

Please refer to http://www.angelfire.com/psy/k_fraser for a link to up-to-date versions of and information about these essays.

This essay was produced in 2003 as assigned coursework for the MSc in Occupational Psychology by Katie Fraser, and has not been peer reviewed or published.

Note that the essays in this section have often been written as reports for real or hypothetical companies. However, the work has not been submitted to these organisations, and they do not endorse any content or recommendations within the work.

NB. Plagiarism of this material is discouraged, due as much to lack of guarantee of content quality as anything. However, feel free to rifle for ideas and references.

**Functional diversity in work groups:
A review and some practical suggestions**

**Organisational Behaviour
MSc Occupational Psychology**

Table of Contents

<i>Chapter and Sub-headings</i>	<i>Page Number</i>
(A) The Puzzle of Functional Diversity	
(1) <i>Mixed effects of diversity</i>	1
(2) <i>What are the issues for diverse workgroups?</i>	2
(3) <i>The mechanisms affecting diversity in teams</i>	3
(B) Other Areas of Research	
(1) <i>Learning from other perspectives</i>	5
(2) <i>Dangers of overgeneralisation</i>	6
(C) Conclusions	
(1) <i>Practical implications and suggestions</i>	6
(2) <i>Future work and conclusions</i>	8
(D) References	9

(A) The Puzzle of Functional Diversity

(1) Mixed effects of diversity.

Diversity is not limited to the groups that equal opportunities legislation highlights. Research has found in-group loyalty and out-group dislike among many populations (Gaertner et al., 1989). The types of diversity that may be affecting organisations most are the ones they actively recommend invest in, and promote at a greater rate than ever before: functionally diverse teams (Jackson, 1996; McDonough, 2000).

Functionally diverse teams, or workgroups (these can be used interchangeably for current purposes), consist of individuals with a variety of educational and training backgrounds working together. Such individuals may have different job roles and names within the team, or may be recruited from different sectors to perform equivalent jobs. There is a widely held belief among management (Jackson, 1996) that such teams can improve decision-making with the wider number of ideas and perspectives they bring to an organisation. This review should hopefully provide guidance about the wisdom of this belief.

Several comprehensive reviews of academic research into how functionally diverse teams operate are available (Jackson, 1996; sections in Milliken and Martins, 1996; Williams and O'Reilly, 1998). The studies within these reviews have provided varied results. Williams and O'Reilly (1998) found that a diverse team's problems generally outweighed its performance benefits, but groups with functionally diverse backgrounds were the one exception to this. On the other hand, Webber and Donahue (2001), found that highly job-related diversity had no relationship with the performance of teams.

The variation in team performance will now be discussed, and attempts made to describe and explain it by considering the two types of conflict that can occur within

groups – task and emotional conflict (Pelled et al., 1999). A brief discussion will describe why teams might, as managers believe, make better decisions when they challenge each other, exchanging viewpoints, and experiencing conflict over the task. This will be coupled with some discussion of how emotional conflict and distress could interrupt the process of task conflict, and prevent any exchange of ideas at all. Lastly, in this section, methodological issues will be mentioned. The next section will summarise some studies of decision-making, covering the areas in which functionally diverse teams have been beneficial and how conflict can affect this process. Finally, studies that might throw further light on functional diversity will be covered, and practical implications and conclusions will be drawn.

As the majority of this research on functional diversity has been completed in the last decade, a point is being reached where more concrete conclusions are being made. This is therefore an ideal time to review the progress how functionally diverse teams are understood, and to provide a better understanding of its mixed effects.

(2) What are the issues for diverse workgroups?

The call for functional diversity seems to have originated in the academic world, which is perhaps the area in which most introspectiveness is encouraged. Campbell (1969) criticised the social sciences for working within traditional disciplines, and Nissani (1997) similarly advocated wider disciplinary study. However, neither thought to suggest that academics, or indeed other specialists, could work together. The likely reason for this is that specialities are rigid (Kim, 1990), and usually encourage different norms, so that two specialists will probably never even see the same problem, and ignore each other's priorities, causing emotional conflict.

Nonetheless, Campbell's ideas are still relevant. The fact is that homogenous teams (with no diversity) tend to conform, and ignore new information (Wiersema and Bantel, 1992). They are often worse at decision-making tasks than heterogeneous

teams (Hoffman and Maier, 1961) and it is not always the team with the best dynamics that puts in the best performance (Lovejoy and Srinivasan, 2002). Task conflict is important for performance

It should be acknowledged that some variation in performance of functionally diverse teams will be due to methodological differences in measuring these variables, such as the amount of laboratory (versus field) work done in the area (Williams and O'Reilly, 1998), the different conceptualisations of functional diversity mentioned above (Bunderson and Sutcliffe, 2002), and the outcome measures used, which range from organisational performance (Wiersema and Bantel, 2002) to group cohesiveness (eg. Webber and Donahue, 2001). Despite this, methodological differences do not provide as structured and convincing explanation for varying performance as conflict can.

(3) The mechanisms affecting diversity in decision-making teams.

Guzzo and Dickson (1996), in their review of team performance and effectiveness, found that the beneficial effects of diverse teams were seen mostly in cognitive and creative tasks, although they do stress that benefits should not be discounted in other areas. DeDreu and West (2001) found that minority dissent had a positive effect on innovation when group participation was high, West (2002) that creativity and implementation were positively affected by the group's knowledge diversity and skills and Wiersema and Bantel (1992) functional diversity led to strategic organisational change through diversity in cognitive perspective. Conflict, in all these cases, appears to give functionally diverse workgroups their benefits, as emotional conflict was suggested to be giving them their problems (Kim, 1990). This provided, historically, the first clue to an explanation for the variability in performance of diverse workgroups through the mechanism of conflict.

Only recently have successful and explicit attempts been made to discover the 'black box' variables (Lawrence, 1997, cited by Pelled et al., 1999; Keller, 2001), such as

conflict, that this article claims lead to variability. Clues from studies such as those describe above, led Pelled et al. (1999) to look into the types of conflicts teams would be experiencing. They found that task conflict had a positive association with cognitive task performance. While Pelled et al. found no effect of emotional conflict, many authors have proposed that emotional conflict with out-group members may lead to poor performance in diverse teams (Polzer et al., 2002; Hoffman and Maier, 1961; Kim, 1990).

Jehn et al. (1999), similarly proposed diversity would split into three different types - knowledge and perspectives (as in task conflict), social category (which might be extended to include a job or discipline), and value diversity. It was value diversity that had the greatest negative effect on team performance, while information diversity had the greatest positive effect. It therefore seems that value diversity, as proposed by Kim (1990) is creating the greatest conflict problems, and probably the most emotional conflict. Emotional conflict would lead to problems with team cohesiveness, which has a small, but significant effect on team performance (Mullen and Copper, 1994). This implies that emotional conflict, in this case, is overriding any benefit on performance that task conflict might have provided.

Williams and O'Reilly (1998), discussing the three most commonly used theories of diversity in the area also reflect the separation between task and emotional conflict. The information and decision-making theory predicts that the availability of information will give further perspectives and ideas to the group (task conflict). However, social categorisation theory predicts that group members will attempt to make their in-group look better, at the expense of the out-group, and the similarity / attraction framework suggests that dissimilar group members will not like each other, both of which would naturally lead to emotional conflict.

Keller (2001) has provided some information about why task conflict among functionally diverse workgroup members can be so valuable, with diverse knowledge being coupled with a variety of contacts. Furthermore, Keller found that job stress, which is likely to arise from emotional conflict, had a detrimental effect in the same

study. This only intensifies the argument that it is task conflict that causes benefits for teams, and emotional conflict that causes their problems.

(B) Other Areas of Research

(1) Learning from other perspectives.

While work in the functional diversity field has been prolific in recent times, there are still lessons that can be learnt from other fields. One comparable area of research is cultural diversity, in particular international diversity, as this also studies the interaction of individuals 'raised' to different values and ideas. Its research is of greater breadth, and covers many more practical issues of diversity (Adler, 1997).

For example Hofstede (1980, cited by Adler, 1997) identified several dimensions along which cultures differed in an attempt to operationalise cultural diversity. Wagner (1995) used this to improve understanding of groups in general, and diversity in particular, by identifying how one of these dimensions, individualism-collectivism affected the cooperation, leading to useful and practical suggestions improving group work.

Perhaps the most insightful work to recently emerge from cultural research is that of Polzer et al. (2002). They used the idea of interpersonal congruence, found when group members are perceived by their teammates as they perceived themselves, via identity negotiation (Swann et al., 2000). Demographic diversity improved cognitive task performance in groups with high interpersonal congruence, and impaired it in groups with low interpersonal congruence.

(2) Dangers of overgeneralisation.

A few words of caution, however. As Guzzo and Dickson (1996) state, we are yet to discover if different form of diversity they have an equal, let alone equivalent, effect. Harrison et al. (2002), for example, found that immediately noticeable diversity and more personality and value-based diversity had quite separate effects over time. This is not to say that comparisons should not be made, but care must be taken over assuming comparability, especially in the long run. With the progress currently being made in the understanding of functional diversity, false conclusions drawn from incomparable studies might slow and interfere with understanding significantly.

(C) Conclusions

(1) Practical implications and suggestions.

The stated aim of this review was to provide suggestions and answers about whether and how functionally diverse teams should be used in organisations, so now some more concrete suggestions will be made for the implementation and use of such workgroups.

Henke et al. (1993) suggest that functionally diverse teams be formed with people selected to have the appropriate mix of competencies in the team, including effective interpersonal skills, which should, presumably, reduce emotional conflict. This conclusion, unlike those above, was not drawn from studies and evidence. However, it is interesting and gratifying to note that observations of practice can concur with theoretical data.

Reduction of emotional conflict can, theoretically, be achieved with some practical and more research-based solutions. Gaertner et al. (1989), in studying in- and out-

group behaviours, found that persuading participants to recategorise their in- and out-groups as either a single group, or as individual members reduced bias. In the 'individuals' recategorisation this was because previous in-group members lost popularity and respect rather than out-group members gained it.

Recategorisation as a single group led to a similar reduction in bias, but this time by improving opinions of previous out-group members. This could provide a means of reducing emotional conflict. Polzer et al. (2002), however, note that as task and emotional conflict are usually strongly linked, recategorisation of a workgroup as the in-group may reduce task conflict, and thus the benefits of a functionally diverse team might also be reduced. Group congruence avoid this problem, as teams that recognised the individuality of members, as the members saw themselves, could still generate task conflict, but avoided emotional conflict.

The group congruence effect appears to be caused by early self-disclosure (Polzer et al. 2002). Instead of encouraging groups to bond as a single entity, then, organisations should encourage them to describe their differences, including positive and negative abilities, and how these relate to the tasks. This would be apparently simple to implement, as a temporary group leader or facilitator could start such a discussion, and then leave the team to its own devices.

Such a process should, of course, be only part of the procedures for managing diversity that any organisation must implement (Jackson, 1996; Williams and O'Reilly, 1998). The divergence in values that any functionally diverse team will encounter must be carefully handled (Jehn et al., 1999), and advice should emphasise that success is the responsibility, and aim, of all workgroup members (Lovejoy and Srinivasan, 2002). As indicated previously, it is also important that the teams are only implemented on tasks that are proven to benefit from task conflict. Tasks where a difference in ideas and perspectives will improve performance will include creative tasks (DeDreu and West, 2001; Wiersema and Bantel, 1992; West 2002) in particular, as these benefit from unstructured and original thinking.

(2) Future work and conclusions.

The emphasis of this review has investigated a weight of knowledge about task and emotional conflict, but decisions about whether the benefits of task conflict outweigh the problems that emotional conflict can provide can still not be fully informed, and therefore the implementation of functionally diverse teams may still be a gamble. It is thus imperative that research continues to seek further understanding of the workings of functionally diverse teams work and their implementation.

As suggested above, other diversity research may be involved in progressing understanding. However, as Williams and O'Reilly (1998) discovered, functional diversity is a unique diversity, and its benefits may be as unique. Suggestions for further research therefore include operationalising the mechanisms by which task and emotional conflict occur in functionally diverse teams, in work such as that of Keller (2001), and attempting to discover how practical suggestions such as that of Henke et al. (1993) can be theoretically based.

There are now many new ideas and questions in this field, and group congruence, the mechanisms of conflict and many other concepts are all becoming clearer. It is hoped that research in this field will one day go on to justify the faith that organisations appear to have in functionally diverse teams, and that their implementation will soon be harnessed for the creative and productive thinking they seem to promise.

(D) References

Adler, N.J. (1997). *International Dimensions of Organizational Behavior*. 3rd Edition. South Western College Publishing: USA.

Benschop, Y. (2001). Pride, prejudice and performance: Relations between HRM, diversity and performance. *International journal of Human Resource Management*, **12**, 1166-1181.

Bunderson, J.S. and Sutcliffe, K.M. (2002). Comparing alternative conceptualizations of functional diversity in management teams: Process and performance effects. *Academy of Management Journal*, **45**, 875-893.

Campbell, D.T. (1969). Ethnocentrism of disciplines and the fish-scale model of omniscience. In Sherif, M. and Sherif, C.W. (Eds.) *Interdisciplinary relationships in the Social Sciences*. Aldine Publishing Co.: USA.

DeDreu, C.K.W. and West, M.A. (2001). Minority dissent and team innovation: The importance of participation in decision making. *Journal of Applied Psychology*, **86**, 1191-1201.

Ely, R.J. and Thomas, D.A. (2001). Cultural diversity at work: The effects of diversity perspectives on workgroup processes and outcomes. *Administrative Science Quarterly*, **46**, 229-273.

Farrell, M.P., Schmitt, M.H. and Heinemann, G.D. (2001). Informal roles and the stages of interdisciplinary team development. *Journal of interprofessional care*, **15**, 281-295.

Gaertner, S.L., Mann, J., Murrell, A. and Dovidio, J.F. (1989). Reducing intergroup bias: The benefits of recategorisation. *Journal of Personality and Social Psychology*, **57**, 239-249.

Guzzo, R.A. and Dickson, M.W. (1996). Teams in organizations: Recent research on performance and effectiveness. *Annual Review of Psychology*, **47**, 307-338.

Harrison, D.A., Price, K.H., Gavin, J.H. and Florey, A.T. (2002). Time, teams, and task performance: Changing effects of surface- and deep-level diversity on group functioning. *Academy of Management Journal*, **45**, 1029-1045.

Henke, J.W., Krachenberg, A.R. and Lyons, T.F. (1993). Perspective. Cross-functional teams: Good concept, poor implementation? *Journal of Product Innovation Management*, **10**, 216-229.

Hoffman, L.R. and Maier, R.F. (1961). Quality and acceptance of problems solutions by members of homogenous and heterogenous groups. *Journal of Abnormal and Social Psychology*, **62**, 401-407.

Jackson, S.E. (1996). The consequences of diversity in multidisciplinary work teams. In West, M.A. (Ed.) *Handbook of work group psychology*. John Wiley & Sons Ltd: UK.

Jehn, K.A., Northcraft, G.B. and Neale, M.A. (1999). Why differences make a difference: A field study of diversity, conflict and performance in workgroups. *Administrative Science Quarterly*, **44**, 741-763.

Keller, R.T. (2001). Cross-functional project groups in research and new product development: Diversity, communications, job stress, and outcomes. *Academy of Management Journal*, **44**, 547-555.

Kim, S. (1990). Interdisciplinary cooperation. In Laurel, B. (Ed.) and Mountford, S.J. *The Art of Human-Computer Interface Design*. Addison-Wesley Publishing Company: USA.

Lovejoy, W.S. and Srinivasan, V. (2002). Perspective. Ten years of experience teaching a multi-disciplinary product development course. *Journal of Product Innovation Management*, **19**, 32-45.

McDonough, E.F. III (2000). Investigation of factors contributing to the success of cross-functional teams. *Journal of Product Innovation Management*, **17**, 221-235.

Milliken and Martins (1996). Searching for the common threads: Understanding the multiple effects of diversity in organizational groups. *Academy of Management Review*, **21**, 402-433.

Mullen, B. and Copper, C. (1994). The relation between group cohesiveness and performance: An integration. *Psychological Bulletin*, **115**, 210-227.

Nissani, M. (1997). Ten cheers for interdisciplinarity: The case for interdisciplinary knowledge and research. *Social Science Journal*, **34**, 201-216.

Nkomo, S.M. and Cox, T. Jr. (1996). Diverse identities in organizations. In Clegg, S.R., Hardy, C. and Nord, W.R. (Eds.) *Handbook of Organization Studies*, Sage Publications: UK.

Pelled, L.H., Eisenhardt, K.M. and Xin, K.R. (1999). Exploring the black box: An analysis of workgroup diversity, conflict, and performance. *Administrative Science Quarterly*, **44**, 1-28.

Polzer, J.T., Milton, L.P. and Swann, W.B. Jr. (2002). Capitalizing on Diversity: Interpersonal congruence in small workgroups. *Administrative Science Quarterly*, **47**, 296-324.

Swann, W.B. Jr., Milton, L.P. and Polzer, J.T. (2000). Should we create a niche or fall in line? Identity negotiations and small group effectiveness. *Journal of Personality and Social Psychology*, **79**, 238-250.

Wagner, J.A. III (1995). Studies of individualism-collectivism: Effects on cooperation in groups. *Academy of Management Journal*, **38**, 152-172.

Webber, S.S. and Donahue, L.M. (2001). Impact of highly and less job-related diversity on workgroup cohesion and performance: A meta-analysis. *Journal of Management*, **27**, 141-162.

West, M.A. (2002). Sparkling fountains or stagnant ponds: An integrative model of creativity and innovation implementation in workgroups. *Applied Psychology: An International Review*, **51**, 355-424.

Wiersema, M.F. and Bantel, K.A. (1992). Top management team demography and corporate strategic change. *Academy of Management Journal*, **35**, 91-121.

Williams, K.Y. and O'Reilly, C.A. III (1998). Demography and diversity in organizations: A review of 40 years of research. In Staw, B.M. and Cummings, L.L. (Eds.) *Research in Organizational Behavior - Volume 20*. JAI Press Inc: USA.