Employee Ownership and Preferences for Organisational Control.

A dissertation submitted in partial fulfilment of the requirements for the Degree of Master of Science in Applied Psychology At the University of Canterbury

By Kimbal John Fraser

2010

Research Supervisors:

Professor Simon Kemp, University of Canterbury

Dr Sanna Malinen, University of Canterbury
# Table of Contents

Acknowledgements ................................................................................................................................ III

List of Figure ........................................................................................................................................ IV

List of Tables ........................................................................................................................................ V

1. Abstract........................................................................................................................................... 1

2. Introduction................................................................................................................................... 2
   2.1 Psychological Ownership ........................................................................................................... 4
   2.2 Organisational Commitment .................................................................................................... 8
   2.3 Satisfaction ............................................................................................................................... 9
   2.4 Organisational Justice ............................................................................................................. 9
   2.5 Organisational Citizenship Behaviours .................................................................................. 12
   2.6 Effectiveness of Employee Ownership .................................................................................. 13
   2.7 Implementation ...................................................................................................................... 15
   2.8 Control ................................................................................................................................... 16

3. Experiment 1 .................................................................................................................................. 20
   3.1 Method ................................................................................................................................... 20
      3.11 Participants .......................................................................................................................... 20
      3.12 Design ............................................................................................................................... 20
      3.13 Materials ............................................................................................................................ 21
      3.14 Procedure ........................................................................................................................... 24
   3.2 Results ..................................................................................................................................... 24

4. Experiment 2 .................................................................................................................................. 28
   4.1 Method ................................................................................................................................... 28
      4.11 Participants .......................................................................................................................... 28
      4.12 Design ................................................................................................................................ 29
Acknowledgements

Thanks to my supervisors Professor Simon Kemp, and Dr Sanna Malinen.

And to the Great Spirit – free at last.
List of Figures

Figure 1. Mean scores for survey questions across survey scenarios.................................25

Figure 2. Graph of interaction between scenario and male and female on the satisfaction question......................................................................................................................27

Figure 3. Means scores for dependent measures (justice, commitment, ownership, and satisfaction).....................................................................................................................34

Figure 4. Interaction between governance control (non- vs. present) and group (worker vs. non-worker) for the question on feelings of ownership .................36

Figure 5. Three-way interaction between governance control (non- vs. present), operational control (non- vs. present), and group (worker vs. non-worker) for the dependent measure satisfaction. ..................................................37

Figure 6. Mean scores for survey questions across survey scenarios.................................44
List of Tables

Table 1. Introduction page used for Experiment 2 .............................................................. 30

Table 2. Scenario 4 as used in Experiment 2 ................................................................. 32

Table 3. Scenario 4 as used in Experiment 3 ................................................................. 43
1. Abstract

Employee ownership describes the situation where employees own an equity stake in an employing organisation. Psychologists have found that employee ownership positively relates to several attitudes that contribute to organisational effectiveness, including: Organisational Commitment, Job Satisfaction, Organisational Justice, and Psychological Ownership. Contrarily, economists point out that employee owned firms exhibit reduced value maximisation compared to investor owned firms, and suggest that employee influence in decision making produces suboptimal outcomes. This thesis investigated whether the psychological effects related to employee ownership are affected by the level of employee control over the organisation.

Experiment 1 investigated if individuals display differing preferences for three factors related to formal and psychological ownership: equity, control, and information, and it was found that greater levels of each factor were preferred. Experiment 2 investigated which of two types of control, operational control or governance control, were preferred for different employee ownership conditions. Higher levels of control were preferred in all cases with governance control preferred overall. Experiment 3 investigated if the preference for governance or operational control changed as the at-risk component of employee remuneration changed. As at-risk remuneration increased, greater levels of control were preferred, and perceptions of organisational justice decreased. Overall it appeared that full organisational control produces the best outcomes in terms of organisational commitment, satisfaction, organisational justice, and psychological ownership, although acceptable outcomes are still possible with decreased levels of control.
2. Introduction

Employee ownership describes an employment relationship where the employee has an ownership stake in the employing organisation. This differs from the more prevalent form of employment relationship where the organisation is owned by investors and employees are hired for their labour. Two common types of employee ownership are worker cooperatives and employee share ownership schemes.

In Worker Cooperatives members of the cooperative (employees) collectively own the organisation. The size of the ownership stake held by each member may vary; usually no external parties will own a stake in the organisation; and members contribute to decision making with a one person-one vote system (Dow, 2003; Hansmann, 1996; Kruse & Blasi, 1998). Worker cooperatives occur predominately in small- to medium-sized firms, with the plywood manufacturing cooperatives in the United States and Mondragon enterprises of Spain being notable examples (Dow, 2003; Kruse & Blasi, 1998).

Employee share ownership has become the predominant form of employee ownership and has attracted much research interest. It will be the type of employee ownership investigated in this study.

Employee share ownership is an employment arrangement where individual employees own a number of shares in their employing organisation. Employees will own shares either directly or indirectly through a trust, usually in combination with external share owning investors who will also own a significant number of shares (Kruse & Blasi, 1998). Typically in this form of employee ownership there will be a definite separation in roles between workers, managers, and investors; the quantity of shares will not necessarily be distributed equally among shareholders and a significant proportion of employees will own shares (Pierce, Rubenfeld, & Morgan, 1991).
An example is the Employee Stock Ownership Plan (ESOP) system used in the United States. ESOPs were legally recognised and granted special tax treatment as a form of pension plan in 1974 by the Employee Retirement Income Security Act (ERISA) (Kruse & Blasi, 1998; Logue & Yates, 2000). An ESOP must invest primarily in own-company shares. A company with an ESOP will make tax deductible contributions or use cash to purchase company shares, which are held in trust on behalf of member employees (Culpepper & Gamble, 2004). The tax deductibility of the contributions makes it financially attractive for companies to operate ESOPs (Kruse & Blasi, 1998). The employee member receives the value of their share allocation on retirement or on leaving the firm, so long as any necessary vesting requirements particular to the company have been fulfilled (Kruse & Blasi, 1998). The voting rights associated with the shares may be held by the trustee or passed onto the member employees (Kruse & Blasi, 1998).

Another example of employee share ownership is the Employee Stock Purchase Plan (ESPP). Here employees purchase company shares outright, and gain a direct ownership stake in the employing organisation which includes the voting rights associated with share ownership (Kruse & Blasi, 1998). Employee-owners may be co-owners with outside investors who are not involved in the daily operations of the organisation. Shares may be offered to employees at a discount of up to 15% to provide the incentive of a financial benefit to encourage uptake by employees (Farmer & Geisler, 2007).

There has been substantial growth in the prevalence of employee share ownership in the United States since the mid 1970s where it has become the predominant form of employee ownership. In the United States, employee share ownership in the form of ESOPs, share bonus schemes, and profit sharing plans investing primarily in employer shares, have grown in number from 1,600 in 1975, to 11,400 in 2009 (NCEO, 2010). In 2006 in the U.S. there were an estimated 13.7 million individuals participating in employee ownership with estimated assets of U.S. $925 billion dollars (NCEO, 2010).
The growth of ESOPs, and employee ownership more generally, has attracted considerable attention from business, public policy, labour, and academic groups (Kruse & Blasi, 1998). Interest in employee ownership has focused on the hopes that it has the potential to broaden wealth distribution; and to improve economic performance of organisations through improvement in employee attitudes, behaviours, and improved worker-management cooperation (Kruse & Blasi, 1998; Pierce & Rodgers, 2004; Poutsma, de Nijs, & Poole, 2003). A survey undertaken in the United States in 1986 outlined reasons why ESOPs were formed by companies, 91% to provide an employee benefit, 70% to improve productivity, 36% to reduce turnover, 32% to transfer ownership to employees, and 24% to raise capital for investment (Kruse & Blasi, 1998).

Since the mid 1970s there have been a large number of empirical studies on employee ownership that have attempted to define and explain the effects it has in organisations (Pierce & Rodgers, 2004). Various disciplines have taken an interest in employee ownership: economics, accounting, law, organisational behaviour, and psychology (Pierce & Rodgers, 2004). The dominant pattern of thought is that employee ownership should improve organisational performance, although there are economic models that hypothesise negative performance effects. Economic and macro-organisational behaviour research has attempted to determine whether employee owned organisations are more productive than non-employee owned ones in terms of investment and financial incentives, whereas psychology and micro-organisational behaviour research have investigated the attitudinal and behavioural effects on individuals due to employee ownership (Pierce & Rodgers, 2004).

2.1 Psychological Ownership

Perhaps the most obvious effect of employee ownership is that employees will come to see themselves as owners of the organisation. Pierce and Rodgers (2004) proposed a model of
the psychology of employee ownership that described ownership existing as separate objective (formal) and psychological states.

Formal ownership is represented by the financial equity an employee owns in the organisation (Pierce & Rodgers, 2004; Wagner, Parker, Christiansen, 2003). From a legal perspective formal ownership is accompanied by three fundamental rights: Equity, a right to the object’s physical being and financial value; Information, a right to information about the objects status; and Control, the right to exercise influence over the object (Pierce & Rodgers, 2004; Pierce et al. 1991).

The concept of psychological ownership was introduced by Pierce, Rubenfeld, and Morgan (1991) who proposed that formal ownership by an individual may encourage the development of a psychological sense of ownership over the organisation. Pierce et al. (1991) proposed that psychological ownership would help to explain attitudinal and behavioural effects arising from employee ownership of the organisation.

Psychological ownership can be described as a state of mind in which a person has feelings of possessiveness and of being psychologically tied to the target of ownership (Pierce et al., 1991), and where the individual feels the target or a piece of it is “theirs” (Pierce, Kostova, & Dirks, 2003). Pierce, Kostova, and Dirks (2001) offered an explanation as to how individuals develop feelings of ownership and identified three mechanisms or “routes” through which psychological ownership emerges in individuals.

(1) Controlling the target. Research has shown that control exercised over a particular target will result in feelings of ownership for that target. Organisations give members the opportunity to exercise varying degrees of control over various factors which may become the target of psychological ownership. The more control the stronger the feelings of ownership over the target. For example, autonomous job designs enable more control over jobs and produce stronger feelings of psychological ownership, whereas centralised hierarchical job designs limit
individual control over jobs producing weaker feelings of ownership (Pierce et al., 2001; Pierce et al., 2003).

(2) Intimate knowledge of the target. The more information and knowledge an individual has about a target the stronger their association with it and the stronger their feelings of ownership over it (Pierce et al., 2001; Pierce et al., 2003). Organisations provide members with the opportunity to gain knowledge of various targets through association and information about them, such as the organisation mission, its goals, and performance (Pierce et al., 2001; Pierce et al., 2003). The better members feel they know an organisation the stronger their feelings of ownership.

(3) Investing the self in the target. The investment of self through investment of time and effort into the target causes the self to feel as one with, and to develop feelings of ownership over the target. Organisations provide their members with the opportunities to invest themselves into facets such as jobs, products, and customers, and therefore experience feelings of ownership over these facets (Pierce et al., 2001; Pierce et al., 2003). Likewise having responsibility for a target is also likely to result in psychological ownership. If an individual feels responsible for a target then they will invest time and energy to ensure its well being and develop a sense psychological ownership for it (Pierce et al., 2003).

Psychological ownership can be organisation-based or job-based (Mayhew, Ashkanasy, Bramble, & Gardiner, 2007). Organisation-based psychological ownership is an individual’s feelings of possession and relatedness to the organisation as a whole, whereas job-based psychological ownership is an individual’s feelings of possession over their job exclusively. Both are attitudinal states, rather than enduring personality traits, and therefore context specific being influenced by the current state of the organisation and job (Van Dyne & Pierce, 2004). Mayhew et al. (2007) found that organisation-based and job-based psychological ownership were distinct work based attitudes differentiable form one another.
Pierce et al. (2001) hypothesised that organisation-based psychological ownership was more likely to arise when the features of the formal ownership arrangement in an organisation enabled the developmental mechanisms necessary for psychological ownership to be realised (investing self in target, knowing the target, and controlling the target). The three fundamental legal rights that define ownership (equity, information, and control) parallel the mechanisms proposed by Pierce et al. (2001) that bring about psychological ownership (Pierce & Rodgers, 2004). Pierce and Rodgers (2004) proposed that employee ownership systems designed to provide the legal rights of ownership will provide the necessary conditions for psychological ownership to emerge, thus linking formal and psychological ownership.

Pierce and Rodgers (2004) proposed a process of how psychological ownership may positively affect employee attitudes and behaviours and provide motivation for the employee-owner to contribute to the wellbeing of the organisation. By extending the opportunity of organisational ownership to employees, sharing organisational information, and permitting employee involvement in decision making, the employer communicates a message to the employee that he or she is valued and important to the organisation. As employees internalise the belief that they are competent, important, and valuable to the organisation they will be motivated to work hard to maintain that self image. Similarly, as employees come to increasingly experience a sense of ownership over the organisation, the organisation becomes a part of the employee owner’s extended sense of self. The self regulatory mechanisms of self-efficacy and self-enhancement provide the performance motivation to maintain or enhance that self image which includes the organisation (Pierce and Rodgers, 2004). Summed up as, “It is when the owned object is a part of the self and the self is motivated to maintain or enhance the sense of self that employee owners are motivated to improve organisational performance and ensure the vitality of the organisation” (Pierce and Rodgers, 2004, p. 606).
2.2 Organisational Commitment

Several organisational attitudes and performance behaviours relate to psychological ownership (Mayhew et al., 2007). Two specific attitudes are Organisational Commitment and Job Satisfaction (Mayhew et al., 2007). Commitment and satisfaction represent evaluative tendencies toward a target, and have been found to be distinct from psychological ownership which represents a sense of possession of a target (Van Dyne & Pierce, 2004; Wagner, Parker, & Christiansen, 2003). There is however a demonstrable positive relationship between the constructs; as an individual’s level of psychological ownership increases so do the levels of organisational commitment and job satisfaction experienced (Mayhew et al., 2007).

Organisational commitment is described by Meyer and Allen (1991) as a desire to maintain an association with an organisation. In their three-component conceptualisation of organisational commitment Meyer and Allen (1991) describe it as having separate affective, normative, and continuance components. Affective commitment is the employee’s emotional attachment to, identification with, and involvement in an organisation (Meyer & Allen, 1991). By definition it would be expected that affective commitment would be closely related to psychological ownership (Mayhew et al., 2007), and several researchers have reported empirical evidence that supports a positive relationship between the two (Van Dyne & Pierce, 2004; Vandewalle, Van Dyne, & Kostova, 1995). Avey, Avolio, Crossley, and Luthans (2009) found a correlation of $r = .48$ between psychological ownership and affective commitment toward the organisation.

According to Meyer and Herscovitch (2001) commitment binds an individual to a course of action relevant to a particular target. Individuals with strong affective commitment are likely to engage in behaviours that are beneficial to the target (Meyer & Herscovitch, 2001). When the target of commitment is an entity such as an organisation and the commitment experienced is affective commitment the resulting behaviours may be very general in scope (Meyer &
Herscovitch, 2001). Affective commitment correlates strongly with a range of outcomes such as: turnover, turnover intention, and absenteeism (all negatively); and job performance, and organisational citizenship behaviours (positively) (Meyer & Herscovitch, 2001).

2.3 Satisfaction

General satisfaction was proposed by Van Dyne and Pierce (2004) to arise in individuals when they possess feelings of ownership for an organisation. General satisfaction levels are based on an evaluation of the overall work situation, whereas Job Satisfaction more specifically focuses on aspects of a particular job (Weiss & Cropanzano, 1996; as cited in, Van Dyne & Pierce, 2004). Research into possession has demonstrated that individuals develop positive evaluations of their possessions, judging owned possession more favourably than those that are not owned. It follows that employees who have developed a sense of psychological ownership over an organisation will have higher levels of general satisfaction (Van Dyne & Pierce, 2004). And when an employee’s evaluation of an organisation is positive, by way of general satisfaction, this will increase job satisfaction (Van Dyne & Pierce, 2004).

Support for a relationship between psychological ownership and job satisfaction has been found in several studies (Van Dyne & Pierce, 2004; Vandewalle, Van Dyne, & Kostova, 1995). Mayhew et al. (2007) found that organisation-based psychological ownership was related to job satisfaction and Pierce, Rubenfeld, and Morgan (1991) found that job satisfaction was related to formal employee ownership dependent on individuals also developing psychological ownership. Avey et al. (2009) found a correlation of $r = .49$ between psychological ownership and job satisfaction.

2.4 Organisational Justice

Organisational Justice also relates to psychological ownership. Organisational justice describes the perceived fairness of treatment received from an organisation by both individuals
and by groups (Aryee, Budhwar & Chen, 2002). Organisational justice consists of 3 dimensions: Distributive justice – the perceived fairness of allocation decisions; Procedural justice – the perceived fairness of the organisational process used to make decisions; and Interactional justice – the perceived quality of interactions between individuals and decision makers (Aryee, et al. 2002; Patterson, Green & Cary, 2002).

Chi and Han (2008) proposed that organisational justice acts as a mediating variable between formal ownership and psychological ownership. Justice perceptions are positively related to organisational practises such as profit sharing, participation in decision making, and information sharing (Aryee, Chen, & Budhwar, 2004). Justice perceptions in turn influence employee attitudes toward the organisation (Aryee et al., 2004). Chi and Han (2008) noted that the three rights associated with formal ownership (equity, control, and information), are similar to the practises that have proven to be related to the development of distributive and procedural justice (profit sharing, participation in decision making, and information sharing), which in turn are similar to the three routes to psychological ownership described by Pierce et al. (2001) (controlling target, knowledge of target, and investment of self). Chi and Han (2008) then reasoned that formal ownership should lead to higher levels of perceived justice, resulting in higher levels of positive affect and psychological ownership for the organisation.

Distributional justice mediates the relationship between the equity right and psychological ownership (Chi & Han, 2008). The equity right of formal ownership allows the employee a claim on the profits of the organisation (Kruse & Blasi, 1998). Distributional justice perceptions are based on the perceived fairness of allocation decisions (Aryee, et al. 2002; Patterson et al. 2002). Chi and Han (2008) proposed that if employees feel fairly treated after participating in profit sharing then they will feel a sense of distributional justice. Higher levels of perceived distributional justice will result in higher levels of psychological ownership and other organisational attitudes (Chi and Han, 2008). Chi and Han (2008) argued that an employee’s
distributive justice perceptions, based on the perceived fairness of the exchange of work effort for financial rewards, will mediate the relationship between employee profit sharing programs and psychological ownership for the organisation.

Procedural justice mediates the relationship between the control right and psychological ownership (Chi and Han, 2008). Formal employee ownership may include the right to participate in organisational decision making (Rosseau & Shperling, 2003). Participation in organisational decision making allows employees to have a voice in the decision making process and allows them to directly influence decisions and outcomes (process and decision control). This participation gives employees control over procedures increasing procedural justice perceptions (Chi & Han, 2008). Pierce et al. (2001) stated that control exercised over a particular target will result in feelings of ownership over that object, and participation in organisational decision making by employees has been shown to increase levels of psychological ownership (O’Driscoll, 2006; Pierce et al., 2004). Chi and Han (2008) argued that the relationship between formal ownership and organisational ownership is mediated by an employee’s perceptions of procedural justice due to the opportunity to contribute to decision making in the organisation.

Procedural justice mediates the relationship between the right to information and psychological ownership (Chi & Han, 2008). Formal ownership entails the right to provision of information on the state of the target (Pierce et al. 1991; Pierce & Rodgers, 2004). The more information and knowledge an individual possesses about a target the stronger their association with it and the stronger their feelings of ownership over it (Pierce et al. 2001). Shperling and Rousseau (2003) proposed that sharing business information can show a desire to promote a common frame of reference between managers and employees especially in decision making and that the extent to which employees are provided information on the business influences their feelings of organisational ownership. Pierce and Rodgers (2004) argued that access to organisational information positively influences employee’s feelings of ownership. Chi and Han
(2008) argued that these observations can be explained thus: provision of business information to employees contributes to perceptions of procedural justice which in turn promotes levels of psychological ownership.

Chi and Han (2008) used Structural Equation Modelling (SEM) to test the linkages between the three rights of ownership (equity, control, and information) and psychological ownership, and examine the mediating roles of distributional and procedural justice. They tested both fully and partially mediated models of this relationship and found that procedural and distributive justice fully but differentially mediated that relationships between the three ownership rights and psychological ownership (Chi and Han, 2008). As one of the few studies to examine the relationship of justice and psychological ownership, Chi and Han (2008) also found a positive relationship between perceptions of distributive and procedural justice and psychological ownership. Together these findings add information as to how formal ownership contributes the emergence of psychological ownership (Chi & Han, 2008).

2.5 Organisational Citizenship Behaviours

Attitudes such as commitment, satisfaction, and organisational justice are an important aspect of employee ownership because they relate to positive work behaviours (LePine, Erez, & Johnson, 2002; Van Dyne & Pierce, 2004; Vandewalle, Van Dyne, & Kostova, 1995; Wagner et al., 2003). Positive work behaviours include Organisational Citizenship Behaviours (OCBs) which are discretionary work behaviours not a part of formal job expectations (LePine et al., 2002). For example, helping co-workers, or volunteering for special tasks (Van Dyne & Pierce, 2004).

Psychological ownership influences levels of OCB (Van Dyne & Pierce, 2004; Vandewalle et al., 1995; Wagner et al., 2003). Vandewalle et al. (1995) found that the relationship between psychological ownership and extra role behaviour was mediated by commitment and Van Dyne and Pierce (2004) found that psychological ownership increased the
explained variance in OCB above that explained by commitment, satisfaction, and demographic factors. This is an important finding that adds validity to the claim that psychological ownership is a construct that can help predict employee attitudes and work behaviours beyond that possible with commitment and satisfaction (Van Dyne and Pierce, 2004).

### 2.6 Effectiveness of Employee Ownership

Formal employee ownership is believed to integrate the goals of the employee with those of the organisation, promote employee control over the organisation, and promote the belief that employees have a vested interest in the success of the organisation (Wagner et al., 2003). It has been proposed that aspects of these claims can be explained by the process described above, where a positive change in employee attitudes and behaviours occurs through the development of psychological ownership, related positive organisational attitudes, and resulting pro-organisation behaviours such as OCBs. (Chi & Han, 2008; Mayhew et al., 2007; Pierce et al., 1991; Pierce et al., 2001; Pierce et al., 2003; Pierce & Rodgers, 2004; Van Dyne & Pierce, 2004; Wagner et al., 2003).

At first sight then, employee ownership is all good. However the simple implementation of a formal employee ownership scheme does not guarantee a positive change in employee attitudes and behaviours, or result in automatic improvements in productivity or organisational performance (Blasi, Conte, & Kruse, 1996; Kruse & Blasi, 1998).

Kruse and Blasi (1998) compared the results of nine studies on the effects of ESOPs on organisation productivity and profitability. Only two studies clearly showed significant positive results at the 95 percent level of confidence, and the remaining seven showed positive trends but these were not significant (Kruse & Blasi, 1998). Kruse and Blasi (1998) estimated the productivity difference between ESOP and non-ESOP firms at 6.2 percent. Wagner et al. (2003) reported mixed findings on the relationship between employee ownership and organisational
financial performance with neutral to positive effects, as did Blasi, Conte, and Kruse (1996); Robinson and Wilson (2006).

A more damning view of the results of employee ownership was provided by economic researchers Faleye, Mehrotra, and Morck (2005) in a study of the financial decision making in 226 publicly traded firms with an employee ownership stake. They found that firms with an employee ownership stake compared to other firms: “deviate more from value maximisation, spend less on new capital, took fewer risks, grow more slowly, create fewer new jobs, and exhibit lower labor and total factor productivity” (Faleye et al., 2005, p. 3).

Faleye et al. (2005) proposed that permitting employees a residual claim on the income of an organisation through share ownership is not an effective method of aligning investor and employee interests. Employees hold a fixed claim over a firm’s cash flows in the form of wages and salaries. Employee share ownership provides employees a residual claim and a voice in the governance of the company through the voting rights associated with their shares. Typically the returns that employee owners receive from their fixed claims on the company (wages or salaries) are far greater than those from their residual claims (dividends). Faleye et al. (2005) claim that strategies that lead to shareholder value maximisation are markedly different from those that maximise the combined value of employee fixed and variable claims; and that employees will use their governance rights to pursue strategies that maximise their combined returns and will be detrimental to shareholder value maximisation. Faleye et al. (2005) found that firms with employee share ownership do not maximise shareholder value.

Several researchers have attributed poorer financial performance in employee owned organisations, such as that illustrated by Faleye et al. (2005), to problems arising from collective decision making (E.g.: Dow, 2003; Dow & Putterman, 1999; Hansmann, 1996). Employees are seen as having more heterogeneous preferences than investors. Investors are primarily interested in wealth maximisation, whereas employees hold differing preferences towards aspects of
organisational life such as: risks to income, job security, relative wage levels, and capital expenditure (Dow & Putterman, 1999; Hansmann, 1996). When employees are involved in managerial decision making these varied preferences cause the decision making process to be slow and result in ineffective decisions (Dow & Putterman, 1999). Conversely, in investor controlled firms investor’s homogeneous preference for wealth maximisation simplifies managerial decision making (Hansmann, 1996). Hansmann (1996) stated that the heterogeneous preferences of employees increase the transaction costs of managerial decision making in labour managed firms relative to those in investor controlled firms.

Solutions suggested as a way to avoid the negative effects of heterogeneous preferences on organisational decision making follow a similar vein. Hansmann (1996) suggested that organisational institutions be created that effectively constrain the range of choices available. He mentions shared norms, limitations on voting procedures and outcomes, and reviews by outside agencies (Hansmann, 1996). Hansmann (1996) theorised that if employees are to be given an ownership stake in an organisation then it is most effective to structure the organisation as an entity that is managed on behalf of, not fully controlled by, its employee owners. Similarly, Morck (as cited in; Kwak, 2005) recommended that employee ownership be implemented in such a way that the voting rights associated with company shares are removed from employee control by holding the shares in a trust, or designing other methods of ownership to avoid problems of collective decision making.

2.7 Implementation

The extent to which employee ownership is successful in producing desirable outcomes, such as positive organisational attitudes and behaviours, is determined by how it is implemented (E.g. Kaarsemaker and Poutsma, 2006; O’Driscoll, Pierce, and Coghlan, 2006; Pierce, O’Driscoll, & Coghlan, 2004; Robinson & Wilson, 2006). Factors such as the history of employment relations, human resource policies, and management practises maintained by the
firm all influence the success of employee ownership (Culpepper et al., 2004; Kruse & Blasi, 1998). And as Hansmann (1996) and Morck (as cited in; Kwak, 2005) have theorised, the ownership structure used to implement employee ownership will also affect the success of the employee owned organisation.

Kaarsemaker and Poutsma (2006) investigated employee ownership from the perspective of Strategic Human Resource Management (SHRM). SHRM is the area of Human Resource Management (HRM) that deals with the link between HRM activities, HRM outcomes (e.g. employee attitudes and behaviours), and organisation performance (Kaarsemaker & Poutsma, 2006). Kaarsemaker and Poutsma (2006) were interested in what employee ownership contributes to the organisation as an HRM practise, and what conditions are necessary to obtain positive results. They concluded that for employee ownership to produce desirable positive outcomes two key factors must be present: First, the idea that employees deserve to be owners must be taken seriously and actively promoted within the organisation. Second, the HRM systems should mirror the rights that make up the construct of ownership: participation in decision making, profit sharing, and information sharing. Additionally, for information sharing to be effective employees must receive training in business literacy (Kaarsemaker & Poutsma, 2006).

2.8 Control

Participating in decision making allows the employee-owner to exercise some control over the organisation. O’Driscoll et al. (2006) described how research into the individual-organisation relationship has revealed that the employee’s affective, motivational, and behavioural responses are more positive when the work environment is characterised by low levels of structure and where there is the opportunity to exercise personal control.

Pierce et al. (2004) highlighted the importance of the control dimension to development of psychological ownership in a study on the relationship between work environment structure,
the personal experiences of control that environment permits, and psychological ownership. They identified three sources of work environment structure that influence the amount of control an individual experiences as being: technology, job design, and the design of organisational decision making systems (O’Driscoll et al., 2006).

High levels of technological structure that are routine and system-controlled limit the amount of control experienced, whereas non-routine technologies that permit more flexible work practices are associated with greater levels of control (Pierce et al., 2004). Pierce et al. (2004) found a negative relationship between level of technological routine and employee perceived control.

Autonomous job design allows employees the discretion to plan how they work. Pierce et al. (2004) proposed that highly autonomous job design provides a high level of perceived control and would be expected to increase experienced psychological ownership. A positive relationship between job autonomy and perceived control was observed by Pierce et al. (2004), and by Mayhew et al. (2007).

The third source of work environment structure than can provide control to the employee is participation in decision making. Participative decision making shares authority allowing employees to contribute to the decision making process (Pierce et al., 2004). In typical hierarchical organisational decision making processes where goal setting, planning, operation, and human resource decisions are made by senior managers and passed down the hierarchy, little decisional control remains at the job level (Pierce at al., 2004). In comparison, participative management practises allow employee decisional input into issues relevant to the context of their jobs providing the job holder with greater control over the job (Pierce at al., 2004). Pierce et al. (2004) found a moderately strong relationship between supervisor ratings of employee participation in work related decision making and employee perceived levels of control.
Similarly, Wagner et al. (2003) found a moderate positive relationship between an organisational climate of self determinism and ownership beliefs. A climate of organisational self determination is defined as managerial support for employees initiating and regulating their own actions. In the workplace this is often promoted through participative management practises (Wagner et al., 2003).

These findings show that the degree of control an employee experiences over issues relating to the context of their job increases their feelings of psychological ownership. Pierce et al. (2004) theorised that having control over higher order organisational processes such as strategic decision making and resource allocation would therefore have greater impact on feelings of organisational psychological ownership. If this proposition were found to be true, then Hansmann’s (1996) and Morck’s (as cited in; Kwak, 2005) recommendation to limit employee control in the interest of organisational financial performance would be faced with some strong theoretical resistance.

Hansmann’s (1996) and Morck’s (as cited in; Kwak, 2005) recommendations were based on the argument that when employees are granted a stake in the control of an organisation, by way of an ownership stake and its associated voting rights, then they use this control to maximise the present value of their wage and benefits which is detrimental to overall shareholder wealth maximisation, as illustrated by Faleye et al. (2005). This argument is often stated in economic research into employee ownership as one of key the reasons why employee ownership is not more prevalent in the economy (Dow, 2003; Faleye et al., 2005; Hansmann, 1996). From an economic stand point, the costs of employee ownership are too great rendering employee owned firms inefficient and less effective than investor owned firms. This stance maintained by economists is in direct contrast to the arguments put forward by psychology researchers who have found that formal ownership results in individual attitudes and behaviours which contribute to organisational effectiveness.
It may be possible to reconcile these two arguments if it were found that limiting employee control over an organisation does not impede the positive psychological effects of employee ownership. If this was found to be so, employee ownership could be implemented in such a way so that the scope of employee decision making was limited to issues surrounding the job context, and control over higher order strategic issues was maintained by senior management and investors. In an effort to investigate whether reconciliation is possible this study investigated how the level of control over an organisation affects employee preferences for employee ownership. This information will help determine whether the recommendation to limit the scope of the democratic participation of employees in employee owned organisations is feasible.

Experiment 1 investigated whether individuals were able to differentiate between the three factors which specify the rights of formal ownership, and the necessary mechanisms to psychological ownership – equity, information, and control (see: Pierce & Rodgers, 2004; Pierce et al. 1991; Pierce et al., 2001). Experiment 2 investigating whether individuals have different preferences for operational control (job context) and governance control (higher order strategic) in employee ownership situations. This was done to determine if it would be possible to limit the scope of employee control as a way to avoid negative ramifications on organisational performance (see: Dow, 2003; Faley et al., 2005; Hansmann, 1996), and still retain the positive psychological effects associated with employee control (1996; O’Driscoll et al., 2006, Pierce et al., 2004). Experiment 3 investigated the claim by Faley et al., (2005) that employee owners use their governance rights (votes) to maximised the combined returns of their fixed and variable incomes. Typically the fixed returns employees receive from wages and salaries are greater than those variable returns they receive as equity holders, whereas investors receive only a variable return in the form of dividends. Experiment 3 investigated if individual preference for control differs as the variable portion of total income increases and comes to resemble an investor’s income from dividends.
3. Experiment 1

Pierce and Rodgers (2004) hypothesised that a formal ownership scheme structured around the rights of equity, control, and information would likely result in feelings of psychological ownership towards the organisation. Research has shown that psychological ownership is positively related to commitment, satisfaction, and justice (Avey et al., 2009; Mayhew et al., 2007; Chi & Han, 2008). Thus Experiment 1 sought to determine whether participants would differentiate between four employment scenarios that described different levels of equity, control, and information, and indicate a differing level of preference for each scenario.

3.1 Method

3.11 Participants

There were 19 male and 19 female participants. Ages ranged from 20 years to 59 years with a mean age of 31.6 (SD = 12.25) years. Participants were volunteers, recruited from the researcher’s social contacts. Each participant was tested independently. One questionnaire was excluded from the study as it was returned with an ambiguous response.

There were two groups used in the study. The first consisted of workers. There were 12 male and 8 females in the worker group. Ages ranged from 23 to 59 years with a mean age of 38.25 (SD = 12.9) years. The second group in the study were non-workers consisting mainly of students. There were 7 males and 11 females, ages ranged from 20 years to 44 years with a mean age of 24.2 (SD = 5.56) years.

3.12 Design

The study was a 1-by-4 within-subjects design. Participants were exposed to four levels of the independent variable; scenarios 1 through 4: (1) Employment, (2) Share Trust, (3)
Representative Control, and (4) Direct Control. The presentation order of the scenarios was randomised. There were 4 dependent measures, each representing a different construct: (1) organisational justice, (2) organisational commitment, (3) psychological ownership, and (4) satisfaction.

3.13 Materials

Printed questionnaires were used (Appendix B). Each questionnaire consisted of 4 scenarios followed by four questions. Each scenario represented a particular type of employment situation.

The scenarios were: (1) Employment scenario. As the control, the Employment scenario depicted a typical employment situation where employees did not have equity in the company, control over the company or information regarding the performance of the company.

(2) Share Trust scenario. This scenario depicted an employee ownership arrangement where an allocation of company shares was held in trust for each employee. This is somewhat similar to an ESOP arrangement where voting rights are held by the trustee. Here employee-owners had no control over the company through shares held in trust, nor information about the performance of the company, but did have an equity stake through direct claim on the value of the shares and dividends paid.

(3) Representative Control scenario. This scenario depicted an employee ownership arrangement where employees held shares personally, but as a group elected a representative to vote on company decisions on their behalf. Here employee-owners had representative control of the company, equity through claim on the value of the shares and dividends, and information regarding the performance of the company.
(4) Direct Control scenario. This scenario depicted an employee ownership arrangement where individual employees held shares in the company and were accorded full share-holder rights over the shares, this is similar to an ESPP. Employee-owners had direct control over the company through full voting rights, equity through claim to the value of the shares and dividends, and full information regarding the performance of the company.

The same four questions were asked after each scenario. Each question asked participants to consider the information provided in the scenario and to score the level of the particular dependent variable that they perceived. The questions concerned: (1) Justice, “Considering the information given in the scenario above, how just, or fair, do you believe that this type of employment arrangement is to workers in the company?” (2) Commitment, “Considering the information given in the scenario above, how committed do you believe you would feel towards the company, its goals, and its ongoing success if you were a worker here?” (3) Ownership, “Considering the information given in the scenario above, how would you rate your belief that you personally owned some of this company, i.e. would you see yourself as an owner of the company?” (4) Satisfaction, “How satisfactory would you find the employment situation described in the scenario above if you were a worker in this company?”

Participants recorded responses to each of the four questions on a 7 point Likert-type scale, 1 indicated the lowest level of the dependant variable and 7 indicated the highest level of the dependant variable. Each Likert-type scale utilised anchors that illustrated the negative low end of the scale, the neutral mid-point, and the positive high end of the scale, as in the example below.
1. Employment Scenario.

You are a worker in a company. You receive a wage which is fair for the type of work you do, this is paid to you weekly.

The company has shareholders who are the owners of the company, they receive a portion of any profits the company makes and can sell their shares for money. The value of their shares may increase if the company performs well, or decrease if the company performs badly.

You do not own shares in the company.

Decisions regarding the operation of the company are made by management. Major decisions must gain the approval of the shareholders who have a right to vote on these decisions. Workers like you are not consulted or included in the process of making major company decisions.

Information regarding the performance of the company is provided to the shareholders by management, but not to workers such as yourself.

Questions:

1) Considering the information given in the scenario above, how just, or fair, do you believe that this type of employment arrangement is to workers in the company?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
</table>

2) Considering the information given in the scenario above, how committed do you believe you would feel towards the company, its goals, and its ongoing success if you were a worker here?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not committed at all to the company, its goals, or success.</td>
<td>Neutral</td>
<td>Completely committed to the company its goals and success.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3) Considering the information given in the scenario above, how would you rate your belief that you personally owned some of this company, i.e. would you see yourself as an owner of the company?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitely not an owner.</td>
<td>Neutral</td>
<td>Most definitely an owner.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4) How satisfactory would you find the employment situation described in the scenario above if you were a worker in this company?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would be extremely dissatisfied with this employment situation.</td>
<td>Neutral</td>
<td>I would be extremely satisfied with this employment situation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.14 Procedure

Each participant was given one questionnaire to complete and one envelope for return of the completed questionnaire to maintain anonymity. One chocolate bar per participant was given as an inducement for participation. Participants completed the questionnaires unsupervised. Participants returned the completed questionnaires in the provided envelopes.

Participants first read a standard coversheet and instructions for the questionnaire (Appendix B). Participants then read each of the four scenarios and indicated a response to each of four questions that followed each scenario by circling a number from 1 to 7 on the Likert-type scale (Appendix B). The order and serial position of the scenarios within each questionnaire was randomised. Participants then read a standard debrief sheet before handing in their completed questionnaire (Appendix B).

3.2 Results

Mean scores for the four survey questions (Justice, Commitment, Ownership, and Satisfaction) and their respective standard deviations were calculated for each of the four scenarios (Employment, Share Trust, Representative Control, and Direct Control). These are provided in graph form in Figure 1. A table of these results is in Appendix A.
A one-way repeated measures analysis of variance (ANOVA) was used to establish if there was a significant difference in the mean scores for each survey question across the four scenarios. For all the questions the mean scores increased across consecutive conditions with the Employment condition receiving the lowest scores, the Share Trust condition was scored the next highest, next Representative Control and finally the Direct Control condition received the highest scores in all questions.

For the Justice question there was an overall significant difference in the means across the four scenarios, $F(3, 111) = 22.79, p < 0.001$. The effect size was $\eta^2 = 0.38$. A Bonferroni procedure indicated that the Justice scores for the Employment and Share Trust conditions were not significantly different from one another. Justice scores were significantly different between the other condition combinations ($p < 0.05$).
For the Commitment question there was also an overall significant difference in the means across the four scenarios, $F(3, 111) = 28.49, p < 0.001$. The effect size was $\eta^2 = 0.44$. A Bonferroni procedure indicated that Commitment scores were not significantly different between the Representative Control and the Direct Control conditions. Commitment was significantly different between all other condition combinations ($p < 0.05$).

There was an overall significant difference in the means across the four scenarios for the Ownership question, $F(3, 111) = 61.30, p < 0.001$. The effect size was $\eta^2 = 0.62$. A Bonferroni procedure indicated that all the scores for Ownership were significantly different from one another across all four scenarios ($p < 0.01$).

There was an overall significant difference in the means for the Satisfaction question across the four scenarios, $F(3, 111) = 25.45, p < 0.001$. The effect size was $\eta^2 = 0.41$. A Bonferroni procedure indicated that Satisfaction in the Direct Control condition was scored significantly higher than all the other conditions ($p < 0.01$). Satisfaction in the Representative Control condition was significantly higher than the Employment condition ($p < 0.001$), and the other combinations of conditions were not significantly different.

Two $4 \times 2$ ANOVAS were performed to establish whether there were any significant interactions between the dependant variables and the two groups: Male and Female; and Worker and Non-Worker. One significant interaction was found, this was for the Satisfaction question between Scenario and Male and Female, $F(3, 108) = 3.01, p < 0.05$. The effect size here was small, $\eta^2 = 0.08$. This interaction indicated that Females found the Employment scenario less satisfactory than Males, and that Females found the Direct control scenario more satisfactory than Males (Figure 2).
This interaction may indicate that women find equity, control, and information more important in determining workplace satisfaction than do men. Hence rating the low-level scenario “Employment” as being less satisfactory than did the men, and rating the high-level “Direct control” scenario as being more satisfactory than the men.

Overall the results indicated that respondents preferred the conditions that depicted greater levels of the three rights of ownership: equity, control, and information; to those that depicted lesser levels of these dimensions. The Ownership measure provided the greatest range of scores ($M = 2.18$ to $M = 5.92$). The low Ownership scores in the Employment condition ($M = 2.18$) may have resulted from instructing respondents that workers are not owners. In the Share Trust scenario respondents were also told that they did not personally own shares, however an allocation of shares was held on their behalf. The Ownership score here was $M = 3.68$, close to a neutral score of 4 on the scale.
4. Experiment 2

Experiment 1 indicated clearly that participants were able to differentiate between scenarios and preferred those with greater levels of equity, control, and information.

The control dimension of ownership has been found to carry significant influence over outcomes such as individual attitudes and organisational performance. Pierce et al. (2004) illustrated a positive relationship between control over the job context and feelings of psychological ownership, and Faleye et al. (2005) described how employee control can lead to sub-optimal organisational decision making.

To establish whether employee control can be limited while still obtaining the positive outcomes associated with employee ownership, Experiment 2 investigated whether participants show a preference for either of two types of control: Operational Control or Governance control, while holding equity and information constant. Operational Control represented control over the job context, or “participative decision making” identified by Pierce et al. (2004) as a dimension of work environment structure that contributes to feelings of psychological ownership. Governance Control represented the voting rights associated with company shares and their potential to influence higher order strategic organisational decision making.

4.1 Method

4.11 Participants

There were 55 participants in total, 31 male and 24 female participants. Ages ranged from 18 years to 65 years with a mean age of 31.5 ($SD = 14.37$) years. Participants were volunteers, recruited from the researcher’s social contacts and from the general student population at the University of Canterbury. Each participant was tested independently.
There were two groups in the study; Workers and Students. There were 17 males and 12 females in the worker group. Ages ranged from 18 to 65 years with a mean age of 41.9 ($SD = 12.5$) years. There were 14 males and 12 females in the student group ages ranged from 18 years to 27 years with an average age of 19.9 ($SD = 2.0$) years.

4.12 Design

The study was a 2 (Governance Control: non- versus present) × 2 (Operational Control: non- versus present) within subjects design. Participants were exposed to all four combinations of the independent variables presented in the form of four written scenarios: (1) No Worker Control, (2) Operational Control Only, (3) Governance Control Only, and (4) Operational and Governance Control. The presentation order of the scenarios was randomised. There were 4 dependant measures, each representing a different construct: (1) organisational justice, (2) organisational commitment, (3) psychological ownership, and (4) satisfaction. These were the same dependent measures as used in Experiment 1.

4.13 Materials

Printed questionnaires were used (Appendix C). Each questionnaire consisted of 4 scenarios followed by four questions. Each scenario represented a particular type of employment situation. All four scenarios were preceded by the same introduction which described three roles in a hypothetical organisation, worker, manager, and shareholder; and described the decision-making responsibilities of each role. The introduction also explained that workers owned shares in the organisation from which they may benefit financially (Table 1).
Table 1
Introduction page to survey used for Experiment 2.

Introduction

The introduction below applies to all the scenarios that appear on the following pages.

You are a worker in a company. You receive a wage which is fair for the type of work you do, this is paid to you weekly. As a worker you are responsible for the tasks that are a part of your job and you make basic decisions regarding the performance of these tasks e.g. deciding how hard you will work, how best to carry out the tasks necessary to perform your job, and how dependable you will be as a worker – the same as any worker in any traditional type of job.

The company also employs managers, the managers have more responsibility than workers and are better paid. The managers make decisions regarding the overall operation of the company, decisions such as: the scheduling of work, planning the inputs necessary to complete projects, and allocating work to the workers who are best suited to perform it. Managers are also responsible for the strategies that the company will pursue to be successful in the long term.

The company has shareholders who are the owners of the company. They own shares in the company and receive a portion of any profits the company makes (known as a dividend). The amount of dividend a shareholder is paid is based on the number of shares they own. Shareholders can also sell their shares for money. The value of the shares may increase if the company performs well, or decrease if the company performs badly.

Major company decisions must gain the approval of the company’s shareholders. As owners of the company they have a right to vote to approve or disapprove these decisions. This enables the shareholders to exert some control over the company and protect the money that they have invested in their company shares.

In this company workers also own an allocation of shares. This means that in addition to your regular wage you will receive a portion of any profit the company makes. If the company performs well your shares may increase in value, but may decrease in value if the company performs badly. You may sell your shares if you leave the company. All shareholders, including workers, are provided with information regarding the financial performance of the company regularly.

Please continue and remember this introduction when reading the scenarios that follow.

The scenarios were: (1) No Worker Control. As the control the No Worker Control scenario depicted an employment situation where workers owned shares in a company but did not have either operational control or governance control over the company.
(2) Operational Control Only. This scenario described a situation where workers owned shares in a company and were involved in operational decision making but had no governance control over the organisation.

(3) Governance Control Only. Here workers were depicted as owning shares in the company and as having the governance control accorded to typical shareholders, but where the shareholding workers had no involvement in operational decision making.

(4) Operational and Governance Control. In the final scenario workers were depicted as owning shares with the governance control rights accorded to shareholders’, and also being involved in operational decision making (Table 2).

The same four questions were asked after each scenario; (1) Justice, (2) Commitment, (3) Ownership, and (4) Satisfaction. Each question asked participants to consider the information provided in the scenario and to score the level of the particular dependent variable that they perceived. These were identical to those used in Experiment 1 and responded to with the same 7 point Likert-type scales as before.
Table 2
Scenario 4 as used in Experiment 2.

Scenario 4: Operational and Governance Control.

As explained previously, you are a worker in a company where you are responsible for the tasks that are a part of your job and you make basic decisions regarding the performance of these tasks. In this company there are also managers. Managers have more responsibility than workers and make decisions regarding the overall operation of the company and are responsible for longer term strategies.

In this company workers also actively participate with the managers in decision making about the overall operation of the company. This means that workers are not just responsible for the tasks that are a part of their jobs, they are also involved in work related decisions that would traditionally be the sole responsibility of a manager. Through this involvement in managerial decision making workers are able to share their work-related knowledge, help to improve the performance of the company, and provide a better workplace benefiting everyone in the company. This is known as participative management and is intended to encourage an open and cooperative relationship between management and workers by including workers in some company decision making.

In this company major decisions must gain the approval of the company’s shareholders as they have a right to vote to approve or disapprove these decisions. The shares owned by workers in the company are the same as the shares owned by the other shareholders so the workers are also involved in this process of approving major decisions. Workers therefore also have some control over the company the same as the other shareholders. This is in addition to making decisions about tasks in their jobs, and participating with managers in operational decision making. The purpose of the workers’ shares is to provide the financial benefits of share ownership to workers, and as a consequence of this arrangement the workers’ shares also provide them with some control over the company.

4.14 Procedure

Each participant was provided with one questionnaire to complete and one envelope for return of the completed questionnaire to maintain anonymity. One chocolate bar per participant was given as an inducement for participation. Participants completed the questionnaires unsupervised.

Participants first read a standard coversheet and instructions for the questionnaire (Appendix C). Participants then read the introduction page and then each of the four scenarios, they indicated a response to each of four questions that followed each scenario by circling a number from 1 to 7 on the Likert-type scale (Appendix C). The order and serial position of the
scenarios within each questionnaire was randomised. Participants then read a standard debrief sheet before handing in their completed questionnaire (Appendix C).

4.2 Results and Discussion

Mean scores for the four survey questions (Justice, Commitment, Ownership, and Satisfaction) and their respective standard deviations were calculated for each of the four scenarios (No Worker Control, Operational Control Only, Governance Control Only, and Operational and Governance Control). These are provided in graph form in Figure 3. A table of these results is in Appendix A.
Higher scores were recorded in all four dependent measures as the depicted level of control increased: lowest scores were recorded for no worker control, next was operational control only, then governance control only, and operational control and governance control received the highest scores.
A 2×2 repeated measures analysis of variance (ANOVA) was used to determine whether there were any significant main effects between the levels of the independent variables for each dependant measure, and whether there was any interaction present.

When Operational Control was present Justice was scored more highly, $F(1, 54) = 24.24$, $p < 0.001$, $\eta^2 = 0.31$, and when Governance Control was present Justice was scored more highly, $F(1, 54) = 42.81$, $p < 0.001$, $\eta^2 = 0.44$. There was no interaction between Operational Control and Governance Control for the justice question (Figure 3.1).

When Operational Control was present Commitment was scored more highly, $F(1, 54) = 21.58$, $p < 0.001$, $\eta^2 = 0.29$, and when Governance Control was present Commitment was scored more highly, $F(1, 54) = 66.84$, $p < 0.001$, $\eta^2 = 0.55$. There was no interaction between Operational Control and Governance Control for the Commitment question (Figure 3.2).

When Operational Control was present Ownership was scored more highly, $F(1, 54) = 15.37$, $p < 0.001$, $\eta^2 = 0.22$, and when Governance Control was present Ownership was scored more highly, $F(1, 54) = 100.31$, $p < 0.001$, $\eta^2 = 0.65$. There was a significant interaction between Operational Control and Governance Control for the Ownership question, ownership scores increased at a greater rate when Operational Control was present without Governance control than when Operational Control and Governance Control were present together, $F(1, 54) = 4.88$, $p < 0.05$, $\eta^2 = 0.08$ (Figure 3.3).

When Operational Control was present Satisfaction was scored more highly, $F(1, 54) = 29.64$, $p < 0.001$, $\eta^2 = 0.35$, and when Governance Control was present Satisfaction was scored more highly, $F(1, 54) = 48.88$, $p < 0.001$, $\eta^2 = 0.48$. There was no interaction between Operational Control and Governance Control for the satisfaction question (Figure 3.4).

A 2×2×2 repeated measures ANOVA using the factors Governance Control, Operational Control, and the categorical predictor Worker and Non-Worker was performed to determine
whether there was any significant interactions between the dependant measures and the categorical predictor.

For the dependant measure Ownership there was a significant 2-way interaction between Governance Control and Group, $F(1, 53) = 4.81, p < 0.05, \eta^2 = 0.08$. The direction of the interaction indicated that feelings of ownership for Non-Workers were lower than for Workers when there was no Governance control, and that feelings of ownership for Non-Workers increased to a higher level than Workers when Governance control was present (Figure 4).

![Figure 4](image-url)

**Figure 4.** Interaction between governance control (non- vs. present) and group (worker vs. non-worker) for the question on feelings of ownership.

This result indicates that the non-workers associated stronger feelings of ownership with the condition of governance control than did workers. The more pronounced effect obtained from non-workers may indicate a preference based on expectation rather than experience in the workforce.
For the dependant measure Satisfaction there was a significant 3-way interaction between Governance Control, Operational Control, and Group, \( F(1, 53) = 9.81, p < 0.005, \eta^2 = 0.16 \) (Figure 5).

While both non-workers and workers preferred higher levels of governance and operational control, the non-workers found the situation of having neither operational control or governance control significantly less satisfactory than did the workers. When operational control was present the non-workers’ satisfaction increased to a score higher than the workers’ and the rate of this increase was higher than that of the increase in satisfaction for governance control (Figure 5).

This result may indicate that compared to workers, non-workers have an inflated expectation of the importance of operational control to job satisfaction. The less pronounced effect obtained from workers may indicate an expectation taken from experience of how relevant this dimension is to job satisfaction.
A 2×2×2 repeated measures ANOVA using the factors Governance Control, Operational Control, and the categorical predictor Sex determined that there were no significant interactions between these factors for each dependant measure.

Overall the results indicate that respondents preferred the conditions that depicted employment situations with more control. Respondents preferred least of all the no worker control condition which depicted no operational and no governance control. This condition received the lowest scores on all four dependant variables.

Respondents preferred governance control over operational control. The condition governance control only scored higher on all dependent measures than the condition operational control only. The effect size for governance control was stronger with larger partial eta squared scores evident than those for operational control.

Respondents preferred having both forms of control present together. Governance control and operational control had an additive effect with the condition operational control and governance control receiving the highest scores for all four dependent measures.

The justice, commitment, and satisfaction questions produced similar results with similar means recorded across the four conditions. This may indicate these dependent measures were all measuring a similar construct.

The ownership question provided comparatively lower scores across the four conditions. This result may indicate that control does not have as greater effect on feelings of ownership as it has on the dependent variables of justice, commitment, and satisfaction.

Governance control scored higher than operational control across all scenarios for the ownership question. The effect here was strong, $\eta^2 = 0.65$. This result indicates that operational control by itself does not engender strong feelings of ownership; however the presence of governance control does so.
While respondents were informed in the survey that they owned company shares, it is possible that factors not specified, such as the quantity of equity held, may have more effect on feelings of ownership than control over the company or company operations.
5. Experiment 3

Faleye et al. (2005) hypothesised that employee owners use their governance rights to maximised the combined returns of their fixed and variable claims on the firm. Typically the fixed returns employees receive in the form of wages and salaries are far greater than the variable returns they receive as equity holders.

Experiment 3 investigated if participant’s preferences for operational and governance control change as the fixed portion of their income decreases and the variable portion increases. Experiment 3 also assessed whether participant’s feelings of ownership and justice changed under the same conditions.

5.1 Method

5.11 Participants

There were 20 male and 20 female participants. The range of ages was from 19 years to 66 years, mean age was 36.78 (SD = 12.25) years. Participants were volunteers recruited from the researcher’s social contacts and each was tested individually. Five questionnaires were excluded from the study. Three were returned incomplete, and two were returned with ambiguous responses.

5.12 Design

Experiment 3 was a 1-by-4 within-subjects design. Participants were exposed to four levels of the independent variable – scenarios 1 through 4. The scenarios were (1) Employment, (2) Low Risk, (3) Medium Risk, and (4) High Risk. The order of presentation of the scenarios was randomised. There were 4 dependent measures: (1) Importance of Governance Control, (2) Importance of Operational Control, (3) Organisational Justice, and (4) Psychological Ownership.
5.13 Materials

Printed questionnaires were used (Appendix D). Each questionnaire consisted of a cover sheet including instructions on how to complete the questionnaire, 4 scenarios followed by four questions, and a page requesting basic demographic information. Each scenario described an employment or employee-ownership situation that represented a different amount of risk to the employee by specifying a different ratio of fixed salary to at-risk salary. Higher levels of at-risk salary represented more risk to the employee.

Scenario 1: Employment Scenario. The control scenario depicted a typical employment relationship where employees received a fixed weekly salary with no at-risk component. Employees did not own any shares in the employing company.

Scenarios 2, 3, and 4 represented employee ownership situations where employees also owned company shares. Scenario 2: Low Risk. Employee-owners experienced a low level of risk on the income they received with 75% being fixed and 25% variable based on any dividend paid on their shareholding. Scenario 3: Medium Risk. Employee-owners experienced a medium level of risk on the income they received with 50% being fixed and 50% being based on any dividend paid on their shareholding. Scenario 4: High Risk. Employee-owners experienced a high level of risk on the income they received with 25% being fixed and 75% being based on any dividend paid on their shareholding.

The same four questions were asked after each scenario. Each question required the participant to consider the information provided in the scenario and score the level of the dependent variable that they perceived.

The questions were: (1) Importance of Governance Control, (2) Importance of Operational Control, (3) Organisational Justice, (4) Psychological Ownership,
Participants recorded responses to each of the four questions on a 7 point Likert-type scale, 1 indicated the lowest level of the dependant variable and 7 indicated the highest level of the dependant variable. Each Likert-type scale utilised anchors that illustrated the negative low end of the scale, the neutral mid-point, and the positive high end of the scale, see Table 3.

5.14 Procedure

Each participant was given one questionnaire to complete and one envelope to maintain anonymity of returned questionnaires. One chocolate bar per participant was given as an inducement for participation. Participants completed the questionnaires unsupervised.

Participants first read a standard coversheet and instructions for the questionnaire (Appendix D). Participants then read each of the four scenarios and indicated a response to each of four questions that followed each scenario by circling a number from 1 to 7 on the Likert-type scale (Appendix D). The order and serial position of the scenarios within each questionnaire was randomised. Participants then read a standard debrief sheet before handing in their completed questionnaire (Appendix D).
Table 3
Scenario 4 as used in Experiment 3.

<table>
<thead>
<tr>
<th>Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>You work for a company where you are paid in part by a fixed weekly salary. The company is arranged so that workers also own some company shares. If the company is profitable then in addition to the weekly salary you are also paid a dividend, this is your share of the profit. The amount of dividend paid is variable. If the company makes a large profit then the dividend paid is large, if the profit is small then a small dividend is paid, and if the company makes no profit then no dividend is paid.</td>
</tr>
<tr>
<td>As a worker your total income is the amount of your fixed salary plus any dividend you are due. When the company is performing at an average level, you would expect 25% of your income to be earned from your fixed salary and 75% of your income to be from the dividend. This provides you with a fair income for the work you do. However, the amount of dividend you receive may be more or less than 75% depending on the performance of the company.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) In this situation how important would it be to you to be able to vote for or against major company decisions suggested by management? Voting would enable you to have some governance control over the company.</td>
</tr>
<tr>
<td>2) In this situation how important would it be to you to be able to participate with management in decision making surrounding the daily operation of the company? Participating in work related decisions would give you some operational control over the company.</td>
</tr>
<tr>
<td>3) Considering the information given in the scenario above, how just, or fair, do you believe that this type of employment arrangement is to workers in the company?</td>
</tr>
<tr>
<td>4) Considering the information given in the scenario above, how would you rate your belief that you personally owned some of this company, i.e. would you see yourself as an owner of the company?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rating</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not important</td>
<td>Neutral</td>
<td>Very important</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Definitely not an owner.</td>
<td>Neutral</td>
<td>Most definitely an owner.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5.2 Results

Mean scores for the four survey questions (Importance of Governance Control, Importance of Operational Control, Organisational Justice, and Psychological Ownership) and standard deviations for each were calculated for all of the four scenarios (Employment, Low Risk, Medium Risk, and High Risk). These are provided in Figure 6. A table of these results is in Appendix A.

![Mean scores across conditions](image)

*Figure 6. Means scores for survey questions across survey scenarios.*

A 1-by-4 Repeated Measures ANOVA was used to determine whether there was a significant main effect for each of the dependent measures across the four scenarios. For the dependent measures: Importance of Governance Control, Importance of Operational Control, and Ownership, the mean score increased over consecutive scenarios. The Employment scenario
received the lowest scores and the High Risk scenario received the highest scores. For the measure Justice, the mean scores decreased over consecutive scenarios with the Employment scenario receiving the highest score and the High Risk scenario receiving the lowest score.

For Importance of Governance Control there was a significant main effect across scenarios, \( F(3, 117) = 95.40, p < 0.001, \eta^2 = 0.71 \). A Bonferroni procedure indicated that scores between the medium and high risk scenarios were not significantly different, but all other scenario combinations were significantly different \((p < 0.005)\). For Importance of Operational Control there was a significant main effect across the four scenarios, \( F(3, 117) = 53.54, p < 0.001, \eta^2 = 0.58 \). A Bonferroni procedure indicated that scores the medium and high risk scenarios were not significantly different, but all other combinations were significantly different \((p < 0.05)\). There was a significant main effect for Justice \( F(3, 117) = 3.11, p < 0.05, \eta^2 = 0.07 \). A Bonferroni procedure indicated that only scores between the employment and high risk scenarios were significantly different \((p < 0.05)\). All other combinations were not significantly different.

Ownership also returned a significant main effect \( F(3, 117) = 99.50, p < 0.001, \eta^2 = 0.72 \). The Bonferroni procedure indicated that scores for ownership in all combinations of scenarios 1 through 4 were significantly different with the exception of scenarios 3 and 4 which were not \((p < 0.05)\). A 2 ×4 repeated measures ANOVA was performed to assess if there was any interaction between the mean scores and sex for each scenario. There were no main effects for sex and no interactions present.

Overall the results indicated that as the level of at risk salary increased as a percentage of total salary the preference for control and feelings of ownership also increased.

For the dependent measures Importance of Governance Control and Importance of Operational Control respondents preferred greater levels of both as the level of at-risk salary increased as a percentage of total salary. Scores for both measures were very similar suggesting than both forms of control were valued similarly. The Employment scenario provided the lowest
preference for control and the High Risk scenario provided the highest preference for control in both measures. This result indicates that as risk over income increases employees prefer greater control over the organisation and the operation of work.

For the dependent measure Ownership respondents indicated that the level of perceived ownership increased as the level of at-risk salary increased as a percentage of total salary. This result indicates that as employees experience greater levels of risk over income they express greater feelings of ownership. The lowest mean score for the Ownership measure was $M = 1.55$ which was obtained for the Employment scenario. This low score may be a result of instructing respondents that the company has shareholders but that they do not own company shares.

The scores for the dependent measure Justice displayed a different trend to the other three dependent measures. Respondents indicated that employment situations with lower levels of risk were perceived as being fairer than employment situations with higher levels of risk. There was only a small difference in perceived fairness between the low risk and medium risk conditions.
6. Discussion

Employee ownership has been proposed as a way to integrate employer and employee interests and it has been positively related to organisational attitudes such as organisational commitment, satisfaction, organisational justice, and psychological ownership in employees (Chi & Han, 2008; Mayhew et al., 2007; Pierce et al., 1991; Pierce et al., 2001; Pierce et al., 2003; Pierce & Rodgers, 2004; Van Dyne & Pierce, 2004; Wagner et al., 2003). Economists have suggested, however, that employee ownership results in suboptimal organisational decision making which has a detrimental effect on organisational financial performance (Dow, 2003; Faleye et al., 2005; Hansmann, 1996). My studies investigated whether the psychological effects related to employee ownership are affected by the level of employee control over the organisation.

Experiment 1 investigated whether individuals were able to differentiate between different levels of equity, control, and information depicted as an employment scenario (control), and three different employee ownership scenarios. Overall it was found that participants preferred greater levels of the three ownership factors. The direct control scenario that depicted the highest levels of equity, control, and information was rated the highest on; organisational commitment, organisational justice, satisfaction, and psychological ownership. The employment scenario, as the control, depicted none of the three factors and was rated the lowest. This result supports findings that employee ownership produces positive organisational attitudes (Chi & Han, 2008; Mayhew et al., 2007; Pierce et al., 1991; Pierce et al., 2001; Pierce et al., 2003; Pierce & Rodgers, 2004; Van Dyne & Pierce, 2004; Wagner et al., 2003), and also supports the claim made by Pierce and Rodgers (2004) that employee ownership schemes which provide the rights of equity, control, and information will result in feelings of psychological ownership.
The results also showed that the equity, control, and information are more important to females than males in determining satisfaction in the workplace. Female participants rated the employment scenario lower than males on the satisfaction question and rated the direct control employee ownership scenario higher than males on the satisfaction question.

Of the three requisites for psychological and formal ownership, the control factor is of special interest. Employee control is exercised through the processes of organisational decision making (O’Driscoll et al., 2006, Pierce et al., 2004) which have the potential to significantly influence organisational performance (Dow, 2003; Faleye et al., 2005; Hansmann, 1996). As was pointed out in the introduction Hansmann (1996) and Dow (2003) have proposed that poor financial performance of employee owned firms (See: Faleye et al., 2005) can be attributed to problems arising from collective decision making. Decision making in employee owned firms may be more complex and costly than that in investor owned firms because employees have more heterogeneous preferences than investors (Dow & Putterman, 1999; Hansmann, 1996). Thus, some economists recommend limiting employee control over organisational decision making to improve the financial performance of employee owned firms. This recommendation is contrasted with that of psychology researchers who have found that employee control is beneficial to individuals and the organisation (Avey et al., 2009; Chi and Han, 2008; Pierce et al., 2004, Van Dyne & Pierce, 2004; Vandewalle et al., 1995).

Experiment 2 investigated the preferences individuals had for either operational or governance control, represented as four conditions: no worker control, operational control only, governance control only, and operational and governance control combined. The conditions described employee ownership situations where the equity and information dimensions of ownership were held constant. Operational Control represented control over the job context through participative decision making, and Governance Control represented higher order strategic control through the voting rights associated with company shares. This experiment
assessed if the recommendation made by economists to limit employee control over the organisation (see: Dow, 2003; Faleye et al., 2005; Hansmann, 1996) would be feasible by investigating if the positive outcomes associated with employee ownership can be obtained without governance control.

The results of Experiment 2 showed that the positive attitudinal outcomes related to employee ownership increase as the level of employee control increases. Overall governance control was associated with higher levels of commitment, satisfaction, justice, and ownership than was operational control. The condition that depicted both operational and governance control combined was rated highest, next was governance control only, then operational control only, and finally, no employee control was rated lowest.

The results showed that governance control is necessary for feelings of ownership to develop. Ownership was rated significantly higher in conditions that depicted governance control. The effect was strong. Ownership ratings for the operational control only condition were not above neutral on the scale, as were the ratings for the no control condition which was rated the lowest. Operational control produced an additive effect when combined with governance control; ownership ratings were highest when governance control and operational control were present together. Ratings for psychological ownership were lower than those for the other dependent variables, and were only rated above neutral on the scale when governance control was present. The same trend was evident with ownership as was with the other dependent variables.

Ratings for ownership increased markedly between the no control and operational control only conditions. Here operational control by itself produced a greater increase in feelings of ownership than it did in combination with governance control. This indicates that the stronger preference for governance control, in terms of ownership feelings, outweighs the effect due to operational control.
By separating operational from governance control it was possible to see that progressively greater levels of control are associated with progressively stronger feelings of psychological ownership and the other related attitudes. These results support the findings of Pierce et al. (2004) and Wagner (2003) that greater employee control in the workplace is positively related to feelings of ownership, and is in accordance with the theory proposed by Pierce et al. (2004) that having control over higher order organisational processes, such as strategic decision making, will have a greater impact on feelings of psychological ownership.

These results help to evaluate the recommendation to limit employee control over the organisation. If the desired result is strong feelings of psychological ownership and high levels of related attitudes then governance control is clearly necessary. However, if lower but still positive levels of these attitudes are an acceptable outcome then limiting some features of employee control over the organisation would be an acceptable solution. This would be so if the trade off reached between higher levels of positive attitudes and the cost incurred from limited employee control is found to be positive.

Non-workers associated stronger feelings of psychological ownership with the conditions that depicted governance control than did workers. Similarly, non-workers found the condition that depicted neither operational or governance control less satisfactory than did workers. The more pronounced preference for control indicated by non-workers may be based on expectations about the nature of the workplace rather than real world experience as with workers.

The claim by Faleye et al. (2005) that employee owners use control rights to maximise their fixed and variable returns from the organisation is an example of different employee and investor preferences for the operation of an organisation. Heterogeneous preferences are believed to result in sub-optimal organisational outcomes and explain the poorer financial performance of employee owned firms (Dow, 2003; Faleye et al., 2005; Hansmann, 1996). The fixed returns that employees receive in the form of wages and salaries are typically far greater
than the variable returns they receive as equity holders. Investors however only receive a variable income in the form of dividends from their equity holdings. Experiment 3 investigated if employee preferences for operational and governance control differ as the fixed portion of their income decreased and the variable portion increased; and whether perceptions of ownership and justice also changed under the same circumstances.

Experiment 3 showed that participants consider both operational and governance control to be more important as the level of variable income increased. Scores for both importance of operational and governance control were very similar suggesting that both are valued similarly and that there is little differentiation between the two. In the high risk condition importance of both operational and governance control were rated near the maximum on the scale. As risk over income increases employees want greater control over their jobs and the organisation.

The difference in importance of control between the medium risk and high risk conditions was not statistically significant and for these risk levels importance of control was close to maximum on the scale. This suggests that employees consider that they should have high levels of control over their jobs and the organisation when the variable component of their income is 50 percent of their total income or above.

Employee feelings of ownership increase as the level of at-risk income increased. Thus, employees consider themselves to be more like owners as the risk experienced over their income increases.

An interesting result was found for justice in this experiment. As the level of variable income increased, perceived justice decreased, which was a different trend to the other dependent measures. Conditions with higher levels of risk over income were perceived to be less fair. Distributional justice is the perceived fairness of allocation decisions (Aryee et al., 2002) and it is likely that higher levels of risk over income are perceived as being less fair by
employees. The range of justice scores was not large; all fell between 4 (neutral) on the scale and 5, and justice scores between the low risk and medium risk conditions were not significantly different from one another. This indicates that employees do not find variable income to be unfair overall, but find fixed income to be fairer. Employees do not differentiate between situations where variable income is between 25% and 50% of total income, but find high levels (75%) of variable income to be less fair.

The results from these three experiments show that employees value control very highly in employee ownership situations. Governance control with its associated higher order strategic influence is valued more highly than influence over the job context through operational control. Higher levels of commitment, satisfaction, justice, and ownership are associated with governance control than with operational control. This being the case, it appears that to realise the full benefits of employee ownership, full control must be offered to employees by providing governance and operational control. However, it is evident that some of the benefits related to employee ownership would be realised in situations where employee control is limited to either operational control only, or governance control only.

### 6.1 Implications

Experiment 3 showed that as employees face a greater variable component in their total income they prefer greater control. As variable income increases it could be assumed that employee preferences would become more like those of investors. If so, then an effective method to reduce the problem of heterogeneous preferences in decision making would be to match the limit of employee control over the organisation with the level of the variable component of an employee’s income. As an example, the variable component of income could be the dividend payable on an equity stake in the organisation. Those with a small equity stake, and a small variable income would receive little control; those with a large equity stake,
associated high variable income, and assumedly investor like preferences, would receive greater control.

Additionally, in the situations where employee income has a large variable component the consequences of employee control would be felt acutely through rises and falls in that income. This would provide a feedback mechanism, which would assumedly align employee preferences with those of investors. Therefore, as an additional solution to the problem of heterogeneous preferences, implementing HRM systems that provide immediate feedback to employees about the consequences of their decisions may be an effective means to align employee preferences with those of investors’. This would require employees to face consequences over their choices. In the case where employee equity stakes are relatively small, additional performance requirements, perhaps in the form of a balanced score-card, could be used to provide additional weight to those consequences as a way to encourage responsible decision making.

Evidenced by the results of these experiments, employees view ownership as entailing a right to governance control over the organisation. This may be due to cultural norms surrounding expectations of the rights associated with property ownership (Pierce et al., 1991).

6.2 Limitations and Suggestions for the Future

A key limitation of this research is that data was obtained from the general population, so stated preferences will be speculative. Different results may have been obtained from a sample of individuals experienced in different forms of employee ownership.

The measures used in this research were opinion based not validated measures for organisational commitment, justice, satisfaction, and psychological ownership. The ratings of the dependent measures may have been different if validated measures had been used.
The operational definitions used for operational control and governance control in experiments 2 and 3 may not have accurately depicted the levels of influence obtainable with each. Specifically, governance control may have over represented the level of control an individual can obtain through the exercise of voting rights associated with a small holding of shares. Likewise, with operational control the level of influence over the job context is limited by operational practicalities – you can’t always get what you want.

As noted above, in Experiment 3 ratings of justice decreased as risk over income increased. In Experiment 2 ratings for perceived justice increased with increases in the level of employee control. A future study should investigate whether the decrease in justice perceptions occurs when an increase in risk over income is matched with an increase in employee control. This would determine if employee control is effective in maintaining perceptions of justice as risk over income increases. Operational control and governance control should be tested for separately to determine if different types of control have different effects on perceived justice under risk. Chi and Han (2008) found that organisational justice mediated the relationship between formal and psychological ownership. This proposal would investigate control as a possible moderator of justice.


## Appendix A

### Mean scores with standard deviations across the scenarios of Experiment 1.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Employment</th>
<th>Share Trust</th>
<th>Representative Control</th>
<th>Direct Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>1. Justice</td>
<td>4.39</td>
<td>1.52</td>
<td>4.53</td>
<td>1.41</td>
</tr>
<tr>
<td>2. Commitment</td>
<td>4.13</td>
<td>1.34</td>
<td>4.97</td>
<td>1.13</td>
</tr>
<tr>
<td>3. Ownership</td>
<td>2.18</td>
<td>1.84</td>
<td>3.68</td>
<td>1.40</td>
</tr>
<tr>
<td>4. Satisfaction</td>
<td>4.18</td>
<td>1.25</td>
<td>4.74</td>
<td>1.11</td>
</tr>
</tbody>
</table>

### Mean scores with standard deviations across the scenarios of Experiment 2.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>No Worker Control</th>
<th>Operational Control Only</th>
<th>Governance Control Only</th>
<th>Operational &amp; Governance Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>1. Justice</td>
<td>4.45</td>
<td>1.42</td>
<td>5.11</td>
<td>1.23</td>
</tr>
<tr>
<td>2. Commitment</td>
<td>4.40</td>
<td>1.26</td>
<td>5.07</td>
<td>1.00</td>
</tr>
<tr>
<td>3. Ownership</td>
<td>2.69</td>
<td>1.50</td>
<td>3.47</td>
<td>1.41</td>
</tr>
<tr>
<td>4. Satisfaction</td>
<td>4.33</td>
<td>1.25</td>
<td>5.25</td>
<td>0.93</td>
</tr>
</tbody>
</table>

### Mean scores with standard deviations across the scenarios of Experiment 3.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Employment</th>
<th>Low Risk</th>
<th>Medium Risk</th>
<th>High Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>1. Importance of Governance Control</td>
<td>3.05</td>
<td>1.72</td>
<td>5.33</td>
<td>1.12</td>
</tr>
<tr>
<td>2. Importance of Operational Control</td>
<td>3.40</td>
<td>1.84</td>
<td>5.23</td>
<td>1.10</td>
</tr>
<tr>
<td>3. Justice</td>
<td>5.00</td>
<td>1.62</td>
<td>4.68</td>
<td>1.27</td>
</tr>
<tr>
<td>4. Ownership</td>
<td>1.55</td>
<td>1.18</td>
<td>4.58</td>
<td>1.62</td>
</tr>
</tbody>
</table>
Please read the following note before completing this questionnaire.

NOTE: You are invited to participate in the research project Employee Ownership and Preferences for Organisational Control by completing the following questionnaire. The aim of the project is to investigate individual preferences for organisational structure by employees in an employing organisation.

The project is being carried out as a requirement for MSc Applied Psychology by Kim Fraser, who can be contacted at kfr24@student.canterbury.ac.nz, under the supervision of Prof. Simon Kemp, who can be contacted at simon.kemp@canterbury.ac.nz. They will be pleased to discuss any concerns you may have about participation in the project.

The questionnaire is anonymous, and you will not be identified as a participant without your consent.

You may withdraw your participation, including withdrawal of any information you have provided, until your questionnaire has been added to the others collected. Because it is anonymous, it cannot be retrieved after that.

By completing the questionnaire it will be understood that you have consented to participate in the project, and that you consent to publication of the results of the project with the understanding that anonymity will be preserved.

Instructions:

On the following pages are several scenarios. Each scenario describes a different employment situation in a company. Each scenario is followed by four questions. Please read each scenario carefully, and then answer all four questions relating to the scenario you have just read before moving on to read the next scenario. Please indicate your response to each question by circling the number on the scale that best describes how you feel. Only one response per question is required. There are no right or wrong answers to the questions.
Scenario:
You are a worker in a company. You receive a wage which is fair for the type of work you do, this is paid to you weekly.
The company has shareholders who are the owners of the company, they receive a portion of any profits the company makes and can sell their shares for money. The value of their shares may increase if the company performs well, or decrease if the company performs badly.
You do not own shares in the company.
Decisions regarding the operation of the company are made by management. Major decisions must gain the approval of the shareholders who have a right to vote on these decisions. Workers like you are not consulted or included in the process of making major company decisions.
Information regarding the performance of the company is provided to the shareholders by management, but not to workers such as yourself.

Questions:

1) Considering the information given in the scenario above, how just, or fair, do you believe that this type of employment arrangement is to workers in the company?

   1                                             2                                             3                                             4                                             5                                             6                                             7

2) Considering the information given in the scenario above, how committed do you believe you would feel towards the company, its goals, and its ongoing success if you were a worker here?

   Not committed at all to the company, its goals, or success.                                Neutral                                Completely committed to the company its goals and success.
   1                                             2                                             3                                             4                                             5                                             6                                             7

3) Considering the information given in the scenario above, how would you rate your belief that you personally owned some of this company, i.e. would you see yourself as an owner of the company?

   Definitely not an owner.                                Neutral                                Most definitely an owner.
   1                                             2                                             3                                             4                                             5                                             6                                             7

4) How satisfactory would you find the employment situation described in the scenario above if you were a worker in this company?

   I would be extremely dissatisfied with this employment situation.                                Neutral                                I would be extremely satisfied with this employment situation.
   1                                             2                                             3                                             4                                             5                                             6                                             7
Scenario:
You are a worker in a company. You receive a wage which is fair for the type of work you do, this is paid to you weekly.

The company has shareholders who are the owners of the company, they receive a portion of any profits the company makes and can sell their shares for money. The value of their shares may increase if the company performs well, or decrease if the company performs badly.

In addition to the shareholders, the company is arranged so that a trust holds an allocation of company shares on behalf of each worker. This means that a portion of the company’s shares are held for you by the trust, but you personally do not own the shares. (This is how trusts work). If the company makes a profit you will be paid a portion of this profit based on your allocation of shares held in the trust. This is paid in addition to your regular wage. The value of the shares may increase or decrease depending on the performance of the company. If you leave the company you will be paid money equal to the value of your share allocation held in the trust.

Workers like you have no control over the company through the shares in the trust. Decisions regarding the operations of the company are made by management and major decisions must gain the approval of the other shareholders who have a right to vote on such decisions.

Information regarding the performance of the company is known by management and provided to the owning shareholders but is not provided to workers such as yourself.

1) Considering the information given in the scenario above, how just, or fair, do you believe that this type of employment arrangement is to workers in the company?

1  2  3  4  5  6  7

2) Considering the information given in the scenario above, how committed do you believe you would feel towards the company, its goals, and its ongoing success if you were a worker here?

1  2  3  4  5  6  7
Not committed at all to the company, its goals, or success. Neutral Completely committed to the company, its goals and success.

3) Considering the information given in the scenario above, how would you rate your belief that you personally owned some of this company, i.e. would you see yourself as an owner of the company?

1  2  3  4  5  6  7
Definitely not an owner. Neutral Most definitely an owner.

4) How satisfactory would you find the employment situation described in the scenario above if you were a worker in this company?

1  2  3  4  5  6  7
I would be extremely dissatisfied with this employment situation. Neutral I would be extremely satisfied with this employment situation.
Scenario:

You are a worker in a company. You receive a wage which is fair for the type of work you do, this is paid to you weekly.

The company has shareholders who are the owners of the company, they receive a portion of any profits the company makes and can sell their shares for money. The value of their shares may increase if the company performs well, or decrease if the company performs badly.

In this company every individual worker also owns some shares in the company. Through your shares you receive a portion of any profit the company makes, this is paid in addition to your regular wage. If the company does not make a profit you will still receive your regular wage, but no additional money. The value of your shares may increase if the company performs well, or decrease if the company performs badly. If a worker leaves the company they must sell their shares to other workers or shareholders.

Decisions regarding the operation of the company are made by management. Major decisions must gain the approval of the shareholders who have a right to vote on the decisions. In this company workers use a different system to vote on company decisions than the other shareholders. Individual workers cannot vote on company decisions, instead workers choose a representative who represents all the workers as a collective group. The representative votes on your behalf when major company decisions are made. The representative is chosen for his or her ability to represent the worker’s views, and his or her professional business skill. The representative will consult with workers to find out what your interests are in regard to company decisions and will recommend what he or she believes will deliver the best outcome. Information regarding the performance of the company is provided to workers like you, the worker’s representative, and the other shareholders by the management of the company.

1) Considering the information given in the scenario above, how just, or fair, do you believe that this type of employment arrangement is to workers in the company?

1  2  3  4  5  6  7

2) Considering the information given in the scenario above, how committed do you believe you would feel towards the company, its goals, and its ongoing success if you were a worker here?

1  2  3  4  5  6  7
Not committed at all to the company, its goals, or success. Neutral Completely committed to the company its goals and success.

3) Considering the information given in the scenario above, how would you rate your belief that you personally owned some of this company, i.e. would you see yourself as an owner of the company?

1  2  3  4  5  6  7
Definitely not an owner. Neutral Most definitely an owner.

4) How satisfactory would you find the employment situation described in the scenario above if you were a worker in this company?

1  2  3  4  5  6  7
I would be extremely dissatisfied with this employment situation. Neutral I would be extremely satisfied with this employment situation.
**Scenario:**

You are a worker in a company. You receive a wage which is fair for the type of work you do, this is paid to you weekly.

The company has shareholders who are the owners of the company, they receive a portion of any profit the company makes and can sell their shares for money. The value of their shares may increase if the company performs well, or decrease if the company performs badly.

In this company every individual worker also owns some shares in the company. In addition to a regular wage workers will therefore receive a portion of any profit the company makes the same as the other shareholders; the amount you receive depends on the number of shares you own. If the company does not make a profit you will still receive your regular wage, but no additional money. The value of your shares may increase or decrease depending on the performance of the company. Workers like you may buy and sell shares in the company as you please, to and from workers, other shareholders, or external parties.

Decisions regarding the operations of the company are made by management. Major decisions must gain approval of the shareholders; this includes the workers who own shares. Both shareholders and individual workers have a right to vote as they please on major company decisions. Information regarding the performance of the company is provided to both shareholders and workers such as yourself by management. You use this information to base your decisions on.

<table>
<thead>
<tr>
<th>1) Considering the information given in the scenario above, how just, or fair, do you believe that this type of employment arrangement is to workers in the company?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2) Considering the information given in the scenario above, how committed do you believe you would feel towards the company, its goals, and its ongoing success if you were a worker here?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>Not committed at all to the company, its goals, or success.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3) Considering the information given in the scenario above, how would you rate your belief that you personally owned some of this company, i.e. would you see yourself as an owner of the company?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>Definitely not an owner.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4) How satisfactory would you find the employment situation described in the scenario above if you were a worker in this company?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>I would be extremely dissatisfied with this employment situation.</td>
</tr>
</tbody>
</table>
Please provide the following information before finishing:

Sex: Male / Female (Please circle one).

Age: _____ (Years).

Primary occupation: ____________________________ (Please indicate).
Debrief.

You have just completed a questionnaire for the study Employee Ownership and Preferences for Organisational Control. The information you have provided will be used to establish if there is any preference for different types of employee ownership scheme that could be potentially used in a real world organisation. Each scenario you have read describes a different type of employee ownership scheme. The questions asked after each scenario represent different psychological constructs that the researcher believes are related to an individual’s experience of an employee ownership scheme.

The project is being carried out as a requirement for MSc Applied Psychology by Kim Fraser, who can be contacted at kfr24@student.canterbury.ac.nz, under the supervision of Prof. Simon Kemp, who can be contacted at simon.kemp@canterbury.ac.nz. They will be pleased to discuss any concerns you may have about participation in the project.

If you no longer want to be a part of this study please indicate this to the researcher now and your questionnaire will not be added to the others collected.

Thank you for your participation.
Please read the following note before completing this questionnaire.

NOTE: You are invited to participate in the research project Employee Ownership and Preferences for Organisational Control by completing the following questionnaire. The aim of the project is to investigate individual preferences for organisational structure by employees in an employing organisation.

The project is being carried out as a requirement for MSc Applied Psychology by Kim Fraser, who can be contacted at kfr24@student.canterbury.ac.nz, under the supervision of Prof. Simon Kemp, who can be contacted at simon.kemp@canterbury.ac.nz. They will be pleased to discuss any concerns you may have about participation in the project.

The questionnaire is anonymous, and you will not be identified as a participant without your consent.

You may withdraw your participation, including withdrawal of any information you have provided, until your questionnaire has been added to the others collected. Because it is anonymous, it cannot be retrieved after that.

By completing the questionnaire it will be understood that you have consented to participate in the project, and that you consent to publication of the results of the project with the understanding that anonymity will be preserved.

Instructions:

On the next page is an introduction. After reading these instructions please read the introduction carefully and then continue. On the pages following the introduction there are four scenarios. Each scenario describes a different employment situation in a company. Each scenario is followed by four questions. Please read each scenario carefully. Then answer all four questions relating to the scenario you have just read before moving on to read the next scenario. Please indicate your response to each question by circling the number on the scale that best describes how you feel. Only one response per question is required. There are no right or wrong answers to the questions.
**Introduction**

The introduction below applies to all the scenarios that appear on the following pages.

You are a worker in a company. You receive a wage which is fair for the type of work you do, this is paid to you weekly. As a worker you are responsible for the tasks that are a part of your job and you make basic decisions regarding the performance of these tasks e.g. deciding how hard you will work, how best to carry out the tasks necessary to perform your job, and how dependable you will be as a worker – the same as any worker in any traditional type of job.

The company also employs managers, the managers have more responsibility than workers and are better paid. The managers make decisions regarding the overall operation of the company, decisions such as: the scheduling of work, planning the inputs necessary to complete projects, and allocating work to the workers who are best suited to perform it. Managers are also responsible for the strategies that the company will pursue to be successful in the long term.

The company has shareholders who are the owners of the company. They own shares in the company and receive a portion of any profits the company makes (known as a dividend). The amount of dividend a shareholder is paid is based on the number of shares they own. Shareholders can also sell their shares for money. The value of the shares may increase if the company performs well, or decrease if the company performs badly.

Major company decisions must gain the approval of the company’s shareholders. As owners of the company they have a right to vote to approve or disapprove these decisions. This enables the shareholders to exert some control over the company and protect the money that they have invested in their company shares.

In this company workers also own an allocation of shares. This means that in addition to your regular wage you will receive a portion of any profit the company makes. If the company performs well your shares may increase in value, but may decrease in value if the company performs badly. You may sell your shares if you leave the company. All shareholders, including workers, are provided with information regarding the financial performance of the company regularly.

Please continue and remember this introduction when reading the scenarios that follow.
Scenario:

As explained previously, you are a worker in a company where you are responsible for the tasks that are a part of your job and you make basic decisions regarding the performance of these tasks. In this company there are also managers. Managers have more responsibility than workers and make decisions regarding the overall operation of the company and are responsible for longer term strategies. **Workers such as you are not involved in making the types of operational or strategic decisions made by managers.**

In this company major decisions must gain the approval of the company’s shareholders as they have a right to vote to approve or disapprove these decisions. **Workers like you are not included in this process of voting on major company decisions, even though you also own shares in the company.** This is because the company shares owned by workers are a special type of share that do not include a right to vote. The purpose of the workers’ shares is to provide the financial benefits of share ownership to them, not to provide them with control over the company.

---

**Questions:**

1) Considering the information given in the scenario above, how just, or fair, do you believe that this type of employment arrangement is to workers in the company?

1 2 3 4 5 6 7

2) Considering the information given in the scenario above, how committed do you believe you would feel towards the company, its goals, and its ongoing success if you were a worker here?

1 2 3 4 5 6 7
Not committed at all to the company, its goals, or success. Neutral Completely committed to the company its goals and success.

3) Considering the information given in the scenario above, how would you rate your belief that you personally owned some of this company, i.e. would you see yourself as an owner of the company?

1 2 3 4 5 6 7
Definitely not an owner. Neutral Most definitely an owner.

4) How satisfactory would you find the employment situation described in the scenario above if you were a worker in this company?

1 2 3 4 5 6 7
I would be extremely dissatisfied with this employment situation. Neutral I would be extremely satisfied with this employment situation.
Scenario:

As explained previously, you are a worker in a company where you are responsible for the tasks that are a part of your job and you make basic decisions regarding the performance of these tasks. In this company there are also managers. Managers have more responsibility than workers and make decisions regarding the overall operation of the company and are responsible for longer term strategies.

In this company workers also actively participate with the managers in decision making about the overall operation of the company. This means that workers are not just responsible for the tasks that are a part of their jobs, they are also involved in work related decisions that would traditionally be the sole responsibility of a manager. Through this involvement in managerial decision making workers are able to share their work-related knowledge, help to improve the performance of the company, and provide a better workplace benefiting everyone in the company. This is known as participative management and is intended to encourage an open and cooperative relationship between management and workers by including workers in some company decision making.

In this company major decisions must gain the approval of the company’s shareholders as they have a right to vote to approve or disapprove these decisions. Workers like you are not included in this process of voting on major company decisions, even though you also own shares in the company. This is because the shares that workers own are a special type of share that do not entitle workers to vote on major company decisions. The purpose of the workers’ shares is to provide the financial benefits of share ownership to workers, not to provide them with control over the company.

Questions:

1) Considering the information given in the scenario above, how just, or fair, do you believe that this type of employment arrangement is to workers in the company?

1  2  3  4  5  6  7  

2) Considering the information given in the scenario above, how committed do you believe you would feel towards the company, its goals, and its ongoing success if you were a worker here?

1  2  3  4  5  6  7  
Not committed at all to the company, its goals, or success.  Neutral  Completely committed to the company its goals and success.

Continued overleaf.
3) Considering the information given in the scenario above, how would you rate your belief that you personally owned some of this company, i.e. would you see yourself as an owner of the company?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Definitely not an owner.</td>
<td>Neutral</td>
<td>Most definitely an owner.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4) How satisfactory would you find the employment situation described in the scenario above if you were a worker in this company?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I would be extremely dissatisfied with this employment situation.</td>
<td>Neutral</td>
<td>I would be extremely satisfied with this employment situation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Scenario:

As explained previously, you are a worker in a company where you are responsible for the tasks that are a part of your job and you make basic decisions regarding the performance of these tasks. In this company there are also managers. Managers have more responsibility than workers and make decisions regarding the overall operation of the company and are responsible for longer term strategies. Workers such as you are not involved in making the types of operational or strategic decisions made by managers.

In this company major decisions must gain the approval of the company’s shareholders as they have a right to vote to approve or disapprove these decisions. The shares owned by workers are the same as the shares owned by the company shareholders so the workers are also involved in this process of approving major decisions. Workers therefore also have some control over the company the same as the other shareholders. The purpose of the workers’ shares is to provide the financial benefits of share ownership to workers, and as a consequence of this arrangement the workers’ shares also provide them with some control over the company.

Questions:

1) Considering the information given in the scenario above, how just, or fair, do you believe that this type of employment arrangement is to workers in the company?

   1  2  3  4  5  6  7

2) Considering the information given in the scenario above, how committed do you believe you would feel towards the company, its goals, and its ongoing success if you were a worker here?

   1  2  3  4  5  6  7
   Not committed at all to the company, its goals, or success.  Neutral  Completely committed to the company its goals and success.

3) Considering the information given in the scenario above, how would you rate your belief that you personally owned some of this company, i.e. would you see yourself as an owner of the company?

   1  2  3  4  5  6  7
   Definitely not an owner.  Neutral  Most definitely an owner.

4) How satisfactory would you find the employment situation described in the scenario above if you were a worker in this company?

   1  2  3  4  5  6  7
   I would be extremely dissatisfied with this employment situation.  Neutral  I would be extremely satisfied with this employment situation.
Scenario:

As explained previously, you are a worker in a company where you are responsible for the tasks that are a part of your job and you make basic decisions regarding the performance of these tasks. In this company there are also managers. Managers have more responsibility than workers and make decisions regarding the overall operation of the company and are responsible for longer term strategies.

In this company workers also actively participate with the managers in decision making about the overall operation of the company. This means that workers are not just responsible for the tasks that are a part of their jobs, they are also involved in work related decisions that would traditionally be the sole responsibility of a manager. Through this involvement in managerial decision making workers are able to share their work-related knowledge, help to improve the performance of the company, and provide a better workplace benefiting everyone in the company. This is known as participative management and is intended to encourage an open and cooperative relationship between management and workers by including workers in some company decision making.

In this company major decisions must gain the approval of the company’s shareholders as they have a right to vote to approve or disapprove these decisions. The shares owned by workers in the company are the same as the shares owned by the other shareholders so the workers are also involved in this process of approving major decisions. Workers therefore also have some control over the company the same as the other shareholders. This is in addition to making decisions about tasks in their jobs, and participating with managers in operational decision making. The purpose of the workers’ shares is to provide the financial benefits of share ownership to workers, and as a consequence of this arrangement the workers’ shares also provide them with some control over the company.

Questions:

1) Considering the information given in the scenario above, how just, or fair, do you believe that this type of employment arrangement is to workers in the company?

1  2  3  4  5  6  7

2) Considering the information given in the scenario above, how committed do you believe you would feel towards the company, its goals, and its ongoing success if you were a worker here?

1  2  3  4  5  6  7
Not committed at all to the company, its goals, or success. Neutral Completely committed to the company, its goals and success.

Continued overleaf.
3) Considering the information given in the scenario above, how would you rate your belief that you personally owned some of this company, i.e. would you see yourself as an owner of the company?

    1  2  3  4  5  6  7
Definitely not
an owner.               Neutral               Most definitely
an owner.

4) How satisfactory would you find the employment situation described in the scenario above if you were a worker in this company?

    1  2  3  4  5  6  7
I would be extremely
dissatisfied with this
employment situation.               Neutral               I would be extremely
satisfied with this
employment situation.
Please provide the following information before finishing:

Sex:  Male / Female (Please circle one).

Age:  _____ (Years).

Principle occupation: ________________________________ (Please indicate).
Debrief.

You have just completed a questionnaire for the study Employee Ownership and Preferences for Organisational Control. The information you have provided will be used to establish if there is any preference for different types of employee ownership scheme that could be potentially used in a real world organisation. Each scenario you have read describes a different type of control structure within a company that has employee owners. The questions asked after each scenario represent different psychological constructs that the researcher believes are related to an individual’s experience of employee ownership.

The project is being carried out as a requirement for MSc Applied Psychology by Kim Fraser, who can be contacted at kfr24@student.canterbury.ac.nz, under the supervision of Prof. Simon Kemp, who can be contacted at simon.kemp@canterbury.ac.nz. They will be pleased to discuss any concerns you may have about participation in the project.

If you no longer want to be a part of this study please indicate this to the researcher now and your questionnaire will not be added to the others collected.

Thank you for your participation.
Appendix D

University of Canterbury. Department of Psychology.

QUESTIONNAIRE

Employee Ownership and Preferences for Organisational Control.

Please read the following note before completing this questionnaire.

NOTE: You are invited to participate in the research project Employee Ownership and Preferences for Organisational Control by completing the following questionnaire. The aim of the project is to investigate individual preferences for organisational structure by employees in an employing organisation.

The project is being carried out as a requirement for MSc Applied Psychology by Kim Fraser, who can be contacted at kfr24@student.canterbury.ac.nz, under the supervision of Prof. Simon Kemp, who can be contacted at simon.kemp@canterbury.ac.nz. They will be pleased to discuss any concerns you may have about participation in the project.

The questionnaire is anonymous, and you will not be identified as a participant without your consent.

You may withdraw your participation, including withdrawal of any information you have provided, until your questionnaire has been added to the others collected. Because it is anonymous, it cannot be retrieved after that.

By completing the questionnaire it will be understood that you have consented to participate in the project, and that you consent to publication of the results of the project with the understanding that anonymity will be preserved.

Instructions:

On the following pages there are four scenarios. Each scenario describes a different employment situation in a company. Each scenario is followed by four questions. Please read each scenario carefully. Then answer all four questions relating to the scenario you have just read before moving on to read the next scenario. Please indicate your response to each question by circling the number on the scale that best describes how you feel. Only one response per question is required. There are no right or wrong answers to the questions.
Scenario

You work for a company where you are paid **in part by a fixed weekly salary**. The company is arranged so that **workers also own some company shares**. If the company is profitable then **in addition to the weekly salary you are also paid a dividend**, this is your share of the profit. The amount of dividend paid is variable. If the company makes a large profit then the dividend paid is large, if the profit is small then a small dividend is paid, and if the company makes no profit then no dividend is paid.

As a worker your **total income** is the amount of **your fixed salary plus any dividend you are due**. When the company is performing at an average level, you would expect **25% of your income to be earned from your fixed salary** and **75% of your income to be from the dividend**. This provides you with a **fair income** for the work you do. However, the amount of dividend you receive may be **more or less than 75%** depending on the performance of the company.

Questions

1) In this situation how important would it be to you to be able to vote for or against major company decisions suggested by management? Voting would enable you to have some governance control over the company.

   1  2  3  4  5  6  7
   Not important Neutral Very at all. important.

2) In this situation how important would it be to you to be able to participate with management in decision making surrounding the daily operation of the company? Participating in work related decisions would give you some operational control over the company.

   1  2  3  4  5  6  7
   Not important Neutral Very at all. important.

3) Considering the information given in the scenario above, how just, or fair, do you believe that this type of employment arrangement is to workers in the company?

   1  2  3  4  5  6  7
   Very unfair. Neither fair Very nor unfair. fair.

4) Considering the information given in the scenario above, how would you rate your belief that you personally owned some of this company, i.e. would you see yourself as an owner of the company?

   1  2  3  4  5  6  7
   Definitely not Most definitely an owner. owner.
**Scenario**

You work for a company which is arranged so that workers all own company shares. As a worker you are paid in part a fixed weekly salary and in addition are also paid a dividend which is a share of any profit the company makes. The amount of dividend paid is variable. If the company makes a large profit then the dividend paid is large, if the profit is small then a small dividend is paid, and if the company makes no profit then no dividend is paid.

The total amount of income you receive is the amount of your fixed salary plus any dividend payable to you. You would expect, when the company has an average level of performance, to receive 50% of your income from your fixed salary and 50% from the dividend. This provides you with a fair income for the work you do. However, the amount of dividend you receive may be more or less than 50% depending on the performance of the company.

**Questions**

1) In this situation how important would it be to you to be able to vote for or against major company decisions suggested by management? Voting would enable you to have some governance control over the company.

   1  2  3  4  5  6  7
   Not important Neutral Very important
   at all.

2) In this situation how important would it be to you to be able to participate with management in decision making surrounding the daily operation of the company? Participating in work related decisions would give you some operational control over the company.

   1  2  3  4  5  6  7
   Not important Neutral Very important
   at all.

3) Considering the information given in the scenario above, how just, or fair, do you believe that this type of employment arrangement is to workers in the company?

   1  2  3  4  5  6  7

4) Considering the information given in the scenario above, how would you rate your belief that you personally owned some of this company, i.e. would you see yourself as an owner of the company?

   1  2  3  4  5  6  7
   Definitely not an owner. Neutral Most definitely an owner.
The company where you work is arranged so that **workers all own some company shares**. In this company you are **paid in part a fixed weekly salary** and also **a dividend paid from any profit** the company makes. The amount of dividend is variable. If the company makes a large profit then the dividend paid is large, if the profit is small then a small dividend is paid, and if the company makes no profit then no dividend is paid.

Your **total income** is the amount of your **fixed salary plus any dividend payable to you** from company profits. You would expect your total income to consist of **75% fixed salary** and **25% dividend** when the company is performing at an average level. This provides you with a **fair income** for the work you do. However, the amount of dividend you receive may be **more or less than 25%** depending on the company’s performance.

### Questions

1) In this situation how important would it be to you to be able to vote for or against major company decisions suggested by management? Voting would enable you to have some governance control over the company.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not important at all.</td>
<td>Neutral</td>
<td>Very important.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2) In this situation how important would it be to you to be able to participate with management in decision making surrounding the daily operation of the company? Participating in work related decisions would give you some operational control over the company.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not important at all.</td>
<td>Neutral</td>
<td>Very important.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3) Considering the information given in the scenario above, how just, or fair, do you believe that this type of employment arrangement is to workers in the company?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
</table>

4) Considering the information given in the scenario above, how would you rate your belief that you personally owned some of this company, i.e. would you see yourself as an owner of the company?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitely not an owner.</td>
<td>Neutral</td>
<td>Most definitely an owner.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Scenario**

You are a worker in a company where you earn a fixed weekly salary which is a fair income for the type of work you do. The company has share holders who own company shares. You do not own any company shares. Share holders are paid a dividend which is a share of any profit the company makes. The amount of dividend paid to share holders varies depending on how much profit the company makes.

As you do not own any company shares you do not receive any dividend payments. You receive your fixed salary in full regardless of whether the company is profitable or not.

**Questions**

1) In this situation how important would it be to you to be able to vote for or against major company decisions suggested by management? Voting would enable you to have some governance control over the company.

   1  2  3  4  5  6  7
   Not important Neutral Very at all. important.

2) In this situation how important would it be to you to be able to participate with management in decision making surrounding the daily operation of the company? Participating in work related decisions would give you some operational control over the company.

   1  2  3  4  5  6  7
   Not important Neutral Very at all. important.

3) Considering the information given in the scenario above, how just, or fair, do you believe that this type of employment arrangement is to workers in the company?

   1  2  3  4  5  6  7
   Very unfair. Neither fair Very nor unfair. fair.

4) Considering the information given in the scenario above, how would you rate your belief that you personally owned some of this company, i.e. would you see yourself as an owner of the company?

   1  2  3  4  5  6  7
   Definitely not Most definitely an owner. an owner.
Please provide the following information before finishing:

Sex:   Male / Female   (Please circle one).

Age:   _____   (Years).

Principle occupation:______________________________ (Please indicate).
Debrief.

You have just completed a questionnaire for the study Employee Ownership and Preferences for Organisational Control. The information you have provided will be used to establish if there is any preference for different types of employee ownership scheme that could be potentially used in a real world organisation. Each scenario you have read describes a different type of control structure within a company that has employee owners. The questions asked after each scenario represent different psychological constructs that the researcher believes are related to an individual’s experience of employee ownership.

The project is being carried out as a requirement for MSc Applied Psychology by Kim Fraser, who can be contacted at kfr24@student.canterbury.ac.nz, under the supervision of Prof. Simon Kemp, who can be contacted at simon.kemp@canterbury.ac.nz. They will be pleased to discuss any concerns you may have about participation in the project.

If you no longer want to be a part of this study please indicate this to the researcher now and your questionnaire will not be added to the others collected.

Thank you for your participation.