

Self-efficacy as an intervening variable between ethical work climate and decision making

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Abstract

Purpose: This paper aims to present and empirically evaluate a model proposing self-efficacy of employees to be an intervening variable between their perception of ethical climate (independent variable) and their decision making when faced with an ethical dilemma (dependent variable).

Design/methodology/approach: 276 public sector human resource practitioners (HRPs) were presented with 15 scenarios. Each scenario contained an organisational directive or situation serving to compromise their capacity to deliver an ethical outcome. Participants' responses consisted of a set of possible actions varying in the degree to which they would, or would not, comply with the directive.

Findings: Results were consistent with the proposed model. Further, analysis found the data to fit poorly to an alternative model proposing ethical climate and self-efficacy to both act directly on decision making. In addition self-efficacy was found to explain a large proportion of the difference between (a) HRPs' prediction of their own likely behaviour, and (b) the behaviour they judged to be ideal.

Originality/value: This paper makes several contributions. First, it represents one of the few studies investigating both perception of ethical climate and self-efficacy. Second, it proposes and tests a possible pathway by which perception of ethical climate influences employee behaviour. Third, it examines the degree to which self-efficacy explains the 'short-fall' between an employee's own proposed action, and the action the employee judges to be ideal.

Keywords: ethical climate, self-efficacy, social cognitive theory, public sector, decision making, human resource management

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Introduction

The concepts of *psychological climate* and *organisational climate* arose from Kurt Lewin's (1943/1975) Field Theory and their empirical operationalization as multidimensional constructs (Jones and James, 1979). The concept *ethical climate* represents a facet of psychological climate with specific focus on ethical aspects of the workplace environment (Deshpande et al., 2011; Mayer et al., 2010; Stewart et al., 2011; Tseng and Fan, 2011; Victor and Cullen, 1987, 1988). Field theory provides an expectation ethical climate will affect psychological characteristics of an employee such as their self-efficacy. Bandura's (1977) Social Cognitive Theory leads further to an expectation self-efficacy will, in turn, affect the degree of non-compliance employees exert in response to an unethical directive. The purpose of this paper is, in a sample of public-sector human resource practitioners (HRPs), to examine a model proposing self-efficacy to be an intervening variable between ethical climate and HRP behaviour. This paper makes several contributions. First, it represents one of the few studies investigating both perception of ethical climate and self-efficacy. Second, it proposes and tests a possible pathway by which perception of ethical climate influences employee behaviour. Third, it examines the degree to which self-efficacy explains the 'short-fall' between an employee's own proposed action, and the action the employee judges to be ideal.

Field theory, psychological climate, organisational climate, and ethical climate

Maxell proposed the behaviour of a particle to be a function of its *electromagnetic field* (Einstein, 1931). Adapting this paradigm, Lewin (1943/1975) proposed the behaviour of a person to be a function of their *psychological field*. Within the workplace, *psychological climate* represents an attempt to quantitatively operationalize Lewin's field. The conventional approach to measure psychological climate is to present a sample of employees with a battery of items designed to encompass their perceptions of all aspects of the workplace psycho-social environment and factor analyse the data to derive a small set of underlying climate dimensions (e.g. Jones and James, 1979; Manning, 2010). This provides a score for each individual on each dimension - each individual's *psychological climate*. Scores aggregated across individuals within a workplace are often used to represent the *organisational climate* for that workplace.

Although psychological and organisational climate have been shown to have significant effects on employee attitudes and behaviours and upon organisational outcomes (Manning, et al., 2012; Patterson et al., 2005), researchers have increasingly concentrated on limited aspects of the psychological field. Studies, for example, have examined particular facets such as; climate for safety (Zohar, 2000), climate for innovation (Delbecq and Mills, 1985), climate for service (Schneider et al., 1998), and ethical climate (Victor and Cullen, 1987).

Victor and Cullen (1987) developed their ethical climate questionnaire (ECQ) using a set of items designed to encompass a theoretical nine-category typology of ethical climate types. These theoretical climate types were generated via a two-dimensional matrix. The first dimension, comprised three levels of ethical criteria used for decision making - principle, benevolence, and egoism. The second dimension, represented the locus of analysis used in ethical decisions - individual, local, cosmopolitan. Victor and Cullen (1988) reported responses to the ECQ of 872 employees of four firms in a single Midwestern US city (a manufacturing plant, a savings and loan company, a small printing company, and a local telephone company). Principal components analysis (PCA) extracted five dimensions; *Caring*, the degree to which the workplace is characterized by workers sincerely interested in each other's well-being; *Law and Code*, the degree to which employees strictly adhere to profession and government regulations and codes; *Rules*, the degree to which employees strictly adhere to their organization or subunit's rules and mandates; *Instrumental*, the degree to which employees are driven by self-interest; and *Independence*, the degree to which employees are expected to be guided by their personal moral beliefs.

Dimensions identified in factor analysis are a function of both the range of items used and the particular sample of respondents. For this reason, Manning (2010), citing earlier claims

by Davidson et al. (2001), argues, for a given climate instrument, the pattern of dimensions extracted will vary between industries and will also vary between different types of organization within an industry. This would appear to be the case in ethical climate research.

Wimbush et al. (1997) attempted to replicate the factor structure of the ECQ in a sample of employees of a single national retail organization. PCA identified five dimensions. Three, *Caring*, *Independence*, and *Instrumental*, were the same as described in the original study. One, *Law and rules*, was essentially an amalgamation of two of Victor and Cullen's dimensions - *Law and code*, and *Rules*. The fifth, *Service*, represented a dimension unique to their sample. Treviño et al. (1998), in a study of alumni of two private colleges, conducted PCA of responses to both the ECQ and items designed to measure organisational culture. Ten dimensions were identified. Seven comprised climate items; *Employee-focussed climate*, *Community-focussed climate*, *Self-interest climate*, *Rules and procedures climate*, *Personal ethics climate*, *Law and professional codes climate*, and *Efficiency climate*. Malloy and Agarwal (2003), in a study of administrators of a non-profit provincial sports federation identified five ethical climate dimensions; *Individual caring*, *Machiavellianism*, *Independence*, *Social caring*, and *Law and code*. Bulutlar and Öz (2009) applied PCA to responses of employees of companies in Istanbul. Five dimensions were extracted. Four were the same as described by Wimbush et al. (1997): *Rules and law* (labelled *Law and rules*, by Wimbush et al.); *Caring*; *Instrumental climate*; and *Independence*. A fifth dimension, *Company profit*, was also identified. This latter dimension had been previously described in another Turkish sample by Elçi and Alpkın (2009).

Analyses presented in this paper represent part of a larger study. The factor structure of the climate instrument is reported elsewhere (Shacklock et al., 2011). PCA applied to responses to the ECQ from a group of public sector HRP found four of the dimensions previously described by both Wimbush et al. (1997) and Bulutlar and Öz (2009); *Caring*, *Law and rules*, *Independence*, and *Instrumental*. A fifth dimension, *Efficiency*, previously described by Treviño et al. (1998), was also found. This latter dimension represents the degree to which employees are expected to place efficiency above all other issues.

Ethical climate and organisational outcomes

In their meta-analysis, Martin and Cullen (2006) describe ethical climate to be associated with positive job attitudes encompassing organisational commitment and job satisfaction. Ethical climate has been found to be negatively related to: turnover intention (Mulki et al., 2008; Stewart et al., 2011); workplace drinking, personal telephone calls, sexual harassment of other employees (Vardi, 2001); misreporting of project status by project members to managers (Smith et al., 2009); and conflict between employees and managers (Schwepker et al., 1997). Mayer et al. (2010) describe ethical climate to act as a mediator between ethical leadership and employee misconduct. In their Turkish sample, Bulutlar and Öz (2009) found ethical climate to impact upon organization commitment with the relationship mediated by workplace bullying. Lütznén et al. (2010) in a study of psychiatric nurses proposed 'if health care workers contemplate the moral nature of their actions in an ethically difficult situation, it seems logical to assume that a positive moral climate averts a feeling of moral stress within the nurse-patient relationship' (p. 214). Elpern et al. (2005, as cited in Lütznén et al., 2010) earlier defined moral distress as 'caused by situations in which the ethically appropriate course of action is known but cannot be taken' (p. 214). Using the Hospital Ethical Climate Survey (Olson, 1998, as cited in Lütznén et al., 2010), they found work related moral stress to be significantly affected by moral (i.e. ethical) climate.

Moral stress may represent a psychological outcome of the gap between an action an employee feels should be done, and the action they actually take. Another psychological characteristic, self-efficacy (Bandura, 1977), may represent a factor which affects the magnitude of that gap.

Self-efficacy

Bandura's (1977) Social Cognitive Theory, originally presented from the view of clinical psychology, emphasised cognitive processes, in particular self-efficacy, which he defined as 'the

conviction that one can successfully execute the behaviour required to produce the outcomes' (p. 193). He proposed self-efficacy arises from four sources: 'performance accomplishments, vicarious experience, verbal persuasion, and physiological states' (p. 191). He goes on to say efficacy 'expectations determine how much effort people will expend and how long they will persist in the face of obstacles and aversive experiences. The stronger the perceived self-efficacy, the more active the efforts' (p. 194).

Authors such as Baggett (2007) propose change in self-efficacy as an outcome measure in ethics training. Jensen and Richert (2005) found efficacy scores of physical therapy students to increase following a formal ethics course. Mason and Ellershaw (2010) found an increase in medical students' scores on a self-efficacy in palliative care scale following a palliative care program incorporating advanced communication skills training, an ethics project, and individual case presentations.

Measures of self-efficacy have been incorporated in several ethics studies. In a study of female participants responding to fear appeals in advertising, Snipes et al. (1999) proposed self-efficacy and the perceived ethicality of an advertisement to be independent variables affecting the dependent variable of purchase intention via intervening variables of attitude toward the advertisement and attitude toward the brand. These relationships were confirmed. Elias (2008) found business students with low academic self-efficacy and high anti-intellectualism were less likely to perceive college cheating as unethical. MacNab and Worthley (2008) in a survey of adults engaged in executive management development programs and education, found self-efficacy to be significantly related to self-reports of propensity to act as an internal whistleblower.

A small number of studies have incorporated both organisational climate and self-efficacy. Lin (2008) examined factors shaping employee customer orientation of sales managers in five Taiwanese insurance companies. Organisational climate was treated as an independent variable - having a direct influence on customer-oriented behaviour (dependent variable). Self-efficacy was treated as an intervening variable (itself affected by empowerment, an independent variable) having both a direct effect on customer-oriented behaviour and also acting as a moderating variable on the relationship between motivating measures and customer-oriented behaviour. Tobin et al. (2006) found both organisational climate and organisational learning to be significant predictors of teacher self-efficacy. Brown et al. (1998) in a study of salespeople of a medical supplies distributor treated both self-efficacy and competitive psychological climate as independent variables proposed to affect the dependent variable self-set goals. These relationships were empirically confirmed. Only self-efficacy, however, was a significant predictor of sales performance (dependent variable).

In a sample of members of the National Association of Metal Finishers, Flannery and May (2000) examined environmental ethical decision making in the U.S. metal finishing industry. They saw self-efficacy and ethical climate as independent variables whose influence affected environmental ethical decision intention (dependent variable), with this influence moderated by moral intensity. The authors found no relationship between self-efficacy and decision making and only a marginal relationship for ethical climate on ethical decision intention.

The present study

Bandura (1977) wrote the 'impact of information on efficacy expectations will depend on how it is cognitively appraised. A number of contextual factors, including the social, situational, and temporal circumstances under which events occur, enter into such appraisals' (p. 200). Lewin's psychological field can be seen to encompass social and situation circumstances and psychological climate can be viewed as an empirical representation of the workplace social and situation circumstances with perception of ethical climate representing those relevant to ethical aspects of decision making. From such a perspective, perception of ethical climate may be considered to represent an independent variable affecting employee self-efficacy. Self-efficacy, in turn, given its explanatory value in affecting the magnitude of effort exerted by a person attempting to execute a behaviour or achieve an outcome, can be considered to be a possible intervening variable between perception of ethical climate and the degree of non-compliance an

employee would exert when faced with an unethical situation. From Social Cognitive Theory (Bandura, 1977) self-efficacy would also be expected to explain a significant portion of any 'short-fall' between the degree of non-compliance an employee would judge to be ideal, and the level of non-compliance they would actually exert themselves.

This study tests this proposal applying the model to a sample of public service HRPs responding to a set of hypothetical scenarios which each contained an ethical dilemma. To achieve an ethical outcome for each scenario, some degree of non-compliance was required to be exerted by the HRP. For each scenario participants reported (a) the response the participant would apply were they to be faced with the situation within their own organization, (b) the ideal response to be made by an HRP in response to the ethical dilemma presented in the scenario, and (c) the respondents' self-efficacy in arriving at an ethical conclusion. Two models were tested. The first, Model 1 (Figure 1a) in accord with many previous investigations (e.g. Brown et al., 1998; Flannery and May, 2000; LaTour and Bliss, 1999; Warthley, 2008) treats self-efficacy as an independent variable directly affecting decision making. The second, Model 2 (Figure 1b), in accord with Field Theory and Social Cognitive Theory treats ethical climate as a set of independent variables impacting on decision making via the intervening variable self-efficacy.

Method

Sample All respondents provided informed consent prior to the study. The sample comprised 276 senior HRP practitioners drawn from 57 agencies of the Australian Federal Government (n = 102), 50 agencies of the Western Australian Government (n = 80), and 45 agencies of the Queensland Government (n = 94). Fifty five per cent of the sample was female, and 45% male. Seventy eight per cent of the sample had worked in HR for more than 5 years, and 52% for more than 10 years.

Ethical Climate Instrument Ethical climate was measured using items derived from the ECQ (Victor and Cullen, 1987). For each item, respondents indicated the degree to which the item described their work environment on a 6-point Lickert-type scale (ranging from completely false to completely true). Minor wording changes were made to adapt the ECQ for use within the Australian public sector. Linear composites were created (by taking the arithmetic mean across appropriate items) to represent the five ethical climate dimensions described in Shacklock et al. (2011); *Caring* ($\alpha = .84$), *Law and Rules* ($\alpha = .83$), *Instrumental* ($\alpha = .64$), *Independence* ($\alpha = .73$), and *Efficiency* ($\alpha = .66$).

Ethical dilemma vignettes Following a literature review a preliminary set of 30 vignettes was developed. Following feedback from an expert panel this was revised to a set of 15 scenarios. Each was designed to present an HRP with a scenario comprising an ethical dilemma. Each required some degree of action to be taken by the HRP to result in an ethical outcome. Table 1 presents one such scenario.

Table 1.

Example of scenario (scenario 7) containing an ethical dilemma.

Your organization has formal arrangements for the redeployment of staff who have been displaced for reasons beyond their control. These provisions require that all vacancies be considered for a redeployee before being advertised. The union has been a signatory to these protective provisions. Several vacancies have just arisen as a result of a new initiative and you have been advised that the CEO is anxious to ensure that your agency advertise the positions to ensure the best applicants are recruited, thus bypassing the agency's redeployment processes.

A set of action choices (Table 2) was used to provide responses to each scenario from two perspectives: (a) the participant's response if *they* were faced with that situation within their own organization, and (b) the *ideal* response to be made by an HRP. Measures generated by taking the mean across responses to the 15 scenarios displayed excellent levels of reliability for both own non-compliance ($\alpha = .88$), and ideal non-compliance ($\alpha = .85$).

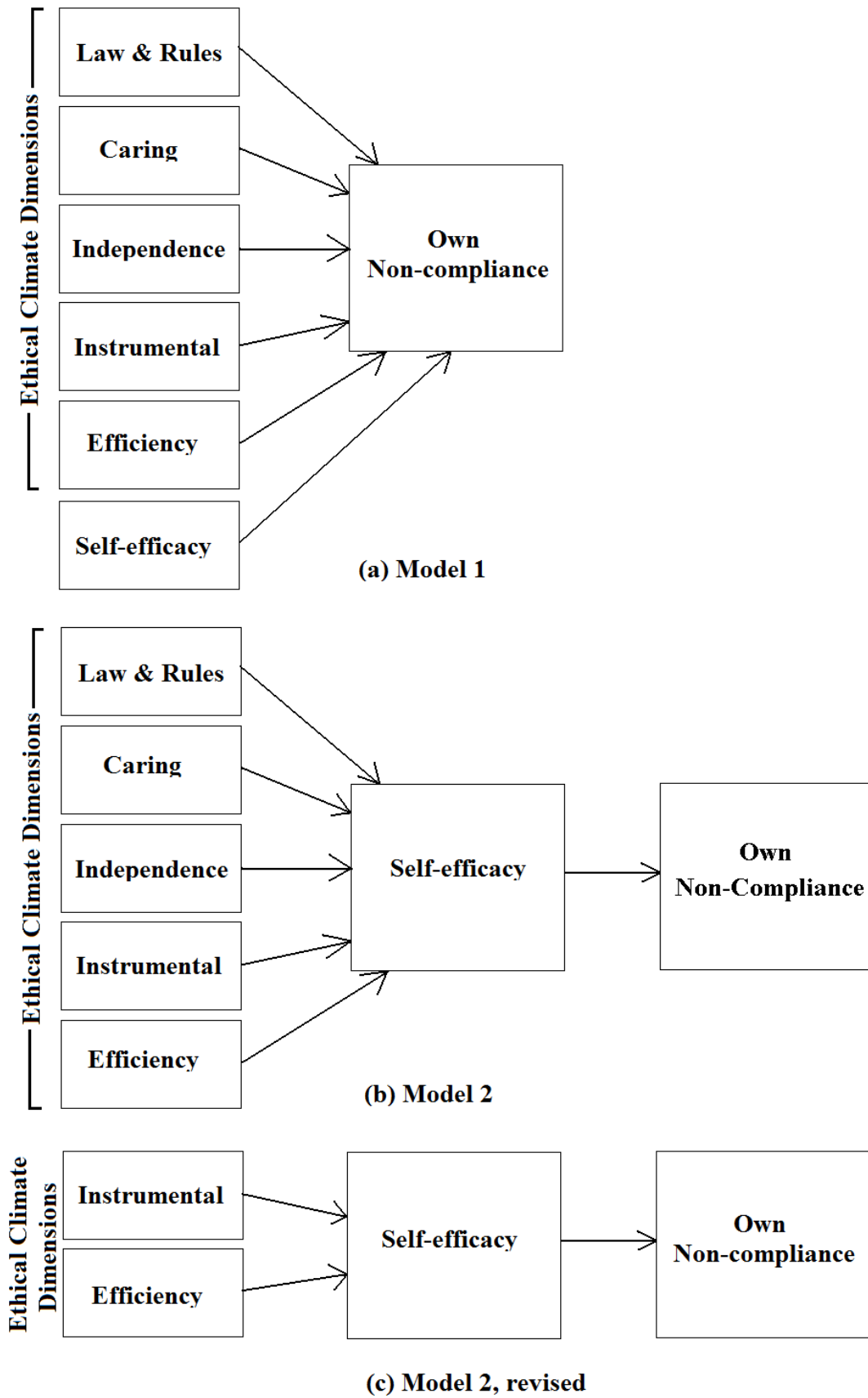


Figure 1. (a) Model 1 proposing ethical climate and self-efficacy as independent variables impacting on respondents predicted non-compliance to an unethical direction or situation. (b) Model 2 proposing self-efficacy to act as an intervening variable. (b) Revised Model 2.

Table 2.
Action choice options (Scenario 7).

1. Agree to bypass the usual redeployment provisions.
2. Advise senior management that, while you will comply with the CEO's request, this is highly irregular, may disadvantage redeployees who are capable of filling the vacancies and may well draw criticism from the union.
3. Advise senior management that such an exception should not be proceeded with before first gaining union agreement and examining the claims of existing redeployees to see if any have the necessary qualifications.
4. Indicate that you are unhappy endorsing this, because it denies the rights of redeployees and contravenes accepted policies and practice to which the agency has committed itself.
5. Refuse to agree to bypassing the redeployment process.

Measure of Self-Efficacy For each scenario, the following item was used as a measure of the respondents' self-efficacy in obtaining an ethical conclusion; "Please indicate, by ticking the appropriate box below, the level of confidence you would have in bringing about an ethical outcome in the immediately preceding situation, which you have just answered, through the action option you have personally chosen to take." Responses were on a seven point Likert-type scale with responses ranging from 'not at all confident' to 'very confident'. For each respondent, a measure of self-efficacy displaying excellent reliability ($\alpha = .88$) was calculated by taking the mean across the 15 self-efficacy items.

Administration of Questionnaire This project was assisted by several central government agencies including; the Office of the Public Service in Queensland, and the Office of the Public Sector Standards Commissioner in Western Australia. Mailing lists of appropriate HRPs within each jurisdiction were developed following discussions with these agencies and other sources. Questionnaires, accompanied by return pre-paid envelopes addressed to the University of the first author, were distributed via mail. No incentives were provided for participation and all responses were confidential.

Results

In all analyses reported below, the unit of analysis is the individual and so climate scores represent their individual *psychological climate*. Consequently, estimates of agreement of climate scores, important when aggregated *psychological climate* scores are used to represent the aggregate organisational climate of workgroups, are not relevant (James, 1982).

There was strong support for the notion the set of scenarios represented ethically challenging situations (Table 3). The mean percentage of participants judging the scenarios to contain an ethical dimension is 91.2%. This ranged from 72.9% for scenario 15 (relating to downsizing) to 97.1% for both scenarios 2 and 6 (relating to enterprise bargaining and performance management, respectively). In an attempt to evaluate whether ethical climate affects HRPs' judgments regarding whether, or not, a situation contains an ethical dilemma, a new variable was created representing the total number of scenarios each HRP identified as containing an ethical dilemma. This variable was entered as the dependent variable and the five ethical climate dimensions were entered as independent variables in a standard multiple linear regression. The analysis found ethical climate did not affect the likelihood of participants viewing the scenarios as containing an ethical dimension, $R = .17$, $F(5,224) = 1.37$, $p > .05$.

Also shown in Table 3 are, for each scenario, the mean responses of the level of non-compliance respondents judged themselves likely to display, the mean level of non-compliance they judged to be ideal, and the mean level of self-efficacy associated with their ability to reach an ethical outcome. As one might expect, level of non-compliance the respondents judged they personally would exhibit falls short of the level they describe to be the ideal.

Table 3.

For each scenario, the percentage of HR practitioners responding whether the scenario contained an ethical dimension, the mean level of non-compliance judged to be ideal and judged likely to be exhibited by themselves ('Own'), and self-efficacy.

Scenario	HRM Topic	Ethical Dimension	Ideal Mean (SD)	Own Mean (SD)	Ideal-Own difference	Self-efficacy Mean (SD)
1	Staff Selection	96.7%	4.20 (1.14)	3.39 (1.06)	.81	5.19 (1.68)
2	Enterprise Bargaining	97.1%	2.94 (.93)	2.45 (.73)	.49	5.43 (1.43)
3	Staffing Requirements	92.6%	3.89 (1.10)	3.13 (.85)	.76	4.78 (1.72)
4	Downsizing (of organisation)	83.6%	2.94 (.96)	2.18 (.84)	.76	4.78 (1.86)
5	Safety	93.8%	3.41 (.74)	3.09 (.65)	.32	5.81 (1.15)
6	Performance Management	97.1%	4.18 (1.13)	4.06 (1.07)	.12	6.22 (1.05)
7	Redeployment	92.6%	3.66 (.96)	3.19 (1.00)	.47	5.51 (1.50)
8	Recruitment	94.5%	3.12 (.92)	2.87 (.86)	.25	5.90 (1.13)
9	Workers Compensation	83.1%	3.79 (1.04)	3.47 (1.18)	.32	5.76 (1.18)
10	Substance Abuse	89.1%	3.91 (.96)	3.84 (1.01)	.07	5.77 (1.25)
11	Equity/Merit	92.8%	2.77 (1.02)	2.51 (.84)	.26	6.04 (1.06)
12	Staff Reductions	95.6%	2.84 (.97)	2.48 (.74)	.36	5.36 (1.42)
13	Performance Pay	91.6%	3.47 (.89)	2.87 (.93)	.60	5.27 (1.38)
14	Consultant Contracting	96.3%	2.68 (.78)	2.23 (.58)	.45	5.14 (1.58)
15	Downsizing (of the local HR area)	72.9%	3.47 (.93)	3.11 (.92)	.36	5.17 (1.45)

Model Testing

Data were entered into AMOS (Arbuckle, 1997) to test Models 1 and 2. Maximum likelihood estimation was employed to test all models. The independence model that tests the hypothesized variables are uncorrelated was easily rejected ($X^2(7) = 237.35, p < .0005$). Model 1, in which self-efficacy was proposed to be an independent variable, was tested next. A significant chi-square difference test failed to provide support for Model 1 ($X^2(1) = 1.75, p < .0005$). Fit indices indicated poor fit of the initial model (Table 4), being either below critical thresholds or presented impossible negative values (which may also be an indication of poor model fit of adjusted fit indices, Goetz and Meadows, 2001). The Goodness of Fit Index (GFI = .832), Adjusted Goodness of Fit Index (AGFI = -3.709), Normed Fit Index (NFI = -.420), Incremental Fit Index (IFI = -.422), Comparative Fit Index (CFI = 0.000) were all less than .9 indicating poor support for the model (Byrne, 2001; Ullman, 1996). The Root Mean Square Error of Approximation (RMSEA = 1.107) was greater than .05, also indicating poor fit (Byrne, 2001). The Parsimony Goodness of Fit (PGFI) index is a measure which incorporates both the goodness of fit of the model and the model's parsimony. The value for this analysis is very low (PGFI = .039). Overall the analysis failed to provide support for Model 1.

Model 2, in which self-efficacy was proposed to be an intervening variable between ethical climate and decision making, was tested next. A non-significant chi-square test provided support for Model 2 ($X^2(5) = 1.75, p > .10$), which represented significant improvement over Model 1 ($\Delta X^2(4) = 335.24, p < .0005$). Fit indices also indicated good fit of Model 2 (Table 4). The Goodness of Fit Index (GFI = .998), Adjusted Goodness of Fit Index (AGFI = .990), Normed Fit Index (NFI = .993), Incremental Fit Index (IFI = 1.014), Comparative Fit Index (CFI = 1.000) were all in excess of .9 indicating good support for the model. The Root Mean Square Error of Approximation (RMSEA = .000) was below .05, also indicating good fit. The value for PGFI (.178) is low. Byrne (2001), however, notes that typically 'parsimony-based indexes have lower values than the threshold level generally perceived as "acceptable" for other normed indices of fit' (p. 82). Overall, the analysis provided support for Model 2 which proposed ethical climate to affect an HRP's self-efficacy, which, in turn, affects the degree of non-compliance associated with the HRP's predicted actions in response to a situation presenting an ethical dilemma.

Table 4.

Goodness of fit indices for structural equation analysis of Model 1, Model 2, and revised Model 2.

Index	Model 1	Model 2	Revised Model 2	Value indicating good fit
$\chi^2/d.f$	336.99	.350	.162	< 2
GFI	.832	.998	.999	> .9
AGFI	-3.709*	.990	.997	> .9
NFI	-.420*	.993	.991	> .9
IFI	-.422*	1.014	1.050	> .9
CFI	.000	1.000	1.000	> .9
RMSEA	1.107	.000	.000	> .05
PGFI	.030	.178	.200	

*Negative adjusted fit indices may result with a poor fitting model (Goetz & Meadows 2001)

The ratio of the unstandardized Parameter Estimate divided by the standard error for the parameter estimate was calculated for each path of Model 2 to produce a z score to enable the statistical significance of each path parameter in the model (Table 5). Paths between the two dimensions of ethical climate, *Instrumental* and *Efficiency*, and self-efficacy were significant. The path between self-efficacy and non-compliance was also significant. The analysis did not, however, support the notion that all of the five dimensions of Ethical Climate were important. One of the dimensions, *Independence*, did not appear to have any relationship to self-efficacy. Another of the dimensions, *Caring*, also exhibited a non-significant path to self-efficacy. Given *Caring* exhibits a significant bivariate correlation with self-efficacy ($r = .22, p < .05$), it would appear to exert a statistically redundant effect on self-efficacy due to covariation with other predictors. In an attempt to increase parsimony, a revised model 2 was produced removing the non-significant paths of *Law and rules*, *Caring*, and *Independence*. Following the procedures of Byrne (2001), modification indices were also inspected to establish whether any additional paths should be included in the revised model (for example, a direct path from an ethical climate dimension to non-compliance). This procedure did not result in the inclusion of any additional paths.

Table 5.

Standardised and unstandardised path parameter estimates, associated standard errors (S.E.), and z-scores for each of the paths in Model 2 and revised Model 2.

Path		Standardized Parameter Estimate	Unstandardized Parameter Estimate	S.E.	z score
<i>Model 2</i>					
Law and rules	→ Self Efficacy	.088	.112	.083	1.345
Caring	→ Self Efficacy	.073	.081	.083	.978
Independence	→ Self Efficacy	.050	.055	.065	.849
Instrumental	→ Self Efficacy	-.172	-.167	.070	-2.382**
Efficiency	→ Self Efficacy	.126	.157	.078	2.005*
Self Efficacy	→ Own Non-compliance	.157	.070	.027	2.626**
<i>Revised Model 2</i>					
Instrumental	→ Self Efficacy	-.244	-.237	.057	-4.155**
Efficiency	→ Self Efficacy	.172	.215	.073	2.931**
Self Efficacy	→ Own Non-compliance	.157	.070	.027	2.626**

* sig. .05 ** sig. .01

A non-significant chi-square test provided support for the revised Model 2 ($X^2(2) = .324, p > .05$), although change from the original Model 2 was not significant ($\Delta X^2(3) = 1.43, p > .05$). Fit

indices showed improvement and indicated good fit of the revised model (Table 5). The GFI (.999), AGFI (.997), NFI (.991), IFI (1.050), CFI (1.000) were all in excess of .9 which also indicated good support for the model. RMSEA (.000) was below .05, also indicating good fit. There was also an increase in parsimony (PGFI = .200) for the revised model.

Respondents' rating of the ideal response to ethical dilemmas

Analyses presented above are consistent with the expectation, from Social Learning Theory, that HRP self-efficacy will affect HRPs own responses when presented with an ethical dilemma. Social Learning Theory would not, however, lead to the expectation that self-efficacy would affect the HRPs' rating of the ideal response to an ethical dilemma. The data supported this expectation, with no relationship found between self-efficacy and the ideal level of non-compliance ($r = -.030$, $p > .10$). Social Learning Theory would predict self-efficacy to explain a significant proportion of the difference between an individual's own action and that which they judge to be ideal. For each respondent, the difference between the level of non-compliance judged to be ideal and their own level of non-compliance was calculated (Table 3). These difference scores were correlated with self-efficacy and a strong relationship was found ($r = -.84$, $p < .0005$) in which 70.7% of the variation in the difference between the ideal non-compliance and their own non-compliance could be explained in terms of self-efficacy.

Conclusion

In this study, good support was found for a model derived from Field Theory (Lewin, 1943/1975) and Social Cognitive Theory (Bandura, 1977). The model proposed self-efficacy to be an intervening variable between perception of ethical climate and the degree of resistance employees would display to unethical organisational directives. Self-efficacy was also found to explain the majority of the short-fall in their own predicted non-compliance with respect to the level of non-compliance they judged to be ideal.

Results presented here are in accord with relationships between variables found in many studies outside the ethical decision making literature. First, they are consistent with studies which describe self-efficacy as a dynamic characteristic of the individual which is modified by feedback from the environment (e.g. Campbell and Hackett, 1986; Johnson et al., 1996). Second, they are consistent with the small number of studies which describe that feedback in terms of organisational climate (e.g. Hoy and Woolfolk, 1993; Brown et al., 1998). Third, they are consistent with the very large body of research reporting significant links between self-efficacy and both goal setting and performance (Bandura, 1993).

The results, however, contrast with the only other study we have identified (Flannery and May, 2000) which examined both ethical climate and self-efficacy in the context of ethical decision making. Flannery and May examined responses of managers within the metal-finishing industry regarding environmental decisions in response to scenarios containing an ethical dilemma. The authors failed to find support for their prediction managers' decision intentions regarding treatment of hazardous wastewater would be influenced by their levels of self-efficacy. They also report a non-significant correlation between ethical climate and self-efficacy. The results of Flannery and May also contrast with those of other studies in other ways. For example, whereas Kurland (1995) found personal moral obligation to be the strongest predictor of insurance agents' ethical intentions, Flannery and May found this variable to be of little importance. It is not clear what factors lead to the divergent results of the present study and those of Flannery and May (2000). Both studies employed hypothetical scenarios as stimuli and planned actions as dependent responses. Both studies also used items of the ECQ of Victor and Cullen (1988) to measure ethical climate. And although Flannery and May used only one dimension from the ECQ to represent ethical climate, that dimension, *Instrumental*, was one of the two climate dimensions for which significant relationships were found with self-efficacy in this study. The two studies certainly differ in terms of populations sampled. In the earlier study it was private sector managers within the metal finishing industry, whereas here it was public sector HRPs. Consequently, the ethical dilemmas were certainly quite different. In the earlier study they concerned environmental issues and in the current study, HRM issues. Flannery and May observed;

Also informative were a few qualitative statements written on questionnaires next to the personal moral obligation items (for instance, “We are required legally, not ethically or morally”). These statements indicated that because disposing untreated hazardous wastewater was illegal, respondents perhaps suppressed feelings of personal moral obligation or considered them irrelevant. (p. 656)

In the light of these comments, the responses Flannery and May received from their participants would appear to be in many cases a consequence of legal prescription. In such a situation, individual variables such as self-efficacy would not be expected to influence decision making. Their responses, therefore, may to some extent be analogous to the responses made by HRP within this study where they were required to provide the ‘ideal’ response. In accord with Social Cognitive Theory, these ideal responses were found not to be correlated with self-efficacy.

Limitations of the study

This study was limited to an examination of ethical decision making of HRPs within the Australian public sector. The study was also limited to examining predicted actions of HRPs when faced with hypothetical scenarios. (Albeit these scenarios had been fully pre-tested in a pilot and determined to be highly realistic and relevant to HR work.) Consequently, within the context of the limited number of studies which have examined ethical climate, self-efficacy, and ethical decision making, the generalizability of the findings presented here can only be evaluated in the context of future studies. This study was also limited by the very common problem that measurement was made on each of the variables at the same time and none were under the control of the investigators. This serves to limit our capacity to be certain of any cause and effect relationships we may wish to conclude. In this study, it is possible the requirement to provide an ideal response to scenarios served to provide some degree of priming of respondents’ responses regarding their own hypothetical actions. If such an effect were present, however, the likely effect is for HRP responses to be biased toward the action they judge to be ideal. Given self-efficacy was found to be correlated with respondents’ ‘own’ responses, but uncorrelated with ‘ideal’ responses, the expected outcome of any such priming effect would serve to underestimate the strength of the relationship between self-efficacy and HRP intended actions.

Implications for future research and practice

Despite empirical evidence to the contrary, many ethical climate researchers (e.g. Mulki, et al., 2008; Stewart et al., 2011; Mayer et al., 2010) treat ethical climate as a unidimensional construct. The results of this study, along with those of Bulutlar and Öz (2009) and Smith et al. (2009) would argue otherwise. Each of these studies measured several dimensions of ethical climate, and each found relationships to vary in strength for different dimensions with other variables. For example, in contrast to some other climate dimensions, *Caring* in this study, displayed a non-significant relationship with self-efficacy; in Smith et al.’s study (2009) *Caring* displayed a non-significant relationship to the misreporting of project status by project members; and in the study by Bulutlar and Öz (2009) *Caring* was related to only two of the four dimensions of bullying (when others were significantly related to three or four of them). These results serve to argue for the treatment of ethical climate as a multidimensional construct. An interpretation of the results of this study and that of Flannery and May (2000) is that it is likely that in some situations self-efficacy and ethical climate are factors influencing ethical decision making of managers. Where strong legal prescription overrides the capacity of the individual to act, however, these factors will not be significant. It is important, therefore, in future studies for researchers to ask questions regarding the degree of latitude a manager believes to be available, within legal or regulatory constraints, when they are presented with an ethical scenario. Several researchers have used measures of self-efficacy to represent the effectiveness of ethics training (e.g. Jensen and Richert, 2005; Mason and Ellershaw, 2010). The results of this study serve to support the notion that self-efficacy provides a psychological characteristic by which ethical climate affects ethical decision making. These results serve to support the idea presented by Baggett (2007) that in practice, measures of self-efficacy should be used as a measure of effectiveness of ethics programs.

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