Multivariate influences on the people side of projects: stress and conflict

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The paper sets out findings from research carried out with a variety of construction project managers. The work considers the definitions and functionality of occupational stress and conflict, and relationships which may exist between the two. The perceived sources of stress and conflict within the construction industry, and its attendant groupings, are discussed in the light of a theoretical construct and supporting field data. The resultant effects of stress and conflict are discussed in some detail along with the variety of coping strategies adopted as conflict and stress negators. Consideration is given to the various forms of conflict which may be found within construction projects and the stages present within the conflict events are discussed with respect to contract interfaces and the analysis of interpersonal relationships. The influence of 'personality type' is addressed with respect to the industry, the industry's operational procedures, and socioeconomic influences upon the individual. Management strategies are then proposed which may be considered as reducers or eliminators of stress and conflict at the earlier stages of the project's lifespan.

Keywords: stress, conflict, construction, personality type

Multivariate approach to stress

The potential causes of occupational stress are numerous and varied, and are closely linked to the many problems of occupational conflict. The cost of this occupational conflict and stress is high in monetary value and also in socioeconomic terms.

Stress is a societal problem which has significant ramifications in terms of the health and well being, prosperity, and productivity of the individual and also for the organisation within which he/she is employed. The absence of stress may lead to 'rust out', whilst too much stress may lead to 'burn out'. Either of these situations may lead to distress, whilst a healthy level of stress, eustress, may achieve an appropriate unification between the individual and his/her lifestyle. In the main, when individuals talk about stress, they mean too much stress and its resulting effects. A precise definition of the term 'stress' is fraught with interpretational and social difficulties.

Seyle seeks to create a synoptic overview when arguing that stress may be described as 'the rate of wear and tear caused by life'. Cox notes that stress may be a byproduct of demands made on the individual which he/she feels that he/she is unable to adequately cope with. Cranwell-Ward sees stress as the result of an individual perceiving that his/her inherent capabilities and resources are unable to complement or meet the demands placed on them by a given situation. French and Caplan focus on quantitative and qualitative aspects of the situation as primary stressors, i.e. on whether there is too much to do or it is too difficult. Tung and Koch expand on these definitions and supplement them by proposing that stress may be contingent upon the individual's environmental interfaces. Pines and Aronson argue that the individual's environment has a significant effect on his/her motivation depletion rate and levels of stress exhibited. The impact in organisational terms of this lost motivation may be quantified in terms of cost or organisational disruption, i.e. the divergence from the desired norm. Hanson suggests that there may be an optimum level of stress at which the individual works most effectively.

The prevailing business and market environment throughout the 1980s and the 1990s had led to an intensification in the rate of change prevalent within organisations which strive to gain higher levels of efficiency and effectiveness. Operating in an environment of uncertainty produces change which may be a potential source of stress for employees. This stress has adverse effects which have been
clearly highlighted and regularly documented. These effects include poor job performance, high levels of absenteeism, discontent or low morale and a high labour turnover, this last feature being the result of the loss of ‘good’ employees, the removal of ‘poor’ ones and retirement from work through ill health. Moore’s analysis shows that, in 1992, only 23 UK companies were active in stress management. Given the increase in media exposure in the UK of this important issue (e.g., in Management Today (Oct 1993) and the BBC Money Programme (10 Oct 1993)), and the growing acceptance of the fact that stress results in costs, it is surprising that the number of companies currently engaged in some form of programme is so low. Businesses and organisations in most sectors of UK industry are reluctant to investigate and try out stress-management programmes for employees. Because of this reluctance they miss out on opportunities for maximising employees’ contributions and reducing costs.

Costs of stress

The costs attributable to stress have been discussed frequently over the years, and can be modelled as shown in Figure 1. It is clear from Figure 1 that the composite cost, at various points in time, comprises several key elements which may be manipulated to reduce the summative effect. The British Heart Foundation has suggested that coronary heart disease, often attributable to stress, costs of the order of £200 per employee per year in the UK. Gill reports that as many as 100M working days have been lost because people cannot face going to work. In the USA, employers can pay up to 80% of private health-insurance premiums giving rise to an inflated on-cost bill for companies. Giving rise to an inflated on-cost bill for companies.

Whilst this principle cannot be applied to all employees in the UK, as yet, it certainly must affect executive and senior-management health-care packages which are now an established add in or attraction in higher-salaried positions.

The statistics available on the costs of stress-related incidents during the 1970s and 1980s suggest that some £30000M were lost in the USA in wages by employees suffering chronic and/or episodic pain. Studies of three conditions, chronic pain, hypertension and headache, produced estimates to suggest that they accounted for 54% of absences. This equates, approximately, to a $10000M bill for US employees.

Cooper analysed absenteeism data available in 1988 and from this analysis argued that 40% of absenteeism can be attributed to mental or emotional problems, and that the incidence of these is on the increase. Litigation is an additional element which must also be added to the cost equation. Current cases going through the courts have ramifications which will add substantial sums to all employers’ cost structures if those bringing the cases are successful.

With the perceived recession in many countries and specific industries, the marketplace has become more competitive. Organisations, hit by problems of reduced productivity, less organisational commitment, and lower job satisfaction, all of which can be stress related, have tried to streamline their management structures and levels of the workforce in order to stay profitable and effective. These efficiency measures may well have added to employees’ stress because of anxiety and uncertainty about employment. In order to redress the balance the organisations may need to consider and implement a strategic approach to stress management.

Organisational stress management: barriers

Whilst there are numerous barriers to effective organisational stress management, many of them may be relatively easily overcome. An overview of the barriers is provided in Figure 2, which highlights the more significant impediments. Cooper asserts that many organisations still try to deal with the adverse effects of stress as a normal part of running a business. This unwillingness to recognise stress explicitly and take proactive management decisions to cope with the effects is one of the major barriers. The attitudes of senior decision makers are extremely important in effective stress programmes. In the work executed within the ICI project, it was the participation and support of the chairman and board of directors which led to the initial impetus and subsequent swift pace of the stress-management initiative.

A second barrier is the short-term approach which UK organisations take to stress-management solutions. This ‘Elastoplast’ treatment of such a complex and sensitive organisational issue only gives rise to ineffective results and dangerous treatment of ‘problem’ employees.

Gordon, in his study of Scandinavian and Scottish companies with stress programmes, clearly demonstrated that one of the most effective aspects was the long-term view applied to investing in changes of habits, attitudes and work practices as fundamental aspects of a stress programme. Companies such as Ethicon (UK), Statshalsen (Sweden), Norsk Data and Norsk Hydro (Norway) and Digital (UK) established and developed stress-management programmes over a 5–10 year period, as opposed to short periods of around one or two months of questionable
one-day training on stress for all staff.

A third barrier is the demand in stress-management programmes for the organisation to explicitly show a caring, people-centred ethos. Organisations without this already in their culture do not want to lose face or authority while trying to meet this demand. Murphy\textsuperscript{27} argues that "no organisation likes to admit to the existence of stress in its workforce but organisations may be inherently stressful for individuals." This comment is set in an environment where organisations, in trying to achieve flatter organisational structures and more autonomous and responsible front-line employees, have added to already overloaded employees critical-decision-making responsibilities, and, by doing so, have created a more stressful situation. This is an example of another barrier to effective stress management: a lack of appreciation of how organisational needs must also take into account individual capabilities.

A final barrier for UK organisations to consider is the need for an integrated and holistic approach to stress management. Only treating a single symptom is not an answer. Employees, especially in the modern organisation, are multiskilled, responsible to several line managers and exposed to health, training, education and career-development issues at work. A potential problem is that one department independently deals with each of these issues in the organisation. The responsibility for managing stressed employees or, better still, preventing stress should be given to an interdepartmental team of people who potentially all have a contribution to make to the design of a stress-management programme. An example of this interdepartmental strategy is given in an analysis of the experience gained at Polaroid\textsuperscript{6}.

**European perspective**

The discussion in studies of the Scandinavian-companies approach shows that stress management is an important priority in managerial agendas in these countries. It is also important to note that, through both government legislation and the social acceptance of stress, the difficulties identified above that face UK organisations were all but removed in Scandinavian countries. In Western industrial society, it still appears to be wrong, weak or a failing to admit to stress, especially within an industry such as construction, which still has a 'macho' image. However, there are powerful socialisation factors in place which, in other European countries, afford a positive and supportive background for managing stress at work.

In Norway, Sweden, the Netherlands and Denmark, for example, there is no great problem in raising the issue; in fact it is considered to be helpful to the organisation to do so. Currently there is a very strong government lobby in the Netherlands to establish legislation which will force companies to take stress management and health at work more seriously. The Netherlands commitment (it hosted the 5th International Stress Management Association Conference) indicates its level and degree of interest, concern and support.

**Construction employees**

All of the above aspects may be encountered when an individual moves from one organisation subgroup to location to another, entailing immersion in a relatively new and unknown environment which may require the adoption of new roles and responsibilities and therefore has significance in terms of stress inducement. Newman's\textsuperscript{11} summary of general issues relating to roles can be illustrated by an interface diagram (Figure 3), which emphasises three key elements: the individual, the work, and relationships.

It can be seen from Figure 3 that the stress framework within which the individual has to function is subject to subtle yet significant changes as each scenario is encountered, i.e. the relationships may be altered, and the work at hand may be different, and thus stress felt at particular points in time may not be the same as stress induced on some other occasion. Allocating scalar values to each of the axes in Figure 3 may allow the individual to quantify his/her current position in relation to the dipole positions. Consider the situation where the values ascribed to each axis range from a normative 0 towards the extreme positional values of ±2. The individual, through appropriate diagnostic instruments, is able to ascertain values for each of the axes as follows: relationships: +2, work: ±1, and personal attributes: −1. Clearly this individual is approaching one of the polar extremities and may be faced with stressful situations. The interface diagram may be seen to function as an early warning device. Its introduction is relatively straightforward, and its use could eventually be of benefit to all those involved in the construction industry.

It may be argued that the primary stress-creating periods in an individual's lifespan relate to several key events, namely moving home, entering a new relationship, and changing jobs. The latter events form focal points for the research described in this paper. It may also be argued that each construction project involves the participants in the development of significant numbers of new relationships and changes of job in terms of location, nature and timeframe.

Those entering a new organisational subgroup or location (i.e. the project) are doing so because the organisation has perceived some form of intrinsic worth in the individual, be it specialist knowledge, skills or abilities. The logic of the situation suggests therefore that the entrant should be as productive for the organisation as soon as possible, and for a consistent period. However, the new-entrant situation is repeatedly thrust upon the construction employee because of the prototypical nature of construction projects and their relatively short lifespans. The construction project also entails interfacing many discrete organisations, trades, and professions in a homogeneous entity which is committed to the successful completion of the project. This homogeneity may be weakened by the occurrence of conflict events.

![Figure 3 Interface diagram](image-url)
Conflict

It may be argued that all industries exhibit some degree of conflict, whether it be overt or covert. Baden-Hellard succinctly defines conflict as 'the opposition of interests, values or objectives'. Bingham strongly suggests that the very 'British' culture prevailing within the UK construction industry ensures that conflict is perceived as a functional part of operational activity. Therefore functional conflict may be found within the relationships which are established when one individual or organisation contracts with another for a range of goods or services. Smith argues that, if properly managed, this functional conflict can be beneficial, and to be encouraged. Internalisation within the newly created contractual relationship of a common set of interests, values, and objectives may reduce the likelihood of conflict. Severe problems arise when the conflict is dysfunctional. Methods are then required which will reduce the dysfunctional conflict to the absolute minimum, whilst at the same time lowering the occurrence of any form of conflict by ensuring that the common set is internalised, mutuality thus occurs.

Conflict sources and causes

Within the majority of construction projects there is a clear set of originators or sources of conflict from

- the client organisation or its representatives;
- within the contractor's organisation;
- within the design team;
- subcontractors;
- suppliers;
- bodies external to the above.

These originators may either act in isolation or interact simultaneously with each other, ensuring that the process of locating the source is extremely difficult. Gardner and Simmons show the complexity of the source relationships which may exist between the various subsets involved in the execution of the project, interpersonal, intrapersonal, intergroup and intragroup. The originators give rise to several common causes of conflict which may be grouped under the following broad headings:

- functional change;
- retardation of progress;
- variance in contractual obligations;
- budgetary matters.

Associated with these main source areas are the 'tension' sources. These are more intangible sources that nonetheless have a significant impact on the individual's perception of conflict. The perception of the conflict is further acted upon by the 'suppression' and 'attention-focus' mechanisms. The former is a function of the individual's personality, and the latter is a function of the organisation's perceived ability to resolve certain conflict events.

The sources and causes of the conflict are part of the larger territory of the conflict event, which is analogous to any project, i.e. it has a start point, discernible intermediate stages, and some form of ending. The larger dimension is considered in Figure 4, which maps and integrates the sources, the causes and the conflict event itself. Each of the conflict stages may not be experienced by all individuals. The personality of each individual has a substantial impact on the experience and its subsequent internal management, and hence the displayed behaviour of the individual. Terhune and Dorch rightly assert that the behaviour exhibited by the individual is a function of both the personality and the situation, and suggest that this behaviour may be represented mathematically by the following variables:

\[ B = f(P \times S) + f(P) + f(S) \]

where \( B \) is the displayed behaviour, \( P \) is the personality type, and \( S \) is the situation.

The underlying origins of the conflict event act upon individuals who are confronted by a variety of situations. Therefore it may be that the ascertainment of a specific mix of personality types and an understanding of the situation will lead to a fuller comprehension of conflict events.

Type theory provides a framework for predicting and, to some extent, interpreting data relating to the motivation, aptitude, achievement, and communication style of the individual. Personality type may be analysed by the use of various psychometric test instruments such as the Myers–Briggs type indicator (MBTI), the Myers-McCaulley test, and the Fundamental Interpersonal Relations Orientations (FIRO) test. The MBTI clearly indicates relationships among individuals in groups, whilst the FIRO test postulates three areas for use in predicting and understanding human interaction. The ability to 'type' individuals and 'predict' interaction may be seen to be of substantial worth at the formative stages of project-team creation. Central to the conflict events are the individuals involved and their approach to each form of conflict.

Signs and symptoms

Much biopsychological work has been executed in order to identify and expand on the signs and symptoms of stress and conflict. Nixon sees two primary sets of stress indicators:

- those which are healthy, e.g. abundant energy, ease of adaptability, stimulation, calmness, control, clear and rational thought, and decisiveness;
- those which are unhealthy, e.g. sleeplessness, raised aggression, difficulty in thinking, fatigue, inflexibility, and anxiety.

The symptoms of stress fall under three broad headings:

- those which are psychological;
- those which are behavioural;
- those which are physical.
The psychological symptoms include depression, paranoia, tenseness, and lack of concentration. The behavioural symptoms include irritability, lack of effort, excessive consumption of food and beverages, and withdrawal from the work environment. The physical symptoms, which are often the most readily identifiable, include cardiobronchial pains, weight loss from undereating, and sleeping at abnormal times. The symptoms may appear as singular factors acting in isolation, or as composites within a highly complex situation. Work by Cooper\(^5\) and Cooper and Davidson\(^5\) has clearly shown the nature and, to some extent, the scale of the problem. The symptoms of stress may have a significant impact on an individual's instigation, perception of, and response to, conflict situations within the organisation. The psychological and behavioural symptoms may combine together to alter the individual's value and judgment state, and so bring substantial influence to bear on potential conflict situations.

The significance of occupational stress may be seen in pending UK litigation and monetary awards already made in the USA (particularly in California). The consequences of conflict are repeatedly disclosed in professional journals and media coverage of the construction industry.

**Research data**

Data for the research was gathered by means of structured questionnaires which were presented to a crosssection of site-based managers operating on a variety of construction projects. The projects varied in terms of their nature, location, duration, and value, and so a broad spectrum of activities was covered by the research. The 54 respondents were split into four categories; the first two groups comprised those who were under 40 and had or did not have degree-level qualifications. The responses from the questionnaires were supplemented by structured interviews conducted at the work site.

The variety and nature of the projects considered within the research are shown in Table 1, along with the main functions/responsibilities of the respondents. From the data shown in Table 1 it is clear that a wide range of functional areas/responsibilities were undertaken by the respondents. Even within the same category of respondent there are substantial variations in the range of functions/responsibilities undertaken by the respondents.

**Analysis of data on stress**

Early analysis of the data on stressors, stress, and coping strategies shows statistically significant homogeneity between the participants with regard to stressors ($\chi^2, p < 0.05\%$). Each of the cohorts is agreed that time, cost, and, perhaps more importantly, people are the primary stressors on any construction project. Time and cost may be subject to external constraints but people are directly under the control and influence of the organisation executing the project. Therefore greater emphasis on the individuals within the project team, i.e. on the composition of the team, may lead to a significant reduction in one of the key stressors.

Havening addressed the stress sources, the focus of the questions moved on to consider how the individual coped with stress during the working week. The coping strategies adopted form a double array of those which may be considered as not conducive to good health, and those which may aid a healthy lifestyle. Table 2 illustrates the nature of the coping strategies adopted within the groups. In each of the groups, time management was used on a relatively small percentage of occasions (in no group did it exceed 25%). The healthy coping strategies, e.g. reducing the impact of work by maintaining prime time with family and friends and a substantial range of sports/hobbies, were seen as being clear winners in the approaches adopted.

There was still, however, a significant incidence of individuals consuming excessive quantities of coffee or alcohol as a primary coping strategy. No doubt exists as to the incidence of stress; rather, the positive aspect to be taken from the data is that a substantial number of the respondents were active in adopting healthy approaches to the reduction/relief of stress.

**Analysis of data on conflict**

As discussed above, the presence of stress may have an influence on conflict and areas within the questionnaire sought to address this issue. The structured questionnaire contained a list showing potential conflict-source areas and the participants were asked to give their ranking of conflict sources in terms of their prevalence and weight. The sources outlined in the questionnaire were as follows:

- **Source 1:** Design matters based around the architectural team.
- **Source 2:** Technical issues relating to specialised components, and materials supplies.
- **Source 3:** Vendor relations (including all types of subcontractor and supplier).
- **Source 4:** Work execution encompassing site operations.
- **Source 5:** Payments both to and from the participants.
- **Source 6:** Personnel matters relating to all staff and operatives on the project.
- **Source 7:** Contractual matters stemming from interpretations of the imposed contract conditions.
- **Source 8:** Union issues of a general nature, e.g. breaks, clothing, and shelter.
- **Source 9:** Health and safety in general.
- **Source 10:** Role of the individual.
- **Source 11:** Role/s of others.
- **Source 12:** Project organisation in relation to the structure on site.
- **Source 13:** Project objectives, i.e. clarity and commitment.
- **Source 14:** Communications in general on the project.
- **Source 15:** Other (left open for the respondent's specification).

The questionnaire responses enabled an array of source placings to be constructed that comprised a primary set, a secondary set and a tertiary set of conflict-source areas. The respondents' data showed that there are distinctive groupings of sources which tend to be more prevalent and influential. Table 3 shows the rank scores for each of the conflict sources. These were analysed with respect to Friedman's distribution for the sources. From this analysis of the data it is clear that there is highly significant agreement among the participants as to the ranking of the conflict sources (at the 0.1% significance level, Friedman's $M$ (calculated) and the table value are 36.6 and 36.12 (using Table 8 of the New Cambridge Elementary Statistical Tables).
Table 1 Respondent groupings, project areas and functions

<table>
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<tr>
<th>Group</th>
<th>Person</th>
<th>Key functions and responsibilities</th>
<th>Project type</th>
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[Functions/responsibilities: 1: control of own labour, 2: direct subcontract labour, 3: safety, 4: general administration, 5: control of cost/value, 6: time/progress, 7: control of quality, 8: liaison with others, 9: dealing with authorities, 10: planning of work. Project values were unavailable in many cases because of the sensitivity of work areas, and competition.]

Table 2 Coping-strategy adoption

<table>
<thead>
<tr>
<th>Group</th>
<th>Prime time</th>
<th>Alcohol/socialising</th>
<th>Humour</th>
<th>Sport/hobby</th>
<th>Coffee/smoking</th>
<th>Time management</th>
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<td>&lt; 40D</td>
<td>62.5</td>
<td>25</td>
<td>25</td>
<td>50</td>
<td>18.75</td>
<td>25</td>
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<td>&gt; 40D</td>
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<td>12.30</td>
<td>25</td>
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<tr>
<td>&gt; 40In</td>
<td>48.0</td>
<td>8</td>
<td>24</td>
<td>64</td>
<td>23.00</td>
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</tr>
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</table>

[< 40D: age less than 40, with a degree; > 40D: aged over 40, with a degree; < 40In: less than 40 with qualifications other than a degree; > 40In: over 40, with qualifications other than a degree.]
The prevalence within a 'top five' of areas concerned with interfaces between two or more of the parties to the contract (e.g. area 1: the design team, area 3: vendors, and area 7: the interpretation of contract conditions) provides support for the contention that people are the most important facet within the project. The constant appearance of similar areas for a range of projects suggests that traditional approaches, and to some extent the alternative dispute-resolution techniques, do not function as inhibitors of further conflict. They may lead to some form of resolution but do not prevent or reduce conflict events.

The findings from the questionnaire survey work suggest that management may have to consider alternative techniques when faced with the commencement of a new project where the potential for conflict, or conflictual situations, is high. These techniques may complement or supplant existing methodologies. The impact of people on stressing and conflictual situations has been shown to be of importance in comprehending and alleviating each situation.

Wider construction community

As additional support for the research data, telephone and fax interviews were held with individuals at a similar level in Australia (five responses), Canada (three responses) and Saudi Arabia (seven responses). In these telephone and fax interviews, the general findings discussed above were supported with several new factors emerging as relevant issues in relation to stress and conflict and the construction-industry employee. These factors were heritage, realistic job previews, and hardiness.

Heritage

This elemental factor is derived from the general finding that a significant proportion of the respondents in both the first data group and the subsequent secondary set are second- or third-generation construction-industry employees. Therefore there is a clearly delineated heritage of working under stratified social pressures, e.g. long hours in the summer/better-weather months and reduced income in the poorer-weather months because of lack of overtime/bonuses, and the physical demands that the construction industry places on the individual. This aspect also had an impact on the second element, realistic job previews.

Realistic job previews

Those coming from a construction-industry-related family were well versed in the many demanding challenges facing construction employees. With this background knowledge their own entry into, and transition within, the industry seemed less traumatic than that experienced by friends or acquaintances who were new entrants.

These two elements go some way towards the construct proposed by Kobasa et al., who argue that 'hardiness', in terms of dealing with situations, may be developed in individuals and so allow them to more adequately manage situations within which they become immersed.

Hardiness

The work carried out by Kobasa suggests that stress-resistant people can be characterised by considering three aspects: control, commitment and challenge. Control relates to the tendency of the individual to believe or act as if he/she can influence the cause of events, and seek explanations of why something has happened, not only in terms of his/her own responsibilities, but also other peoples' actions. It may be argued that those in charge of construction sites are able to exercise such control over events and others' actions. Commitment relates to belief in the work at hand and the interest in this work, and in essence to consideration and valuation of not only the practicalities of what work is being carried out, but also the underlying reason for the work.

The completed construction is a lasting memorial to the skill and expertise of those who worked on the project and to the individual in charge who was able to maintain the goals and objectives set out at project commencement. This commitment is often demonstrated by the camaraderie found within the construction 'community'. Challenge relates to the perception that change is the norm, rather than stability. The accepted transition from one construction site to another is a clear sign of acceptance of the challenge element.

Management strategies

Management faced with stressful or conflict situations must have alternative strategies available for implementation. In this paper it is advocated that management should consider adopting and using the following:

- enhancement of the positive coping strategies;
- implementation of stress management and counselling programmes;
- training in conflict identification and resolution;
- psychometric testing of individuals.

The coping strategies are significant weapons in the battle to reduce or eliminate occupational stress. Many of the strategies suggested by the participants may be available to the organisation at little cost. Identification and reduction of conflict at early stages in the project's life may ensure significant social, economic and image benefits at a later date. The use of psychometric tests may allow the formation of groups or teams which display greater cohesion and commitment and so are more effective in achieving preset objectives. Such engineering of groups may have significant advantages that are primarily derived from the reduction of the time spent in each of the storming, forming, and norming stages, so allowing earlier arrival at the all-important performing stage. With appropriate 'typing' of the individuals, it may be possible to engineer out undesirable behavioural elements and so ensure a more acceptable response to conflict, or conflictual situations. At
the commencement of any new project, management have
the opportunity to select those who may contribute more
effectively to the attaining of the project’s and the organis-
ation’s objectives.

Benefits of effective stress-management programme
It is in the best interests of the organisation to have healthy
employees at its workplace. Indirect costs and ‘shunting’ of
work, which causes secondary stress for other colleagues,
can be all too quickly detrimental to efficiency. Other
savings may arise from reduced absenteeism, resulting in
lower direct and indirect costs.

A secondary benefit is the feeling of wellbeing en-
gendered in the workforce and at the workplace. Stamp’s
suggests that ‘a proper concern for well-being is not a soft
option about being kind to people’. This type of organis-
tional ethos, created by sensitive decision making in times
of change and chaos, can indicate to the employees manage-
ment’s ability to respond appropriately. This appreciation
of the relationship between the individual and the organis-
ation is essential to a feeling of wellbeing.

A healthier, more efficient employee will produce better
work for a longer period of time. The health and stress
aspects of work being well managed could mean a positive
‘return on investment’ from organisational activities such
as training, staff development, employee assistance pro-
grammes, counselling, and healthy-living programmes.

Once again this should not be a short-term strategy.
Achieving the benefits of a stress-management scheme
requires a certain ‘cognitive shift’ in senior-management
thinking.

For many managers, it is part of their training and ex-
perience to consider a longer timeframe for financial
decisions and results. This is a natural aspect of develop-
ment planning. Applying this to people investment seems to
engender a strange reluctance. Rosen goes for a balanced
approach, juggling the career and psychological needs of
workers with the company’s needs for competitiveness and
profitability. He suggests that a healthy company results
from a long-term investment in people. This is not achieved
by nice-person programmes, but by long-term investment
that has a ‘quantifiable effect on the bottom line by keeping
workers at work, performing more productively, reducing
excess illness and turnover costs’ (and, in times of recession,
downtime costs).

Another benefit is assistance in forecasting and develop-
ment planning. Accurate future planning depends on there
being reasonably stable or predictable conditions within the
organisation. Nothing invalidates such planning more than
employee absence and its concomitant effects. The impor-
tance of planning and having good marketing and manu-
factoring decisions in place cannot be underestimated. A
healthy organisation will be that much more reliable and
achieve an enviable saving in costs.

Models of stress management for organisations
Dorch adopts a matching of person and job within his
model, and takes this as a central premise for effective
stress management. His model, as illustrated in Figure 5,
is a complex interplay between factors such as tasks, skills,
experience, and preferred and required behaviours.

The main difficulty seems to be that this approach is time-
consuming and extremely specific. It is specific to indivi-
duals, jobs and even organisations, and thus it is not easily
transferable from one organisation to another. Also, can
such a perfect match ever be achieved in an environment of
change? However, job–person fit is a recognised aspect of
most stress-management programmes.

Arroba and James proffer a model which can be
applied to the whole organisation. It is a four-stage process
consisting of awareness raising through an educating
phase and skills acquisition, and, uniquely, ending with an
organisational-stress audit. McHugh and Brennan, in
their critique of the four-stage model, say that it does not
go far enough. They create points of refinement on the
Arroba and James model to take stress management into the
domain of quality management. Their concept of total
stress management (TSM) takes the all-encompassing
‘quality’ model for organisations and suggests that it is the
optimal use of stress levels in an organisational context
which can achieve enhanced levels of effectiveness. The
problem that is overlooked in this idea is that of knowing
when the optimum has been reached, and avoiding overload
and breakdown (of both people and the organisation).

An alternative model is that shown in Figure 6. The
principles upon which it is based are as follows:

- Most stress-management programmes have similar
  contents and intent。“

Figure 5 Fit between person and job

Figure 6 Interface model for organisational stress management
Implications for UK organisations

Acceptance of the need to commit further management effort and resources to resolving numerous issues surrounding stress and conflict may be forced upon UK organisations by current litigation and impending legislation. Other countries have considered the problem, and the resulting progress in effective stress management has been rapid in countries such as the USA, Norway, the Netherlands and Sweden. The social conditions and different cultural influences in these countries, in both industrial organisations and society in general, encourage and allow this kind of development, and conflict is seen as an aspect of construction activity which should be better managed. The first task therefore is to create appropriate organisational cultures and environments.

Organisational stress and conflict are sensitive issues. As such, they call for an introspective examination of all work-related activities and the people involved. Many managers do not relish this approach because they know, or accurately anticipate, that some of the 'blame' for stress will be laid at their doorstep, and they do not want this publicly or formally confirmed. The worker does not like it because it is seen as a 'big-brother syndrome'. Notions of blacklists and blocked promotions quickly surface. Nevertheless, it is an important and maybe vital cathartic experience for an organisation to undertake if the organisation is to successfully manage the stress and conflict that does exist in a positive and constructive way in order to survive in the next century's business environment.

Conclusions

This work suggests that there may be a link between stressors and conflict on construction projects. The individual operates within an environment which is subject to multivariate pressures. These pressures demand that the individual is able to draw on abilities/skills which can accommodate significant change with the minimum of influence upon personal effectiveness and efficiency. The demands may give rise to stress, and this occupational stress may be a precursor to, or complement, conflict situations, especially as construction projects are still predominantly about people. Focusing attention on stress and conflict at a much earlier point in the project's lifespan may enable management to consider more effectively the options available to them. The traditional and alternative approaches to conflict resolution allow the conflictual situation to develop into full-blown conflict, and so miss a golden opportunity to prevent conflict arising. If the industry is to progress further in eradicating or mitigating the effects of conflict, then it must take on board techniques which enable the environment under which the project is executed to be engineered. The persistent occurrence of occupational stress and conflict demands much management effort and other resources to bring it to some form of (satisfactory) conclusion. The final costs in both human and financial terms may be a price which the industry cannot afford.

As discussed above, stress management must stem from a convergent holistic view of the organisation and the individual. At the centre of the European approach to stress management is this holistic view of the individual. Work-related stress is only a part of the total problem, and, by implication, only a part of the total solution. To effect an acceptable return on capital where stress management is concerned, organisations must treat the problem holistically.

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