

Professor Alan Patching has qualifications in quantity surveying and project management and also holds a Masters degree in Counselling and Psychotherapy Practice. He is a registered psychotherapist with the United Kingdom Council for Psychotherapy. He has extensive construction industry experience, including with the Queensland State Department of Works, as the founder of well-respected construction project management firm, RCP, and as National Projects Director (Australia) for giant Japanese Construction firm, Kumagai Gumi. Patching is probably best known for his roles as CEO of the owning entity of the Sydney Olympic Stadium and as owners' Project Director overseeing design, construction and pre-Olympic operations of the Sydney Olympic. He was also Project Director of the pre-construction phases of Suncorp Stadium in Brisbane, and advisor to the Treasurer during construction of that venue.

RESEARCH FINDINGS SUMMARY - participants' information

- 84 from small organisations (1-19 employees), 124 from medium organisations (20-199) and 281 from large organisations (220 or more)
- 253 were construction project managers (CPM) 124 were construction administration personnel (CAP) and 112 were people across non construction business at large (NCB)
- 74% of CPMs earned between \$100k and \$149,999, compared with 27% of CAPs and 22% of NCBs
- 37% of CPMs earned \$150k or more, compared with 8% of CAPs and just over 6% of NCBs
- (Approx.) 82% of CPMs, 35% of CAPs and 62% of NCBs were male and (approx..) 18% of CPMs, 65% of CAPs and 39% of NCBs were female

Research findings summary – Quantitative analyses (what the situation is)

General perceptions of stress

- Stress was more caused by work factors for CPMs and by home factors for CAPs and NCBs, although the difference between CPMs and NCBs was not high on this measure
- More CPMs considered their work to be stressful than did CAPs and NCBs
- CPMs and NCBs from **small organisations** believed stress affected their ability to perform at work more so than NCBs from small orgs
- CPMs from **medium organisations** believed stress affected their ability to perform at work more so than CAPs and NCBs from small orgs
- CPMs and CAPs from **large organisations** believed stress affected their ability to perform at work more so than NCBs from large orgs

Status of training of leaders and managers in identifying signs of stress

- CPMs and CAPs from **large organisations** (more so than those from medium and small organisations) reported that leaders and managers were trained to identify signs of stress in themselves and their employees, while NCBs from **small organisations** reported that leaders

and managers were trained to identify signs of stress in themselves and their employees (more so than those from medium and large organisations)

- Across all role types, substantially more people reported that their leaders and managers were not trained in identification of signs of stress than reported their leaders and managers were so trained
- 32% of participants from large organisations reported being unsure regarding whether or not their leaders and managers were trained in identifying signs of stress, compared with over 18% from medium and 6% from small organisations
- Only some 50-55% of participants across the various organisation sizes provided an opinion regarding the effectiveness of the stress identification training given to leaders and managers in their organisations. The majority reported positively about that effectiveness

Status of training all employees in identifying signs of stress

- Of those participants who agreed that their organisations did train all employees in identifying signs of stress in themselves and others, for CPMs and CAPs (i.e. people employed in the construction industry) reported it was more the case in large organisations than in medium, and more the case in medium organisations than in small. However, the findings from NCB participants were the reverse (small organisations' employees likely to agree that training was provided more than medium and medium organisations more than large)
- The previous figures need to be considered, however, in light of the fact that 80% of participants from small organisations, 55% from medium and 69% from large expressed uncertainty regarding the training or did not regard the question as being applicable in their organisation

Opinion regarding sufficiency of an Employee Assistant Scheme, or counselling, to help employees suffering from stress

- There was inconsistency of opinion across the role types and organisational sizes regarding whether an EAP was sufficient to address employees' suffering effects of stress '
 - More CPMs from large organisations agreed that an EAP was sufficient than those from medium, and more from medium organisations agreed than from small
 - For CAPs the order of increasing agreement that an EAP was sufficient was small organization - large organization – medium organization
 - For NCBs participants from large and small organisations agreed in approximately equal numbers more than did those from medium organisations
- *However, across all role types, substantially more participants disagreed that an EAP was sufficient to deal with employee stress in their organisation*
- Twice as many CPMs confirmed that their organisation provided some form of non-EAP counselling service than did not, with more large organisations doing so than do not. However, these findings must be considered in light of the fact that high numbers of participants reported being unsure about the provision of the service or considered the question not applicable to their employment circumstances (53%-60%-68% for CPMs, CAPs and NCB participants respectively)

- Of the CPMs who responded, 27% considered the service provided effective compared with just over 10% who considered it ineffective

Attitudes to training of leaders and employees in stress avoidance and management

- The majority of participants disagreed or strongly disagreed with the proposition that *stress should be a matter left for individuals to address and was not the responsibility of employers* (68% of PCMs, 55% of CAPs and 52% of NCBs)
- The result above was reasonably consistent across organisation sizes, with fewer participants employed in small organisations disagreeing or strongly disagreeing with the proposition than those from medium or large (44% from small organisations, 53% from medium and 69% from large either disagreed or strongly disagreed with the proposition)
- Participants across role types either agreed or strongly agreed that organisations should train their leaders and managers in stress avoidance and management techniques (90% of CPMs, 81% of CAPs and 75% of NCBs)
- This level of agreement was consistent across organisation size as well (73%, 83% and 88% of participants from small, medium and large organisations respectively)
- Participants across role types also either agreed or strongly agreed that organisations should train all their employees in stress avoidance and management techniques (89% of CPMs, 81% of CAPs and 72% of NCBs)
- Again, this level of agreement was consistent across organisation size as well (67%, 79% and 80% of participants from small, medium and large organisations respectively)

Existence of stress avoidance and/or stress management program in the participant's organisation

- 81% of small organization participants, 56% of medium and 39% of large organization participants reported that their employers had a stress avoidance program (usually working hour rules and processes oriented) in operation
- A surprising 36% of participants from large organisations were not sure whether or not their organisations had a stress avoidance program in place, compared with approximately 6% of small organisations and 10% of medium
- Construction participants were somewhat negative towards stress avoidance programs, and an early pilot study to the full research indicated that this was because to adopt stress avoidance practices commonly used in general business (such as limiting hours worked per week or number of weekends worked per month) actually tended to increase stress for construction employees, especially when they were behind schedule and approaching a non movable contractual deadline
- Notwithstanding the above, approx. 14% of CPMs agreed or strongly agreed that their stress avoidance program was effective, compared with approx. 20% of CAPs and 15% of NCBs

- Responses regarding the existence of a stress management program in their organisation were the reverse of those for the existence of a stress avoidance program. 83% of small organisations, 60% of medium and 43% of large reported that their organisation did NOT have a stress management program in place within the organisation (compare with the first point in this section), and 11%, 13% and 31% respectively of participants from small, medium and large organisations were unsure if such a program existed
- Where a stress management program did exist, more participants from each role type reported it to be effective than reported it to be ineffective
- There was less uncertainty across all role types regarding the existence of An Employee Assistance Program (EAP) in their organization than there was regarding stress avoidance and stress management programs, and the participants indicated a preference for EAPs over stress avoidance and stress management programs.
- 53% of PCMs confirmed existence of an EAP compared with 24% and 26% respectively for stress avoidance and stress management programs. There was also less uncertainty as per the previous points across organizational size, with 55% of participants from large organisations and 45% for medium confirming the existence of an EAP compared with 25% and 34% respectively in medium and small organisations confirming a stress avoidance program and 26% and 27% respectively confirming a stress management program. The figures from small organisation participants were substantially lower – with only 8% and 6% confirming existence of stress avoidance and stress management programs respectively
- Participants across all role types agreed or strongly agreed that their EAP was effective more than they disagreed or strongly disagreed. *(this is rather curious, as one interpretation could be that it is better to deal with effects of stress after they have become problematic than to take steps to avoid people experiencing the effects of stress)*

Absenteeism due to stress

- This was difficult to determine from the responses to the survey question. A probable reason was found in the qualitative data analysis (summarised later herein). Participants believed it was unlikely that many construction employed person would admit to having leave days due to stress, for fear of appearing weak
- There was a strong pattern of decreasing agreement with the proposition that stress contributed to absenteeism with increasing size of organization for which the participants worked. 62% of participants from small organisations agreed or strongly agreed with the proposition compared with 38% and 28% from medium and large organisations respectively
- A similar negative correlation was found between stress experienced and perceptions of absenteeism due to stress, such that participants who reported their work to be stressful had a higher likelihood of agreeing or strongly agreeing that absenteeism was due to stress
- In addition there was a negative correlation between perceptions of work being stressful and agreeing or strongly agreeing that absenteeism was due to stress, such that those who perceived their work to be more stressful were likely to disagree or strongly disagree that stress contributed to absenteeism

Personal experience of stress related issues

- 58% of participants agreed or strongly agreed that they had experienced stress more consistently than they would have liked over the preceding months, compared with 23% who somewhat disagreed or strongly disagreed
- 40% of PCMs rated that stress over the previous month at 70% or higher, compared with 32% of CAPs and 27% of NCBs
- 6.1% of PCMs rated that stress over the previous month at 90% or higher, compared with 4.2% of CAPs and 3.6% of NCBs

Managing stress

- A non-compulsory question was asked regarding whether participants took medication for stress related issues. Over 97% of participants responded. 13% of PCMs, 15% of CAPs and 18% of NCBs took medication, and approximately 20%, 23% and 17% respectively considered to be 70% or more effective
- Some 50%, 48% and 46% of CPMs, CAPs and NCBs respectively took some form of personal action to avoid or manage stress (exercise, walking, listening to music, reading, yoga etc.)
- Approximately 60%, 85% and 95 % of CPMs, CAPs and NCBs respectively considered their chosen method of avoiding or managing stress to be effective
- Between 50% and 60% of participants across the different organisational sizes and role types considered their chosen means of stress avoidance or stress management to be effective

Sources of stress for participants

- 73% of PCMs experienced work related stress at a perceived level of 50% or more, while for non work related stress the figure was 27%
- 58% and 60 % of CAPs and NCBs respectively experienced work related stress at a perceived level of 50% or more, while for non work related stress the figures were 44% and 41% respectively
- 48% of PCMs experienced work related stress at a perceived level of 70% or more (12% for non work related stress) compared with 37% and 43% of CAPs and NCBs respectively (20% each for non-work related stress)
- However, 10% of PCMs experienced work related stress at a perceived level of 90% or more, compared with 8% and 14% of CAPs and NCBs respectively. For non work related stress, the corresponding figures were 1.7% for PCMs and 3.6% for each of PACs and NCBs
- 24% of PCMs, 20% of PACs and 10% of NCBs reported that their level of stress had a 70% or more impact on their ability to perform at work

Contributing factors to workplace stress for PCMs

CATEGORY

THEME

1. Intense or major life experience

1. Loss or serious illness of a close friend or relative
2. Previous or current mental illness, breakdown, severe anxiety or depression
3. Divorce or other relationship breakdown

2. Specifically work/employer contributors to stress

1. Senior managers lacked understanding of construction project managers' role and workload
2. Senior managers won work by drastically reducing margins and/or promised early delivery of projects which often necessitated working six day weeks and sometimes required catch up work on Sunday, thereby placing huge stress on construction project managers
3. Management understaffed projects in terms of experienced construction project managers and tended to overload the most experienced and best performing construction project managers, making it difficult for them to have time off and exposing them to the risk of burnout
4. There was a high level of pressure on construction project managers to satisfy clients, no matter what.
5. Lack of communication between senior managers and construction project managers resulted in pricing and scheduling errors in tender submissions and in poor project planning which increased risk of significant negative consequences as the job progressed.
6. Winning projects by submitting low-margin or no-margin tenders led to pressure on construction project managers to increase profit despite the consequential problems of having to deal with lower quality subcontractors and the increased stress arising from that

3. Work-life balance issues

1. Pressure of work effects on primary family carer
2. Lack of quality family time each day or each week
3. Lack of time for self (after work and family)

4. Locus of control aspects of stress

1. Sense of a need to escape the industry but feeling it was not possible due to knowledge/competence limitations or salary level implications
2. Fear of losing one's job if one complained
3. Sense of inability to change a system that badly needed changing

5. Industry contributors to stress

1. Concern for aspects of safety that arose from a stressed and/or fatigued construction project management team
2. Union issues/pressures
3. Pressure from poor quality project contract documents as a consequence of clients putting fee reduction pressure on consultants
4. The cut throat economic climate in some regions