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The Role of Sociocultural Adjustment During an Internal Merger Change

Felicity Joslin, The University of Melbourne, Australia Lea Waters, The University of Melbourne, Australia Paul Dudgeon, The University of Melbourne, Australia

Abstract: Large-scale corporate restructures are a commonly used business strategy performed to streamline structure and systems, and hence, improve efficiency and competitive advantage. Reconfiguring a workforce is not an easy task, however, especially if it involves the amalgamation of previously distinct workgroups. The personal and work-related consequences of merger-related change have been well-researched and documented, as have the support mechanisms that change managers can use to support the change. Following the proposition that sociocultural adjustment may also contribute to merger outcomes, the current study used structural equation modelling to assess the experiences of two previously distinct employee groups as they interacted during an internal merger. The two employee samples were sourced from a multi-national communications organisation (N = 295; males = 45%, females = 55%). Data was collected through questionnaires at three points in time (baseline, 6 months and 12 months). Structural equation results indicated that sociocultural adjustment was an important factor that contributed to employees' personal (i.e. psychological distress) and work-related (i.e. role ambiguity, job satisfaction, and organisational commitment) outcomes of change over. Sociocultural adjustment played a role above antecedent mechanisms used by the employee (i.e. openness to change) and the organisation (communication, social support, and employee participation). A multiple-group model showed that sociocultural adjustment affected psychological distress, but not work-related outcomes, differently for the host and acculturated groups. Specifically, sociocultural adjustment contributed to the acculturated group's psychological distress significantly more than to the host group's. Overall, the findings of the current research highlight the importance of managing the sociocultural aspects of merger-related change.

Keywords: Sociocultural Adjustment, Organisational Change, Employee Resistance

N THE FACE of increased competitive pressure from the external environment over the last two decades, many organisations have focused on strategic change and growth in a bid to hold their place within the marketplace (Burnes, 2000). According to Hill and Jones (2004), mergers and acquisitions have been a popular form of strategic change. Whilst there is some evidence for successful mergers, unsuccessful mergers have been common. Shrivastava (1986) reports that "almost half to two thirds of all mergers simply don't work...[and] one out of every three acquisitions is divested" (p. 66). Indeed, according to Cartwright and Cooper (1993b) many fail to realise the expected returns due to the high financial, strategic and human costs often associated with mergers.

The high rate of merger and acquisition failure has sparked considerable theoretical discussion regarding the key success factors in amalgamating distinct organisational groups (Cartwright & Cooper, 1993a; Fulmer & Roderick, 1988; Nahavandi & Malekzadeh, 1993; Shrivastava, 1986). These discussions reveal a unanimous belief that "human factors" may have a far greater impact on the outcomes of

merger-related change than economic mismanagement or strategic mismatch.

The aim of the current study was to investigate whether the sociocultural adjustment of the merged groups following amalgamation would influence work-related change outcomes such as role ambiguity, job satisfaction, organisational commitment and work performance and employee psychological distress. The study also examined whether these relationships differed between the two merged groups.

Merger Failure: The Human Side of Change

Historically, explanations of merger failure have been attributed to over-inflated purchase prices, strategic mismatch and financial mismanagement (Cartwright & Cooper, 1993a, 1993b; Jemison & Sitkin, 1986; Layne, 2000). These factors, however, do not account for the negative behavioural consequences (i.e. absenteeism, strikes, low morale, sabotage, increased accident rates, confusion, increased dissatisfaction and turnover) that accompany many mergers (Buono & Bowditch, 1989; Cartwright & Cooper, 1992; Davy, Kinicki, & Scheck, 1988; Layne, 2000; Meeks, 1977; Sinetar, 1981). Na-



havandi and Malekzadeh (1993) attribute these consequences to mismanagement of the human and cultural aspects of a merger.

Not surprisingly, it is now recognised that "while strategic, operation and financial concerns are and will continue to be significant, a merger of two organisations is, in reality, a merger of groups and individuals; that is, a merger or acquisition is ultimately a human process" (Layne, 2000, p. 2). Indeed, there is now a wealth of evidence to show that organisations operate, and change, through their employees (Bovey & Hede, 2001; Kanter, Stein, & Jick, 1992; Tessler, 1989). Cartwright and Cooper (1993a) suggest that one-third to one-half of mergers fail because of employee-related problems during the change process.

While mergers and acquisitions differ from internal restructures (i.e. mergers and acquisitions involve purchasing more resources, while internal restructuring involves shredding, or re-arranging, resources to become more cost effective), the change processes involved in the merger of two distinct workforces may be similarly experienced at the employee-level. For example, employees within either situation may endure considerable modifications with respect to work location, people, practices and politics (Nahavandi & Malekzadeh, 1988). Thus, although internal restructures may not be subject to the same economic and strategic risks as merger and acquisitions, they are likely to face similar human relation challenges.

With growing recognition of the "soft" issues associated with merger-related change, recent researchers have investigated the attitudinal, emotional and behavioural impact of mergers on the individual in a bid to highlight the importance of employee issues during the change (Bordia, Hobman, Jones, Gallois, & Callan, 2004; Buono & Bowditch, 1989; Cartwright & Cooper, 1994; Layne, 2000). Research shows that such mergers are associated with heightened psychological distress (Cartwright & Cooper, 1993a; Pollard, 2001) increased role ambiguity (Abramis, 1994; Danna & Griffin, 1999), reduced job satisfaction (Robino & Demeuse, 1985), lowered organisational commitment (Lawson & Angle, 1998), and poor work performance (Schweiger & Denisi, 1991).

Discussing the frequency of high merger failure, Cartwright and Cooper (1993a; 1993b) and Nahavandi and Malekzadeh (1988; 1993) argue that many problems stem from lack of integration and culture in compatibility (i.e. whether groups become integrated, autonomous, or displaced). In the next section, sociocultural influences during merger-related change are investigated in more detail.

Sociocultural Adjustment in Merger Situations

Organisational culture "represents an imperfectly shared system of inter-related understandings that is shaped by its members' shared history and expectations" (Larsson & Lubatkin, 2001, p. 1576). According to Buono, Bowditch and Lewis (1985), organisational culture constitutes a "normative glue" (p. 480) that holds an organisation together through unique patterns of beliefs and expectations. Burke and Litwin (1989) suggest that when different cultural groups are brought into permanent contact, as is the case in mergers, there is generally a power struggle to maintain "the way we do things around here" (p. 277).

Buono et al. (1985) and Cartwright and Cooper (1993b) both suggest that the amalgamation of previously separate work cultures during an organisational merger creates a major managerial challenge. They suggest that the neglect of cultural factors during merger situations is likely to result in poor employee morale, increased stress and reduced organisational commitment and productivity. Walter (1985) claims that the costs to performance resulting from poor cultural integration following a merger may be as high as 25-30%. Supporting this contention, Shrivastava (1986) proposed that one third of all mergers fail because of faulty post-merger integration, and that cultural integration is the most critical, and least researched, integration type. Despite these assertions, Nahavandi and Malekzadeh (1988) and Jemison and Sitkin (1986) argue that the role of sociocultural factors, together with the processes involved in merging organisational groups as cultural entities, have not been adequately researched.

In the field of cross-cultural psychology, Berry (1977; 1980b; 1990b; 1992) has laid the foundation for extended work on acculturation - the "phenomena which result when groups of individuals having different cultures come into continuous, first-hand contact, with subsequent changes in the original culture patterns of either or both groups" (Redfield, Linton, & Herskovits, 1936, p. 149). Berry (1980a; 1990a) characterises acculturation as a longitudinal process occurring through three phases: contact, conflict and adaptation. During the contact phase groups meet and interact and engage in cultural and behaviour exchange, which results in some form of cultural and psychological change among the people involved. As pressures to change familiar ways of life are experienced, conflict usually results, particularly if individuals are unwilling to change, or if discrepancies exist between individual and group goals. The goal of adaptation is to stabilise group relations and the individuals within these groups.

¹ A term often used to differentiate the people-related issues of change from the "hard", commercial-related issues.

Sociocultural adjustment forms part of the adaptation process and is determined by the individual's ability to find a comfortable niche within the wider cultural network (Berry & Sam, 1997; Searle & Ward, 1990).

Although few studies have empirically investigated the role of sociocultural adjustment within an organisational context, Berry's (1997) framework can be used to suggest that sociocultural adjustment between recently merged groups of employees is likely to be related to post-merger employee reactions (demonstrated by high job satisfaction, organisational commitment and work performance, and reduced role ambiguity and psychological distress).

One study by Chatterjee, Lubatkin, and Schweiger's (1992) provides preliminary support for this prediction by showing a positive relationship between managerial perceptions of inter-organisational cultural similarities (which may be viewed as a proxy for sociocultural adjustment) and shareholder value, indicating that sociocultural factors may influence employee work performance. Whilst Chatterjee, et al.'s (1992) research represents an important step forward in assessing the relevance of sociocultural adjustment in organisational merger situations, more work is clearly needed to investigate the relationship between sociocultural adjustment and change outcomes.

For example, Chatterjee, et al. (1992) utilised manager's perceptions to measure the cultural component in their research. However, since sociocultural adjustment is a personal, subjective and idiosyncratic view, it would be more relevant to assess the perceptions of the employees themselves. Chatterjee, et al. also looked at the company-level outcome of shareholder value. Yet, research examining employeelevel outcomes of change is needed in order to test the claims of Buono and Bowditch, (1989), Cartwright and Cooper (1993a) and Layne (2000)

that it is the human side of change (i.e. employee reactions) that leads to mergers not being successful.

Theoretical discussions by Buono et al. (1985) and Pikula (1993) argue that if cultural barriers are not broken down, merged employee groups may develop an "Us-and-Them" syndrome characterised by "distorted perceptions and hostile feelings toward the other group" (Pikula, 1993, p. 11), suggesting that the merged groups have not adjusted to the new sociocultural environment.

To date then, although the theory and research into sociocultural adjustment within an organisational context is in its infancy, it is suggestive of the fact that the relationships formed between different employee groups (who each have their own distinctive culture) is likely to be an important factor contributing to the outcomes experienced by employees in merger-related change (Cartwright & Cooper, 1993a; Layne, 2000). These studies also provide preliminary evidence to suggest that sociocultural adjustment may be a critical factor in any organisational merger scenario, and one that is likely to contribute to merger success.

The current study investigated whether sociocultural adjustment had a significant contribution to work-related outcomes and psychological distress in two groups of employees following an internal merger (see Figure 1). The above review leads Hypothesis 1.

Hypothesis 1: Twelve months after two work groups were merged, sociocultural adjustment will have a significantly positive influence on work-related outcomes (i.e. job satisfaction, organisational commitment, role ambiguity and work performance) and show a significantly negative relationship with psychological distress

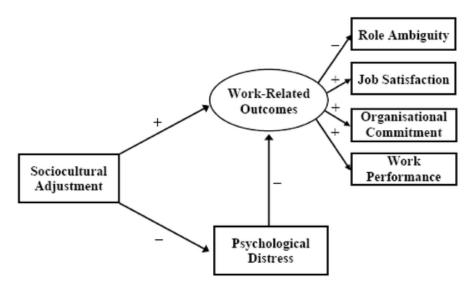


Figure 1: Hypothetical Model: Sociocultural Adjustment as a Predictor of Work-related Outcomes and Psychological Distress following an Internal Merger

The Asymmetry of Acculturation: Is it a Viable Assumption?

One interesting aspect of Berry's (1980a; 1992) theory and research is that although he recognises acculturation to be a neutral term in principle (i.e. change may take place in either or both groups), he argues that in practice one group tends to be dominant. Berry suggests that the dominant group (i.e. the host group) typically maintains more cultural elements than the nondominant group (i.e. the relocated group). Thus, change is often predicted to be more pronounced in the nondominant group as a result of influence from the dominant group, rather than the other way around.

The consequence of this assumption is that most studies into acculturation have failed to investigate the impact of a merger upon the dominant group. One exception to this is the research of Terry, Callan and Sartori (1996). Their research challenged this assumption by showing that employees within the dominant group pre-merger may not actually perceive themselves to be the stronger partner once the groups have merged. Their results also showed that the dominant group experienced significantly more negative reactions (e.g. low situation control, low self-efficacy and high stress) and reported levels of adjustment (as measured via psychological well-being and job satisfaction) to the merger than the nondominant group. Terry et al.'s research, thus, highlights that sociocultural adjustment during an internal merger is "real" for both dominant and non-dominant merger groups. These findings provide preliminary evidence to suggest that dominant merger groups are also likely to be emotionally and behaviourally affected by the intrusion of another culture into their work domain.

Following with the findings of Terry et al.'s (1996) research, the current paper hypothesises that sociocultural adjustment is an essential factor for *both* merger parties in determining their psychological mindset, and work-related attitudes and behaviours postchange. Thus, Hypothesis 2 states the following.

Hypothesis 2: Sociocultural adjustment will be significantly related to psychological distress and work-related outcomes (i.e. job satisfaction, organisational commitment, role ambiguity and work performance) for both the dominant (host) and nondominant (relocated) work groups.

In summary, organisational culture is often cited as an important contributor to the success (or failure) of mergers and acquisitions (Cartwright & Cooper, 1993b; Jemison & Sitkin, 1986; Nahavandi & Malekzadeh, 1993). However, these claims have lacked sufficient theoretical grounding and empirical validation. The lack of empirical research using sociocultural adjustment as a predictor of organisational change outcomes represents a gap in the literature. The current study will fill this gap by examining the influence of sociocultural adjustment on work-related outcomes (i.e. role ambiguity, job satisfaction, organisational commitment and work performance) and psychological distress following an internal merger.

Method

Participants

The participants in this study were members of an Australian communications company that implemen-

ted a planned change to consolidate resources within a mature division of their business. The consolidation was designed as an internal restructure to merge two independent work groups into one. More specifically, resources (staff, product and machinery) from a smaller city-based facility (*Facility X: Relocated group*) were transferred to a large suburban facility (*Facility Z: Host group*).

Twelve months after they work groups merged, 170 host employees and 80 relocated employees completed questionnaires. Missing data was replaced by imputed estimates calculated using the EM method² in SPSS (2002).

Significant group differences were found for employee tenure, shift time, and employment status (see Table 1). Employees in the acculturated group had worked with the organisation significantly longer than those in the host group. The majority of acculturated employees worked a morning shift, while host employees were equally spread across afternoon and night shifts. The acculturated sample contained significantly more full-time workers than the host group. No significant differences were found for age range or gender.

Table 1: Crosstabs Chi-Square Significance for Demographic Variables between the Host and Relocated Group

Demographic	Chi-square	p
Sex	2.85	.061
Age	5.88	.209
Job role	6.08	.108
Tenure	48.10	> .001
Shift time	138.52	> .001
Employment status	27.57	> .001

Measures

The following measures were all recorded on a 5-point Likert rating scale. Scale options ranged from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). In all cases, high scores reflect a large amount of the measured attribute. Alpha reliabilities for all scales are displayed in Table 2.

Independent Variable

Sociocultural adjustment. An existing sociocultural adjustment scale designed for an organisational setting was unable to be sourced. Thus, a measure designed by Eshel and Rosenthal-Sokolov (2000) for cross-cultural research was used as a foundation to develop scales for use within an organisational context. The Perceived Acceptance by Host and Perceived Acceptance by Relocated Group scales were used to formulate similar items relating to inter-cultural relations within an organisational setting. Four items were constructed and included "My new coworkers are willing to help me in my job," "I am willing to help my new coworkers in their job," "I am satisfied with my relations with my new coworkers" and "The general atmosphere within the workplace is supportive."

Dependent Variables

Psychological distress. The 12-item short version of the General Health Questionnaire (Goldberg, 1972) was used as measure of psychological distress (eg. "I have lost much sleep because of worry" and "I have felt constantly under strain").

Role ambiguity. Role ambiguity was measured using a 6-item scale developed by Rizzo et al. (1970). Example items included "Clear, planned goals and objectives exist for my job" and "I know exactly what is expected of me."

Job satisfaction. Six items from the Overall Job Satisfaction scale (Brayfield & Rothe, 1951) were used to measure the degree to which an individual liked his or her job (e.g. "I find real enjoyment in my job" and "I am seldom bored with my job").

Organisational commitment. The 15-item Organisational Commitment scale (Mowday, Steers, & Porter, 1979) was used to measure employee loyalty (e.g. "I feel very little loyalty to this organisation" and "I am proud to tell others that I am part of this organisation").

Work performance. Employee work performance was measured using a 9-item scale sourced from Rodwell et al. (1998). Example items included "I am proud of my work performance" and "My work is always of high quality."

² EM estimates the means, the covariance matrix, and the correlation of quantitative variables with missing values, using an iterative process.

Procedure

Data was collected on-site and in work hours. Participants were informed that their involvement was voluntary and that they could withdraw at any time. Confidentiality was discussed in more detail if issues were raised by employees. Those who decided not to participate returned to work. Participants took between 20 and 30 minutes to complete the questionnaire and the researcher remained in the room at all times.

Following Podsakoff, MacKenzie, and Podsakoff's (2003) suggestions to control common method variance, participants were not required to write their name or work identification number on questionnaires. Anonymity helps to reduce participant's evaluation apprehension, and therefore, potentially make them more likely to respond honestly to questionnaire items. The researcher also attempted to reduce evaluation apprehension by securing the room from senior managers, and verbally encouraging participants to answer honestly.

Analytic Strategy

Following the recommendations of Anderson and Gerbing (, 1988 #301) and Mulaik, James, Alstine, Bennett, Lind, and Stilwell (, 1989 #304), the psychometric properties of the work-related outcomes latent variable was confirmed through the analysis of a measurement model. Sociocultural adjustment and Psychological Distress were validated through first-order CFA.

The predictive relationships among study variables were then tested through longitudinal structural models. SEM is a statistical technique that has been shown to be a powerful and efficient way of simultaneously examining a number of predicted relation-

ships between latent and manifest variables (Bentler, 1995; Byrne, 2001). For the current study, the use of SEM meant that the researchers could look at the simultaneous relationship between sociocultural adjustment on psychological distress and work-related outcomes rather than having to use multiple regression to analyse the unique relationship of sociocultural adjustment on psychological distress and then sociocultural adjustment on work-related outcomes. The SEM also allowed the researchers to explore the way in which psychological distress is associated with work-related outcomes in an internal merger. A major advantage of SEM is that it minimises the effect of unreliable data by accounting for measurement error in latent variables (Homes-Smith & Rowe, 1994).

Validity of Scales

Confirmatory Factor Analysis

Confirmatory factor analysis supported a single factor structure for sociocultural adjustment, $\chi^2(2, N=250) = 0.45$, p = .978, CFI = 1.00, TLI = 1.03 and psychological distress, $\chi^2(54, N=250) = 285.42$, p < .001, CFI = 0.79, TLI = 0.70. All standardised regression weights shown (i.e. factor loadings) were significant at p < .001.

Measurement Model

The measurement model showed strong validation for the latent variables used in the current research, $\chi^2(2, N=250)=8.64, p<.05, CFI=.984, TLI=.952, RMSEA=0.115 (0.045, 0.199), SRMR=.034. Except for RMSEA (which favours complex models) all fit indices indicate a good fitting model. Standardised regression weights are displayed in Figure 2.$

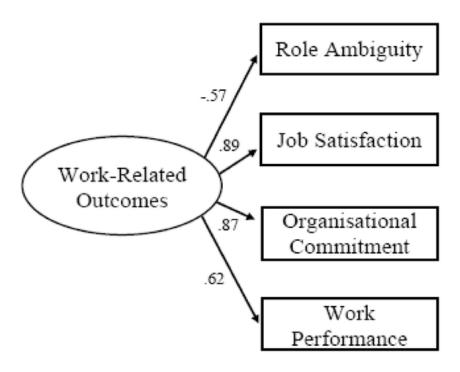


Figure 2: Standardised Regression Weights for the Measurement Model

The consistency of the measurement model was next assessed for the two study groups. On the basis of Bollen (1989) and Farrell's (1994) guidelines for analysing multiple group data with SEM, a series of hierarchical assumptions were tested, each suggesting an increased level of invariance between the groups (see Table 2).

The results of a chi-square difference test (see Table 3) showed that progressively constraining factor loadings (b) and latent variances (c) to be equal across the groups did not jeopardise model-data fit. Fit indices confirmed that model (c) fit the data as well as the unconstrained model, $\chi^2(8, N=250)=15.80, p<.05, CFI=.981, TLI=.971, RMSEA=0.063 (0.009, 0.108), SRMR=.023.$

Table 2: Multiple Group Measurement Model and Structural Model Hierarchical Assumptions

Measurement Model	Structural Model
(a) The models have the same pattern of fixed and free parameters.	(a) Path coefficients have the same pattern for the host and acculturated groups.
(b) Factor loadings are the same across groups.	(b) Path coefficients between sociocultural adjustment and psychological distress are the same across groups.
(c) Factor loadings and variances for the latent variable (i.e. work-related outcomes) are the same across groups.	(c) Path coefficients between sociocultural adjustment and the two outcome measures (i.e. psychological distress and work-related outcomes) are the same across groups.
	(d) Path coefficients between sociocultural adjustment and the two outcome measures (i.e. psychological distress and work-related outcomes), as well as the path between psychological distress and work-related outcomes are the same across groups.

Nested models			Chi-square difference from unconstrained model						
	χ²	df	CFI	TLI	RMSEA (90% CI)	SRMR	Δχ²	Δdf	P
(a) Unconstrained model	10.25*	4	.985	.954	0.079 (0.018, 0.141)	.026			
(b) Factor loadings equal	13.65*	7	.984	.972	0.062 (0.000, 0.111)	.022	3.41	3	.333
(c) Factor loadings and latent variances equal	15.80*	8	.981	.971	0.063 (0.009, 0.108)	.023	5.56	4	.235

Table 3: Model Fit Indices and Chi-Square Difference Comparisons for the Multiple Group Measurement Models

Note. Lowercase letters alongside the nested model labels reflect the multi-group assumptions under investigation. N = 250.

The measurement model, thus, showed that the latent variables utilised in the current study are valid and reliable tools for the current study samples. All equality constraints for the latent variables from measurement model (c) were carried over to the multiple group structural models analysed for Hypotheses 2.³

Results

Descriptive Statistics

The means, standard deviations, intercorrelations and alpha coefficients among the nine study variables were analysed using SPSS 11.5 statistical software (Inc., 2002). Independent sample means (see Table 4) indicate that sociocultural adjustment was quite

high for both merger groups, although slightly higher for the host group. Both groups reported that their psychological distress and role ambiguity were lower than their job satisfaction, organisational commitment and work performance.

Multiple Analysis of Variance (MANOVA) was used to test for significant difference between the groups. Wilks' Lambda multivariate test indicated that the host and relocated groups did not significantly differ, F(6,243) = 1.48, p = .185. Univariate tests, however, showed that although this was true for organisational commitment, F(1,248) = 3.63, p = .058, and psychological distress, F(1,248) = 3.63, p = .058, levels of sociocultural adjustment, role ambiguity, job satisfaction and work performance were found to be different between the two groups (see Table 4).

p < .05.

³ The variance of work-related outcomes factor was not constrained equal in the later structural models because it functioned as an endogenous latent variable there.

Variable	Н	Iost Acculturate		turated	F	p	1	2	3	4	5	6
Variable	M	SD	M	SD								
1. Sociocultural adjustment	3.71	0.73	3.47	0.68	6.42	.012	(.80)					
2. Psychological distress	2.36	0.71	2.55	0.73	3.63	.058	45	(.88)				
3. Role ambiguity	2.29	0.73	2.50	0.69	4.51	.035	39	.43	(.79)			
4. Job satisfaction	3.42	0.95	3.14	0.96	4.74	.030	.50	49	51	(.90)		
5. Organisational commitment	3.47	0.70	3.30	0.57	3.63	.058	.51	42	47	.78	(.89)	
6. Work performance	4.02	0.57	3.86	0.57	4.85	.029	.43	45	46	.53	.54	(.75)

Table 4: Mean, Standard Deviations, MANOVAs, Alpha Reliabilities and Intercorrelations among Observed Study Variables

Note. Alpha reliabilities appear in parentheses. All correlations are significant at p < .01. N = 250. Individual scores were calculated as item mean values rather than item sum scores. As all items used 5-point Likert response scales, these scores have a possible range between 1 and 5.

Inspection of the correlation matrix in Table 5 shows that sociocultural adjustment was positively associated with job satisfaction (r = .45, p < .01), organisational commitment (r = .51, p < .01) and work performance (r = .43, p < .01), and negatively correlated with psychological distress (r = -.45, p < .01) and role ambiguity (r = -.39, p < .01). Intercorrelations between dependent variables ranged from .42 to .78. Alpha reliabilities (shown on the diagonal in Table 4) were high for all scales.

Goodness-of-Fit Indicators in the Structural Equation Modelling

The current study, the estimation method used in the structural equation models was maximum likelihood (ML), which is shown to be suitable for the analysis of normally distributed data (Arbuckle & Wothke, 1999).

The biasing effect of sample size and assumption violation (e.g. multivariate normality and kurtosis) on the χ^2 statistic is well noted (Anderson & Gerbing, 1988; Bentler & Bonett, 1980; Bollen, 1990; Browne & Cudeck, 1993; Hu & Bentler, 1995; Tabachnick & Fidell, 1996). This weakness, together with the restrictive assumption of exact fit, creates doubt over the ability of the χ^2 to provide an ultimate measure of model adequacy. Therefore, the current study utilised the comparative fit index (CFI;(Bentler, 1990), Tucker-Lewis index (TLI; (Tucker & Lewis, 1973), the root mean square error of approximation (RMSEA; (Steiger & Lind, 1980) and the standardised root mean square residual (SRMR; (Sörbom & Jöreskog, 1982) to evaluate agreement between the structural models based on theory and data.

Structural Models

AMOS 5.0 (Arbuckle, 2003) ML estimation was employed to test the competing structural models.

Does Sociocultural Adjustment Predict Work-Related Outcomes and Psychological Distress?

Results for Hypothesis 1 showed that sociocultural adjustment was a valid predictor of work-related outcomes (i.e. role ambiguity, job satisfaction, organisational commitment and work performance) and psychological distress, $\chi^2(8,\,N=250)=25.61,\,p<.01,\,\text{CFI}=.971,\,\text{TLI}=.945,\,\text{RMSEA}=0.094\,(0.055,\,0.136),\,\text{SRMR}=.041.\,\text{The squared multiple correlations}$ (i.e. R^2) indicated that sociocultural adjustment alone explained 21% of the variance in psychological distress, while sociocultural adjustment together with psychological distress explained 45% of the variance for work-related outcomes.

Inspection of standardised regression weights indicated that sociocultural adjustment directly influenced psychological distress (β = -.45, p < .001) and work-related outcomes (β = .43, p < .001). Psychological distress also was also found to be direct predictor of work-related outcomes (β = -.36, p < .001).

Are there any Differences between the Host and Relocated Groups?

Hypothesis 2 was tested via multiple group SEM; a technique which allows the researcher to progressively constrain regression paths to be equal for both groups, whilst testing for model fit. If constraints are found to jeopardise model fit, then this suggests that the path coefficients for the study groups are statist-

ically different. In contrast, if the data is found to fit well with the model after paths are restricted to be equal for the groups, this indicates that the regression process is the same for both groups. Following Farrell's (1994) guidelines, a series of hypotheses were tested relating to the progressive constraint of path coefficients (see Table 2).

The chi-square difference tests (see Table 5) comparing the measurement constrained model (a) with the model constraining the paths leading from sociocultural adjustment to work-related outcomes and psychological distress (c) indicated that the more restricted model was not a significantly worse fit of the data, $\Delta \chi^2$ (2, N = 250) = 4.56, p = .102. This result suggested that there were no differences in the relationship between sociocultural adjustment and individual and organisational outcomes of change

(i.e. work-related outcomes and psychological distress) for the two merger groups.

Imposing an additional path constraint between work-related outcomes and psychological distress (d) revealed that this relationship was also invariant for the two groups, $\Delta \chi^2$ (3, N=250) = 5.34, p=.149. Thus, the model constraining all structural paths to be equal between the two merger groups provides a good fit with the data, χ^2 (22, N=250) = 47.54, p=.100 (0.042, 0.095), SRMR = .038, without losing chisquare significance (see Table 5). This result indicates that psychological distress affected work-related outcomes similarly for both merger groups.

Overall, structural model findings demonstrated that the internal merger was experienced in a similar way by the host and relocated groups.

Table 5: Model Fit Indices and Chi-square Difference Comparisons for the Multiple Group Structural Models Nested Models

	Fit indices							Chi-square difference			
	χ²	df	CFI	TLI	RMSEA (90% CI)	SRMR	$\Delta \chi^2$	Δdf	p		
(a) Measurements constrained	42.20**	19	.961	.938	0.070 (0.042, 0.099)	.036					
(b) Sociocultural adjust- ment to psychological distress constrained	43.27**	20	.961	.941	0.068 (0.040, 0.097)	.037	1.07	1	.302		
(c) Sociocultural adjust- ment to psychological distress and work-related outcomes constrained	46.77**	21	.957	.938	0.070 (0.043, 0.098)	.037	4.56	2	.102		
(d) Sociocultural adjust- ment to psychological distress and work-related outcomes constrained, as well as psychological dis- tress to work-related out- comes	47.54**	22	.957	.941	0.069 (0.042, 0.095)	.038	5.34	3	.149		

Note. Lowercase letters alongside the nested model labels reflect the multi-group assumptions under investigation. N = 250.

Discussion

The current research was undertaken with two objectives: (1) to determine whether sociocultural adjustment predicted work-related outcomes and psychological distress following an internal merger and (2) to determine whether sociocultural adjustment's influence on change outcomes would differ between the host group and relocated group; and in particular, to test whether dominant host groups do, indeed, experience a personal reaction to being merged.

Analysis of these two objectives provides a significant contribution to the literature on organisational change and culture in a number of ways. First, following Buono et al. (1985) and Cartwright and Cooper (1993b) argument that lack of cultural consideration following a merger is likely to lead to negative change outcomes, the current research investigated the direct relationship of sociocultural adjustment upon work-related outcomes (i.e. role ambiguity, job satisfaction, organisational commitment and work performance) and personal outcomes (i.e. psychological distress) change outcomes.

^{**}p < .01.

Second, in response to criticisms by Terry et al. (1996) that the cross-cultural literature considers the process of acculturation as being less salient for dominant acculturation groups (and therefore leading to the practice of not assessing the experiences of the host group), the current study also examined the experiences of both merger groups.

Sociocultural Adjustment as a Contributor to Internal Merger Outcomes

The first hypothesis of the current study was that sociocultural adjustment would predict work-related outcomes of change (i.e. role ambiguity, job satisfaction, organisational commitment and work performance) and psychological distress in a merger context.

The SEM model tested for Hypothesis 1 was found to be a good fit with the data, showing support for this hypothesis. Standardised regression weights suggested that sociocultural adjustment had a highly significant positive relationship with work-related outcomes (i.e. the more socioculturally adjusted, the more job satisfaction, organisational commitment and work performance, and less role ambiguity) and highly significant negative relationship with psychological distress (i.e. the less socioculturally adjusted, the more psychologically distressed).

These findings provide empirical validation to claims that positive social relations between different cultural groups is likely to be an important factor to help explain the individual-level attitudinal, emotional and behavioural changes that occur during and after a merger (Chatterjee et al., 1992; Layne, 2000). In this case, results suggest that over a 12 month period the host and relocated groups progressed through the acculturation process outlined by Berry (Berry & Sam, 1997); i.e. resolved initial conflict, stabilised group relations and adjusted to new cultural network. This adjustment in turn positively influenced their feelings toward work and themselves 12 months after the merger.

In light of Cartwright and Cooper's (1993b) suggestion that during mergers human factors are often left second best to strategic, operation and financial issues - perhaps due to the difficulty of managing the amalgamation of previously separate work cultures (Buono et al., 1985; Nahavandi & Malekzadeh, 1993) - the current results indicate that the study organisation possibly took conscious steps toward managing the human elements of the merger process.

Similarities between the Internal Merger Groups

The second hypothesis of the current study was that sociocultural adjustment would be a significant predictor of work-related outcomes (i.e. job satisfaction, organisational commitment, role ambiguity and work

performance) and psychological distress for *both* dominant (i.e. host) and nondominat (i.e. relocated) groups. SEM multiple group analysis indicated that the role of sociocultural adjustment in influencing psychological distress and work-related change outcomes was the same for both merger groups. Thus, Hypothesis 2 was also supported in the current study.

These findings suggest that sociocultural adjustment is an important determinant of employee outcomes for both the dominant and nondominant groups. Specifically, it was found to be a factor that encourages greater job satisfaction, organisational commitment and work performance, as well as, reduced psychological distress and role ambiguity, following merger-related change.

Therefore, unlike the sociological research that presumes that dominant groups are less likely to be effected by the intrusion of another cultural group into their domain (Berry, 1992), the current study found support for Terry et al.'s (1996) conclusions that mergers are also unsettling for dominant groups. The testing of the dominant (i.e. host) and nondominant (i.e. relocated) groups in this study represents a step forward in acculturation methodology.

Study Implications

The current research findings suggest that sociocultural adjustment is an important factor contributing to employees' experiences of an internal merger. In particular, sociocultural adjustment was found to directly influence work-related outcomes and psychological distress. These findings highlight the importance of managing inter-relational employee issues during the merger. Specifically, interventions designed to enhance sociocultural adjustment immediately after group contact are likely to positively influence other human- and work-related success factors. Larsson and Lubatkin (2001) found that the best way to enhance sociocultural integration between merged groups was to "involve the affected employees in such socialisation activities as introduction programs, training, cross visits, joining retreats, celebrations" (p. 1594).

The direct influence of psychological distress on work-related outcomes such as role ambiguity, job satisfaction, organisational commitment and work performance also suggests that this should also be closely monitored, both to protect employees from unnecessary sufferances, and to ensure that work performance is not severely hindered by lowered employee well-being. Reviewing the incidence of psychological distress during organisational change, Mack, Nelson and Quick (1998) suggested that managers could intervene by controlling irrational beliefs and cognitive distortions relating to change. Therefore, as well as practical support techniques

(i.e. communication, social support and employee participation), Mack et al. proposed that organisations should utilise cognitive restructuring; that is, changing or re-framing employees' perception of the change. Cognitive restructuring may help dispel employee fears regarding their ability to work as effectively or as enjoyably with the new group. This could be done through open forums that bring cognitive distortions into the open and allow employees to discuss their concerns with managers.

Methodological Considerations and Future Research

One of the main advantages of the current research was that it was performed in a work setting and observed the challenges, emotions and triumphs of a major change operation as it directly occurred. The field nature of the study, however, also meant that the researcher was bound by organisational constraints.

First, despite the researcher's attempt to reduce method effects of self-report data (i.e. by ensuring anonymity), this could still have led to some unknown degree of common method bias. The nature of the change in the current research site, however, meant that objective ratings from supervisors or managers would not be suitable as part of this research because many supervisors and managers were working with unfamiliar employees in the merged state, and hence, they could not comment on personal or work-related state of those employees. Also, as discussed earlier, acculturation is an internal and subjective phenomenon and so we were best to ask the employees directly.

Second, although the size of the total study sample was reasonable (N = 250), when separated out the

sample numbers (Host = 170; Relocated = 80) were relatively small for the use of SEM, since the 2 statistic is sensitive to sample size. However, it is generally accepted that in order to be confident in the estimates generated, there should be 10 cases for every parameter estimated (Tabachnick & Fidell, 1996). Hence, the simple model structure used in the current study meant that the sample size to parameter estimate ratio was acceptable (i.e. Host = 1:28, Relocated = 1:13).

Third, the current research was conducted with one organisation within a specific industry, and therefore, results found here may not necessarily be generalisable to other organisational merger situations. For instance, the change process that occurred in the current factory-style environment may be different from that which may occur during an internal merger in the IT industry, where fluid work and team arrangements are more custom (Fiero & McGee, 2000).

Fourth, this study only captured employees *after* the merger. Future research would benefit from doing a pre-merger test to look at the situational and dispositional effects.

Conclusions

Overall, this research showed that finding one's place within the larger cultural mix following an organisational merger is important in the context of employee attitudes and well-being. In particular, sociocultural adjustment was revealed as a factor that influenced psychological distress, role ambiguity, job satisfaction, organisational commitment and work performance for both merger parties.

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About the Authors

Dr Felicity Joslin

Felicity Joslin has recently completed a Doctorate in Industrial and Organisational Psychology at the University of Melbourne. Her Doctorate thesis was titled The Experience of an Internal Merger: The Relationships between Openness to Change, Institutional Support, Acculturation, Psychological Distress and Work-Related Outcomes. Whist completing her thesis, Felicity also worked actively with the research organisation as an organisational behaviour and change consultant. Here, she developed and facilitated a series of Idea Generation workshops designed to bring together different employee cultures within the workplace to address key employee concerns (i.e. communication, leadership, reward, and equity). Felicity has six years experience in the fields of organisational psychology, development, and change. She has previously worked at Coyne Didsbury PDI, ANZ, Mercer HR Consulting, and Lifeline Melbourne. She is currently residing in London on a Working Holiday visa.

Dr Lea Waters

Lea Waters is an Associate Professor in the Department of Management, Faculty of Economics and Commerce, University of Melbourne. She holds a PhD in organisational psychology and has published in the fields of management, organisational psychology and education. Her work has been published and presented in the USA, Canada, Australia, Britian and Europe. In 2004 she was awarded the Australian and New Zealand 'Management Educator of the Year' award. In 2005 she was awarded the Elton Mayo Early Career Award from the Australian College of Organisational Psychologists.

Dr Paul Dudgeon

Paul teaches quantitative methods in the Department, primarily in the areas of research methods, structural equation modelling, multilevel modelling, item response modelling and regression. His research interests broadly cover two main areas: (a) the use of structural equation modelling and multilevel modelling, and (b) the application of quantitative methods to psychological data, especially in the area of the psychopathology of psychotic disorders. As well as research in these two areas, he is also involved in a large scale longitudinal study of affect regulation in early adolescence that is headed by Associate Professor Nick Allen at the ORYGEN Research Centre in Parkville, and has ongoing research collaborations with a number of researchers at the ORYGEN Research Centre.

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