How can workplace communities be more resilient to changes in their working environment?

A case study of the new Burwood Hospital shared work-space

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Introduction

The new Burwood Hospital site was opened mid-2016 and merged existing Burwood-site staff with Princess Margaret Hospital staff, as their site was phased out due to earthquake damage. The previous work environment for both Burwood and Princess Margaret sites could be described as predominantly closed, private offices.

The modern design of the new Burwood Hospital site fulfils many contemporary office specifications. The fully open shared work-space on level two accommodates around 150 staff at capacity. The work-space features include; pods of desks organised into work-specific teams with a collection of hot-desks available; a range of quiet rooms and meeting rooms of various sizes and features; staff kitchen and social area; built-in storage; colours and textures based on local environmental connections; and, acoustic elements that support hospital privacy and limit external noise disturbances.

The shift from private offices to a shared work-space has presented many challenges to staff. The need to adapt to a contrasting working style surrounded by a large number of co-workers, as well as finding new ways to complete hospital-specific, private phone calls and tasks, are among the collection of barriers to adaptation and resilience for staff at Burwood Hospital.

The aims of this research encompass the ideas of social resilience and transitional adaptation inspired by post-disaster studies. Applying these theories to a workplace that has undergone dramatic changes, this research hopes to provide some insight into how workplaces can reduce vulnerability, improve resilience and maintain employee productivity when undergoing changes.

The following key research questions summarise the goals of this study;

1. What are the identifiable challenges of moving into a new shared work-space for the staff at Burwood Hospital?
2. In what ways have staff at Burwood Hospital been supported in adapting to the new space since moving in June 2016?
3. Could the environment be improved for staff at Burwood Hospital so that their overall satisfaction is improved?
4. What are the elements of a shared work-space that support or undermine resilience in a workplace community?

Literature Review

Open-plan working environment

There is a range of literature available discussing open-plan working environments and the various benefits and challenges staff encounter while adapting to them. The transition for Burwood staff from private offices to this new modern environment makes it essential to understand how a shared working environment functions.

Open-plan working environments are often encouraged because they can facilitate communication and interaction between co-workers (Brand & Smith, 2005). Gensler (2013) indicates that encouraging collaborative spaces in a work-space by providing enablers for cooperation and communication should be a primary focus for work-space design. Other research also suggests that social capital and connectedness in the workplace, besides just collaborative working can be beneficial for individual well-being, job satisfaction and productivity (Requena, 2003). This supports the transition to a shared working environment for Burwood Hospital staff.

While shared working environments are beneficial for collaborative work and social connectedness, there are many challenges when transitioning particularly for levels of personal satisfaction and control of disturbances. Sundstrom, Herbert and Brown (1982) suggest that there is generally a lower level of satisfaction for open working environments than private offices. This lower level of satisfaction is likely to be due to two significant challenges; loss of privacy and increased external disturbances. Kim and Dear (2012) discuss the trade-off that does not appear to be balanced enough with supposed advantages of open-plan working environments. Their research suggests that the penalties of increased noise levels and decreased privacy are much larger than benefit of enhanced ease of interaction. De Croon, Kuijer, Sluiter, & Frings-Dresen (2005) specifically discuss privacy issues for open work-spaces suggesting that there needs to be some level of both visual and acoustic isolation to support staff confidence discussing personal topics, which holds particular importance for the Burwood Hospital working environment. Anjum, Paul, & Ashcroft (2005) state the importance of furniture design and layout as a method of mitigating sound and privacy issues for open plan working environments as certain types of dividers can control noise in the environment. Allen, Bell, Graham, Hardy, & Swaffer (2004) suggest that soft furnishings are preferable to use as a noise-minimising barrier in the instance of open work environments. Considering ways to mitigate sound is an important aspect of open work-space environments as Kaarlela-Tuomaala, Helenius, Keskinen and Hongisto (2009) found noise disturbance is the highest ranked complaint for staff. Co-workers voices, laughter and phones ringing are among the most disturbing noises. The level of disturbance may

depend on the type of task staff are undertaking. Prose and mental arithmetic tasks are particularly impaired, according to Banbury and Berry (1997). In a shared workspace, all of these challenges need to be taken into account with particular consideration to staff well-being and productivity.

Resilience

The challenges of open-plan working environments could arguably be experienced more positively or negatively depending on individual resilience and coping mechanisms. Resilience is defined by Adger (2000) as the "ability of groups or communities to cope with external stresses and disturbances as a result of (…) change." According to Kaarlela-Tuomaala, Helenius, Keskinen, & Hongisto (2009), people who work in an open-plan working environment tend to use more coping strategies to adapt to new disturbances at work than people working in private offices. For some, the time taken to personally implement these coping strategies can create wasted time and loss of performance and productivity (Haapakangas et al., 2008; Brennan, Chugh, & Kline, 2002).

This research is heavily influenced by the theories of community resilience and environmental transitions suggested by Wilson (2012). The transition from private offices to an open-plan working environment for Burwood Hospital staff could be analysed with consideration to resilience theory implying that the staff who are more resilient will adapt better and continue to achieve a high level of productivity in their work. Rees, Breen, Cusack & Hegney (2015) discuss occupational stress in particular, stating that people will cope differently depending on their levels of personal resilience. Wilson's (2012) community resilience theory suggests that environmental transitions occur with varying trajectories due to differing levels of resilience. The small-scale community of Burwood Hospital is somewhat applicable to this theory due to the nature of its transition.

Improving work-space environments

The comfort pyramid model by Vischer (2007) suggests different variables that support individual comfort and satisfaction. The model builds up from physical comfort at the base (i.e. access to fundamental needs), to functional comfort (ergonomic support, access to quiet rooms) and psychological comfort (individual feelings, access to information, communication, relations with others). The optimal outcome is reached when the three levels are achieved but one level can also compensate another. This model could be used to inform management decisions regarding structural changes in the workspace.

In order to assist the adaptation process for staff, this research has investigated literature that examines potential workplace improvement methods. Ahmadpoor Samani, Zaleha Abdul Rasid, & Sofian (2017) state that even if there is a high level of dissatisfaction regarding the work-space and

disturbances, this alone cannot reduce performance and productivity. Ahmadpoor Samani, Zaleha Abdul Rasid, & Sofian (2017) describe the effect of the work environment perceptions on employee behaviour and performance. They suggest that the perceived satisfaction of the work environment mediates the negative effects of distraction on work performance. High satisfaction with the working environment and features increases the ability to effectively work in the environment and use the structure and features to minimise distraction. To summarise, with respect to Burwood Hospital, if staff perceive the environment to be effective and are happy with arrangements, they are more likely to cope with distractions better. This would imply that the initial design of the office is an important aspect of the transition.

The range of literature available regarding open-plan work environments suggests some key challenges as well as advantages of shared work-spaces. These aspects are experienced differently by different workplace communities. The experience of Burwood Hospital staff in particular is examined further in this study.

Methodology

A range of data collection methods were used to examine the work-space resilience of Burwood Hospital. The purpose of choosing three different data collection methods was to gain a comprehensive collection of information including qualitative and quantitative data. The survey component of this method ensured there would be some key indicative data of the overall satisfaction of the work-space as perceived by staff. The focus group intended to gather more in-depth information of staff perceptions of the work-space as well as discussing the concept of resilience. Qualitative data is an effective way to understand the experience and processes that staff have endured (McGuirk & O'Neill, 2010). The final component of this methodology is the structured observational study of the work-space. The purpose of this was to gather some quantitative data on usage of meeting rooms and quiet rooms which had been stressed as a significantly challenging feature of the work-space.

Survey

The online survey was the first stage of data collection. The survey was produced via Qualtrics, an online surveying software. It was distributed to around 150 staff on the Level 2 administrative floor with 58 responses. The online survey was structured around the following topics;

1. Demographics
2. Information and Communication
3. Identifying Workplace Challenges
4. Access and Usage of Meeting and Quiet Rooms
5. Adapting to Change

The demographic questions were intended to get an indication of the structure of the workforce. This section included basic questions such as age and gender combined with work specific questions such as the department staff work in, the length of their employment and their situation before the merge.

The remaining sections of the online survey were designed to investigate how Burwood Hospital staff perceived the shared work-space. Various elements of work-space satisfaction were investigated including the physical structure and layout, information and communication platforms, and privacy and noise control. The survey also asked participants to consider their adaptation process since the merge or since arriving in the shared work environment by questioning things such as how well people believed they had adapted, how their expectations compared to reality, and the changes they had made to cope with new challenges.

Focus Groups

Focus groups were co-ordinated post-survey in order to gather some detailed qualitative data. Two focus groups were conducted with each group comprising of between 4-5 people. Focus groups were not recorded but notes were taken on key phrases, ideas and quotes to support the results of this study. The structure of the focus group involved three key parts;

1. Recapping the survey to address lingering topics
2. Work-space area participatory task
3. Resilience theory participatory task

The first part of the focus group was used to discuss any issues that had arisen during the survey that participants may have felt they had not had the opportunity to discuss in detail. The intention of this part of the focus group was to expand on the data collected in the survey. The discussion was unstructured and allowed the participants to speak about any aspect related to the survey that they desired.

The second part of the focus group was a participatory task intended to encourage the participants to identify challenging or favourable areas of the whole work-space. A large floor plan was laid out to help participants think about the entire work-space and beyond just the area they work in or use frequently. Participants were asked to place green or red markers on areas they liked/used often or areas they disliked/did not use while discussing the various issues and ideas with the group. This task was particularly useful to keep participants consistently on topic.

The final part of the focus group was another participatory task based on the transitional resilience model by Wilson (2012) (see figure 6a). The model is a representation of post-disaster community resilience. This study assumed that the model could be applied to the Burwood Hospital merge and shift into a new shared work-space to describe their adaptation process. The focus group used this model and asked participants to discuss how relevant they felt it was to their personal experience, what aspects they would change to better represent their experience and what level of recovery/resilience they felt at present. Each participant had a paper copy of the model to annotate as they pleased which was taken and adapted into a composite model shown in the results section of this report.

Observational Study

The observation study was the final part of the raw data collection and was a structured study over a two day period. This study involved:

1. Monitoring the usage of the quiet and meeting rooms
2. Identifying the purpose of the use of quiet and meeting rooms

The study began by identifying the physical structure and composition of each of the quiet and meeting rooms, including desks, telephones and computer access, and the number of chairs and sofas in each of them. The rooms were monitored at fifteen minute intervals over a five hour period to see which rooms were used and for what purpose. This part of the methodology was important for management staff at Burwood Hospital, allowing them to identify which of the quiet rooms and meeting rooms could be improved or modified. It also enabled them to see what elements of the quiet rooms staff were satisfied with.

Results

The results of this study aim to meet the objectives and identify how a work-space can be resilient using the case study of Burwood Hospital.

Information and Communication

The results of the survey show an overall positive appreciation of the pre-merge information. Most of the staff were satisfied with the information that was provided in the development phase of Burwood Hospital (shown in figure 1).

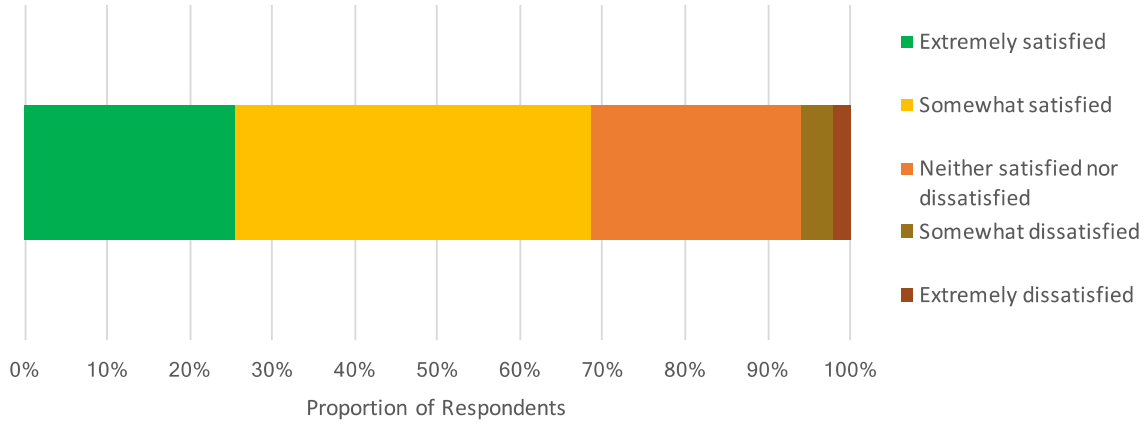

Figure 1: Staff satisfaction with pre-merge communication and information

Focus group participants also stated high satisfaction with information and communication regarding the new work environment. Many even suggested that they were surprised to be as well-informed as they were, expecting to have significantly less information and involvement than what occurred.

The most popular platforms of engagement during the pre-merge phase was the mock-up tour and staff forum. 95% of respondents engaged in either of these platforms, indicating face-to-face communication is more popular than digital. A cross-analysis of results also showed a clear positive correlation between the satisfaction level of information provided pre-merge and the diversity of platforms engaged with (shown in figure 2).

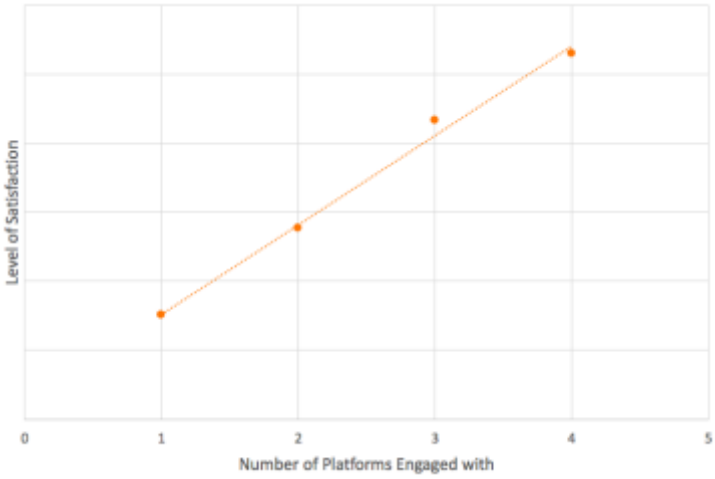

Figure 2: Relationship between level of satisfaction and average number of platforms engaged with

While satisfaction with communication pre-merge was high, results show more than 20% of staff are doubtful about finding someone to discuss or report issues to at present. Cross analysis also shows a correlation between confidence level communicating issues to management and satisfaction with information provided suggesting those who are confident seem to engage with information easier than those who are not as confident.

Identifying Work-space Challenges

Many work-space challenges were identified and ranked through the results of the online survey. Figure 3 shows survey respondents various levels of satisfaction. Elements of the work-space that staff were more satisfied with included; staff social rooms, kitchen facilities, personal working area and printing facilities. Of the work-space elements included in the questionnaire, control of external disturbances, noise levels, and storage were some elements indicating higher levels of dissatisfaction.

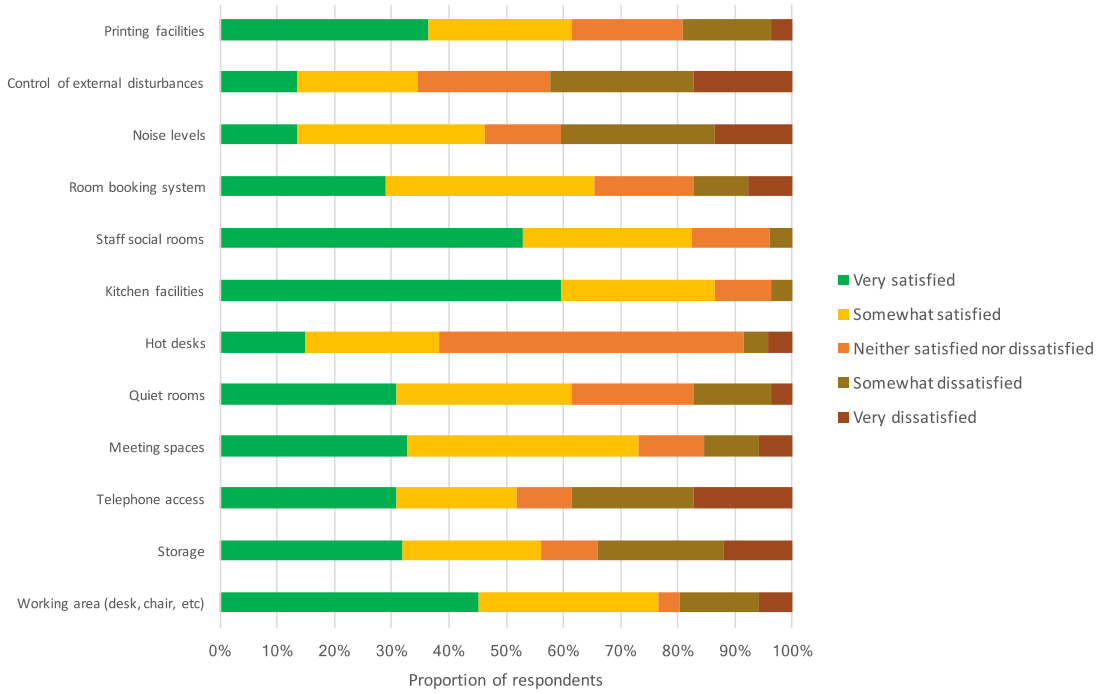

Figure 3: Staff satisfaction with various elements of their shared workspace

Focus group participants further supported these results as they identified areas they liked/used often or areas they disliked/did not use. The skylight from the waiting room a floor below the office was seen as a large disturbance by focus group participants because of the noise and distractions coming from below. Participants recommended something surrounding the skylight to detract away from the disturbances, such as a glass screen or plants.

There were also various favourable areas of the work-space identified by focus group participants. The staff lounge was liked by a number of focus group participants as it was seen as a good place to socialise and connect with co-workers. Many people suggested they now interact with a wider range of people than they had previously. The large group meeting rooms were also liked by the majority of focus group participants. They were described as spacious with easy-to-use technology that can be utilised for large meetings and forums. Meeting rooms and quiet rooms at the end of corridors, more distant from personal working areas, were preferred as they are perceived to have better privacy for confidential discussions. There were mixed responses regarding the location of facilities such as the few printers dispersed around the work-space, some disliking the decreased accessibility (compared to owning a personal printer) and others recognising the benefit of increased physical movement.

Overall, there were a range of elements consistently identified as favourable or challenging. Generally, staff seem satisfied with the work-space and many can recognise the benefits of some changes.

Burwood Quiet Rooms and Meeting Rooms

The quiet rooms and meeting rooms at Burwood Hospital are well utilised. Figure 4 shows the survey respondents indication of frequency which they use the facilities. 71% of survey respondents use the quiet rooms or meeting rooms daily or several times a week. Figure 5 shows those who had worked in a shared work-space previously were significantly more satisfied with the quiet rooms and meeting rooms. The focus group expanded on this response with participants suggesting that the amount of rooms available was an above average allocation of space for private discussions and quiet work.

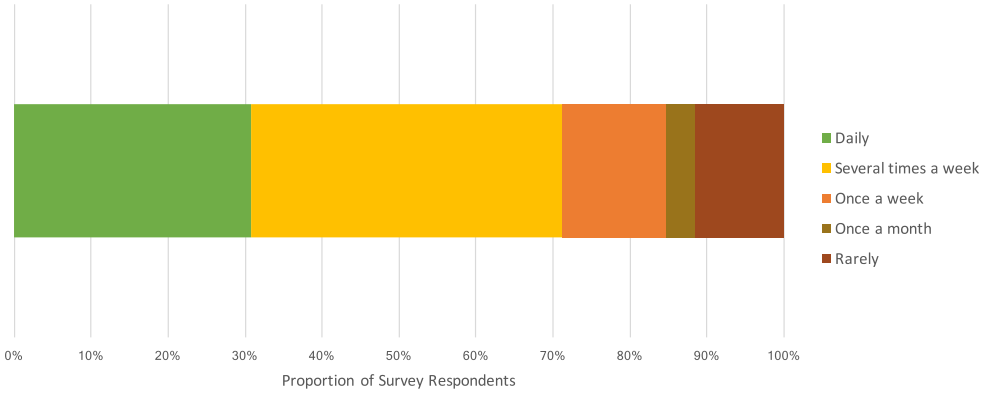

Figure 4: Staff use of meeting rooms and quiet rooms

Staff also tend to be slightly more satisfied with meeting rooms than quiet rooms. 73% of respondents indicated feeling satisfied with meeting rooms compared to 62% feeling satisfied with quiet rooms. Focus groups found that this could be explained by the request for more computers and telephone access in the quiet rooms.

There were a number of quiet rooms around the work-space that staff identified as having limited privacy. Focus group participants felt privacy was compromised due to a number of factors; proximity to co-workers working areas, clear glass, vulnerability of facing the desk opposite the glass doors and doubtfulness regarding the sound-proofing of quiet rooms.

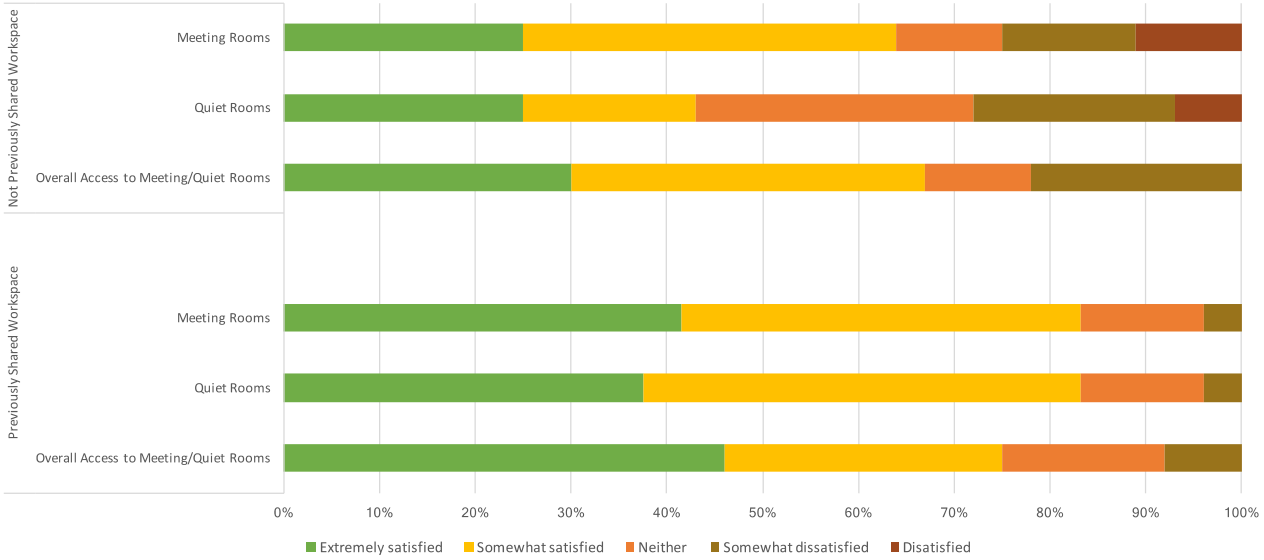

Figure 5: Comparative satisfaction of meeting and quiet rooms for staff who have or have not previously worked in a shared workspace

The observational study was particularly insightful for the investigation of meeting rooms and quiet rooms. The results showed a lot of variety in use of different meeting rooms and quiet rooms. Meeting rooms seemed to be particularly popular and used for their intended purposes. Organised team or large group meetings were occurring throughout the two days of observations. The quiet rooms tended to vary more in usage possibly because of the differing levels of privacy, facilities and space. Some key observations were that quiet rooms with phones and computers were more frequently used and were mostly used according to their intended use. People seemed to utilise this feature of the workspace and take advantage of the private phone call and working spaces. A significant unintended use that was observed is some staff using small quiet rooms as a personal office and remaining in the same room all day. This is potentially a sign of less resilient staff members coping with change by defying intended use of the space and reverting to old practice.

Adapting to Change

An initial indication of resilience and adaptive capacity was obtained from the survey. 82% of survey respondents indicated a positive level of adaptation when asked how well they had coped with the work-space changes and only 4% stated they had adapted quite poorly. Several staff stated that the reality of the work-space was actually better than their perceived expectation prior to the shift. 47%

of survey respondents indicated they were more satisfied with the work-space than they expected to be.

In order to adapt to change, 56% of survey respondents indicated they had changed their working routine. A significant proportion (43%) of these respondents now leave their desk/working area more often, while 21% work from another location more often and 11% have adjusted the order of their daily tasks to better adapt to the shared work-space environment. When asked for reasons why staff had changed their routine, many stated they needed to change to improve productivity, avoid external disturbance, make their private phone calls and manage their work across two different floors (the work-space and lower level hospital wards). When comparing those who did and did not change their routines, the average level of perceived personal adaptation was not significantly different, indicating it is not completely necessary for some people to change the way they complete tasks to adapt to a new environment.

Since the shift, 38% of respondents have noticed some form of improvement. Several employee's noted these to be mostly structural changes such as better indoor temperature control and enhanced technology available. Many respondents also recognised the improved social activity and better departmental connectedness and collaboration.

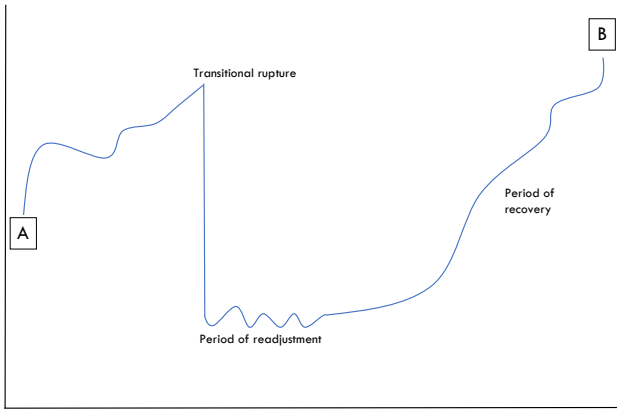

Figure 6a: Transitional model of resilience (Adapted from Wilson, 2012)

Another significant source of data for this section comes from the participatory task completed in the focus groups. As shown in figure 6a and 6b, the participants added or changed any features of the simplified Wilson's (2012) transitional resilience model to represent their experience of the change in their work-space. Key results of this participatory task indicated that the experience of a changed work environment was dissimilar to the transitional rupture of the Wilson (2012) model. However, most participants could relate to the model in some way. Participants stressed the importance of communication in the pre-shift phase stating that understanding the change and being able to see why it was occurring helped them to accept it and adapt.

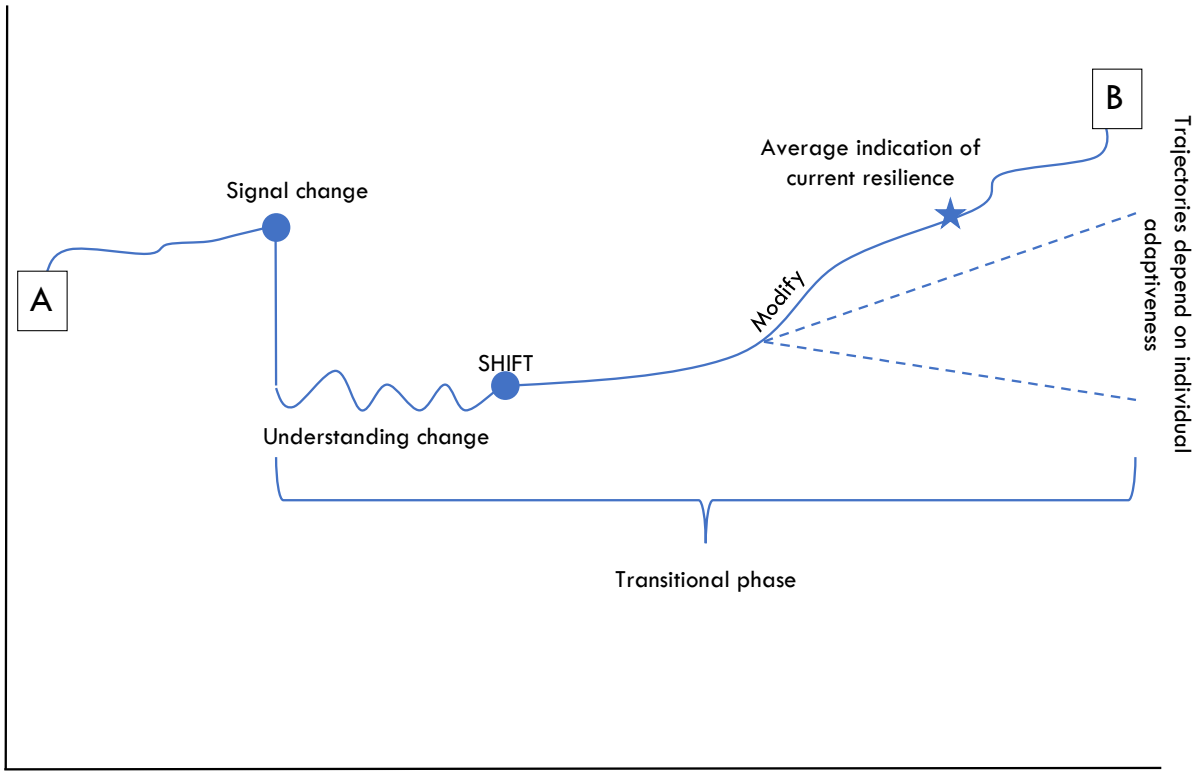

Figure 6b: Composite model of transitional resilience from focus group participation (Adapted from Wilson, 2012)

Discussion

The following discussion links the results from the case study of Burwood Hospital to the overarching theme of resilience. Key findings include the following enablers of work-space resilience;

1. Communication and engagement between upper management (decision-makers) and staff regarding any disruptions.
2. Personal resilience and the ability to adapt and accept change.
3. Management awareness of the physical environment and ability to change structures or facilities that are not working well.

These enabling factors are recommendations for future shared-work-space environments to consider and further investigate.

Communication and Engagement

This study stresses the significance of communication and engagement for workplaces. The importance of information flow between management and staff regarding any changes or disturbances has consistently been discussed by participants in this study.

The composite Wilson (2012) model of transitional resilience intends to emphasise the pre-change communication and engagement and a significant determinant for resilience. Many participants reported that those who were difficult to engage with and may have refused to accept change were the most vulnerable and affected staff in the transition for Burwood Hospital. While the importance of pre-change communication is emphasised, it should be acknowledged that working environments are dynamic and often subject to many disturbances, both external and internal. It is important that leaders and decision makers in the workplace keep staff well-informed and engaged with each other. Results from this study support this while many felt satisfied with pre-merge information, participants were slightly less satisfied with communicating issues now.

People who are engaged and communicate more, have better and more resilient outcomes. However, the people who are less likely to engage seem to have worse outcomes. This study has not been able to identify a solution for this group of disadvantaged staff. Further work would need to be done in order to determine how the less engaged people could still have positive outcomes. Whether this is through anonymised communication platforms or more private individual and concentrated channels, there is potential for this group of staff and their consequently worse outcomes to be studied further.

Personal Adaptive Capacity

Employees of the Burwood hospital have shown quite a good capacity of resilience. The conclusion gained from the study indicates that while the workspace environment plays a role in individual adaptive capacity, a more significant contributor is attributed to the individual's adaptive capacity. Meaning that only so much can be done for people before it becomes up to them personally to adapt and cope in whichever way they find most effective.

Personal workplace resilience is often dependent on a number of individual characteristics (Rees, Breen, Cusack, & Hegney, 2015). A significant contributor is often neuroticism, an individual's personal tendency to be more instable, anxious and frustrated causing them to be more vulnerable to change. However, self-efficacy and mindfulness can improve resilience as people determine whether they can change the situation they are in and improve their own outcomes. Participants from Burwood Hospital suggested some staff were more negative and did not have the capacity to acknowledge their adaptive capacity and saw resignation as the only resolution.

Varying coping strategies is an area that could have further research. People tend to have different coping strategies depending on their personal character traits. Raising awareness about the different ways people can cope with disturbances and adapt to the work environment may enable more individuals to be resilient. Specifically at Burwood Hospital, people could be encouraged to use the quiet rooms, as there are still people who rarely use them and may not realise their usefulness.

Physical Mitigation Measures

The physical structure of a work-space can easily influence how people feel and how productive they are. The staff of Burwood Hospital indicated through the survey varying levels of satisfaction with aspects of their new open work-space environment.

The favourable response towards the staff kitchen and meeting rooms contrasted the lower satisfaction for telephone access, storage, noise levels and control of external disturbances. The focus groups supported this information as participants commended the architects evident careful design and consideration for the aspects of the kitchen and larger meeting rooms. However, the Burwood Hospital staff tended to be less satisfied with the consideration of quiet rooms with telephone access and the levels of noise in the work-space.

Fortunately, with this information, management could improve telephone access by providing more telephones in meeting rooms. This is a physical mitigation measure that may not significantly improve

the productivity of the overall working environment, but when implemented simultaneously with the other two factors (communication and engagement, and personal adaptive capacity) would create a more resilient, dynamic and adaptable environment. While management staff cannot change the space to satisfy each individual, it is important to listen to the requirements of staff and be flexible to make changes and continuous improvements where suggested and needed.

Future Research and Limitations

This research is insightful for Burwood Hospital staff and management to develop their community resilience, but also for other workplace communities to consider the ways their dynamic environment could affect staff productivity and well-being. Major disruptive changes should follow these recommendations to maintain high levels of resilience and avoid placing their staff in a particularly vulnerable situation.

The importance of context should be stressed when considering these conclusions. The hospital environment needs to consider clinical aspects of many staff's working routine and how this changes their particular needs. The same level of consideration should be placed on industry-specific tasks that any other workplace may encompass. To apply this methodology or findings to another workplace would have to be done with caution and consideration of the difference in tasks, structure and workplace specific requirements.

Methodological limitations may have restricted the results of this study. Survey and focus group participation could have been higher therefore giving the study a more representative sample of the workplace. The study was also limited by time constraints and resources. Given a longer study period and resources, the research could have examined additional elements.

Overall, there is a significant gap that this research fills. The study of a workplace transition from one working environment to a new, contrasting workspace is insightful for many businesses and organisations who appear to be making the same shift to modern open-plan working environments. Considering all limitations, there is still potential for much more work to be done in this area, more detailed analysis of transitional adaptation in different industry environments would be particularly significant.

Conclusion

The case study of the new and recently merged Burwood Hospital has been particularly insightful in determining some key characteristics of workplace-specific resilience. As defined by Wilson (2012, pg.

15) resilience is ‘the capacity of a system to absorb disturbance and reorganise.. it is measured by the size of the displacement the system can tolerate and yet return to a state where a given function can be maintained’. The Burwood Hospital example reflects this definition through their varying experiences of the shift from a closed-private work-space to a modern, shared work-space. The capacity of the workplace system has been tested through the adaptation to work-space changes. Results showed that individuals have had different experiences and capacity to adapt because of a range of factors. These can include personal adaptiveness, the range and volume of information that can be engaged with, and structural suitability of physical work-space elements. The Burwood Hospital example could be regarded as a particularly resilient work-space from the results indicated in this report, however it is difficult to make any relative conclusions without comparative examples. Nevertheless, this report can conclude that the key enablers of work-space resilience are; communication and engagement, personal willingness to adapt and physical adaptation measures.

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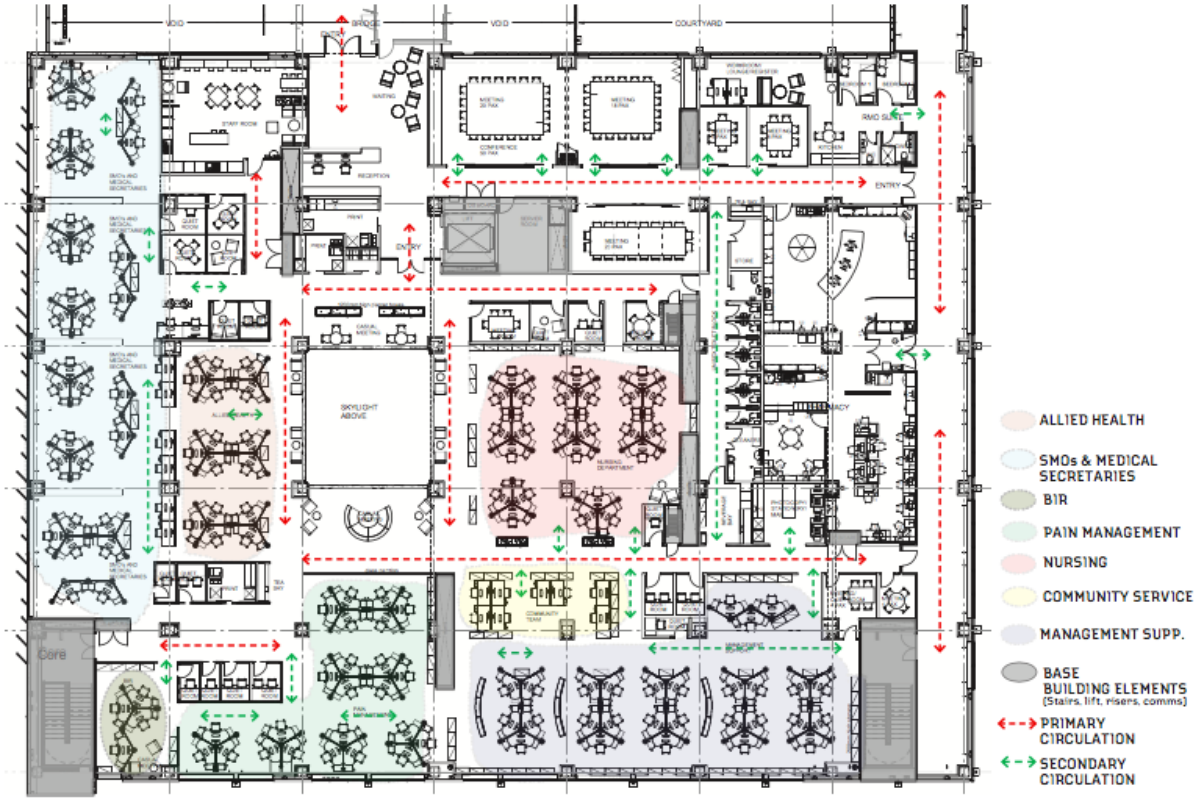
Appendices

Appendix 1: Burwood Hospital Floor Plan



LEVEL 2 ADMIN AND EDUCATION CENTRE - DEPARTMENTS
Burwood Hospital Redevelopment

Klein SHEPPARD ROUT ARCHITECTS Jasmax

Appendix 2: Survey

Workspace Satisfaction Survey

Demographic questions:
Age: *20-29,30-39,40-49,50-59, 60+*

Gender: *Female/Male*

Have you ever worked in a shared workspace before? *Yes/No*

How long have you worked in the new Burwood Hospital shared workspace?
- Under 4 months
- Between 4-12 months
- Since the merger

What site did you work from previously?
- Princess Margaret
- Old Burwood Campus
- Other, please specify

What department do you work in?
- Allied health
- SMO's
- Medical Secretary
- BIRs
- Pain Management service
- Nursing
- Community team
- Management/admin

Information & Communication
In the development phases of the new Burwood Hospital site, how satisfied did you feel with the information provided to you?
- Very satisfied
- Quite satisfied
- Neither satisfied nor dissatisfied
- Quite dissatisfied
- Very dissatisfied

What platforms for information did you engage with? *tick all that apply*
- Social media (Facebook)
- Intranet website
- E-mail enquiry
- Staff forum
- Mock-up tours
- Literature review
- Floor-plan maps
- Videos
- Development posters

How confident do you feel to find a way of communicating with management staff regarding any problems you have in the shared workspace?

- Very confident
- Quite confident
- Neither confident nor doubtful
- Quite doubtful
- Very doubtful

If there were to be any major changes in the future, what would be your preferred way of getting information/communicating?

- Social media
- Intranet website
- E-mail enquiry
- Staff forum
- Videos
- Posters
- Other: please specify

Identifying work-space challenges:

On scale of 1-5 (1 being never, 5 being always) how often would you engage in the following tasks?

- Text processing, writing & reading
- Mathematical tasks, accounts, statistics
- Planning or creative work
- Telephone discussions
- Group meetings
- One-on-one meetings
- Practical organisation
- Clinical/patient tasks

How satisfied are you with the following features of your workspace (*put into a table. 1=very dissatisfied, 5=very satisfied)*:

- Working area (desk, chair etc.)
- Storage
- Telephone access
- Meeting spaces
- Quiet rooms
- Hot desks
- Kitchen facilities
- Staff social rooms
- Booking system for rooms
- Noise levels
- Control of external disturbances
- Printing facilities

Rank the following advantages of working in an open workspace in order of how much you feel they impact your productivity and wellbeing:

- Close proximity to colleagues
- Increased social interaction
- Meeting new people from different departments
- Accessibility to shared facilities
- Increased movement around the workspace

Access to meeting/quiet rooms:

How frequently do you use any of the quiet rooms?

- Rarely
- Once a month
- Once a week
- Several times a week
- Daily
- Not applicable

Overall, how satisfied are you with the access to quiet rooms?

- Very satisfied
- Quite satisfied
- Neither satisfied nor dissatisfied
- Quite dissatisfied
- Very dissatisfied
- Not applicable

Can you suggest any advantages of the quiet rooms?

Can you suggest any possible improvements for the quiet rooms?

Working routine:

Have you made any changes to your workday routine since moving into the new shared workspace? (E.g. where you work from, hours etc.) *Yes/No, if yes go to question 2, if no skip this section.*

What changes have you made?

- I work more from home
- I work more from another location
- I have changed my working hours
- I have adjusted my order of daily tasks
- I leave my desk/change room more often
- Other: please specify

For what reasons have you changed your working routine?

Adapting to change

How confident do you feel using the improved technology within the workspace?

- Very confident
- Quite confident
- Neither confident nor doubtful
- Quite doubtful
- Very doubtful

How well do you think you have adapted to changes in the workspace environment (moving from single closed offices to open-plan workspace)?

- Very well
- Quite well
- Neither well nor poor
- Very poorly
- Quite poorly

How did your expectations compare to reality of working in the new workspace

- Significantly more satisfied
- More satisfied
- Expectations and reality were the same
- Less satisfied
- Significantly less satisfied

Have you noticed any post-move improvements or changes? *Yes/No*

If yes, please list below

Did you feel the changes listed made any significant impact for your overall satisfaction in the workspace? *Yes/No/Not applicable*

Do you have any suggestions that could help you adapt better?

Focus groups

Do you wish to participate in a focus group to discuss your workplace further? Please provide an email so we can contact you

Thank you for participating, your contribution is extremely valuable for our research
E. McCone, C. Moore & S. Cordonnier.

Appendix 3: Observational Study Structure

Burwood Hospital: Observational Study of Quiet Rooms and Staff Room																										
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	2.3A	2.3B	2.4	2.5	2.6	2.7	2.8	2.9	2.10
10:30am																											
10:45am																											
11:00am																											
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Burwood Hospital: Observational Study Comments			
Q1	Q2	Q3	Q4
Q5	Q6	Q7	Q8
Q9	Q10	Q11	Q12
Q13	Q14	Q15	Q16

Burwood Hospital: Observational Study Comments			
Q17	Q18	2.3A	2.3B
2.4	2.5	2.6	2.7
2.8	2.9	2.10	Other comments: