less creative in different ways. The type of creativity that will emerge in an organisation depends in part on the leaders but also in part on the organisational environment, which, of course, leaders have a role in creating. There is, however, general agreement that if creative outcomes are to occur, leaders need to operate according to an open, participatory style and encourage an environment that is unconventional and less hierarchical than that found in the more traditional organisation. It is also suggested that leaders with good interpersonal skills who allow creative people to work autonomously on a process, encourage more creative outcomes.

Resources and skills

Resources and skills are the basic tools an organisation has at its disposal to complete its business. These can include the people, capital, machines, equipment, materials, patents, and copyrights that an organisation has acquired for use in its operations. The quantity and quality of intellectual assets available to the organisation is also a key resource. Resources and technology can impact the feelings and attitudes of people in

organisations by either enhancing or inhibiting appropriate creative behaviours. (Issaksen et al, 2000). A lack of key resources can often frustrate and provide barriers to creative thinking and limit initiative. Access to, and effectively using, resources can be a stimulus for creativity and change.

The work of an organisation requires people to have an appropriate mix of skills, knowledge and capabilities to perform the work efficiently and effectively. The work undertaken influences the selection of who needs to work on what jobs. The demands made by these jobs influence the behaviours required by the organisation to accomplish its purpose, and in turn, affects the climate.

Individuals' skills and abilities are the capabilities and knowledge held by individuals within the organisation. They determine the level of talent available to the organisation to meet work requirements. If a workplace is filled with highly qualified people, with sufficient talent to contribute to the purpose of the organisation the climate will be positively affected.

If creativity is concerned with the generation of ideas while team and organisational creativity is concerned with both the generation of ideas and the implementation of these ideas this would make creative people an essential element of the organisational creativity process.

Summary and Conclusions

This review has attempted to find common patterns and themes in the literature regarding the factors that enhance organisational creativity. Although the dimensions – organisational climate, organisational culture, organisational structure and systems, leadership and resources and skills - were explored individually it is important to acknowledge that the dimensions are somewhat overlapping and the boundaries between them are blurred. In fact, it is the sum of the whole rather than the individual parts that enhance creativity in organisations. Each dimension on its own cannot support creativity. Organisations are complex social, political and technical systems and no simplistic formula for becoming more creative can be applied.

There appears, however, a general consensus among researchers in this field that:

- creativity is impeded by cultures that emphasise formal rules, respect for traditional ways of doing things, and clearly demarcated roles,
- creativity is encouraged by climates which are playful about ideas, supportive of risk taking, challenging and tolerant of ambiguity,

- democratic, participative leadership styles facilitate creativity while authoritarian styles inhibit it,
- creativity is enhanced by organisational structures and systems that are adaptable and flexible,
- access to, and effectively using, resources can be a stimulus for creativity and change.

Organisational creativity is linked to a risky balance of complexity, compromise and choice. The creative organisation needs to be flexible while controlling risk, but at the same time provide the freedom to search for the 'new' through learning and experimentation. I have shown that there is evidence that supports the view that an environment that is conducive to creativity is critical and is linked both to the culture, the climate, and the physical aspects of the environment. There is a systems view of creativity which suggests that creative outcomes are produced in a creative environment, where creativity as a culture is encouraged and rewarded. In this context, creativity is not confined to a few individuals, but all employees are encouraged to be creative for the benefit of the whole.

In organisations, creativity is facilitated when individuals are given maximum discretion in how they organise their work, when self-efficacy is strong, and when information is of high quality. Individual and organisational creative development is supported by structures and processes that ensure permeable boundaries, value increasing complexity, and provide safe psychological spaces.

It is my hope that with greater understanding of the factors that enhance organisational creativity practitioners take them into consideration when starting new enterprises or when they need to sustain or revitalise creativity in their workplace knowing that with the effective leadership of people and appropriate management of the working environment it is possible to produce substantially enhanced creative performance.

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