

HUMAN RESOURCES COMMITTEE: 1 SEPTEMBER 2008

SUBJECT: STRESS SURVEY**JOINT REPORT OF THE CHIEF FIRE OFFICER AND PERSONNEL ADVISOR**

1 INTRODUCTION

- 1.1 The Work Related Stress Survey is an analysis tool provided by the Health and Safety Executive (HSE). The tool is in a written questionnaire format that is allocated to a random sample of employees. The aim of the tool is to investigate how the workforce generally manages the risks associated with work related stress.
- 1.2 Responses from the survey are categorised into 7 stressors, these being: demands, control, manager's support, peer support, relationships, role and change. The HSE system analyses responses by comparing them with a comparison group of employees that responded "to the same questions as part of a nationwide survey of psychosocial working conditions". This provides an indication of current performance in relation to the comparison group and claims to allow interim and longer term targets to be determined depending upon performance levels. The questionnaire also includes 4 questions to collect demographic information that can be used to compare groups within the organisation depending upon age, gender, job type etc.

2 BACKGROUND

- 2.1 The HSE Work Related Stress Survey was initially administered in 2006 to a random group of Tyne and Wear Fire and Rescue Authority employees. The HSE analysis tool was then used to interpret results by comparing them with the HSE comparison group and derive targets for performance.
- 2.2 The HSE method has many benefits, the most important being that it provides a common framework for measuring workplace stress nationally but the tool also suggests targets and allows organisations to benchmark against one another and the comparison group. The tool operates by comparing the average rating of all Authority employees for each stressor (demand, control etc) with those gained from a national comparison group. Interim and long term targets are achieved by comparing the Authority average ratings with the top 20%, average and bottom 20% of the comparison group ratings.
- 2.3 The HSE Work Related Stress Survey provides a wealth of information from the 35 questions that address the 7 stressor categories but the 4 demographic questions allow comparisons to be made between groups within Authority. The report produced from the HSE analysis is useful in comparing the Authority with a national comparison group and for benchmarking against other organisations but it does not offer any conclusions on work related stress within the organisation.

- 2.4 There were 322 questionnaires returned from the 2006 survey and a further 282 in 2007. The volume of data obtained means that it may be subjected to a more detailed statistical analysis to generate conclusions and recommendations that would generalise to the entire workforce of the Authority.
- 2.5 A preliminary analysis was performed on the 2006 questionnaire data to investigate correlations between each of the 35 questions to identify significant interrelationships. The original aim was to investigate the links between the questions involving bullying and harassment and other questions to gain a more thorough understanding of other influences that relate to the individuals perception that they are subject to bullying and harassment.
- 2.6 The outcome of the preliminary analysis with 2006 questionnaire data resulted in amendments to the demographic data collected to permit more specific and meaningful conclusions. The demographic information was extended from the categories of role (operational or corporate), age and scale (corporate) to role (operational operational, operational other or corporate), gender (male or female), age and length of service. Corporate scale was excluded in 2007 as this category was of little value to the analysis due to the relatively low proportion of corporate employees and subsequent low numbers in each corporate scale category.
- 2.7 Analysis of information collected from the 2006 Work Related Stress Survey suggested that responses to the questionnaire could be influenced by role however the existing categories of 'operational or corporate' were too ambiguous to test this assumption. As a consequence of variation in the nature of operational roles a more robust analysis could be performed by dividing this category in two to reflect positions that are operational, employees based on a station and those that are based at headquarters in a more support based role.
- 2.8 Gender and length of service were also added as categories to provide more to enhance the usefulness of conclusions generated since these are both likely to influence the way that an employee responds to the questionnaire. Analysing the questionnaire data in this way will have a major influence on conclusions generated since the purpose of collecting demographic data is to examine differences between the different groups in the sample. This allows conclusions to be drawn from subjecting the data to statistical manipulation to identify whether any of the differences could occur by chance or result from real between group differences. This will ensure that any initiatives undertaken to manage stress will have maximum impact as they can be precisely designed to meet the needs of specific groups and focus on only the areas that can make a real difference. This will optimize the use of resources invested in stress management initiatives in terms of human resource and the scale of interventions and benefit the workforce by targeting those groups that are most in need of assistance.

3 SUMMARY OF FINDINGS

- 3.1 The full comprehensive results are attached at Appendix A for the information of Members.

3.2 Listed below are the general conclusions that can be drawn from the analysis of the survey:

- Corporate employees consistently attributed ratings that suggest that they have more control over how their job is carried out/organised than operational employees.
- Age appears to be a significant influence on perception of work related stress; the 41-50 age group gave the lowest (least favourable) ratings for all stressors.
- Younger age groups experience less demands or cope better with conflicting demands (2006, 2007)
- Senior corporate grades report more pressure to work long hours (demand). This is the only difference within the corporate grades.
- Individuals with less than 5 years service reported less impact from the demand stressors.
- Gender differences have little impact on perceptions of work related stress and impact only on the demand stressor.
- Consultation about change was suggested to be a major issue by all groups.
- Differences between groups were mainly observed in relation to demand and control stressors with no difference between groups at all on the relationship stressor.
- The HSE national comparison group should be used with caution and only as a guide as the comparator group is the general public and not sector specific.

3.3 The Chief Fire Officer is currently considering the results of these surveys, however in order to progress matters further a number of focus groups are being initiated to explore the findings further and, coupled with the results of these surveys, will give a clearer indication on the way forward.

4 RISK MANAGEMENT

4.1 A risk assessment has been undertaken to ensure that the risk to the Authority has been minimised as far as practicable. The assessment has considered an appropriate balance between risk and control; the realisation of efficiencies; the most appropriate use of limited resources; and a comprehensive evaluation of the benefits. The risk to the authority has been assessed as low utilising the standard risk matrix based on control measures being in place. The complete risk assessment is available on request from the Chief Fire Officer.

5 FINANCIAL IMPLICATIONS

5.1 There may well be financial implications that have not, as yet, been identified however it is envisaged that they will be minimal and can be met from existing budgetary provision.

6 EQUALITY AND FAIRNESS IMPLICATIONS

6.1 There are no equality and fairness implications in respect of this report.

7 HEALTH AND SAFETY IMPLICATIONS

7.1 There are no health and safety implications in respect of this report.

8 RECOMMENDATIONS

8.1 The Authority is recommended to:

- a) Endorse the actions taken by the Chief Fire Officer;
- b) Receive further reports as appropriate.

BACKGROUND PAPERS

The undermentioned Background Papers refer to the subject matter of the above report:

- Strategic Plan 2006-2010

Appendix A

1 Characteristics of the sample group (Analysis of differences between demographic Groups)

A comparison of average responses for the different demographic groups was performed for each of the 7 stressor categories. Only significant differences between the demographic groups are reported. Graphs are used to illustrate the group differences where responses differ significantly on a number of questions.

2.1 Demands:

Demands in the workplace can be physical as well as mental. They can include both communication and also tasks and projects. Some roles require multitasking while others are more sequential in operation and in deadlines. Demands can increase with variations in workload, absence of a colleague or vacant positions.

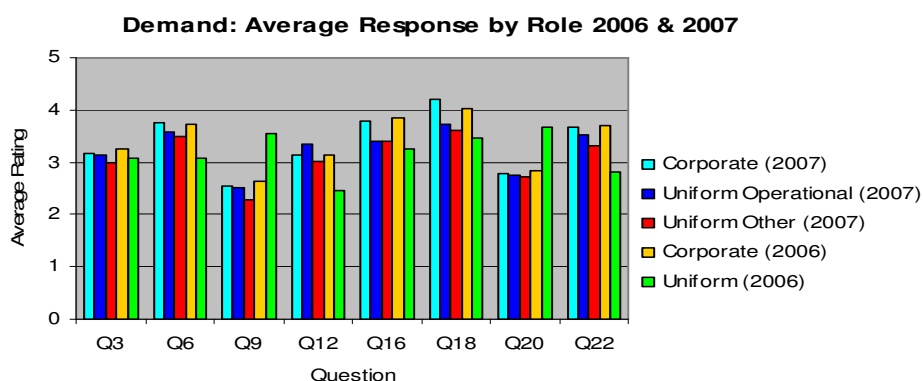
The HSE analysis tool highlighted demands as an area where there was a clear need for improvement. One area was assessed as good and this was “neglecting tasks because there’s too much to do”. A good rating is defined by the HSE as “Good, but need for improvement. Represents those better than average but not at...the 80th percentile”. This means that the average rating for TWFRS employees of 3.22 (2006/07) is higher than more than half of the organizations in the comparison group. Whilst improvement is needed, it is not a priority for action as initiatives focusing on high priority areas will automatically increase this rating.

2.1.1 Role Related Differences on the Demand Stressor

2006: Significant role related differences were observed between operational and corporate average ratings on opportunity to take sufficient breaks. Operational employees stated that they were less able to take sufficient breaks (average rating: 3.47) in comparison with corporate employees (average rating: 3.85). This difference was statistically significant, however both groups fall within the seldom to sometimes category in response to the question “I am unable to take sufficient breaks”.

2007: Role related differences were observed in relation to pressure to work long hours. Both operational groups (operational and operational other) stated that they were more often pressured to work long hours. The corporate average rating was 4.21 suggesting that the corporate respondents never or seldom experience pressure to work long hours. The operational ratings by comparison were 3.72 (operational) and 3.60 (other) and both of these fall within the seldom to sometimes category.

It would be expected that differences would be consistent year on year; one possible explanation could be changes to the composition of the demographic groups for the 2007 survey. This was not true for the question on “pressure to work long hours” as the main difference was between corporate ratings. In 2006 the average corporate rating was 4.02 (seldom pressured to work long hours) however this increased to 4.21 in 2007 (seldom to never pressured to work long hours) and this was the primary reason for the highly significant difference on this question for corporate and operational employees. The difference between the groups on opportunity to take sufficient breaks was still significant in 2007 but to a lesser extent.



Scale: 1 = Always, 2 = Often, 3 = Sometimes, 4 = Seldom, 5 = Never

Demand Stressor Questions

- Q3: Different groups demand different things that are hard to combine
- Q6: I have unachievable deadlines
- Q9: I have to work very intensively
- Q12: I have to neglect some tasks because I have too much to do
- Q16: I am unable to take sufficient breaks
- Q18: I am pressured to work long hours
- Q20: I have to work very fast
- Q22: I have unrealistic time pressures

2.1.2 Age Related Differences on the Demand Stressor

Age groups were categorized as 18 - 30, 31 - 40, 41 - 50, 51 - 60 and 61+. The 61 + group contained only a very small number of respondents and so conclusions from this group are not reliable.

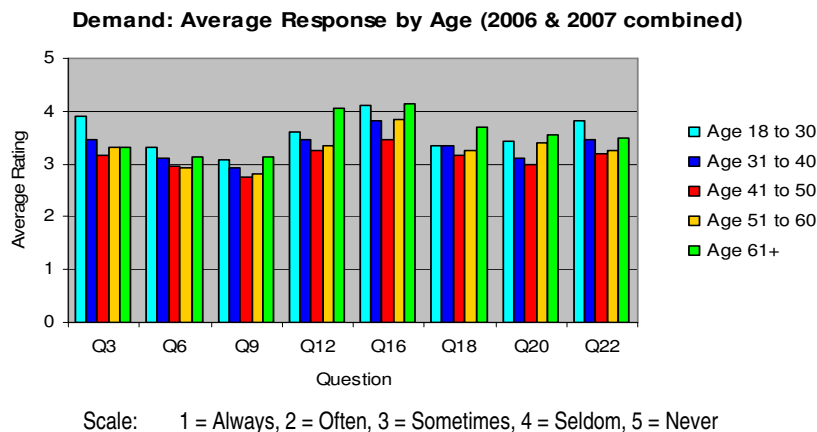
Significant age related differences were found in relation to neglecting tasks because there’s too much to do, unachievable deadlines, different groups demand different things, ability to take sufficient breaks and unrealistic time pressures. In 2007 an additional difference was observed in relation to pressure to work long hours. A summary of the differences is presented below:

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- The 18-30 group average rating was seldom for unachievable deadlines, insufficient breaks and unrealistic time pressures. The other age groups were in the seldom to sometimes category for both the 2006 and 2007 surveys.
- The 18 to 30 group average rating for “different groups demand different things” and neglecting tasks due to workload were seldom to sometimes. The other older groups were in the sometimes category.
- In the 2007 survey a further significant difference materialized with younger respondents (18 to 30) stating that they were seldom to never pressured to work long hours, the remaining groups were all in the seldom to sometimes category.

In summary the data suggests an age related trend that younger age groups are slightly more resilient to the demand stressor. The 41 to 50 age group consistently gave the lowest ratings on the demand stressor implying that this group experiences the greatest level of stress from demands in the workplace.



Demand Stressor Questions

Q3: Different groups demand different things that are hard to combine
 Q6: I have unachievable deadlines
 Q9: I have to work very intensively
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 Q16: I am unable to take sufficient breaks
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 Q20: I have to work very fast
 Q22: I have unrealistic time pressures

2.1.3 Corporate Scale Differences on the Demand Stressor (2006 only)

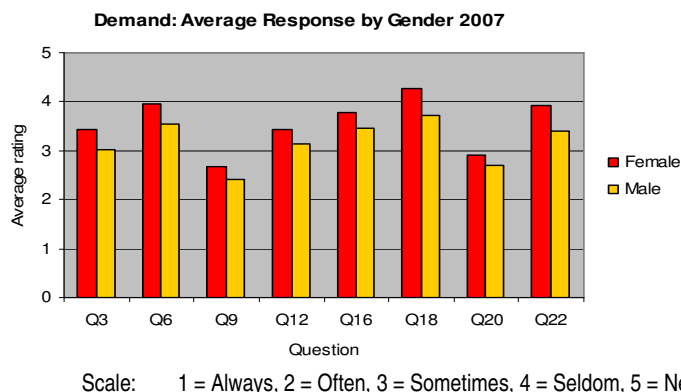
Differences in response patterns according to scale applied only to corporate employees, there were 3 categories of scale and these were 1 to 3, 4 to 6 and SO and PO grades.

Significant differences between these groups were observed in relation to only one question and this was pressure to work long hours. The SO/PO group had the lower average rating of 3.5 (seldom to sometimes experience pressure to work long hours). The average for the scale 1-3 group was 4.26 and for the scale 4-6 group 4.14, both of these were in the seldom to never category. This was a highly significant difference.

2.1.4 Gender Differences on the Demand Stressor (2007 only)

Gender information was collected only as part of the 2007 demographic information. Significant differences in how the different demographic groups responded according to gender are presented below:

- The largest differences for the demand stressor were in relation to pressure to work long hours and unrealistic time pressures. Female employee average ratings were seldom to never for pressure to work long hours and seldom for unrealistic time pressures. In both cases the male employee rating was seldom to sometimes. This was a very highly significant difference.
- Significant differences were also observed for unachievable deadlines and unable to take sufficient breaks. Whilst both sets of averages fell in the seldom to sometimes categories, female respondents tended more toward seldom being exposed to these demands.

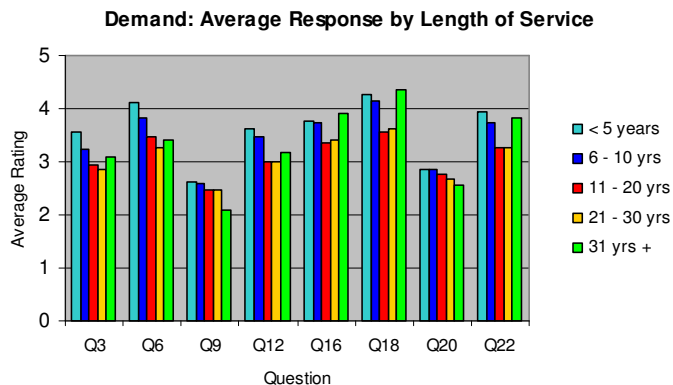


Demand Stressor Questions

Q3: Different groups demand different things that are hard to combine
 Q6: I have unachievable deadlines
 Q9: I have to work very intensively
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 Q16: I am unable to take sufficient breaks
 Q18: I am pressured to work long hours
 Q20: I have to work very fast
 Q22: I have unrealistic time pressures

2.1.5 Length of Service on the Demand Stressor (2007 only)

Length of service was collected only as part of the 2007 demographic information. There were 6 subcategories used in the analysis and these were 5 years or less, 6 to 10 years, 11 to 20 years, 21 to 30 years, 30 years plus and non disclosed. Significant differences were observed for different groups demand different things that are hard to combine, unachievable deadlines, neglecting tasks because there is too much to do, pressure to work long hours and unrealistic time pressures. In the majority of cases more favourable ratings were given by those with less service and this appeared to follow a trend where those with longer service held less positive perceptions. There were some exceptions to this where the group with over 31 years service also responded favourably. This can be clearly seen on the graph in response to questions 3, 6, 12, 16 and 22. On questions 16 and 18, the average for those with over 31 years service was the highest.



Scale: 1 = Always, 2 = Often, 3 = Sometimes, 4 = Seldom, 5 = Never

Demand Stressor Questions

Q3: Different groups demand different things that are hard to combine
 Q6: I have unachievable deadlines
 Q9: I have to work very intensively
 Q12: I have to neglect some tasks because I have too much to do
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2.2 Control

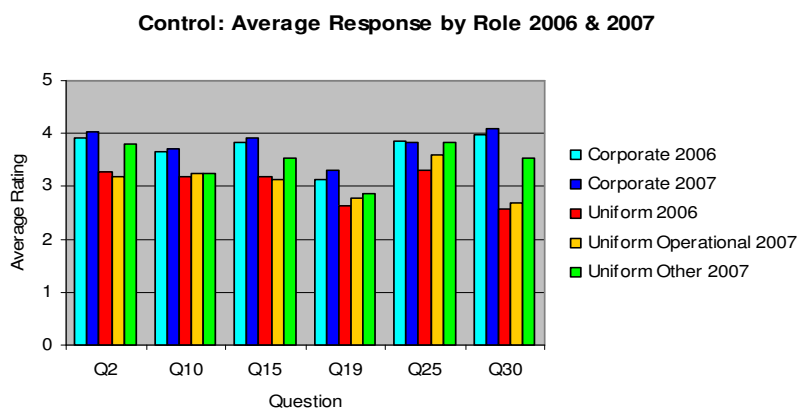
Control is a primary factor of stress in the workplace. Lack of control at work and not having a say in how a job is done or how to organize work can create ongoing high levels of stress, especially if paired with excessive demands.

The HSE analysis tool highlighted control as an area where there was a clear need for improvement with urgent action required for the questions that related to choice over what people do at work and say over the way that they work. Choice in deciding how to do work was recognized as good. These findings were identical for both the 2006 and 2007 surveys.

2.2.1 Role Related Differences on the Control Stressor

In the 2006 survey there were highly significant differences between operational and corporate employees on all of the questions that contributed to the control stressor. On the 2007 survey this theme was repeated however the difference on 'say over work' was still significant but to a lesser degree. A summary of differences in average ratings is presented below:

- Corporate employees feel that they have more control over when they can take a break
- Corporate employees feel that they have slightly more say over their work speed.
- Corporate employees feel that they have more choice in how to do their work
- Corporate employees feel that they have more choice over what they do at work
- Corporate employees feel that they have more say over the way that they work
- Corporate employees feel their working time can be much more flexible



Scale Q2, Q10, Q15, Q19: 1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Always

Scale Q25, Q30: 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

Control Stressor Questions

Q2: I can decide when to take a break
 Q10: I have a say in my own work speed
 Q15: I have a choice in deciding how I do my work
 Q19: I have a choice in deciding what I do at work
 Q25: I have some say over the way I work.
 Q30: My working time can be flexible

The graph clearly illustrates the differences in perception of control between corporate and operational employees. There is also a significant difference between the operational and operational other categories.

2.2.2 Age Related Differences on the Control Stressor

Responses varied by age on only one control question relating to choice over how to do work. On both the 2006 and 2007 surveys choice over how to do work appears to increase with age. The range of responses was sometimes for the 18 to 30 group, sometimes to often for the 31 to 40, 41 to 50 and 51 to 60 age groups and always for the 61 plus age group.

2.2.3 Corporate Scale Differences on the Control Stressor (2006 only)

There were no differences on the control stressor between corporate scales.

2.2.4 Gender Differences on the Control Stressor (2007 only)

There were no significant gender differences on the control stressor.

2.2.5 Length of Service Differences on the Control Stressor (2007 only)

The only significant difference for length of service was over choice what to do at work and this was greatest for those with over 31 years service who reported that this was often given. The second highest rating was for those with less than 5 years service with average responses in the sometimes to often range. Those with between 6 and 30 years stated that they seldom to sometimes have a choice over what to do at work. Length of service differences follow the same trend as age related differences on the control stressor.

2.3 Manager Support

Support includes assistance, encouragement, coaching and mentoring, training and general resources provided by the organization in relation to how they impact upon employee performance and wellbeing.

Manager support was highlighted by the HSE analysis tool as needing improvement. There were 2 areas where the organization was highlighted as performing well for both years. The areas were on supportive feedback and being able to rely on the line manager to help with a work problem.

2.3.1 Role Related Differences on the Manager Support Stressor

There were no significant differences in response patterns between operational and corporate roles on the manager support stressor for both the 2006 and 2007 surveys.

2.3.2 Age Related Differences on the Manager Support Stressor

Age related differences were observed in relation to questions on supportive feedback and support given through emotionally demanding work on both surveys

- Older employees responded much less favourably than younger employees on how often they receive supportive feedback, the greatest difference was observed between the 18-30 group and the 41 to 50 age group. The younger group average ratings were that they sometimes to often received supportive feedback in contrast with the 41 to 50 group who seldom to sometimes received supportive feedback. The 41 to 50 and 61 plus age groups stated that they sometimes to always received feedback.
- Support through emotionally demanding work followed an identical pattern to the above where again the greatest difference was observed between the 18 to 30 and 41 to 50 age groups.

2.3.3 Corporate Scale Related Differences on the Manager Support Stressor (2006 only)

There were no differences on the manager support stressor between corporate scales.

2.3.4 Gender Related Differences on the Manager Support Stressor (2007 only)

There were no significant gender differences on the manager support stressor.

2.3.5 Length of Service Related Differences on the Manager Support Stressor (2007 only)

The impact of length of service impacted on only one question relating to supportive feedback where those with less than 5 years and more than 31 years service responded to suggest that they sometimes to often received supportive feedback. Those with between 6 and 30 years average responses were in the seldom to sometimes range.

2.4 Peer Support

Peer support includes assistance and encouragement from colleagues in relation to how this impacts upon employee performance and wellbeing.

Peer support was an area that the HSE analysis tool highlighted as having a clear need for improvement. There were two critical areas which were 'respect from colleagues' and 'colleague's willingness to listen to work related problems'. Colleagues' willingness to help was highlighted as an area of good performance.

2.4.1 Role Related Differences on the Peer Support Stressor

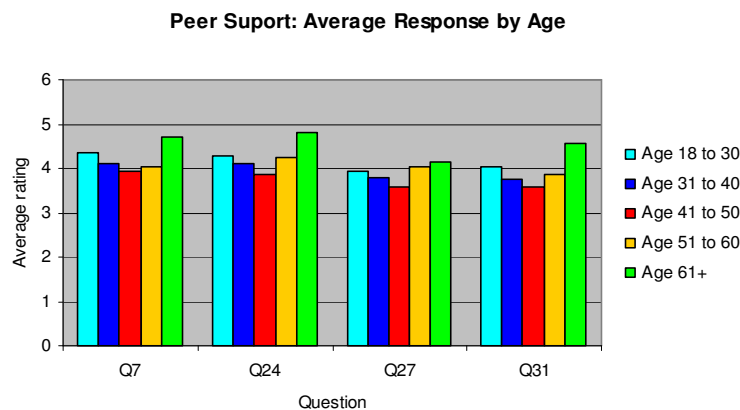
There were no differences in response patterns between operational and corporate roles on peer support.

2.4.2 Age Related Differences on the Peer Support Stressor

2006: Significant age related differences were observed in relation to colleagues' willingness to help if work gets difficult and also getting help and support from colleagues. In both instances the group with the lowest average rating was the 41 to 50 age group. The average rating implied that they sometimes to often received help. The group with the highest average rating was the 61 plus group followed closely by the 18 to 30 group who often to always received help.

2007: There was no significant difference for if work gets difficult colleagues will help however there were additional significant differences for receiving respect and willingness to listen to colleagues.

The graph below presents a summary of average responses by age group for 2006 and 2007 combined.



Peer Support Questions

Q7: If work gets difficult my colleagues will help me

Q24: I get help and support I need from colleagues

Q27: I receive the respect at work I deserve from my colleagues

Q31: My colleagues are willing to listen to my work related problems

Scale Q7: 1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Always

Scale Q27, 27, Q31: 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

The trend appears to be that the 18-30 group feel that they receive more peer support than the 31-40 group who in turn feel that they receive more support than the 41-50 group who consistently gave the lowest ratings. Ratings increase again consistently for the 51-60 group with the highest ratings given by the 61 plus group. This would imply that the 61 plus group is the most satisfied with the level of peer support that they receive but as this was only a very small group this conclusion cannot be substantiated.

2.4.3 Corporate Scale Related Differences on the Peer Support Stressor (2006 only)

There were no differences on the peer support stressor between corporate scales.

2.4.4 Gender Related Differences on the Peer Support Stressor (2007 only)

There were no significant gender differences on the peer support stressor.

2.4.5 Length of Service Related Differences on the Manager Support Stressor (2007 only)

There were no significant differences on peer support stressor due to length of service.

2.5 Relationships

Relationships can be a prime source of stress. Uncomfortable tension at work and unresolved issues can escalate to frustration and add to the everyday stress load. Potential sources could be overly demanding managers, managers who dictate, difficult colleagues, workplace politics, conflicts or personal agendas.

'Relationships' was a stressor that the HSE tool identified as having a clear need for improvement. There was one critical area relating to bullying at work.

2.5.1 There were no significant differences observed between any of the demographic groups for the 2006 and 2007 surveys on the relationships stressor. Therefore it can be concluded that satisfaction with relationships at work is independent of role, gender, age, scale and length of service.

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2.6 Role

Individuals that don't clearly understand their role and responsibilities within the organization or position can experience conflicts when tasks are assigned that are outside their responsibilities.

Role was an area highlighted by the HSE tool as an area where improvement is required. In the 2006 survey there were two critical areas highlighted and these were being clear about the goals and objectives of the department and understanding how work fits the overall aim of the organization. In 2007, only one critical area remained and this was understanding how work fits the overall aim of the organization. This represents an improvement in performance.

2.6.1 Role Related Differences on the Role Stressor

2006: There were no significant differences between the different demographic groups on the role stressor for the 2006 survey but the question concerning how work fits the overall aims of the organization was almost significant.

2007: When the demographic groups were adjusted for the 2007 survey there was a significant difference between role related groups in relation to understanding how work fits the aims of the organization. The highest ratings were given by the corporate and operational other categories both in the often to always category. The lowest ratings were given by the operational group who gave responses that averaged sometimes to often.

2.6.2 Age Related Differences on the Role Stressor

There were no differences on the role stressor between different age groups in both 2006 and 2007.

2.6.3 Corporate Scale Related Differences on the Role Stressor (2006 only)

There were no differences on the role stressor between corporate scales.

2.6.4 Gender Related Differences on the Role Stressor (2007 only)

There were no significant gender differences on the role stressor.

2.6.5 Length of Service Related Differences on the Role Stressor (2007 only)

There were significant differences for length of service on being clear about the goals and objectives of the department and understanding how work fits the overall aim of the organization. All of the average ratings for those with less than 5 years service and more than 31 years service were in the often to always category. The groups with between 6 and 30 years service were in the sometimes to often category. The 31 years service or more group had average ratings of 4.73 for being clear about departmental goals and 4.91 for understanding organizational aims implying that respondents chose to answer always on most occasions.

2.7 Change

Change relates to the way that organizations communicate and manage the many transitions that they experience. These may be large transformational changes or small incremental changes such as a restructure to a change of time for a team meeting. This can include information prior to the change as well as information during the change, reducing the surprise element and stress for employees.

Change was highlighted by the HSE tool as an area for improvement. The average ratings for this category were the lowest of all categories in both 2006 and 2007. This indicates that this is the one area where employees are least satisfied suggesting a great deal of room for improvement, particularly in relation to consulting employees about change and ensuring that they are clear how changes will work out in practice.

2.7.1 Role Related Differences on the Change Stressor

2006: Considerable differences were observed between corporate and operational employees for the 2006 survey on responses to being clear how changes will work out in practice. The corporate group gave the highest rating of neutral, the operational rating fell into the category of disagree to neutral

2007: There were no significant differences between roles on the change stressor for the 2007 survey.

2.7.2 Age Related Differences on the Change Stressor

2006: Age related differences were observed in relation to being clear how changes at work will work out in practice, the youngest group (18-30) responded most positively with an average rating of neutral to agree. The lowest ratings were observed for the 41-50 and 51-60 age groups of disagree to neutral.

2007: There were no significant differences between age groups on the change stressor in 2007.

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2.7.3 Corporate Scale Related Differences on the Change Stressor (2006 only)

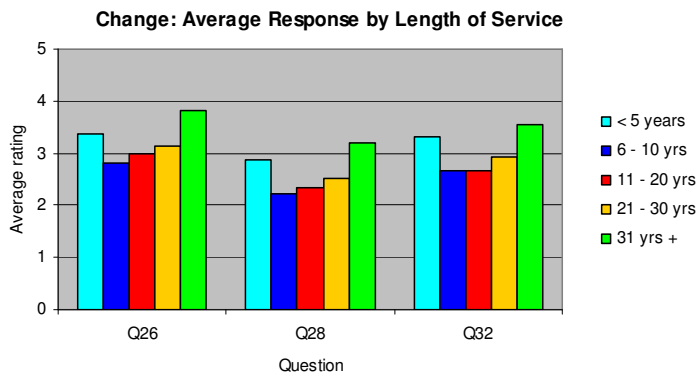
There were no significant differences by corporate scale in response to questions on the change stressor.

2.7.4 Gender Related Differences on the Change Stressor (2007 only)

There were no significant gender differences on change stressor.

2.4.5 Length of Service Related Differences on the Change Stressor (2007 only)

Significant differences in relation to length of service were observed for consultation about change and being clear how changes will work out in practice. In both instances, those with the most and least service gave more favourable ratings than the groups in between.



Change Stressor Questions

Q26: I have opportunities to question managers about change at work
 Q28: Staff are always consulted about change at work
 Q32: I am clear how changes made at work will work in practice

Scale: 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

2.8 Summary

In summary of examination of group differences there are some stressors that differ on every demographic group and other stressors that do not vary at all. A summary of the stressors and their impact on the different demographic groups is presented below.

Stressor	Significant Group Differences
Demands	Length of Service(2007)**, Age**, Gender, Role(2006), Role(2007), Corporate Scale(2006)
Control	Role (2006)**, Role (2007), Age, Length of Service (2007)
Manager Support	Age**, Length of Service
Peer Support	Age**
Relationships	No significant differences between demographic groups
Role	Length of Service (2007)** Role (2007),
Change	Age

** Indicates groups with the most highly significant differences

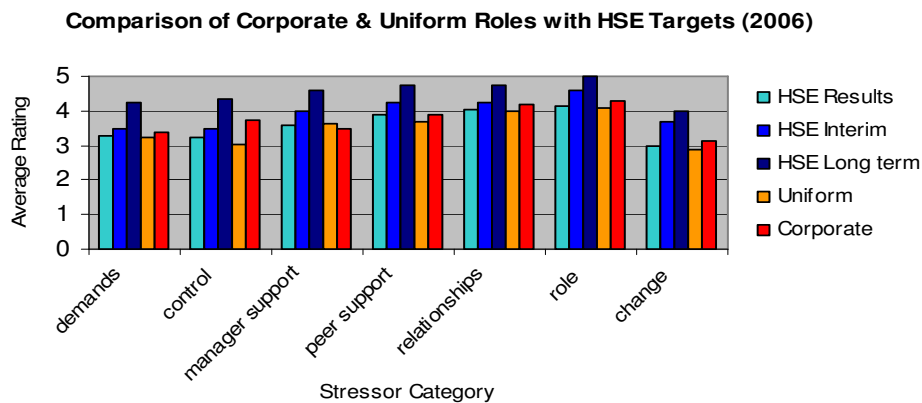
Age influences all of the categories except relationships and role. Age is linked to length of service in almost every category except role. Length of service was the second most influential group difference on perceptions of work related stress. The third major influence was role highlighting the different nature of operational and corporate roles. Gender and corporate employee scale produced group differences only on the demand stressor.

3 Comparison of Group Differences with HSE Targets

3.1 The major influences on group differences in response to the questionnaire were age, length of service and role. The age and length of service categories appear to be linked. Since these group differences are highly significant it is useful to examine the average responses for different roles and ages in comparison with the HSE targets. This information is presented in the graphs below:

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3.2 Comparison of Corporate and Operational Ratings with HSE Targets

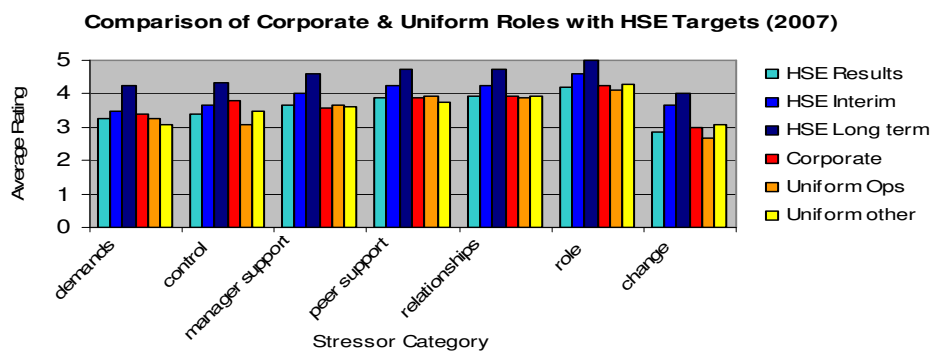


Summary

Corporate average ratings are consistently higher than operational average ratings with the exception of manager support.

Corporate average ratings are above the interim target for control and change.

The greatest difference between corporate and operational roles can be observed on the control stressor.



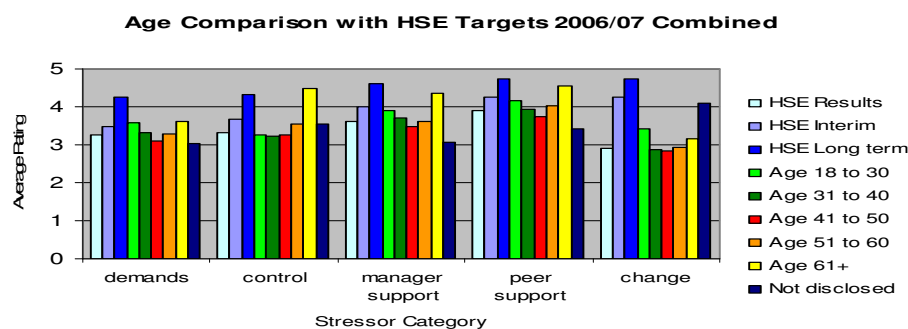
Summary

Corporate employees appeared to give the highest ratings followed by operational other.

In most cases the operational gave slightly lower ratings. These are greatest on the control and change stressors.

The comparison charts illustrate the differences between corporate and operational employees on each of the stressors. Corporate and operational 'other' employees generally give more positive ratings than operational 'operational'. This suggests that corporate and operational other employees are better equipped to manage the risks associated with work related stress, however it is more likely that the results reflect fundamental differences between roles.

3.3 Comparison of Different Age Groups with HSE Targets



Summary

Corporate average ratings are consistently higher than operational average ratings with the exception of manager support.

Corporate average ratings are above the interim target for control and change.

The greatest difference between corporate and operational roles can be observed on the control stressor.

The Age comparison chart illustrates the differences in response patterns according to age. The youngest and oldest groups generally respond to the stress survey more positively implying that they cope better when managing the risks associated with work related stress.

4 Variation and Consistency in Response Patterns

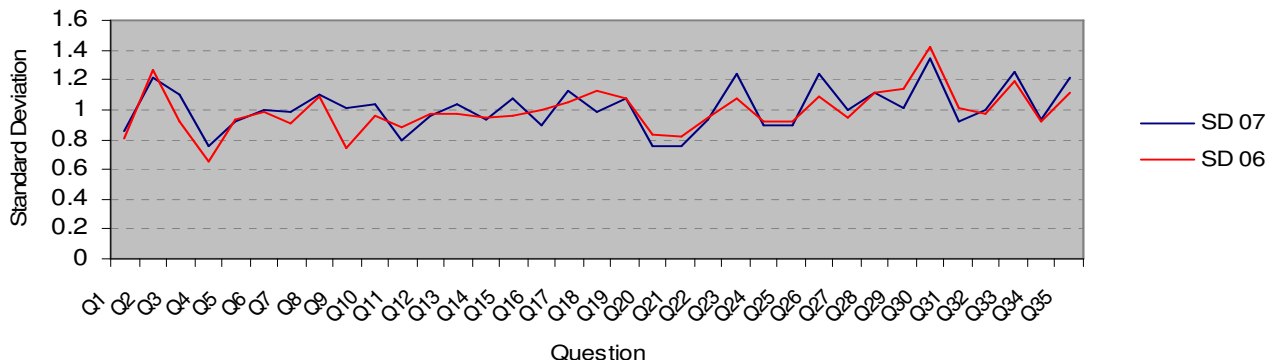
- 4.1 The process of averaging scores is useful for comparing the average ratings given by particular groups of employees according to gender, age, role etc as described above. Whilst this method is extremely useful in summarizing the data it does not provide information on the spread or range of the scores or the extent of agreement between the ratings. The graph below presents the standard deviations or spread of ratings for each of the 35 questions included in the work related stress survey. Higher standard deviations mean that there was less agreement between respondents and a

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greater range or spread of ratings. A low standard deviation means that there was more consistency between ratings and that ratings were generally clustered around the average rating with a limited range or spread.

Graph to Illustrate the Extent of Variance by Question



4.2 The questions that elicited the least consistency or agreement between respondents were:

- Question 2: I can decide when to take a break (control)
- Question 23: I can rely on my line manager to help me out with a work problem (manager support)
- Question 26: I have sufficient opportunities to question managers about change at work (change)
- Question 30: My working time can be flexible (control)
- Question 33: I am supported through emotionally demanding work (manager support)
- Question 35: My line manager encourages me at work (manager support)

One question stood out as having the most variation in response and this was question 30.

It is interesting that half of the questions that measure manager support are included in this category. Support is the overarching stressor category that has been divided into manager and peer support for the work related stress survey. Of the remaining questions for the manager support category question 8 (supportive feedback) and question 29 (able to talk with manager about upset) also indicate a relatively high range of scores, once more implying less agreement on ratings. These results mean that caution is advised when interpreting average scores on the manager support stressor.

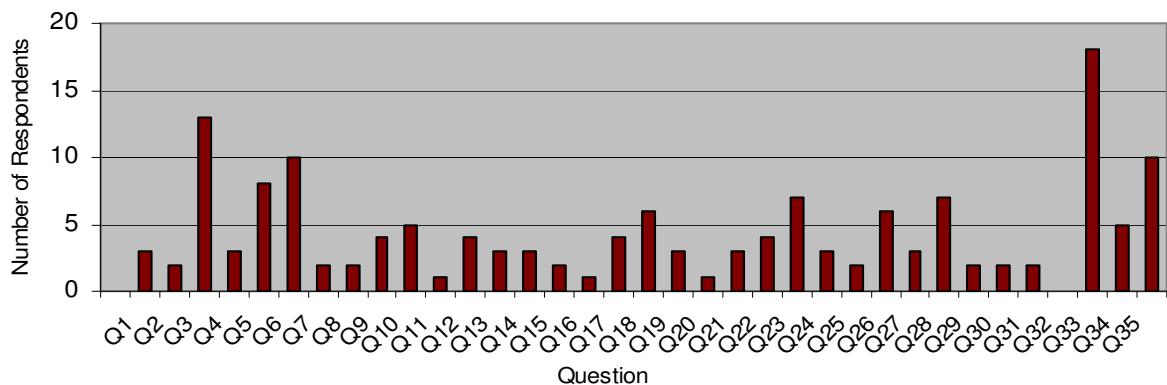
4.3 The questions with a high level of agreement between respondents were:

- Question 4: I know how to go about getting my job done (role)
- Question 11: I am clear what my duties and responsibilities are (role)
- Question 20: I have to work very fast (demand)
- Question 21: I am subject to bullying at work (relationships)

4.4 Assessing the Impact of the "No Answer" Option in the 2007 Survey

There were 5 response options for the first survey in 2006 reflecting a typical 5 point likert scale where the mid point is either neutral or sometimes with extreme positives and negatives at either side. This scale used for the 2007 survey had an additional 6th option of 'no answer'. As mentioned, the mid point of a 5 point (1 to 5) likert scale is 3 and this represents neutral ground where the respondent has neither a positive or negative perception. The 6th category means that they now have two chances to avoid giving a positive or negative response. This may have impacted upon the reliability and internal consistency of the questionnaire. However, the information generated from the addition of the no answer option is useful to consider perceptions to the survey questions alongside measuring feelings toward workplace stress.

Questions Where Respondents Chose the No Answer Option



There are a relatively small number of people who chose the 'no answer' option for the majority of questions. The exceptions to this were:

Question 33: I am supported through emotionally demanding work (manager support) – 6% of respondents chose not to answer this question.

Question 3: Different groups at work demand different things for me that are hard to combine.

Question 35: My line manager encourages me at work.

Question 5: I am subject to personal harassment in the form of unkind words or behaviour.

The most important of these is question 33 which also had a very low level of agreement between respondents. Perhaps one explanation for this may be taken from the structure of the question “I am supported through emotionally demanding work”. This leaves the respondent to wonder first of all what constitutes emotionally demanding work before thinking about manager support in the same context. It would be beneficial to first identify the numbers of respondents who feel at times that their work can be “emotionally demanding”. This question would appear to be more aligned to the demand stressor. It is likely that individuals in administrative roles would struggle to describe their work as emotionally demanding whereas the opposite may be true of those who occupy operational positions and deal with trauma.

5. Relationships Between Work Related Stress Survey Questions– Correlations

Insight into interrelationships between questions can be useful in informing the content of future stress management activity. The outcomes of this report and the HSE analysis may provide recommendations but an understanding of how the individual questions influence responses for each of the stressor categories will identify useful “levers” to influence perceptions of workplace stress. This can be achieved through correlating each question with every other question. This analysis is particularly powerful since the two sets of survey results were treated as independent samples, that is, any recommendations are based on outcomes that were obtained in both 2006 and 2007 independently.

Many of the questions were correlated with each other to some extent, explaining the high reliability of the Work Related Stress Survey. It would be expected that there would be reasonable correlations between individual questions and the category that they were designed to measure. This was generally the case with a few exceptions detailed below:

5.1 Demand Stressor

Inspection of the demand stressor revealed that major influence was unrealistic time pressures measured by question 22. This question correlated strongly with all of the other ‘demand’ questions except question 20 (I have to work very fast). Question 20 shared only weak relationships with all of the other questions measuring the demand stressor.

Cluster 1: All demand questions (Different groups demand things that are difficult to combine, unachievable deadlines, working intensively, neglecting tasks because there's too much to do, unable to take sufficient breaks, pressure to work long hours and unrealistic time pressures).

Cluster 2: Questions relating to working intensively and working fast

Cluster 3: Questions relating to different groups demand things and neglecting tasks due to too much to do

Correlations between questions were reasonably substantial (except question 20)

The level of agreement between respondents within this stressor category was relatively high with the exception of question 18 “I am pressured to work long hours”.

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Lever = Unrealistic time pressures would be a priority because it will impact upon all other areas of the demand stressor and also correlates with every other question on the questionnaire to some extent.

5.2 Control Stressor

The major influence on the control stressor appeared to be question 15; I have a choice in deciding how I do my work. Correlations or interrelationships within this group were high with the exception of question 30; my working time can be flexible which only shared strong relationships with questions 2 and 15.

Cluster 1: I can decide when to take a break (question 2), I have a choice in deciding how I do my work (question 15), I have some say over the way I work (question 25) and my working time can be flexible (question 30).

Cluster 2: I have a say in my own work speed (question 10), I have a choice in deciding how I do my work (question 15) and I have a choice in deciding what I do at work (question 19)

Correlations between questions were generally high (except question 30)

Agreement between respondent ratings was high for say over work speed, choice over how to do work and say over the way that work is done. There was little agreement/consistency on the other questions.

Lever = Choice in deciding how I do my work as this question relates to all of the others and is also identified as a critical area in the HSE analysis..

5.3 Manager Support Stressor

All correlations within this stressor can be regarded as relatively high except the relationship between emotionally demanding work and being able to discuss with manager things that have upset or annoyed me and emotionally demanding work and relying on the line manager to help with work problems. There was no one particular question that would act as a lever from examination of the correlations and there were no distinct clusters among the questions.

There were additional correlations between the manager support stressor and questions from the peer support and relationships stressors. These were between:

- Being able to talk to the line manager about things that have caused upset and getting support from colleagues (peer support).
- Being able to talk to the line manager about things that have caused upset and receiving the respect that I deserve at work from colleagues (peer support).
- Being able to talk to the line manager about things that have caused upset and relationships at work are strained (relationships).

The level of agreement between respondents was reasonable but not highly consistent.

Lever = There was no one particular scale that emerges as a lever for the others, the theme is about accessibility to a manager who will make time to listen but separately receiving feedback and encouragement.

5.4 Peer Support Stressor

All of the responses measuring this stressor correlated with each other to a moderate extent. There were also some significant relationships with other questions from other stressor categories, these were:

- Getting support from colleagues and being able to talk to the line manager about things that have caused upset (manager support).
- Receiving respect from colleagues and being able to talk to the line manager about things that have caused upset (manager support).
- Receiving respect and relationships at work are strained (relationships).

No one question emerged as a lever for others. The critical areas identified by the HSE analysis were colleague's willingness to listen and receiving respect. Willingness to listen had the strongest relationships with the other peer support stressors but receiving respect was linked to other stressors.

Responses were slightly more consistent and in agreement than those for the manager support stressor.

Lever = Receiving respect from colleagues and colleagues willingness to listen to work related problems.

5.5 Relationships

Correlations between questions were moderate and two distinct clusters emerged, these were:

Cluster 1: Personal harassment and being subject to bullying.

Cluster 2: Friction and anger between colleagues and relationships at work are strained.

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There was some relationship between personal harassment and friction and anger but only a weak relationship with relationships at work are strained. Bullying shared only weak relationships with friction and anger between colleagues and relationships at work are strained. This would suggest that respondents who report that they are subject to bullying and personal harassment confine this to a single relationship which does not appear to influence relationships with other colleagues and peers. All of the relationship questions yielded a high level of agreement between respondents, the highest being for question 21 "I am subject to bullying at work" where the average response was never/seldom. There was only one link to the other stressors and this was between relationships at work are strained and receiving respect from colleagues. Whilst the critical area identified by the HSE was bullying 'strained relationships' influenced the other questions and also related with other stressors to a greater extent.

Lever = I am subject to bullying

5.6 Role Stressor

Relationships between questions in the role stressor group were weak to good, the strongest relationship was between being clear what's expected and being clear what duties and responsibilities are. Agreement between responses was also very high for these questions and also knowing how to get the job done. There was less consistency for clarity on goals of department and knowing how work fits the overall aims of the organization. Relationships formed into 2 clusters.

- Cluster 1: Being clear what's expected at work, being clear what duties and responsibilities are and being clear about the goals and objectives of the department.
- Cluster 2: Being clear about the goals and objectives of the department and understanding how work fits into the overall aims of the organization.

Levers = Being clear what duties and responsibilities are and being clear about the goals and objectives of the department.

5.7 Change

All questions within the change stressor shared good relationships resulting in one overall clear cluster and no subgroups. There was no one change question that has more influence to the others however there are close links to the role stressor and other significant relationships and these are given below:

- Being clear how changes will work out in practice and receiving supportive feedback (manager support)
- Opportunities to question managers about change and being clear about the goals and objectives of the department (role)
- Staff are consulted about change and clear about the goals and objectives of the department (role)
- Being clear how changes will work out in practice and being clear about the goals and objectives of the department (role).
- Opportunities to question managers about change and having a choice in deciding how to do work (control)
- Being clear how changes will work out in practice and understanding how work fits the overall aims of the organization (role).

Agreement between respondents on the change stressor questions was in the average band.

Lever – Change and how this impacts upon the individual's role

6. Exploration of Responses to Questions 5 and 21 – Harassment and Bullying

6.1 Question 5: I am subject to personal harassment in the form of unkind words or behaviour

The average score for this question was reported as 4.26 for the 2006 survey and 4.19 for the 2007 survey (seldom to never). When compared with the comparison groups this is a below average score. An average of 5 would mean that none of the respondents reported that they were subject to harassment whereas an average of 1 would mean that all respondents were always subject to harassment. In investigating personal harassment it is useful to look at the average scores for each demographic group. A summary of these is presented in the table below:

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	Demographic Group	Average Rating 2006	Standard Deviation 2006	Range	Average Rating 2007	Standard Deviation 2007	Range
Role	Corporate	4.46	.818	2→5	4.26	.96	1→5
	Operational	4.19	.964	1→5			
	Operational Ops				4.10	1.05	1→5
	Operational Other				4.35	.77	2→5
	Non disclosed	4.25	.96	3→5	4.33	1.15	3→5
Gend	Female				4.38	.81	2→5
	Male				4.13	1.03	1→5
	Non Disclosed				4.22	.83	3→5
Age	18 – 30	4.61	.68	3→5	4.40	1.00	1→5
	31 – 40	4.20	.98	1→5	4.32	.87	2→5
	41 – 50	4.17	.951	1→5	4.07	1.00	1→5
	51 – 60	4.33	.954	1→5	4.28	.83	3→5
	61 +	NA	NA	NA	3.25 **	2.06	1→5
	Non Disclosed	4		3→5	4	1	3→5
Length of	> 5 years				4.5	.77	1→5
	6 – 10 years				4.12	1.05	1→5
	11 – 20 years				4.03	1.02	1→5
	21 – 30 years				4.11	1	1→5
	31 years plus				4.10	1.45	1→5
	Not disclosed				4.28	.83	3→5
Scale	Scale 1 to 3	4.68 **	.65	3→5			
	Scale 4 to 6	4.31	.85	3→5			
	Scale SO to PO	4.19	.91	3→5			

Range: 1 = Always 2 = Often 3 = Sometimes 4 = Seldom 5 = Never subject to personal harassment

6.1.2 Primary observations:

- There is a significant difference on role with operational employees much more likely to report that they experience harassment and the 2007 findings imply that this is restricted to operational employees.
- Female employees are less likely to report that they experience personal harassment.
- The youngest age group (18-30) had the highest average rating implying that they experience less personal harassment.
- Employees with less than 5 years service reported the least personal harassment.
- The frequency of personal harassment increases with corporate scale, the higher the scale the more harassment, although agreement decreases.

6.2 Question 21: I am subject to bullying at work

The average score for this question was reported as 4.55 for the 2006 survey and an almost identical 4.56 for the 2007 survey (seldom to never). When compared with the comparison groups this was in the bottom 20th percentile with urgent action needed. 39 respondents stated that they were always, often or sometimes bullied at work in 2006 and 32 in 2007. A summary of average results for different demographic groups is presented in the table below:

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	Demographic Group	Average Rating 2006	Standard Deviation 2006	Range	Average Rating 2007	Standard Deviation 2007	Range
Role	Corporate	4.72	.56	3→5	4.37	1.21	0→5
	Operational	4.45	.98	0→5			
	Operational Ops				4.56	.74	2→5
	Operational Other				4.62	.66	3→5
	Non disclosed	4.25	.96	3→5	4.33	1.15	3→5
Gend	Female				4.46	.94	0→5
	Male				4.52	.89	0→5
	Non Disclosed				4.56	.73	3→5
Age	18 – 30	4.78	.55	3→5	4.55	1.02	0→5
	31 – 40	4.39	1.05	0→5	4.62	.67	2→5
	41 – 50	4.5	.89	0→5	4.52	.79	2→5
	51 – 60	4.57	.89	1→5	4.30	1.18	0→5
	61 +	NA	NA	NA	4.40	1.34	2→5
	Non Disclosed	4.33	.58	4→5	4.40	.89	3→5
Length of	> 5 years				4.47	1.22	0→5
	6 – 10 years				4.62	.55	3→5
	11 – 20 years				4.43	.85	2→5
	21 – 30 years				4.57	.71	2→5
	31 years plus				4.73	.90	2→5
	Not disclosed				4.44	.78	3→5
Scale	Scale 1 to 3	4.65	.61	3→5			
	Scale 4 to 6	4.66	.67	3→5			
	Scale SO to PO	4.94	.25	4→5			

Range: 1 = Always Bullied 2 = Often Bullied 3 = Sometimes Bullied 4 = Seldom Bullied 5 = Never Bullied

6.2.2 Primary observations:

- In 2006 Operational employees were slightly more likely to report that they experienced bullying more often than corporate employees but the non disclosed group had the lowest average rating overall. This suggests that this group experiences the most bullying however all responses were never, seldom or sometimes and no respondents reported that this was often or always. This implies that there were mid range responses. In 2007 this situation changed with more corporate employees reporting more frequent perceptions of bullying although the non disclosed group was still higher.
- There were no significant differences on gender.
- There was no consistent trend relating to age with the 31- 40 group reporting the highest ratings for bullying in 2006, i.e. they are subjected to bullying more frequently than the other groups but this was reversed in the 2007 survey.
- Employees with more than 31 years service perceived themselves as being bullied less frequently and those with 11-20 years, less than 5 years and non disclosed suggested the highest frequency.
- Responses for corporate scale in 2006 suggested a trend where frequency of reports of bullying decreased as scale increased with a very high level of agreement between respondents.

6.2.3 Bullying

6.2.4 2006: 39 respondents stated that they sometimes, often or always experienced bullying at work, this equates to 12% of the total. These were split between the sometimes, often and always categories as follows:

- Always = 4 (All operational)
- Often = 4 (All operational)
- Sometimes = 31 (6 Corporate, 25 Operational)

A summary of the demographic groups is presented below:

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2006		Corporate			Operational		
Total No. in Group		87			231		
No. Sometimes, Often, Always Bullied		6 (7%)			33 (14%)		
Demographic Group Splits		Total in group	Sometimes often always bullied	%	Total in group	Sometimes often always bullied	%
Age	Age 18 – 30	24	2	8%	22	1	4%
	Age 31 – 40	15	1	6%	59	12	20%
	Age 41 - 50	26	1	4%	127	16	13%
	Age 51 – 60	20	2	10%	22	4	18%
	Age 61+	2	0	0	0	0	0

6.2.5 2007: 32 respondents stated that they sometimes, often or always experienced bullying at work, this equates to 11% of the total. These were split between the sometimes, often and always categories as follows:

- Always = 1 (Corporate)
- Often = 5 (3 Corporate, 2 Operational)
- Sometimes = 26 (5 Corporate, 15 Operational operational, 5 Operational other, 1 non disclosed role)

A summary of the demographic groups is presented below:

2007		Corporate			Operational			Operational Other		
Total No. in Group		82			144			53		
No. Sometimes, Often, Always Bullied		9 (11%)			16 (11%)			5 (9%)		
Demographic Group Splits		Total in group	Sometimes often always bullied	%	Total in group	Sometimes often always bullied	%	Total in group	Sometimes often always bullied	%
Gender	Female	45	4	9%	7	1	14%	14	0	0
	Male	37	5	13%	131	15	11%	37	5	9%
					6 did not specify gender			2 did not specify gender		
Age	Age 18 – 30	23	2	9%	21	0	0	5	2	40%
	Age 31 – 40	19	0	0	29	3	10%	9	1	11%
	Age 41 - 50	16	4	25%	80	11	14%	26	1	4%
	Age 51 – 60	19	2	10%	14	2	14%	9	1	11%
	Age 61+	5	1	20%	0	0	0	0	0	0
								4 did not specify age		

6.2.6 Comparison of Reports of Bullying Year on Year

The number of respondents stating that they were always bullied has reduced from 4 to 1, the often and sometimes categories have remained stable. In 2006 no corporate employees stated that they were always or often bullied however in 2007, the one respondent who said that they were always bullied was corporate and there were a further 3 corporate employees who stated that they were often bullied. In 2006 the highest percentage of those reporting that they were always, often or sometimes bullied was the operational group at 14% compared to 7% for corporate. In 2006, there was a more even split across the groups.

Areas of concern in 2006 were operational employees in the 31-40, 41-50 and 51-60 age groups. In 2007, areas of concern changed completely to corporate employees in the 41-50 and 61 plus age groups, although the latter group only contained 5 respondents. For operational employees, the main area of concern is the 18-30 group in the operational other category (non-operational) although once more this group has only a very small number of respondents.

6.2.7 Interpretation

It is difficult to form any firm conclusions since the response patterns in relation to bullying are inconsistent year on year. One solution to this would be to survey all employees on the next work related stress survey to gain more data to allow conclusions to be formed as it is difficult to assess the true extent of perceptions of bullying from two small independent samples.

6.2.8 Relationship between Harassment and Bullying Questions and Other Questions

Further insight into question 5 (harassment) and question 21 (bullying) can be gained by exploring relationships with other questions to gain more information on respondent perceptions. This is particularly powerful since only those relationships that appeared in both the 2006 and 2007 are reported other than very substantial unexpected relationships.

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Question 5: I am subject to personal harassment in the form of unkind words or behaviour

- No relationship with question 20 "I have to work very fast", this was observed in both the 2006 and 2007 surveys. So if a respondent stated that they experience harassment this will not be because of their work speed.
- There were no consistent relationships with other stressors. In 2006 harassment had a weak relationship ($r = .344$) to question 3 "Different groups demand different things that are hard to combine". In 2007 harassment had a weak relationship with supportive feedback ($r = .310$). As these observations were each derived from only one survey outcomes are inconclusive.

Question 21: I am subject to bullying at work

- In 2006 and 2007 bullying had no relationship with question 9 "I have to work very intensively". In 2006 there was a weak but significant correlation between bullying and being able to talk to the line manager about things that have upset the respondent at work. Those who were more able to talk with their line manager were less likely to report that they experienced bullying. An additional correlation of $r = .414$ was found in 2007 between bullying and respect from colleagues, the more the respondent received respect the less likely they were to perceive being subject to bullying.

7 Conclusions on Stressors

7.1 Demands

- 7.1.1 Corporate employees perceive that they are generally less affected by work demands than operational employees, but the operational 2006 category responded more favourably than the corporate group on working fast and working intensively, something that on average they are sometimes or seldom required to do.
- 7.1.2 Younger groups coped better with risks associated with work related stress on demands and this can be linked to similar observations for length of service where those with less than 5 years service were generally more positive. In all instances the 41-50 group averaged the lowest rating implying that they are more affected by work demands. This area warrants further exploration and could be explored through a focus group.
- 7.1.3 Younger respondents seldom faced unachievable deadlines and this could be because younger employees have less responsibility however, this group is quite broad. It would seem appropriate to speculate whether this is because younger people generally occupy less responsible roles. It would be useful to consider this outcome with information of the age profile and managerial responsibility of the organization available.
- 7.1.4 There were highly significant gender differences on demands although this may be linked to the fact that the majority of females were in corporate roles, extending the size of the sample to include all TWFRS employees would provide further insight into this outcome.
- 7.1.5 On analyzing relationships between questions on the control stressor "unrealistic time pressures" had a significant impact on overall perception of demands. This requires further exploration into what employees perceive unrealistic time pressures and their personal experiences of unrealistic time pressures.

7.2 Control

- 7.2.1 Operational employees gave much lower ratings to all of the questions on the control stressor than corporate employees. There are structural constraints in the nature of the fire-fighter role that must be considered in relation to responses to question 2, "I can decide when to take a break" and question 30 with regard to flexible working. Questions 10, 15, 19 and 25 relate to control over what is done at work and how it is done and once more there is little flexibility in this due to the safety critical nature of the role where creativity and autonomy are definitely not appropriate on the fire-ground. Many of these features are fundamental to the role and may not necessarily lead to increased stress. Further investigation is warranted here to address the question of whether less flexibility results in increased stress and if so how can the role be made more flexible whilst maintaining emergency cover.
- 7.2.2 When comparing TWFRS results with the HSE national comparison group conclusions will be skewed as the nature of the fire-fighter role will significantly reduce the organizational average on the control stressor.
- 7.2.3 An age related trend was revealed in relation to "Choice over how work is done". The largest difference was between the 18-30 and 61 plus age groups. This could be a consequence of experience or perception that older employees are more responsible. The 18-30 age group is very broad and incorporates those who may be new into the working environment alongside those with substantial experience. It would be useful to break this group down into two groups of 18 to 25 and 25 to 30 to allow more meaningful conclusions to be drawn.
- 7.2.4 Choice over how work is done also emerged as a lever for the other control questions, once more this could be addressed through focus groups to test employee perceptions of where exactly they feel that they could have more choice over the way that work is done. These focus groups would need to include groups of employees with similar roles.

7.3 Peer and Manager Support

- 7.3.1 The two stressors were related on a number of questions suggesting that it is not the source of the support that is important but the fact that it is available. In relation to managers the main issue appears to be availability and approachability of the line manager to support the employee where required. In relation to peers good positive working relationships appear to be important. The youngest age group responded most positively to peer support questions but this could be because younger employees have greater 'affiliative' needs, that is they need to relate more to those around them at work.
- 7.3.2 A major influence on manager support would be manager development training on motivation since control over how work is done, feedback and interesting projects all have major influences on employee satisfaction. In addition to this a performance appraisal system would provide the mechanism for work to be formally discussed and feedback given and training could include motivational tools. An alternative could also be the introduction of structured bi-weekly one to one sessions between employees and line managers. This could be implemented in a similar way to the "team brief" sessions with preliminary training and monitoring to ensure that all sessions take place and any follow up work is carried out. Peer support could be increased by raising the awareness of the importance of good working relationships, investing in teambuilding workshops or continuing the team away day concept.
- 7.3.3 The 41-50 age group again had the lowest ratings for peer support and this could be explored further by focus groups with those aged 41-50 to explore perceptions as to why they are less satisfied with peer support.

7.4 Relationships

- 7.4.1 Relationships were not affected by role, age, gender, scale or length of service. Bullying was identified as a critical area however the 'sometimes' category is ambiguous. Sometimes could be daily or once or twice in a career history depending on the individuals interpretation. Whilst it is important to remember that the Work Related Survey seeks perceptions and whilst an individual reports that they experience bullying this does not necessarily mean that this is the reality. The question "I am subject to bullying at work" is highly subjective and this area needs clarifying. Only 1 individual responded that they were 'always bullied' in the 2007 survey and although this is extremely worrying it is a reduction on the previous year. Again, it is advisable to extend the breadth of the survey to include all employees to get a more detailed understanding.
- 7.4.2 There was an interesting correlation between bullying and respect from colleagues which could suggest that bullying could be more of an issue between peers than between line managers and subordinates. This could be explored through focus groups that would also tackle the issue of exactly what bullying is and how it could be addressed.
- 7.4.3 A further option could be to code the questionnaires by departments that they are sent to in order to identify potential 'hot spots' for bullying. This would not compromise the anonymity of the respondents but assist in identifying problematic areas. This would also assist in managing the response rate by identifying the number of questionnaires sent to a particular department and the number returned. If all employees are surveyed that manager support could be enlisted where managers remind employees to complete and return questionnaires at team meetings.

7.5 Role

- 7.5.1 The major significant outcome from this stressor was that operational employees felt that they were less aware of how their role fits into the overall aims of the organization. This possibly reflects the distance between community fire stations and headquarters. Much of this could be a consequence of informal communication, headquarters based employees may be given information from colleagues, they will see who is visiting the building and know what meetings are taking place in addition to chatting to other employees in the canteen.
- 7.5.2 This is another area that would be ideally discussed at a focus group with representatives from different stations to offer a balanced perspective. This could probe what employees would like to be communicated to about, have there been any instances of good communication and when were they surprised about something that they had heard that impacted upon their role.
- 7.5.3 Possible initiatives could include information seminars or surgeries where a member of SMT is available for one evening session, say 5.30 to 7 pm once a month to provide a briefing and answer questions or listen to concerns. This would follow a similar theme to the listening events but would be less structured.
- 7.5.4 This issue is more to do with meaningful and relevant information for individual sections/departments. The way that information is communicated must be tailored to the specific group to enable individuals to understand how changes will affect them. It could start with consultation to promote employee involvement and could be promoted at team meetings. However, there was a positive difference between the 2006 and 2007 survey outcomes which reduced from two to one critical area possibly through the introduction team-talk to formalise the team meeting procedure.

7.6 Change

- 7.6.1 Results from the survey for both years suggested that change was the one area where employees were least satisfied. There were strong links to the role stressor implying that it is not change overall but the way that change impacts upon individuals and more specifically their roles. The service has endured huge transformational changes over the past five years in the way that they operate and the way that they are selected and promoted and this specifically relates to operational employees who are at the core of the business. Perhaps as the pace of change slows perceptions of the impact of change will become more positive however this is not enough.
- 7.6.2 One positive initiative would be the introduction of a simplified change plan or timetable that is made available to all employees so they know what to expect long before the change impacts on them or decisions are finalized. Information surgeries could be implemented. A further possibility could be identifying how other organizations perform on the change stressor to identify any strategies that may be useful in communicating change to employees. Involvement could be another possibility, by inviting cross sections of employees to form focus groups for consultation on change or pull together working groups to discuss the implementation of change.
- 7.6.3 This area requires urgent action and an important first step would be to identify how employees would like to be communicated to and what specifically they feel that they could receive improved communication on.

8 Conclusions General

8.1 Outcomes from the Surveys

It would be anticipated that there would be no major improvement on any of the areas since there have been no new major initiatives since the last survey. The two surveys would simply act as a benchmark for future surveys. This is supported by the fact that the survey outcomes are virtually identical. There are a number of reasons why future surveys must be extended to cover all TWFRS employees and these are:

- Some of the demographic groups were very small in particular those relating to gender with very low numbers of females and age groups for the 61 plus categories and also the 'operational other' category. There were significant differences on gender for the demand stressor. It would have been useful to compare females in corporate roles with females in operational roles however the numbers in each group, particularly the female operational group were too low to permit meaningful comparisons.
- There were some interesting outcomes to suggest that employees in the 61 plus age group are relatively resilient to workplace stressors but the numbers in this group of 2 employees in 2006 and 5 employees in 2007 do not support conclusions that would generalize to all employees in this age group.
- There appears to be an increase in corporate employees perception of bullying but a larger sample is required to understand the true extent of perceptions of bullying in relation to the entire workforce.
- Whilst collection of demographic information provides information on gender, age and role and this analysis suggests that target areas for initiatives should be the 41 to 50 age group and operational employees it is difficult to pinpoint exactly where the hot spots are. If all employees were surveyed then questionnaires could be coded by department.
- An extended survey would provide sufficient information to construct an internal benchmark to measure the impact of future interventions or stress management initiatives. This would overcome the issues of lower perceptions of control by operational employees since the HSE national comparison group portrays this as negative but this is likely to be explained by the "structure" of the role and not a reaction to a perceived situation.

8.2 Reliability Analysis

A reliability analysis was performed on the combined 2006 and 2007 Work Related Stress Survey questionnaires. The purpose was to assess how reliably the questionnaire measures the single concept of work related stress. The combined analysis yielded a value of .78. This value provides an indication of 'inter item consistency' or how well the questions and stressors fit together to measure workplace stress. This figure is above the threshold of .7 and is therefore acceptable, perfect would be 1. This value does not indicate how well the Work Related Stress Survey covers stress however the tool is based upon the 7 internationally accepted primary causes of stress in the workplace. These are control, work environment, demands, support, relationships, role and change. The categories in the HSE tool differ slightly as work environment is not assessed and support is split into two separate categories of manager support and peer support.

8.3 HSE National Comparison Group

As suggested above the HSE tool is a very reliable tool for assessing perceptions of work related stress. It has also been mentioned that the comparison group can be a useful tool to benchmark against a national standard. However, the comparison group should be used cautiously as more information is required on the make up of this group and how this relates to TWFRS employees. The significant differences between corporate and operational employees is one example of how comparisons with the national group may portray the organization in a less favourable light. The method of comparing organizations with this group is by assessing performance in relation to the top 20% and bottom

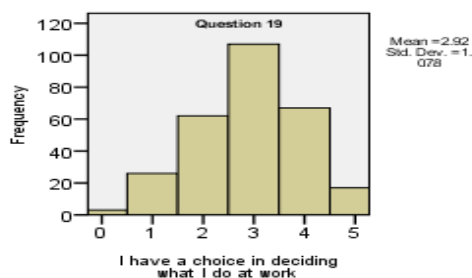
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20% of the comparison group. There are no concerns regarding this if the comparison group composition is similar in nature to TWFRS employees and also that average responses to the survey questions are normally distributed but this is not true.

One example may be taken from responses to question 5 on bullying. This was highlighted by the survey as a critical area for TWFRS but the average scores were 4.55 for the 2006 survey and 4.56 for 2007. This is on a 1 to 5 scale where 1 is always subject to bullying and 5 is never. The HSE analysis states that TWFRS is within the bottom 20th percentile. Responses to this question are not normally distributed and the graph of TWFRS operational responses for question 21 (2007) illustrates this clearly. There would be very little difference between the top 20th percentile and the bottom 20th percentile because all ratings are clustered around the score of 5. In contrast, if the average responses were normally distributed as in responses to question 19 comparing TWFRS average responses would be more meaningful as an average rating of 1 to 2 would equate to the bottom 20th percentile and an average rating of 4 to 5 would be in the top 20th percentile.



The histogram shows that average responses to question 21 "I am subject to bullying are positively skewed toward the higher end of the scale. There will be very little difference between the top and bottom 20th percentiles which will both fall between 4 and 5.



The histogram shows the average responses to question 19 "I have a choice in deciding what I do at work". The responses are normally distributed to form a 'bell shaped curve'. Therefore, there will be a considerable difference between the top and bottom 20th percentiles with the average response being 3. This graph demonstrates that using a comparison group is appropriate when data is normally distributed.

In conclusion, the HSE comparison groups should be used as a guide until more information becomes available on the composition of the comparison group and even then, the comparison group is only useful for survey questions that follow the normal distribution (i.e. question 19).