

# Psychological Capital, Authentic Leadership, Organisational Identification and Stress in Voluntary Sector Workers

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## Abstract

The concept of a resilient workforce is of growing interest in a changing and economically challenging context. This study aimed to empirically test the interaction between psychological capital (PsyCap) authentic leadership (AL) and organisational identification (OID) as a model for resilience in the workplace. Method: A questionnaire survey assessed psychological capital, authentic leadership, organisational identification, and job stress in 498 staff working in emotional-labour-intensive roles, delivering health and social care services in the community as part of the growing voluntary sector infrastructure. Findings showed that psychological capital and organisational identification mediated the relationship between authentic leadership and job stress.

## Keywords

Psychological Capital, Authentic Leadership, Organisational Identification

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## 1. Introduction

The single biggest development in leadership research in the past 50 years has been the incorporation of followers into the equation leading to models that explain effective leadership as a process of interaction between the leader and their followers [1-4]. One such is the Authentic Leadership Theory [5]. Authentic Leadership is defined as, “*a pattern of leader behaviour that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalised moral perspective, balanced processing of information and relational transparency on the part of leaders fostering positive self-development*” (p. 94) [6]. These authors identified four key components of authentic leadership above, and developed a measure, which has been widely used in research [7]. Authentic leadership has been shown to increase job satisfaction and work engagement [8], and even eudemonic wellbeing [9]. Authentic leadership is associated

with healthier work environments and with building a resilient workforce through developing psychological capital [10, 11, 12].

The psychological states underpinning positive organisational behaviour were identified [13], [14], as resilience, optimism, hope and self-efficacy, which together are labelled as psychological capital (PsyCap) [15, 16, 17, 18]. A large number of studies have demonstrated positive relationships between PsyCap and employee satisfaction, health and performance [19], as well as its influence at the group and organizational levels [16, 20, 21, 22]. Of particular interest to the current study is the fact that a number of studies have linked PsyCap with authentic leadership [11, 23, 24].

Effective leadership occurs when leader and followers share a common identity and this relates to the construct of authenticity which is at the heart of authentic leadership [7]. Organisational identification which derives from the social

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identity perspective [25, 26], occurs when “employees perceive oneness with an employing organization and feel that they belong to it” (p. 14) [27]. Recent studies have found that organisational identification is positively related to both task and job performance [28, 29], and to low turnover intention, organizational citizenship behaviour, employee satisfaction and well-being [30], [31]. Leaders are important in shaping followers’ identities and their social identifications with their work organization [27]. These authors go on to speculate a relationship between organisational identification and ethical leadership though no research has yet looked at this potential.

Occupational stress has been declared a world-wide health epidemic [32] and has adverse effects, both in financial and humanistic terms [33]. The UK Health and Safety Executive reported an estimated 13.5 million working days lost due to stress-related illness with an associated £4 billion cost to the economy annually [34]. The costs to the individual can be categorised as psychological (cognitive and emotional), behavioural (sleep disturbances, avoidance of work, accidents) and physiological (CHD, gastro-intestinal conditions, headache) [35]. The highest stress-rated occupations in the UK were those with greatest ‘emotional labour’, which included health and social services jobs (e.g. ambulance drivers, social workers) [36]. There is a significant proportion of the workforce engaged in health

care in the UK [37], including many in demanding roles in the voluntary and community sector. However, there is little research dedicated to exploration of the specific impacts on the workforce in the voluntary sector operating in partnership with statutory services. According to a recent survey 41% of voluntary organisations report a worsening financial situation although 78% of organisations report an increase in demand for services [38]. Although not unique to the voluntary sector, the current economic climate presents a significant source of work stress. Indeed it has been reported as the greatest source of work stress by 39% of business leaders in the European Union [39].

The brief review above suggests that individually authentic leadership, psychological capital, and organisational identity, are implicated in stress, health and wellbeing at work. However there has been no research looking at how all three interact in the process despite the fact that one could intuit that there may be a combined effect.

The aim of this study is to explore the relationships between authentic leadership, psychological capital, organisational identification and work stress in voluntary sector workers, during a period of economic change. Based on the extant and emerging literature a model of the relationship is proposed (see Figure 1) and this model was tested using path analysis.

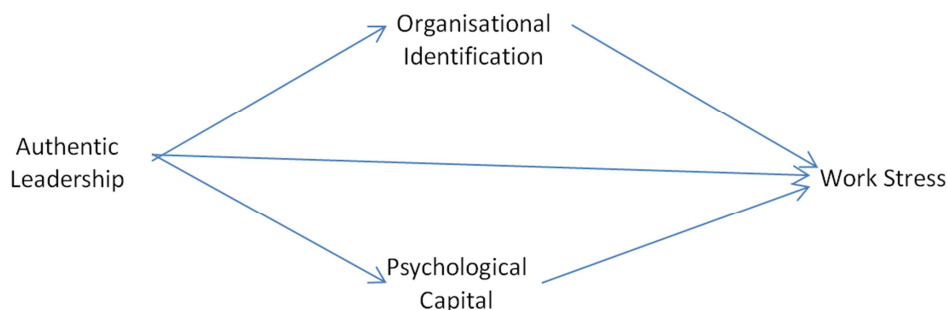


Figure 1. Proposed Path Model of the relationship between Key Variables.

## 2. Method

### 2.1. Design

The current study used a quantitative survey with questionnaire data collection to explore the relationships between psychological capital, authentic leadership, organisational identification and work stress in a voluntary sector service delivery organisation, during a period of economic change.

### 2.2. Participants

The participants consisted of a targeted sample of 498 employees (396 females and 102 males) in a range of

positions within the voluntary sector providing health and social care related services. Participants were predominately female (79.5% female, 20.5% male) as is typical of the health and social care sector generally. Age range distribution was 21-29 = 120, 30-39 = 222, 40-49 = 90, 50-59 = 48, and 60 plus = 18. Overall 60 held a managerial role while 438 were engaged in direct service delivery. Length of tenure with the company ranged from less than 2 years to over 10 years. 39% were with the organisation over 6 years.

### 2.3. Measures

Current level of work stress was measured using the Workplace Stress Scale [40]. This is an 8-item scale designed to provide a quick and valid measure of stress levels in the

workplace. The scale had very good internal reliability in this data ( $\alpha = .89$ ). The scale has 5 negatively worded items, e.g. 'I have too much work to do and/or too many unreasonable deadlines' and 3 positively worded items e.g. 'I have adequate control or input over my work duties'.

Psychological capital (PsyCap) is a second-order core factor consisting of self-efficacy, optimism, hope and resilience. These constructs are collectively related to a range of work performance outcomes and job satisfaction [18]. In this study PsyCap was measured using the Psychological Capital Questionnaire (PCQ-24) ( $\alpha = .89$ ) [17]. The four component factors were each measured by 6 items. To facilitate the state-like framing, the PCQ asks the respondent to describe how they think about themselves right now. For example: Self-efficacy ( $\alpha = .85$ ): 'I feel confident in representing my work area in meetings with management'; hope ( $\alpha = .80$ ): 'If I should find myself in a jam at work, I could think of many ways to get out of it'; resilience ( $\alpha = .72$ ): 'I usually take stressful things at work in my stride'; optimism ( $\alpha = .79$ ): 'I always look on the bright side of things regarding my job.' The Self-Rater Version was used, where level of agreement is rated on a 6-point Likert-type scale (1 = strongly disagree to 6 = strongly agree). This tool has been widely used in a range of contexts with extensive testing of its psychometric properties [17].

Perceived leadership style in the organisation was measured using the Authentic Leadership Questionnaire [41]. There are 16 items; 5 linked to transparency ( $\alpha = .71$ ) (e.g. 'My leader admits mistakes when they are made'); 4 linked to moral/ethical component ( $\alpha = .83$ ) (e.g. 'My leader makes decisions based on his/her core values'); 3 on balanced processing ( $\alpha = .69$ ) (e.g. 'My leader analyses relevant data before coming to a decision') and 4 items linked to self-awareness ( $\alpha = .88$ ) (e.g. 'My leader seeks feedback to improve interactions with others'). Each statement is rated on how frequently it fits the style of the respondent's leader (0 = not at all to 4 = frequently, if not always). This theory-based measure has also undergone review in many contexts where the construct of authentic leadership has been shown to have predictive validity for important work-related attitudes and behaviours (e.g.  $\alpha = .91$ ) [42].

The Organisational Identification Measure is a 10-item measure with 5-point Likert scale rating ( $\alpha = .76$ ) [43]. Items include 'When someone criticises [*name of organisation*], it feels like a personal insult' and 'The organisation's successes are my successes'. It has a sound theoretical basis in Social Identity Theory [44] and can be seen as a sub-set of the wider construct of identification to a psychological group. This has previously been shown to be linked with level of employee-

employer satisfaction [45] organisational effectiveness [46], job satisfaction, job involvement and organisational commitment [43].

## 2.4. Procedure

All employees working in the delivery of community-based services within two organisation were invited to participate in a study on 'Exploring resilience at work in challenging times'. Data was collected from all consenting employees via an on-line survey link sent to 700 staff using their work email. The survey was open for a period of 4 weeks. Two reminder email prompts were sent out in the final 2 weeks. A total of 524 questionnaires were submitted anonymously (74.9%). On initial review of the dataset those with more than 5% missing responses were removed to leave a valid sample of 498 responses. The mean score was substituted for a non-response in those with less than 5% missing data. The final return rate was 71.1%.

Two exclusion criteria were applied. Those working for less than 6 months with the current employer were not included to ensure the responses reflected a reasonable experience of the impact of the working conditions both internally and externally. This replicates the timeframe applied by other researchers. Also those in non-service delivery positions were excluded from the sample (e.g. administration staff) as the sources of stress for these staff may be substantially different.

## 2.5. Ethical Considerations

Ethical approval for the study was granted by both the host organisation where the survey was conducted and the University Ethics Committee prior to commencement of the study.

## 3. Results

The aim was to test the relationship between authentic leadership, psychological capital, organizational identity and work stress and the first stage involved an analysis of the correlations, firstly between the global variables (see Table 1) and secondly the separate dimensions of these variables (see Table 2).

**Table 1.** Correlations between study variables.

	1	2	3
Work stress			
Organisational identification	-.723**		
Authentic leadership	-.728**	.586**	
Psychological capital	-.755**	.712**	.679**

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table 2.** Correlations between factors of main study variable.

	1	2	3	4	5	6	7	8	9	10
Work stress	.557**									
Organisational identification	-.500**	-.676**								
Transparent leadership	-.521**	-.661**	.457**							
Ethical leadership	-.584**	-.710**	.478**	.764**						
Balanced leadership	-.460**	-.607**	.397**	.708**	.731**					
Self aware leadership	-.531**	-.660**	.452**	.793**	.779**	.727**				
Self-efficacy	-.381**	-.465**	.537**	.442**	.461**	.379**	.419**			
Hope	-.484**	-.635**	.635**	.516**	.577**	.500**	.557**	.725**		
Resilience	-.399**	-.636**	.537**	.574**	.602**	.551**	.574**	.583**	.689**	
Optimism	-.461**	-.721**	.635**	.469**	.554**	.472**	.488**	.416**	.599**	.487**

\*\* . Correlation is significant at the 0.01 level (2-tailed).

There were significant, large, inverse relationships between authentic leadership, psychological capital and organizational identity and work stress. Furthermore the pattern of significant correlations between the individual dimensions of authentic leadership, psychological capital and organizational identity and work stress indicate that all dimensions

contribute to the variance.

Hierarchical multiple regression analysis (HMRA) was then used to identify the predictive relationship between authentic leadership, psychological capital and organizational identity and work stress and the results are shown in Table 3.

**Table 3.** The predictors of work stress from HMRA.

Model 1	B	SE B	$\beta$	$\Delta R^2$
age	.053	.060	.058	.01
sex	.164	.153	.069	
Model 2				
age	.109	.039	.119**	.58***
sex	.064	.099	.027	
Psychological Capital	-.823	.044	-.762***	
Model 3				
age	.111	.035	.120**	.08***
sex	.056	.089	.024	
Psychological Capital	-.531	.054	-.492***	
Authentic leadership	-.351	.044	-.399***	
Model 4				
age	.121	.032	.131***	.06***
sex	.061	.082	.026	
Psychological Capital	-.327	.059	-.303***	
Authentic leadership	-.297	.041	-.337***	
Organisational identification	-.244	.037	-.325***	

Total  $R^2 = .72$ \*\*\*

\*\*\*  $p < .001$  \*\*  $p < .01$

Age and sex were entered on the first step but did not account for a significant percentage of variance (.01). On step 2 psychological capital was added and accounted for 58% of the variance in work stress. On step 3 authentic leadership added a further 8% to variance explained, and on step 4 organisational identification added a further 6% bringing the total variance accounted for to 72% overall. As this is cross sectional data the order of entry of variables is arbitrary and further HMRA varying the order of entry produced the following results. Step 2, authentic leadership (53% of variance), step 3 organisational identification (14% of variance), and step 4 psychological capital (5% of variance)

producing a total again of 72% overall. Step 2, organisational identification (54% of variance), step 3 psychological capital (11% of variance), and step 4 authentic leadership (7% of variance) producing a total again of 72% overall.

The final stage in analysis used structural equation modelling with AMOS-22 to test the proposed model in Figure 1. The result from this is shown in Figure 2 which does confirm the model as a good fit ( $\chi^2(30) = 94.18$ ,  $p < .001$ , CMIN/DF = 3.14; CFI = .97; IFI = .97; RMSEA = .09). Again as this is cross sectional data we tested the other possible models but the one presented in Figure 2 was the only one that met the criteria for fit.

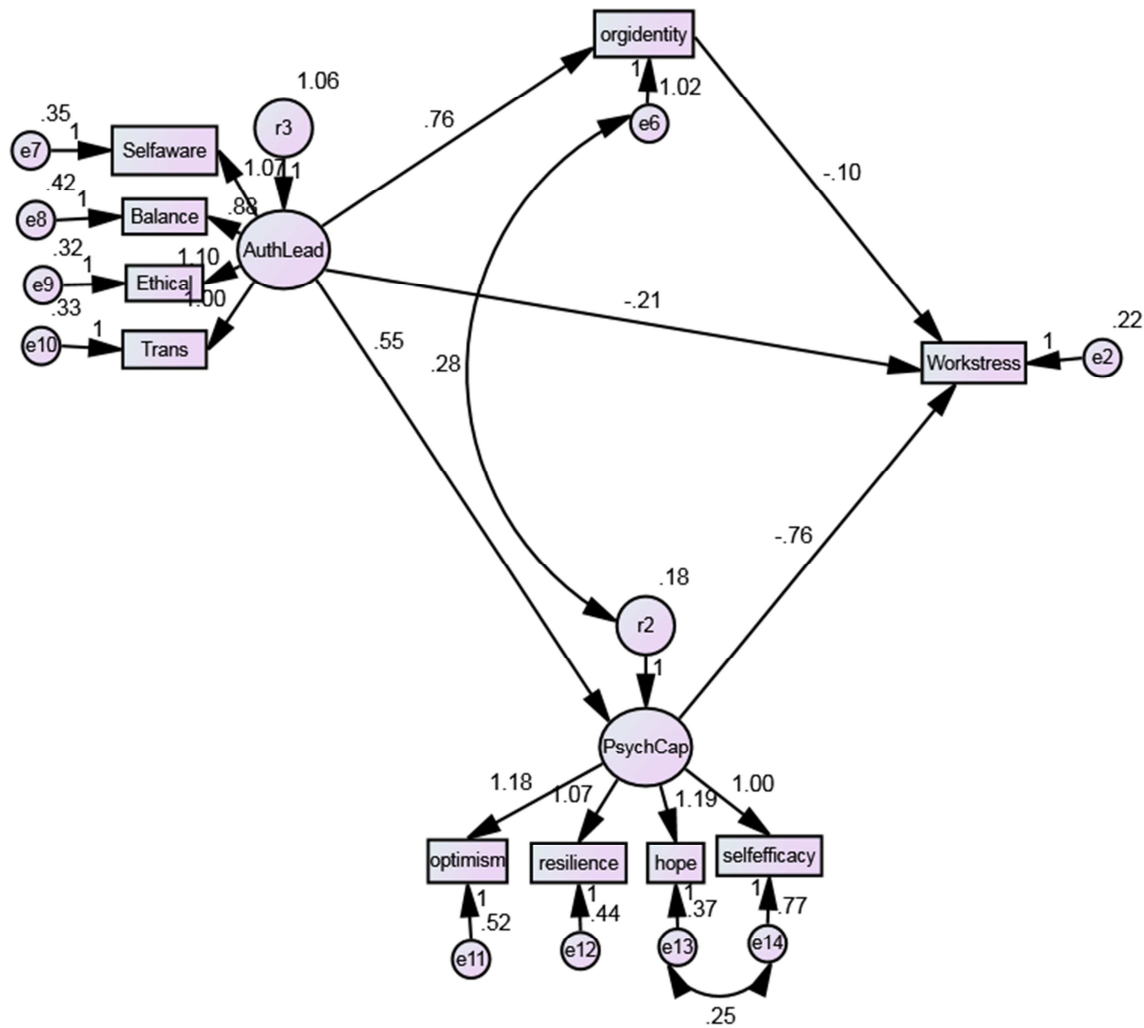


Figure 2. Path model of work stress (Chi-square (30)=94.18,  $p < .001$ , CMIN/DF=3.14; CFI=.97; IFI=.97; RMSEA=.09).

## 4. Discussion

This study aimed to add to existing theory and research on employee factors associated with work stress and consequently to inform the design of support tailored to promote a resilient workforce in challenging times. In particular this study contributes to our understanding of non-statutory health and social care staff. In essence the results of this study show that authentic leadership is significantly related to organisational identification and psychological capital. The proposed model was a good fit and suggests that both organisational identification and psychological capital mediate the relationship between authentic leadership and work stress. The present findings fit well with the growing literature on positive organisational behaviour and suggest that the core of any effective organisation is a resilient workforce. However there has been a trend to assume that putting the workforce in the centre of stress and health research at work also means that in some way the causes for ineffective and unhealthy organisations lie in the individual

and that interventions should focus on enabling workers to cope better. Linking authentic leadership with psychological capital provides us with a more multilevel model of how a resilient workforce can be developed. It indicates intervention at all levels to ensure that the leadership style empowers workers, while work contexts enable the development of psychological capital. The tripartite link proposed here between authentic leadership, psychological capital and organisational identification suggests a mechanism through which resilience in an organisation may be achieved, i.e. through enabling the development of shared identities. The vast literature on social identity theory provides an evidence base from which processes of identity can be understood and developed. The ultimate aim is to develop an organisational culture with shared identity as its core. The terms 'connection culture' have been used to describe this approach to organisational culture [47].

## 5. Conclusion

This study brings together the constructs of psychological



capital, authentic leadership and organisational identification as a positive psychology model underpinning health and wellbeing in the workplace. The evidence suggests that a tripartite model in which authentic leadership enables the development of psychological capital and organisational identification might underpin a shared culture as an approach to building resilience in the workforce. Our analysis shows that organisational identity, psychological capital and work stress are inter related in complex ways with the style of leadership experienced. One could argue that authentic leaders will foster a strong sense of identification within an organisation through their open and transparent style and their ethical and balanced approach to treating people. In such a context positive psychological capital can prosper through a growth in optimism, hope and self-efficacy culminating in a resilient worker. In this context workers feel a sense of belongingness, support and being valued and are thereby more likely to see the demands of the job as challenges rather than stressors.

## Conflict of Interest

The authors have no conflict of interest to declare

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