

Organisations and the Issue of Multiple Identities: Who loves you baby?

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Abstract

This paper investigates the relationship between organisational identity and identification with work group and profession. Academic literature points to two competing standpoints, first, a compatible relationship between focal points of identity and second, a trade off relationship whereby an increase in one is at the expense of another. Using the population of a large public UK sector organisation ordinary least squares regression and ordered logit regression were used to examine these relationships. The findings established a strong relationship in which work group, organisational and professional identity were compatible. The results also highlight the influence of value fit, which potentially transcends conventional moderators such as role level (seniority) or type of work. These findings have significance for future developments in organisational identity research.

Key Words: organisational identity, multiple identities, quantitative methods

Introduction

In the last two decades, organisations have experienced pressures from a number of sources including competitors, shareholders and consumers that have led to organisations following a 'lean and mean' strategy. For employees, this has resulted in rationalisation, delayering, re-engineering or downsizing, all phrases that indicate actual or potential redundancy (Baruch, 2001). Whatever term is adopted, this trend has caused many employees to rethink issues of commitment, loyalty and identification with their employer (Rousseau, 1995). The conventional or 'old' psychological contract was characteristically relational, with mutual trust allegedly at the heart of the bond between employee and employer. According to this understanding, employees offered loyalty and commitment while employers conferred job security, career prospects and training and development. Change to a 'new' transactional relationship has been widely acknowledged in the literature (for example see Hiltrop, 1996; Herriot and Pemberton, 1995; Cappelli, 1997) and is characterised by a withdrawal of an affective relationship with their employer.

The logic of the new psychological contract argument suggests there has been a reduction of commitment and erosion of identity with employers. The implications of diminished identification has been well explored in the academic literature which reveals that organisational identification is positively connected to trust, motivation, commitment, performance and citizenship (Abrams et al, 1998; Bhattacharya et al, 1995; Haslam, 2001). As a consequence organisational identity, or the lack of it, may have important consequences for organisational performance.

At an individual employee level, the demise of ‘organisational moorings’ signifies the loss of a sense of meaning, belonging and control; consequently, it has been asserted that alternative foci for identity have become more prominent (Ashforth, 2001). It has been suggested that employees at present concentrate on ‘the macro’ (external to the organisation), with allegiance to the occupation or profession (Gaillie et al, 2001) or ‘the micro’ (internal within the organisation) in the form of work group (Causser and Jones, 1996) or project (Cappelli, 2000). It can therefore be claimed that the issue of identity has become more complex in recent years with varying foci of identity: the organisation as an entity, the direct workgroup and the professional body that is external to the employee-employer relationship.

The academic literature clearly presents different focal points for identity but what appears to be underdeveloped is the relationship between organisational identity and allegiance with the workgroup or profession. Moreover Foreman and Whetten (2002) have stated that there has been a great deal theoretical development in the field but there is a dearth of empirical work, particularly surrounding the matter of multiple identities.

Two competing perspectives can be drawn from existing academic studies. The first argument makes a case for multiple identities or nested identities and states that different centres of identity need not be in competition, but are in harmony with each other. It follows that individuals may identify with their immediate colleagues, *and* identify with the values of their employer *and* also feel allegiance with their profession. For example a doctor may identify closely with colleagues in a health practice, identify with the values and aspirations of the National Health Service and

have allegiances and connections with the medical profession. A second line of argument suggests that a trade off ('either/or') relationship exists among different foci of identity. As a result if an individual identifies more strongly with their workgroup it is at the expense of the organisation and profession. To return to the medical analogy, if a doctor identifies with their health practice colleagues/ peer group it follows that the level of identify with the National Health Service and medical profession decreases. This paper examines these two competing standpoints and is shaped by the following research question, how does the level of organisational identity relate to the nature of the relationship between identification with the immediate workgroup or profession?

Defining and Conceptualising Organisational Identity

Organisational identity has become an important theoretical lens to explain the relationship between an employee and employer and has been defined as “a cognitive linking between the definition of the organisation and the definition of self” (Dutton, et al, 1994:242). In essence strong organisational identity arises when an individual incorporates their perception of their employer’s values into their own belief system, thus individual and organisational ideals are compatible. Such a process arises from two routes, firstly, affinity with an employer where individuals self select to join an organisation whose values match their own long standing beliefs, or secondly, emulation, where an individual’s beliefs change during the period of employment to become closely tied with those of their employer (Pratt, 1998).

The theoretical basis of work in the field centres on social identity theory and self-categorisation theory. Albert and Whetten’s (1985) seminal work made a case for

organisational identity being a distinct form of broader social identity, an area explored in the 1970s by academics such as Tajfel (1978). Organisational identity examines the process of how employees define themselves through their relationship with their employer. The process of identification essentially occurs firstly through social comparisons between themselves and distinct groups. Thus identity is defined by “the individual’s knowledge that he/she belongs to certain social groups together with some emotional and value significance to him/her of this group membership (Tajfel, 1972:292). In short, individuals define themselves by joining social groups that have meaning or importance to them. For example, a doctor may define himself/herself as being part of a medical practice whose goal is to help care for people in their local community. In addition a doctor will be part of the medical profession, a high status profession that thereby enhance their self-esteem and self-identity.

In order to clarify an individual’s identity a second process of social comparison occurs *between* groups. Those in the same social group are perceived to be alike, with a shared frame of reference and norms, and become part of the ‘in-group’. As a consequence differences with others are amplified and thus are categorised as the ‘out-group’, thereby making the in-group membership more distinctive and attractive (Pratt, 1998). The implications of the process of social identity is that individuals define themselves through group membership and ascribe to characteristics of the group; the stronger the identification the more an individual’s attitudes and behaviour are governed by group norms (Sparrow and Cooper, 2003).

Organisational identity is a particular manifestation of social identity. The construct has often been equated with three related concepts: internalisation, affective commitment and positive organisational fit (Pratt, 1998). The distinction between organisational identity and these other concepts is that it is self-definitional; hence an employee *shares* organisational values and beliefs rather than merely *accepting* them. Sparrow and Cooper (2003) succinctly summarise the distinction; commitment raises the question of ‘should I maintain membership with my employer’, whereas identity revolves around the issues of ‘who am I’ and to ‘what extent do I define myself through the organisation’. In essence and individual can be committed to an organisation without necessarily defining themselves by its values.

Organisational Identity Research Agenda To Date

To date the field of organisational identity has centred on two important themes: antecedents of identity; and outcomes or implications of organisational identity. On the former issue, research has demonstrated that specific factors enhance organisational identity, with the probability that individuals’ identification with their employer is higher where:

- 1 Employees work for high status groups (Ellemers, 1993)
- 2 Others in the group are similar to themselves (Turner et al, 1987)
- 3 A member of staff is part of smaller groups (Brewer, 1991)
- 4 There is reduced internal conflict between group identities (Pratt, 1998)
- 5 Tenure increases (Dutton et al, 1994)
- 6 Individuals’ personality traits suggest a higher propensity or disposition to identify with the organisation (Mael and Ashforth, 1995)
- 7 Organisational values match the values of the individuals’ (Tajfel, 1972)

A number of the above hypotheses relate to self-categorisation theory and are relevant for inter-organisational comparison, for example organisational identity will be higher when individuals work for externally perceived high status groups. In comparison, alternative hypotheses can be examined by comparisons within the organisation, for instance tenure. The locus of our research is the within the organisation perspective.

As mentioned earlier, many studies have investigated the consequences of organisational identity, the second focal point for organisational identity research. Research has shown that organisational identification is positively associated with performance, job satisfaction and citizenship behaviour and negatively associated with turnover intentions and actual turnover (Abrams et al, 1998; Bhattacharya et al, 1995; Haslam, 2001).

The Emerging Organisational Identity Research Agenda

As highlighted earlier, over the last two decades a number of changes to the employment relationship have occurred and resulted in renewed identification with workgroup (Causser and Jones, 1996) and profession (Cappelli, 2000). An important issue that has been under researched is the nature of the relationship between profession, work group identity and organisational identity. Are the identities complementary and congruent; can an individual strongly identify with the work group, organisational and profession? Or is it a case of competing loyalties, or a trade off, so that if there is strong identification with the profession it is at the cost of other focal points of identity?

1. The compatibility argument.

In the self-identity literature Feldman (1979) proposed that an individual will be a member of a number of social groups all of which contribute to an overall sense of self. However, these identities will not all have equal meaning or worth and may be arranged subconsciously in a hierarchical or nested form, thus individuals may hold multiple identities (Foreman and Whetten, 2002). In an employment setting these multiple identities may stem from connections with colleagues, a department, the organisation as a whole or profession. In the 'best case scenario' values and beliefs of these distinct communities will be complementary and mutually reinforcing; thus an individual will strongly identify with different foci of identity, the workgroup, organisation and profession.

2. The trade off argument

(a) The relationship between professional and organisational identity

It has been proposed that due to a loss of association with the organisation, employees have consciously sought alternative sources of identity (Albert et al, 2000). One line of argument highlighted earlier, points to a new identification with occupation. Cappelli's (2000) work illustrated that the average organisational tenure has fallen but employees remain in the same occupation for longer periods and therefore identify with the enduring social group, their profession. In short, what is alleged here is an increasing trade off between organisational and occupational identity; professional identity has grown stronger while organisational identity has been undermined post the 'downsizing' phenomenon.

The conflicts of identification for industrial scientists has long since been researched with occupational standards and values being at odds with those held by their employer (Scott, 1965; Ritti, 1971); this particular example is of special relevance to us given the nature of our sample (see case study background). This clash of identities is based on the premise that professionals are governed by two sources, firstly administrative principles and cultural values of the organisation and, secondly by the standards of occupational communities and ‘collegial control’ (Van Maanen and Barley, 1984). This tie to a professional community is grounded on the supposition that “because trained practitioners are assumed to have internalised the occupation’s standards, professions champion their members’ right to control their own work” (Zabusky and Barley, 1997: 362). As a consequence of employing a trained professional, or in the current lexicon, knowledge worker, employees expect a certain level of autonomy and the organisation assumes that they will ‘get on with the job in hand’. Thus the pull becomes a question of loyalties between the authority of position within an organisation versus the authority of expertise, knowledge and skill.

The above argument assumes that there will be a conflict between organisational and professional identity. It should be stated however that organisational identity theorists suggest that the “relationship between profession/occupation identification and organisational identity has yielded negative, null and positive associations” (Mael and Ashforth, 1992: 106).

(b) The relationship between work group and organisational identity

Competing literatures refute increased identification with the profession but point to a renewed focus on micro, intra organisational groupings such as workgroup (Causser

and Jones, 1996), team (Cairncross, 2002) or project (Cappelli, 2000). There are few empirical studies that have examined these clusters; one of the few studies has been conducted by Van Knippenberg and Van Schie's (2000). They discovered that employees identified more strongly with their work group than with their employer and indeed the workgroup was a stronger predictor of positive employee attitudes. Their argument is based around the assertion that identification is stronger in smaller groups, as they are more likely to form distinct communities with common values due to sustained interaction. For the purpose of this paper, a broad definition has been taken where the term workgroup incorporates project, department and team.

Summary and hypotheses

From reviewing the literature two sets of hypotheses have been derived: our primary hypotheses and secondary substantive hypotheses. These hypotheses are outlined below:

Primary hypotheses

- H1: The greater the employee's professional/workgroup identity, the greater the variance of organisational identity.
- H2. The stronger the organisational identity the weaker the identification with the workgroup.
- H3. The stronger the organisational identity the weaker the identification with the profession.

Secondary substantive hypotheses

Mael and Ashforth (1995) maintained certain individuals have a greater felt need to identify with an employer and therefore have a greater propensity for organisational identity.

H4. The greater the need for identity the higher the level of organisational identity will be.

In organisations where employees balance numerous different responsibilities and pressures there is potential for role conflict and difficulties in reconciling internal identities. A group that has frequently been studied for this pull of identities are industrial scientists. It has been argued that this group of specialists will experience particular strain because the goal of science, knowledge, is radically different from industries goal of profit (Zabusky and Barley, 1997).

H5. The greater the conflicting internal identity the lower organisational identity will be.

The international human resource management literature has established that strategic decisions tend to be made by a small management team in head quarters (Taylor, 1991). As a result it could be argued that the strongest cues and signals typically stem from senior management in an organisation's head quarters and this direct communication will mean that organisational identity will be stronger in head quarters or the corporate office.

H6. Organisational identity will be stronger in the corporate office than in other geographical locations.

Scott and Lane (2000) state that managers are more likely to identify with the organisation as this group can influence the shape and the nature of the organisation more than other groups. Often organisational strategies reflect the values of senior

managers (Hambrick and Mason (1984). Further managers are frequently highly visible and may become strongly associated with the organisation, for example Richard Branson is the ‘face’ of Virgin.

H7. The higher an individual is in the organisation the stronger the organisational identity.

Changes in the employment relationship and the marketisation strategy mean that knowledge workers trade on their expertise status to create niches for themselves. As such their focus is on the external labour market rather than the internal labour market within a single organisation (Berg, 1981).

H8. Knowledge workers are less likely to identify with the organisation

Methodology

Case Study Background

This research is based upon a single case study of a large UK public sector organisation with a workforce of over 1,000. The organisation contains a high proportion of knowledge workers with a significant number of scientists, as defined by degree holding. It is largely a self-selected workforce based on two key dimensions, (a) individuals whose values align closely to the distinctive value’s of the organisation’s mission and (b) technically trained individuals whose skills can only be fully utilised in this particular organisation. In some geographical areas, the organisation will be the ‘employer of choice’ given limited labour market alternatives. To provide any more detail about the organisation would immediately identify it, we are not able to do this for confidentiality reasons.

Measures and Data Collection

The survey instrument was distributed to the population of the organisation in August 2004, the response rate was 77%, thereby allowing generalisability and ensuring rigour in the results. This very high response rate compares favourably with the most comparable study by Van Knippenberg and Van Schie (2000) whose response rates were 36% and 27% in their two case studies.

Summary Information On Key Variables

The study draws upon findings of an attitude survey that was conducted in August 2004. In order to ensure validity and rigour, validated measurement scales were used for a range of variables (see appendix 1 for full details). For the primary hypotheses the measures drawn on were organisational identity (Kreiner and Ashforth, 2004); commitment to profession (Blau, 1989), identification with peers (Cook and Wall, 1980). The secondary substantive hypotheses have drawn on the validated measures of need for identity and conflicting identity (Kreiner and Ashforth, 2004). Hypothesis 6 used the dichotomous measure of head office versus the rest of the organisation. Hypothesis 7 examined status and had three levels: senior manager, manager and non-managerial. The final hypothesis used job type as a proxy for knowledge worker, in the case scientific staff and managers were labelled knowledge workers, and the remaining population were non-knowledge workers. Control variables were measure of age, tenure, gender and highest qualification.

Summary statistics on the key variables used in our analysis are presented in Table 1. It can be seen that the high response rate was maintained for all variables – the minimum number of non-missing values exceeded 750 cases for all variables used in

the analysis. Variables are listed by category. The first category refers to measures of Organisational Identity (OI), which we adopt as the dependent variables in our regression models. These were coded on a scale of 1 to 5 where the higher the value, the greater the OI.

The remaining categories (2 to 9) refer to groups of independent variables. Categories 2 to 5 have been coded such that values increase with the magnitude of the underlying phenomenon we are trying to capture, and are also coded on a 1 to 5 scale. For example, the Identity with Profession variables are all coded such that the higher the value, the greater the identity the employer feels with his or her profession. Categories 7, 8 and 9 are all binary (“dummy”) variables which have been given the value 1 if the employee has the characteristic being described, and the value zero otherwise. For example, if the person works in the Highlands, then “Based in Highlands” will equal one, and zero otherwise.

Insert table 1 here

Estimation Issues

Our discussion of the literature leads to the following eight hypotheses which we first tested under the assumption that the dependent variable can be treated as continuous. We shall then relax this assumption and acknowledge the fact that the dependent variable is really an ordered categorical variable, best estimated using ordered logit.

H1: The greater the employee’s professional/workgroup identity, the greater the variance of organisational identity (*Positive Heteroskedasticity*).

We hypothesise that, while organisational identity may increase with professional and workgroup identity (hypothesis 2 below), the *variance* in organisational identity will also increase with those determinants.

This reflects the *potential* for conflicting loyalties, but not necessarily the *actualisation* of that conflict. For those with strong identity with their profession/workgroup who have experienced such conflict, organisational identity may be reduced. On the other hand, for those for whom no such conflict has yet become apparent, professional/workgroup identity will serve to reinforce organisational identity. When professional/workgroup identity is low, no such potential for conflict exists, and the organisational identity measure will have relatively little variation.

If this hypothesis is true, we would expect the standard deviation of organisational identity to increase with professional and workgroup identity. In a multiple regression setting, this effect will result in a non-spherical error term (the error term will vary systematically across the sample). The variance of the error term will in fact rise with professional/workgroup identity and result in *positive heteroskedasticity*.

Our heteroskedasticity hypothesis is listed first because it will affect our estimation strategy. If heteroskedasticity is present, then we would expect the standard errors in ordinary least squares (OLS) to be biased and inconsistent. This means that we shall have to correct for the effect of heteroskedasticity on the standard errors before we use t-ratios based on these standard errors to eliminate irrelevant explanatory variables. Note, however, that heteroskedasticity will not in itself bias the coefficients. As such, White's (1980) corrected standard errors are typically used.

H2: The greater the identity with profession, the greater is OI.

If the dependent variable is continuous, then we can interpret the regression coefficients as first partial derivatives with respect to each explanatory variable. Our second hypothesis can therefore be written as follows,

$$H2: \partial OI / \partial PI > 0$$

where OI is organisational identity, and PI is professional identity. That is, we would expect the first partial derivative with respect to PI to be greater than zero. The corollary of this interpretation is that we would expect the coefficients on the various measures of professional identity to be positive.

H3: The greater the identity with workgroup, the greater is OI.

We can similarly summarise this hypothesis as,

$$H3: \partial OI / \partial WI > 0$$

where WI is workgroup identity. We expect the coefficients on the various measures of workgroup identity to therefore be positive.

H4: The greater the need for OI, the greater is OI.

We can similarly summarise this hypothesis as,

$$H4: \partial OI / \partial NOI > 0$$

where NOI is the need for organisational identity.

H5: The greater the conflicting internal identity the lower organisational identity will be

$$H5: \partial OI / \partial CI < 0$$

where CI is conflicting identity.

H6: OI will be weaker away from the corporate office.

$$H6: \partial OI / \partial L > 0$$

where L is location away from the corporate office.

H7: The greater the employee's seniority, the greater is OI.

$$H7: \partial OI / \partial S > 0$$

where S is seniority.

H8: Knowledge workers will have lower OI.

$$H8: \partial OI / \partial K > 0$$

where K is knowledge.

Ordinary Least Squares (OLS)

We shall first test these hypotheses using ordinary least squares (OLS). Our plan was to use a general-to-specific modelling approach to eliminate irrelevant independent variables on the basis of t-values. While the existence of heteroskedasticity would potentially support our hypothesis about the nature of conflict between organisational identity and professional/workgroup identity (Hypothesis 1), it also raises the problem of inconsistent standard errors. The use of weighted least squares to correct for heteroskedasticity is not necessary in many circumstances because heteroskedasticity does not actually bias coefficient estimates (it only affects the estimation of the standard errors) and because “using the wrong set of weights has two ... consequences which may be less benign. First, the improperly weighted least squares estimator is inefficient. This might be a moot point if the correct weights are unknown, but the GLS standard errors will also be incorrect. The asymptotic

covariance matrix of the estimator ... may not resemble the usual estimator.” (Green, 1993: 407). Using FGLS heteroskedastic estimation as an alternative to weighted least squares is also problematic: “if the form of the heteroscedasticity is known but involves unknown parameters, it remains uncertain whether FGLS corrections are better than OLS. Asymptotically, the comparison is clear, but in small or moderate-sized samples, the additional variation incorporated by the estimated variance parameters may offset the gains to GLS.” (Green, 1993, p. 407). The most appropriate course of action, therefore, is to correct the standard errors. White’s (1980) method has been widely applied and has now become the most popular method for dealing with heteroskedastic errors.

However, it has been found that when the sample size is not large, White’s standard errors, whilst a considerable improvement on OLS standard errors, are not always reliable. MacKinnon and White (1985) subsequently proposed three versions to be used when the sample size is small, and the third of these tests, what they call ‘HC3’, is the most reliable, particularly when heteroskedasticity is known to be present (see Long and Ervin 1999 for an excellent review of this topic). As a result, if we find evidence for the existence of heteroskedasticity, all the significance levels calculated for the coefficients estimated in the OLS regressions will be calculated using HC3 (comparable robust standard errors will be used for the ordered logit regression).

We believe that a general-specific elimination strategy of the original independent variables will be a more appropriate modelling strategy than to base our model on composite variables. It is common, for example, to use factor analysis, principle components or some other means to create composite variables from the range of

explanatory variables. However, there are major drawbacks with this approach, not least the fact that the meaning of coefficients on the created factors will be difficult to interpret:

“First, the results are quite sensitive to the scale of measurement in the variables. The obvious remedy is to standardize the variables, but, unfortunately, this has substantial effects on the computed results. Second, the principle components are not chosen on the basis of any relationship of the regressors to y , the variable we are attempting to explain. Lastly, the calculation makes ambiguous the interpretation of results. The principle components estimator is a mixture of all of the original coefficients. It is unlikely that we shall be able to interpret these combinations in any meaningful way.” (Greene 1993, p. 273).

For the sake of transparency and statistical robustness, we therefore use separate explanatory variables. We shall, however, report OLS results for a composite version of the five possible dependent variables (computed as the simple average of these variables). Our main focus, however, will be on the original dependent variables. This is partly because of the ambiguities that a composite dependent variable raises for ordered logit estimation, which we shall now briefly discuss.

Ordered Logit Model

Although OLS is often used to model Likert-scale dependent variables, there is a potentially fundamental problem associated with this type of application. It arises from the fact that Likert-scales are ordinal and not cardinal. We have assumed so far that the underlying boundaries that define the categories of response are equally

spaced; that the difference between the “agree” and “strongly agree” category is the same as the distance between the “disagree” and “neutral” categories, for example (see Long 1997: 114ff). This assumption may well not hold true in reality.

A technique particularly suited to the analysis of ordinal dependent variables is ordered logit regression (see Long 1997). The intuition behind the ordered logit is that, rather than assuming the cutpoints of the categories of the dependent variable are equally spaced, it actually estimates the value of the cutpoints using a process of iteration. If the estimated values of the cutpoints turn out to be equally spaced, then our OLS assumption would in fact prove to be a fair approximation and there would be little to gain from using ordered logit. On the other hand, if the cutpoints are not equally spaced, then our OLS will be questionable and there would be a strong case for using ordered logit.

This leads us to the main reason for not making use of a composite measure of our five possible dependent variables. Creating a composite dependent variable would confuse the application of ordered logit. Because ordered logit estimates the cutpoints between the categories of the dependent variable, using the average (or some other transformation) of several dependent variables would make these cutpoint estimates meaningless, and render our method for testing the validity of OLS redundant.

Note, however, that unlike OLS regression, the coefficients of the ordered logit model do not strictly equate to the first partial derivatives. That is, they do not tell us the impact of incremental response of a particular determinant, holding all other determinants constant. Because of the fundamentally non-linear nature of the logit

functional form, all variables essentially interact with all others and so computation of the first partial derivatives is relatively complex (see Greene, 1993). So, while the signs of the coefficients in a logit model can be interpreted the same was as those of OLS coefficients, the magnitudes of the coefficients cannot. As a result, we shall not only present the estimated coefficients, but also the predicted probabilities associated with each value of the independent variables, holding all others constant.

Testing Our Hypotheses

H1: The Greater the Professional/Workgroup Identity, the Greater the Variance of Organisational Identity (*Positive Heteroskedasticity*).

The implication of this hypothesis is that we would expect the standard deviation of OI to be greater for higher levels of professional/workgroup loyalty. In fact, we find the *opposite* to be the case. In the following figure we plot the standard deviation of each of the OI measures against the scores of the most significant professional and workgroup identity measures. We find that the overall slope is negative (in a simple linear regression on the standard deviation of OI, the slope on WI and PI scores have a slope of -0.10 , sig. = 0.000, $R^2 = 0.38$, $n = 89$). However, we do find some evidence that the standard deviation of OI does rise for the very highest values of WI and PI.

For example, if we run a regression of the standard deviation of OI on both the linear and squared values of the WI and PI scores (adjusted $R^2 = 0.547$, $n = 89$), we find that the coefficient on the PI and WI measures is again negative at -0.446 (sig. = 0.000), but that the coefficient on the quadratic term is positive 0.058 (sig. = 0.000). We can find the turning point by differentiating and solving for x the setting $dy/dx = 0$, which

yields $x = 3.85$ (where y is the standard deviation of OI, and x is the professional/workgroup identity score). In other words, assuming equal spacing between scores, the variance of OI starts to rise from PI and WI scores of around 4 and above (as demonstrated in the quadratic line-of-best-fit in the figure below).

Insert figure 1 here

What is not in doubt, however, is the fact that the variance of OI scores is not constant across values of the explanatory variables. This is evident from the above discussion and verified using Levene's (1960) test for equality of variance (based on splitting the sample in two according to WI and PI scores, the chances of incorrectly rejecting the null of homogenous variance of aversion are less than one in a hundred; similar results were achieved using Brown and Forsyth's 1974 alternative method).

Testing this proposition in the context of multiple regression amounted to testing the null hypothesis of "homoskedasticity" (constant variance of the error term) against the alternative hypothesis of "heteroskedasticity" (non-constant variance of the error term, also referred to as a "non-scalar error covariance matrix"). Examination of the scatter plots of residuals made it patently clear that heteroskedasticity was a defining feature of our models. Unsurprisingly a battery of heteroskedasticity tests unanimously and unambiguously rejected the null of homoskedasticity. For example, we report the Breusch-Pagan (1979) heteroskedasticity test results in the last row of Table 2, all but one of which have significance values less than 0.000, and all reject the null of homoskedasticity at the 5% significance level. The corollary of all this is that we must use heteroskedasticity-corrected standard errors to compute the t-values in our regressions.

We use Davidson and MacKinnon (1985) HC3 standard errors (which have been shown to be considerably more robust than the original White (1980) correction method in small and medium size samples). Corrected t-values were used not only in the final set of regressions, but at each intermediate stage to decide on whether an explanatory variable should be included. We followed a general-to-specific modelling approach, resulting the final set of regressions reported in Table 2 where only explanatory variables with HC3 corrected t-ratios greater than 2 are included.

H2: Greater the identity with profession, greater is OI.

The remaining hypotheses were tested in the context of OLS and ordered regression. We experimented with a variety of functional forms and alternative variables. We arrived at our final selection of models on the basis of t-ratios, adjusted R^2 and Aikine Information Criterion values. The OLS results for this refined selection models of are presented below in Table 2 for our 5 dependent variables, and also for our simple composite dependent variable, OIC. Hypotheses are accepted if the estimated sign of the coefficient matches the expected sign given in column 2.

For hypothesis 2, for all professional-identity variables where the coefficient was significantly different from zero (B2, B9, B14, B15), we found that the sign of the coefficients were positive for all OLS regressions as expected. This was true for all six dependent variables. We can therefore conclude that our data verify hypothesis 2. Overall, the two most successful measures of professional identity were B15 (significant in 5 out of the six regressions presented in Table 2) and B9 (significant in four of the six regressions).

H3: Greater the identity with workgroup, greater is OI.

All workgroup-identity variables where the coefficient was significantly different from zero (E1, E2 and E6), we found that the sign of the coefficient were positive for all OLS regressions as expected. We can therefore conclude that our data verify hypothesis 3.

H4: Greater the need for OI, greater is OI.

Six of the variables used to measure the need for organisational identity (G11, G12, G13, G14, G16, G17) were found to be significant in at least one of our regressions, making this the dominant category in our regressions. Again, all coefficients were positive as expected, conclusively verifying our hypothesis.

H5: The greater the conflicting internal identity the lower organisational identity will be

Three variables measuring conflicting identity (G22, G23, G24) were found to have coefficients significantly different from zero. For G23 and G24, the signs of the coefficients were as predicted by our hypothesis, and so the evidence regarding Hypothesis 5 is ambiguous as in the G29 regression, which has the highest adjusted R^2 , these variables were not statistically significant, and the G22 variable which was significant had an unambiguously positive coefficient).

H6: OI will be weaker away from the corporate office.

We tested this hypothesis by including dummy variables that were coded as equal to one if the respondent worked other than in the corporate office. Surprisingly, the South East Area dummy had a positive coefficient in those variables where it was significantly different from zero. However, in our preferred regression, G29, this

variable was not statistically significant, and the two areas that were significant, the HIG Area and the South West Area, the coefficients are unambiguously negative as expected.

H7: The greater the employee's seniority, the greater is OI.

Our proxy for this variable was whether the employee was a senior manager. We found this to have the expected effect in those regressions where the variable was statistically significant. However, the variable had no significant effect in our preferred regression, G29.

H8: Knowledge workers will have lower OI.

We used two sets of proxy indicators of whether the respondent was a *knowledge worker*: first, job type – whether they were in a policy/strategy or scientific post, and second, whether they had advanced qualifications – HND, Degree or Post Graduate. In the regressions where these variables were significant (the G31 and G32 regressions) we found all the signs to be negative. However, in our preferred regression (dependent variable = G29), none of the proxies for knowledge-workers proved to be significant drivers of organisational identity.

Insert table 2 here

Ordered Logit Regressions

Our five dependent variables (G27 to G32) each have five possible categories (strongly agree, agree, neutral, disagree, strongly disagree). To justify ordinary least squares estimation we have demonstrated that the four cutpoints that separate these categories are indeed equally spaced, as suggested by our arbitrary coding (the five categories of our dependent variables have been coded 1, 2, 3, 4, and 5, respectively).

It is clear from even a cursory examination of the estimation of cutpoints presented in Table 3 that the presupposition of equally spaced cutpoints cannot be justified. In particular, cutpoints 2 and 3 tend to be much closer together than cutpoints 1 and 2 or cutpoints 3 and 4. Ordered logit estimation would indeed appear to be more appropriate.

Testing Hypotheses H2 to H8 using Ordered Logit

As noted earlier, the magnitude of the logit coefficients are difficult to interpret, but the signs are not. Hence, as with the OLS regressions, we aim to test our hypotheses by comparing the expected and actual signs on coefficients.

Results for **Hypotheses 2 and 3** are broadly similar to the OLS results. All significant independent variables in both categories have coefficients greater than zero, and again this is true for our preferred regression (which is once again the G29 regression due to its superior Pseudo-R² value). **Hypothesis 4** results were also generally as predicted, although G15 curiously came out as negative.

The ordered logit results **Hypothesis 5** were no less ambiguous than the OLS results, with G22 having a positive coefficient, but G23 and G24 having a negative coefficient. In the preferred regression at least, **Hypothesis 6** was verified (both location in HIG and South West Areas had negative effects on organisational identity), though as in the OLS the South East dummy variables came out with positive coefficients in some regressions.

We found not evidence to support **Hypothesis 7** in the ordered logit estimates, but there was some evidence that **Hypothesis 8** may be valid (the coefficients on our knowledge worker proxies all had the expected negative coefficients in the G31 and G32 regressions, but not for our preferred regression).

Insert table 3 here

Predicted Probabilities from the Ordered Logit

Our final method for examining our eight hypotheses was to consider the predicted probabilities from our ordered logit regression. Table 4 presents the predicted probability of an employee entering a particular G29 organisational identity category for each given value of an independent variable holding all other dependent variables constant at their means. Thus, the table allows us to isolate the effects of each individual explanatory variable, and also to compare the magnitude of the effects of different drivers of organisational identity.

The corollary of **Hypothesis 2** is that we would expect that the probability of an employee strongly agreeing with statement G29 (*When I talk about the organisation, I usually say 'we' rather than 'they'.*) would rise for higher levels of professional identity. Higher levels of professional identity are coded with higher values (highest is 5). For the B9 proxy for professional identity, we do indeed find that the probability of strongly agreeing with the G29 statement rises (from 0.04 to 0.08) as the B9 score rises (from 1 to 5), holding all other drivers constant. The B14 variable has an even bigger impact, with the probability of strongly agreeing with the G29 statement rising from 0.02 to 0.08 as B14 rises from 1 to 5. Hypothesis 2 therefore appears to be confirmed by our results.

Similarly, **Hypothesis 3** (*Greater the identity with workgroup, greater is OI*) is also confirmed. As E1 rises from 1 to 5, the probability of strongly agreeing with the G29 statement rises from 0.03 to 0.07, holding all other explanatory variables constant.

Four variables were statistically significant in capturing the effects of **Hypothesis 4** (*greater the need for OI, greater is OI*). Of these, the Table 4 would suggest that G16 has the most potent effect on the probability of strongly agreeing with the G29 statement, causing the probability to rise substantially from 0.00 to 0.22 as the G16 values rise from 1 to 5. Compared to the other influences on OI, this is a huge effect.

Finally, **Hypothesis 5** (*the stronger the conflicting identity, the lower is OI*) is also apparently confirmed by the predicted probabilities approach, though the effect is weak. As G22 rises from 1 to 5, the probability of strongly agreeing with the G29 statement is predicted to rise from 0.04 to 0.07 (an increase of just 0.03).#

Insert table 4 here

Summary Table of Results

The table below summaries key results pertaining to the eight hypotheses using three stage validation process of ordinary least squares regression, ordered logit regression and predicted probabilities from the ordered logit. The table outlines whether the hypotheses are confirmed or refuted.

Insert table 5 here

Discussion

Organisational identity has become an important issue in organisations in recent years particularly due to the proliferation of mergers and acquisitions, and the dominance of conglomerates where it is increasingly difficult to comprehend organisational

boundaries and indeed 'who' the employer is. Moreover this issue is compounded as a result of the greater use of generic mission statements, particularly in the private sector, which make it difficult for organisations to be unique or distinctive, an attribute that is important for strong organisational identity.

Commentary on organisational identity has developed over the last 15 years and stems from the broader agenda of social identity and social categorisation theory. Studies in organisational identity, as mentioned earlier, highlight that an individual may be a member of a number of social groups, for example project team, department in addition to being an employee of the organisation as a whole. Further, an individual may also feel affinity with their profession so work related social groups need not remain within the boundaries of the organisation. Feldman (1979) argued that as a result of numerous group memberships that individuals will have nested or multiple identities, which are compatible with each other. Thus there is a positive correlation between organisational identity and workgroup and professional identity.

Other streams of literature have also drawn on the organisational identity construct; the psychological contract literature has applied the term in order to further explain changes in the employment relationship. This line of literature has argued that the relationship between organisational identity and workgroup or professional identity has not been characterised by compatibility but rather as a trade off relationship, a negative rather than a positive correlation. In short, a case has been made for an increase in professional or workgroup identity as the expense of organisational identity.

With these competing perspectives in mind this paper examined how does the level of organisational identity relates to the nature of the relationship between identification with the immediate workgroup or profession. The findings strongly reveal that there is a positive correlation between both organisational identity and affinity with the workgroup or profession. As a consequence the results would suggest that the three foci of identity (work group, profession and organisation) are compatible, as suggested by the nested identities school of thought. These findings are generally corroborated by hypothesis 1's results that suggest that the greater the identity with work group and profession the lower the variation, or standard deviation, of organisational identity. These findings have implications for the psychological contract literature that suggests that the identities are in competition with each other.

The strong statistical findings indicate that as organisational identity increases so do work group and professional identities. Equally, if there is low organisational identity, work group and professional identity will also be low. Therefore at the extremes appears to be either high work related identity or low work related identity. This result points to the influence of personality traits particularly as a strong positive correlation was found between the need for identity and strength of organisational identity. There are two important points that stem from this finding, firstly, the trend reinforces the notion that not all individuals will define themselves through work, regardless of foci or sub group and speaks to Goldthorpe's (1969) notion of the instrumental worker, and can be summarised using the frequently used metaphor of 'work to live or live to work'. Further it also underlines the linkage between organisational identity and social identity; social identity examines definition of 'self' using non-work related variables. The second implication of these results is that those

with a predisposition to organisational identity are more receptive to cultural cues and symbols from the organisation, which has a reinforcing effect and enhances organisational affiliation. Moreover there is some evidence in this study, although not conclusive, to suggest that if there are conflicting organisational messages and conflicting internal identities this results in lower organisational identification. The process of socialisation and the use of rhetoric tactics are under researched areas and are important areas for future research (Pratt, 1998).

The results regarding knowledge workers and level within the organisation (as defined by senior manager, manager or non-managerial) proved to be interesting. The findings highlighted that there was no relationship between strength of identity and level within the organisation; senior management and non-managerial staff were equally as likely to strongly identify with their employer. Further the results concerning knowledge workers were ambiguous; a clear negative correlation between knowledge worker and organisational identity surprisingly did not present itself. The results regarding geographical difference were comparable to the findings surrounding knowledge workers, where there was some support, albeit a little ambiguous, for the view that organisational identity will be stronger in head quarters. Explanations for these trends are perhaps contextual. Drawing on Pratt's (1998) useful distinction of affiliation and emulation, there is a strong case that individuals' self-selected this organisation based on its values. Descriptive statistics suggest that there is strong value fit between employees and employer and thus are bound in the affiliation category. Unlike many organisations, the case study has a very distinct mission and nationally has only one directly comparable organisation. Therefore the lack of variance within the organisation is perhaps less marked because of this notion

of affiliation or common purpose that transcends job type. Furthermore the organisation is characterised by a number of career ladders, for instance career pathways for managers is very different from pathways for scientists, therefore there can be harmonious diversity rather than direct competition.

Implications for Future Research

Three principle issues have emerged from this study that inform future organisational identity research. Firstly, it is clear that there is no inherent trade off or problem reconciling identities. Regrettably we do not have the capacity to comment on the weighting or the relative importance placed on each locus of identity. An important question is - is the process of accommodation driven by people with even or uneven weighting between identities? We suspect it will be very different between individuals but the implications for management are profound. If research supports an uneven split where an individual's identity is derived predominately from a single source, the implications of mismanaging the focus on identity will have significant implications for employee attitude and behaviour. For instance, if there is strong identification with the organisation in conjunction with a positive, albeit weaker, identification with the workgroup and profession, then it suggests there is less capacity to cognitively compensate if a crisis occurs at an organisational level.

Secondly, by drawing on Pratt's (1998) typology concerning routes to organisational identity (affinity or emulation), the importance of context is highlighted. The case study organisation in this piece of research was selected based on its distinctive mission and values. As a result, trends generated by the study must be interpreted with knowledge that due to a strong person-organisational fit it is likely that there has

been self-selection and employees have an affinity with the organisation's values on recruitment. As such it is important to conduct replication studies in different contexts for instance in the private or voluntary sectors.

Finally, this research provides cross-section statistical results and it is important to examine how the relationship between workgroup, organisational and professional identity changes over time. Arguably professional identity is relatively stable as it is less well specified. In contrast organisational identity and organisational context is likely to be highly variable due to changes in senior management, business processes and nature of the business environment, therefore organisational identity is potentially extremely vulnerable. The extent to which identification with the workgroup is stable will be a function of the rate of staff turnover and size of work group; the turnover of one member of the group will have less impact if the group is relatively large. A longitudinal study in this area would significantly contribute to the current body of knowledge in the organisational identity field.

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Appendix 1: Measurement Scales

Level of organisational identity (Kreiner and Ashforth, 2004)

There is a common sense of purpose in my organisation
My employer has a clear and unique vision.
There is a strong feeling of unity in my organisation.
My employer has a specific mission shared by its employees.

*5 point scale from strongly disagree to strongly agree

Professional Identification (Blau, 1989)

I like this career too well to give it up
If I could go into a different profession which paid the same, I would probably take it
If I could do it all over again, I would not choose to work in this profession.
I definitely want a career for myself in this profession.
If I had all the money I needed without working, I would probably still continue to work in this profession.
I am disappointed that I ever entered this profession.
This is the ideal profession for a life's work.

*5 point scale from strongly disagree to strongly agree

Peer Identification (Cook and Wall, 1980)

If I got into difficulties at work I know my fellow workers would try and help me out.
I can trust the people I work with to lend me a hand if I need it.
Most of my fellow workers can be relied upon to do as they say they will do.
I have full confidence in the skills of my fellow workers.

Most of my fellow workers would get on with the job even if managers were not around.

I can rely on other workers not to make my job more difficult by careless work.

*5 point scale from strongly disagree to strongly agree

Need for Identity (Kreiner and Ashforth, 2004)

Without an organisation to work for, I would feel incomplete.

I'd like to work in an organisation where I would think of its successes and failures as being my successes and failures.

An important part of who I am would be missing if I didn't belong to a work organisation.

Generally, I do not feel a need to identify with an organisation that I am working for.

Generally, the more my goals, values and beliefs overlap with those of my employer, the happier I am.

I would rather say 'we' than 'they' when talking about an organisation that I work for.

No matter where I work, I'd like to think of myself as representing what the organisation stands for.

*5 point scale from strongly disagree to strongly agree

Conflict Identity (Kreiner and Ashforth, 2004)

G22. I have mixed feelings about my affiliation with the organisation.

G23. I'm torn between loving and hating the organisation

G24. I have contradictory feelings about being part of the organisation

*5 point scale from strongly disagree to strongly agree

Table 1 Descriptive Statistics

Category	Variable	N = no. of non-missing values	Mean	Standard Deviation	Minimum Value	Maximum Value
1. Organisational Identity (OI) = Dependent variables	g27SEPcrit_insult	768	2.926	1.037	1	5
	g28OthersViewSEP	766	3.705	0.795	1	5
	g29weNotTheySEP	767	3.585	0.951	1	5
	g30SEPsucc_mine	766	3.063	0.876	1	5
	g31SEPcomplem	766	3.081	0.908	1	5
	g32SEPmediaCrit	768	2.986	0.980	1	5
	OI = average of g27 to g32	759	3.227	0.658	1	5
2. Identity with profession	H2_b09LikesCareer	835	3.238	1.084	1	5
	H2_b12ThisProfessn	826	3.593	0.923	1	5
	H2_b13Evenif_Had£	831	2.550	1.183	1	5
	H2_b14DisapEntProf	834	4.006	0.911	1	5
	H2_b15IdealLifeswk	834	3.032	0.921	1	5
3. Identity with workgroup	H3_e1colleaguesHelp	794	4.202	0.722	1	5
	H3_e2collsLendHand	793	4.175	0.731	1	5
	H3_e6collsCareful	794	3.591	0.959	1	5
4. Need for OI	H4_g11IncWithoutOrg	767	2.300	0.982	1	5
	H4_g12OrgSucEqMySuc	769	3.505	0.888	1	5
	H4_g13OrgPartOfMe	768	2.460	1.042	1	5
	H4_g14NoNeedTolident	768	3.331	0.936	1	5
	H4_g16WeNotThey	767	3.936	0.801	1	5
	H4_g17OrgStandsFor	769	3.908	0.731	1	5
5. Conflicting identity	H5_g22	768	3.345	1.078	1	5
	H5_g23	767	3.284	1.125	1	5
	H5_g24	769	3.148	1.082	1	5
6. Location	H6_LOChig_d	851	0.219	0.414	0	1
	H6_LOCse_d	851	0.236	0.425	0	1
	H6_LOCsw_d	851	0.220	0.414	0	1
7. Employee's seniority	H7_SENsm_d	851	0.026	0.159	0	1
8. Knowledge workers (job type and qualification)	H8_KWpol_d	851	0.103	0.305	0	1
	H8_KWsc_d	851	0.197	0.398	0	1
	H8_QL4hnd_d	851	0.114	0.318	0	1
	H8_QL5degree_d	851	0.321	0.467	0	1
	H8_QL6pgrad_d	851	0.385	0.487	0	1
9. Control variables (gender, age and tenure).	VC1_male_d	851	0.461	0.499	0	1
	VC2_AGE_41t50_d	851	0.201	0.401	0	1
	VC3_tgt5y_d	851	0.476	0.500	0	1
10. Value fit	g39	768	3.319	0.746	1	5
	g40	766	3.428	0.695	1	5
	g41	763	2.984	0.839	1	5

Figure 1: Quadratic line-of-best-fit for standard deviation of organisational identity and workgroup/ professional identity scores

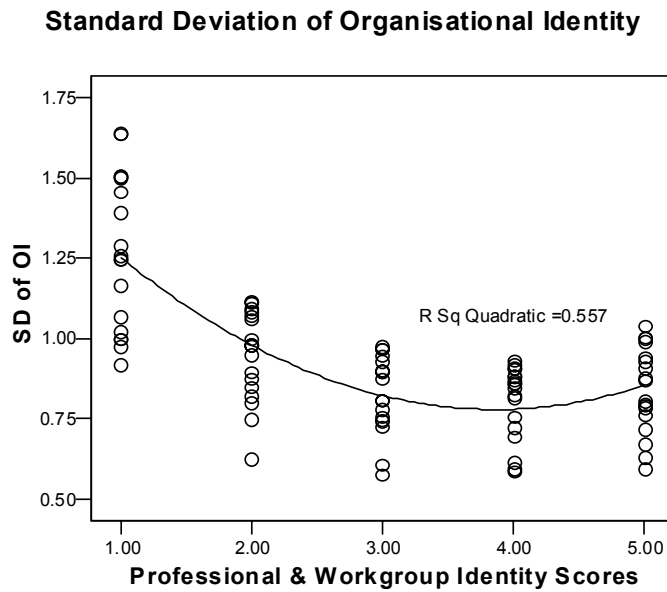


Table 2: Refined OLS Regressions (Dependent Variable = OI)

Category Hypothesis	Expected sign	Independent Variables	G27	G28	G29	G30	G31	G32	OIC
	+/-	Constant	0.66 (2.76)	1.21 (4.75)	0.04 (0.16)	0.08 (0.42)	0.22 (0.92)	1.48 (5.85)	0.53 (2.85)
H2: Greater the identity with profession, greater is OI. $\partial OI/\partial PI > 0$	+	B9. I like this career too much to give it up	0.12 (3.06)		0.10 (3.06)	0.09 (2.86)	0.12 (3.53)		
	+	B12. I definitely want a career for myself in this profession.		0.21 (5.90)					0.09 (3.34)
	+	B14. I am disappointed that I ever entered this profession.			0.13 (3.02)				
	+	B15. This is the ideal profession for a life's work.	0.13 (2.69)			0.15 (3.88)	0.12 (2.81)	0.13 (2.98)	0.10 (3.57)
H3: Greater the identity with workgroup, greater is OI. $\partial OI/\partial WI > 0$	+	E1. If I got into difficulties at work I know my fellow workers would try and help me out.			0.10 (2.42)				0.06 (2.13)
	+	E2. I can trust the people I work with to lend me a hand if I need it.					0.09 (2.10)		
	+	E6. I can rely on other workers not to make my job more difficult by careless work.		0.09 (2.69)					
H4: Greater the need for OI, greater is OI.	+	G11. Without an organisation to work for, I would feel incomplete.	0.13 (3.33)				0.15 (4.21)		0.08 (3.65)
	+	G12. I'd like to work in an	0.12			0.09	0.09	0.11	

Category Hypothesis	Expected sign	Independent Variables	G27	G28	G29	G30	G31	G32	OIC
$\partial OI/\partial NOI > 0$		organisation where I would think of its successes and failures as being my successes and failures.	(2.54)			(2.34)	(2.50)	(2.52)	
	+	G13. An important part of who I am would be missing if I didn't belong to a work organisation.				0.11 (3.67)			
	+	G14. Generally, I do not feel a need to identify with an organisation that I am working for.		0.07 (2.07)				0.10 (2.40)	0.06 (2.17)
	+	G16. I would rather say 'we' than 'they' when talking about an organisation that I work for.	0.21 (3.99)	0.14 (2.85)	0.51 (11.20)	0.14 (2.91)	0.24 (5.56)	0.15 (2.66)	0.23 (6.57)
	+	G17. No matter where I work, I'd like to think of myself as representing what the organisation stands for.		0.20 (3.32)		0.15 (2.88)			0.10 (2.50)
H5: The greater the conflicting identity the lower OI is $\partial OI/\partial CI > 0$	+	G22. I have mixed feelings about my affiliation with the organisation.	0.12 (2.64)		0.09 (2.49)	0.12 (3.94)	0.07 (2.26)	0.10 (2.06)	0.08 (2.72)
	+	G23. I'm torn between loving and hating the organisation							-0.07 (-2.92)
	+	G24. I have contradictory feelings about being part of the organisation.	-0.16 (-3.92)	-0.06 (-2.18)				-0.17 (-3.78)	
H6: OI will be weaker away from the corporate office. $\partial OI/\partial L > 0$	-	Located in the HIG Area			-0.23 (-3.05)				
	-	Located in the South East Area	0.16 (2.19)				0.17 (2.53)	0.17 (2.12)	0.15 (3.36)
	-	Located in the South West Area			-0.19 (-2.49)				
H7: The greater the employee's seniority, the greater is OI $\partial OI/\partial S > 0$	+	Senior Manager				0.40 (3.65)			0.21 (2.57)
H8: Knowledge workers will have lower OI. $\partial OI/\partial K > 0$	-	Job Type = Policy/Strategy						-0.26 (-2.18)	
VC: Control variables: gender, age and tenure.	-	Job Type = Scientific					-0.16 (-2.13)		
	-	Highest qualification = HND					-0.29 (-2.56)		
	-	Highest qualification = Degree					-0.22 (-2.09)		
	-	Highest qualification = Post Graduate					-0.27 (-2.70)		
	+/-	Gender of respondent = male				0.13 (2.34)	0.20 (3.16)		0.09 (2.18)
+/-	Age of respondent = 41 to 50 years		0.14						0.11

Category Hypothesis	Expected sign	Independent Variables	G27	G28	G29	G30	G31	G32	OIC
Diagnosics:				(2.52)					(2.56)
	+/-	Age of respondent > 50 years			0.20 (3.28)				
		N	735	733	734	733	732	734	726
		Adjusted R ²	0.158	0.205	0.324	0.286	0.261	0.095	0.376
		AIC	2026	1587	1734	1657	1731	1990	1125
		Breusch Pagan sig.	0.015	0.000	0.000	0.000	0.000	0.000	0.000

Figures in parentheses are t-ratios based on MacKinnon and White (1985) HC3 standard errors. Dependent variables, G27 to G32, are defined by the original survey questions and coded so that higher values are ascribed to higher levels of organisational identity. OIC = Composite measure of organisational identity computed as the simple average of G27 to G32, which are based on the following survey questions:

- G27. When someone criticises the organisation, it feels like a personal insult.
- G28. I am very interested in what others think about the organisation.
- G29. When I talk about the organisation, I usually say 'we' rather than 'they'.
- G30. The organisation's successes are my successes.
- G31. When someone praises the organisation it feels like a personal compliment.
- G32. If a story in the media criticised the organisation, I would feel embarrassed.

Table 3 Ordered Logit Regressions (Dependent Variable = OI)

Category Hypothesis	Expected sign	Independent Variables	G27	G28	G29	G30	G31	G32
H2: Greater the identity with profession, greater is OI.	+	B9. I like this career too much to give it up	0.20 (2.53)			0.21 (2.68)	0.20 (2.47)	0.25 (3.10)
	+	B12. I definitely want a career for myself in this profession.		0.58 (6.50)				
	+	B13. If I had all the money I needed without working, I would probably still continue to work in this profession.					0.15 (2.12)	
	+	B14. I am disappointed that I ever entered this profession.	0.20 (2.07)			0.36 (3.65)		
	+	B15. This is the ideal profession for a life's work.	0.20 (2.13)				0.40 (4.12)	0.31 (3.24)
H3: Greater the identity with workgroup, greater is OI.	+	E1. If I got into difficulties at work I know my fellow workers would try and help me out.				0.25 (2.45)		
	+	E2. I can trust the people I					0.24	

		work with to lend me a hand if I need it.						(2.40)	
	+	E4. I have full confidence in the skills of my fellow workers.		0.28 (2.93)					
H4: Greater the need for OI, greater is OI.	+	G11. Without an organisation to work for, I would feel incomplete.	0.32 (4.19)		0.16 (2.03)		0.37 (4.60)		
	+	G12. I'd like to work in an organisation where I would think of its successes and failures as being my successes and failures.				0.28 (2.98)	0.22 (2.41)	0.19 (2.11)	
	+	G13. An important part of who I am would be missing if I didn't belong to a work organisation.				0.27 (3.53)		0.16 (2.14)	
	+	G14. Generally, I do not feel a need to identify with an organisation that I am working for.		0.18 (2.06)		0.18 (2.10)		0.20 (2.38)	
	+	G15. Generally, the more my goals, values and beliefs overlap with those of my employer, the happier I am.			-0.24 (-2.06)				
	+	G16. I would rather say 'we' than 'they' when talking about an organisation that I work for.	0.38 (3.50)	0.46 (4.06)	1.38 (10.80)	0.35 (3.11)	0.64 (6.13)	0.34 (3.39)	
	+	G17. No matter where I work, I'd like to think of myself as representing what the organisation stands for.	0.25 (2.17)	0.60 (4.61)	0.30 (2.35)	0.35 (2.78)			
H5: The greater the conflicting identity the lower OI is	+	G22. I have mixed feelings about my affiliation with the organisation.	0.23 (2.66)		0.15 (1.98)	0.32 (4.42)			
	+	G23. I'm torn between loving and hating the organisation	-0.19 (-2.14)						
	+	G24. I have contradictory feelings about being part of the organisation.	-0.22 (-2.25)	-0.19 (-2.52)					-0.22 (-3.32)
H6: OI will be weaker away from the corporate office.	-	Located in the HIG Area			-0.42 (-2.23)				
	-	Located in the South East Area				0.38 (2.30)	0.42 (2.55)		
	-	Located in the South West Area			-0.42 (-2.15)				
H7: The greater the employee's seniority, the greater is OI	+	Senior Manager				1.32 (2.88)			
H8: Knowledge workers will have lower OI.	-	Job Type = Policy/Strategy			0.60 (2.25)				-0.57 (-2.50)
	-	Job Type = Scientific					-0.40 (-2.31)		
	-	Highest qualification = HND					-0.79 (-2.66)		
	-	Highest qualification = Degree					-0.60 (-2.32)		
	-	Highest qualification = Post Graduate					-0.82 (-3.21)		
Control variables:	+/-	Gender of respondent = male			0.43 (2.75)	0.40 (2.70)	0.48 (3.23)		

gender, age and tenure.	+/-	Age of respondent = 41 to 50 years		0.38 (2.07)				0.34 (2.09)
	+/-	Age of respondent > 50 years			0.44 (2.87)			
Estimated Cutpoints.		Cutpoint 1	1.76	2.75	5.18	4.19	2.84	-0.33
		Cutpoint 2	4.30	4.61	7.72	6.88	5.64	2.63
		Cutpoint 3	5.24	6.41	9.10	9.10	7.49	3.71
		Cutpoint 4	8.67	10.07	12.82	12.76	11.10	6.75
		N	735	733	734	733	732	734
		Pseudo R ²	0.074	0.108	0.192	0.147	0.126	0.043

Table 4 Predicted Probabilities from the G29 Ordered Logit Model

	Coding:	Probability of Each G29 Category						Probability of Each G29 Category				
		s. disagree	disagree	neutral	agree	s. agree		s. disagree	disagree	neutral	agree	s. agree
H2: B9.	1	0.01	0.12	0.24	0.59	0.04	H4: G11	0.01	0.10	0.21	0.63	0.05
	2	0.01	0.10	0.22	0.63	0.04		0.01	0.09	0.19	0.66	0.05
	3	0.01	0.09	0.19	0.66	0.05		0.01	0.07	0.17	0.68	0.06
	4	0.01	0.07	0.17	0.69	0.07		0.01	0.06	0.15	0.70	0.07
	5	0.00	0.06	0.14	0.71	0.08		0.00	0.05	0.14	0.72	0.09
H2: B14	1	0.02	0.21	0.31	0.45	0.02	H4: G15	0.00	0.05	0.12	0.73	0.10
	2	0.01	0.16	0.27	0.53	0.03		0.00	0.06	0.14	0.71	0.08
	3	0.01	0.11	0.23	0.60	0.04		0.01	0.07	0.17	0.69	0.07
	4	0.01	0.08	0.19	0.67	0.06		0.01	0.09	0.19	0.66	0.06
	5	0.00	0.06	0.14	0.71	0.08		0.01	0.10	0.22	0.62	0.04
H3: E1	1	0.02	0.17	0.28	0.51	0.03	H4: G16	0.33	0.54	0.10	0.04	0.00
	2	0.01	0.14	0.25	0.56	0.03		0.10	0.50	0.25	0.15	0.00
	3	0.01	0.11	0.22	0.61	0.04		0.03	0.25	0.31	0.40	0.02
	4	0.01	0.09	0.19	0.66	0.05		0.01	0.08	0.18	0.68	0.06
	5	0.01	0.07	0.16	0.69	0.07		0.00	0.02	0.06	0.70	0.22
H5: G22	1	0.01	0.11	0.23	0.61	0.04	H4: G17	0.02	0.17	0.29	0.50	0.02
	2	0.01	0.10	0.21	0.63	0.05		0.01	0.14	0.25	0.56	0.03
	3	0.01	0.09	0.19	0.66	0.05		0.01	0.11	0.22	0.62	0.04
	4	0.01	0.08	0.17	0.68	0.06		0.01	0.08	0.18	0.67	0.06
	5	0.01	0.07	0.16	0.70	0.07		0.01	0.06	0.15	0.71	0.08

Table 5: Summary Table of Results

Hypotheses	Statistical Test		
	Ordinary least squares regression	Ordered logit regression	Predicted probabilities from ordered logit
H1: The greater the professional/workgroup identity, the greater the variance of organisational identity	Refute	Not applicable	Not applicable
H2: Greater the identity with profession, greater is OI.	Confirm	Confirm	Confirm
H3: Greater the identity with workgroup, greater is OI.	Confirm	Confirm	Confirm
H4: Greater the need for OI, greater is OI.	Confirm	Confirm	Confirm
H5: The greater the conflicting internal identity the lower organisational identity will be	Ambiguous findings	Ambiguous findings	Confirm
H6: OI will be weaker away from the corporate office.	Ambiguous findings	Ambiguous findings	Not applicable
H7: The greater the employee's seniority, the greater is OI.	Refute	Refute	Not applicable
H8: Knowledge workers will have lower OI.	Refute	Ambiguous findings	Not applicable