Motivation, pay satisfaction, and job satisfaction of front-line employees

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Abstract

Purpose – This paper aims to explore the complex relationships between intrinsic and extrinsic motivation, pay satisfaction and job satisfaction at the retailer that uses a pay-for-performance plan for front-line employees.

Design/methodology/approach – This paper draws on a single organization case study across seven stores, and uses a survey, archival documents, open-ended questions and researcher interaction with employees and managers.

Findings – The results provide some support for the complementary nature of intrinsic and extrinsic motivation. Intrinsic motivation was positively associated with pay and job satisfactions, whereas extrinsic motivation was negatively associated with job satisfaction, and not associated with pay satisfaction. The qualitative insights indicate that pay fairness is important, and those who perceived pay was not fair generally made comparisons with others or felt that pay did not reflect their effort. It is also found that the majority of employees perceived that goals were clear.

Research limitations/implications – The dominance of extrinsic motivation without including behavioural, social, and psychological factors in agency theory research is questioned. The research finds no support for “crowding out”, but rather finds some evidence of “crowding in” where intrinsic motivation is enhanced, to the detriment of extrinsic motivation.

Practical implications – The findings highlight that managers should enhance both intrinsic and extrinsic motivation, and pay employees well to increase job satisfaction.

Originality/value – Few studies examine incentives for front-line employees, and there is evidence that minimum wage employees can have high intrinsic motivation. Perceptions of pay fairness can vary across motivation levels, age, and gender.

Keywords Incentives (psychology), Motivation (psychology), Intrinsic motivation, Pay satisfaction, Job satisfaction, Employees

Paper type Case study

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1. Introduction

No other incentive or motivational technique comes close to money[1].

Such a quotation reflects the dominant view in the management accounting literature that pay-for-performance incentive systems have a motivational effect. In fact, some authors assert that the primary aim of incentives is to enhance extrinsic motivation by satisfying an individual employee’s needs indirectly through means of pay and bonuses (Anthony and Govindarajan, 2007; Kunz and Pfaff, 2002). The link between pay-for-performance and extrinsic motivation is explicit in the agency theory literature. Extrinsic motivation is the importance placed on external rewards, such as bonuses and promotion (Van Herpen et al., 2005), or the threat of wage cuts or dismissal (Frey, 1997). In an agency theory context, incentive contracts designed to encourage extrinsic motivation are held to be indispensable (Osterloh et al., 2002). Similarly, expectancy theory argues that linking incentives to performance motivates employees to increase their effort and performance (Jenkins et al., 1998; Lawler, 1973; Vroom, 1964).

The literature has shown that remuneration issues play a critical role in organizations; however, there has been little advice that companies could use in terms of when certain incentive system designs have been more (or less) appropriate (Heneman et al, 2002a; Merchant, 1989; Merchant et al., 2003). The need for more theoretical development is important because the use of pay-for-performance plans is growing (Broadbent and Cullen, 2005; Lawler, 2000), and there is a trend to increasing variable pay as a percentage of total remuneration (Heneman et al., 2002b). Another gap in the literature has been that most of the economics-based incentives research has been at the chief executive officer level, and few studies have examined incentives at the business unit or for front-line employees (Kominis and Emmanuel, 2005; Merchant et al., 2003; Prendergast, 1999).

A challenge to the view that pay increases motivation comes from cognitive evaluation theory, which argues that incentive pay has a negative effect on intrinsic motivation – a “crowding-out” effect (Gagne and Deci, 2005). However, research findings into the crowding-out effect have been mixed (Kunz and Pfaff, 2002). To explain the mixed results from the crowding-out studies, self-determination theory argues that it depends on the extent to which individuals feel autonomy (i.e. their actions are self-determined) or that they are being controlled, such as where pay is linked to achieving specific outcomes (Deci and Ryan, 2008). There are also implications for pay-for-performance plans where pay is perceived as inequitable (Adams, 1965), as individuals are continually making comparisons between themselves and others (Festinger, 1954).

Understanding the design implications of incentive systems is important to our understanding of employee motivation and whether these incentive systems are related to satisfaction. The motivation for this paper comes from calls for future management accounting research to address three issues. First, we are challenged to examine the design implications of pay-for-performance plans at lower levels in organizations (Kominis and Emmanuel, 2005, 2007; Merchant et al., 2003). Second, we seek to understand more about the relationship between extrinsic and intrinsic motivation (Kominis and Emmanuel, 2005, 2007; Kunz and Pfaff, 2002). Third, we draw on the organizational psychology and human resource literatures to develop the existing management accounting literature further (Kominis and Emmanuel, 2005).

The purpose of this paper is to examine employee motivation, pay satisfaction and job satisfaction for a retailer that uses a pay-for-performance plan for front-line employees.
The survey data have been used to examine four research propositions. We find no significant association between extrinsic motivation and pay satisfaction, which questions the rudiments of the agency theory. Intrinsic motivation is positively associated with pay satisfaction. This suggests the “crowding-out” effect may be overstated (Kunz and Pfaff, 2002). We find that extrinsic motivation and job satisfaction are negatively associated. Finally, intrinsic motivation is positively associated with job satisfaction.

We make four contributions to the literature. First, we find some evidence to suggest that intrinsic and extrinsic motivation may be complementary. Almost half the sample of employees highly rate elements of both intrinsic and extrinsic motivation. This combination of high intrinsic and extrinsic motivation, coupled with the negative association between pay and extrinsic motivation, challenges the agency theory argument that extrinsic rewards are necessary to ensure employees do not minimize their effort (i.e. shirk) (Bonner and Sprinkle, 2002). The potential for intrinsic and extrinsic motivation to be complementary has been discussed in the management accounting literature (Dermer, 1975; Kominis and Emmanuel, 2005, 2007; Kunz and Pfaff, 2002, Ronen and Livingstone, 1975). The second contribution is the positive association between pay and intrinsic motivation, which suggests that the “crowding-out” literature may have overstated the case that extrinsic rewards have a negative impact on intrinsic motivation (Kunz and Pfaff, 2002). Our third contribution is finding that intrinsic motivation increases job satisfaction, whereas extrinsic motivation decreases job satisfaction. This is consistent with the “crowding-in” argument (Frey, 1997). The fourth contribution is that perceptions of pay unfairness cut across levels of motivation, age, and gender and are generally based on comparisons with other employees or feelings that pay did not reflect an individual’s effort.

The literature section is followed by a description of the case study and survey, then the discussion and analysis of the quantitative and qualitative results, and finally the conclusions.

2. Literature
2.1 Motivation and pay satisfaction

The philosophy behind pay-for-performance plans draws upon reinforcement theory that suggests that pay be linked to performance by setting specific targets and then rewarding individuals for achieving these targets (Heneman, 1992; Skinner, 1953). Agency theory is based on compensation contracts designed to balance trade-offs between risk and incentives for individuals and groups in order to align the interests of managers and shareholders (Eisenhardt, 1989; Jensen and Meckling, 1976). Agency theory focuses on extrinsic rewards that are tangible and quantifiable (Merchant et al., 2003). Actions are rewarded and punished, and so this determines employees’ actions and effort and performance (Jensen and Murphy, 2004; Kreps, 1997). Therefore, pay is a powerful lever to influence extrinsic motivation (Locke et al., 1980).

This gives rise to the following research proposition:

P1. The association between pay satisfaction and extrinsic motivation is positive.

The other form of motivation, intrinsic motivation, captures the aspects of doing work for its own sake (Osterloh and Frey, 2002; Ryan and Deci, 2000b), provides psychological benefits of well-being (Ryan and Deci, 2000b), accomplishment (Dermer, 1975),
increasing responsibility (Herzberg, 2003), self-actualisation (Kunz and Pfaff, 2002), and is self-sustaining (Osterloh and Frey, 2002). A number of authors argue that money is a poor motivator and can actually impede intrinsic motivation, such as reducing creativity and innovation (Amabile, 1998; Frey and Osterloh, 2002; Herzberg, 2003; Kerr, 1975; Kohn, 1993). In fact, the specific focus on extrinsic motivation may distract attention from the task; this has been termed the “hidden cost of rewards” (Lepper and Greene, 1978). This view has been incorporated in the “crowding theory” (Frey and Jegen, 2001).

When an activity is intrinsically appealing (e.g. challenging), the positive effects can be undermined if extrinsic rewards are also linked to the activity (Frey and Osterloh, 2002) and crowd out intrinsic motivation (Lee and Whitford, 2007). This crowding out has been further elaborated under the cognitive evaluation theory, which proposes that pay (extrinsic motivation) can erode intrinsic motivation, and this in turn reduces performance (Gagne and Deci, 2005; Kunz and Pfaff, 2002).

This leads to the research proposition:

P2. The association between pay satisfaction and intrinsic motivation is negative.

2.2 Motivation and job satisfaction

The relationship between an employee’s motivation and job satisfaction is now examined. A number of researchers (Heneman et al., 1988; Igalens and Roussel, 1999; Pool, 1997) have concluded that work motivation and job satisfaction should be treated separately, so that factors of influence can be more readily identified and to allow for better understanding. Herzberg’s (2003) motivation-hygiene theory identifies intrinsic motivators (e.g. achievement, recognition, the work itself) and hygiene factors which tend to be extrinsic factors (e.g. company administration, supervision, salary). Herzberg’s view is that these motivators lead to job satisfaction because they satisfy an individual’s need for self-actualisation (Maslow, 1954; Tietjen and Myers, 1998).

Expectancy theory, as developed by Porter and Lawler (1968), argues that a pay-for-performance system influences job satisfaction (Ferris, 1977; Igalens and Roussel, 1999). Supporting this view, Pool (1997) examines the relationship between work motivation and job satisfaction and finds significant positive association indicates that as work motivation increases, job satisfaction increases. In relation to extrinsic motivation, a positive association with job satisfaction has also been found (Moynihan and Pandey, 2007; Wright and Kim, 2004).

While the dominant argument has been for a positive association between extrinsic motivation and job satisfaction, Frey (1997) argues for a “crowding-in” effect. Intrinsic motivation can increase as a result of work enhancement programs that have increased work morale (Frey, 1997). When employees’ enjoyment of their job increases, intrinsic rewards may undermine the extrinsic motivation (Frey, 1997). The proponents of self-determination theory argue that pay-for-performance can have a positive effect on intrinsic motivation by being supportive and encouraging employee autonomy and self-esteem (Deci and Ryan, 2008; Gagne and Deci, 2005). However, self-determination theory remains silent on whether extrinsic motivation will decrease, if intrinsic motivation increases.

This leads to the research proposition:

P3. The association between extrinsic motivation and job satisfaction is positive.
Having examined extrinsic motivation, our attention moves to intrinsic motivation. The findings of the studies of self-determination theory suggest that supportive work environments, which encourage intrinsic motivation, will result in increased job satisfaction and more effective performance (Gagne and Deci, 2005; Deci and Ryan, 2008; Kunz and Pfaff, 2002). When pay-for-performance systems link individual and organizational performance, employees can see their work is important, which in turn increases their job satisfaction because they are able to fulfill high-order needs, such as self-esteem (Wright and Kim, 2004).

This leads to the research proposition:

P4. The association between intrinsic motivation and job satisfaction is positive.

Having identified four research propositions, our study will explore two further issues: pay fairness and goal clarity. These issues will not be formulated into research propositions but be used to provide further insights into extrinsic and intrinsic motivation and job satisfaction.

2.3 Pay fairness and goal clarity

Pay fairness is an important issue in the design of pay-for-performance systems. Equity theory (Adams, 1965) draws on social comparison theory (Festinger, 1954), and research suggests that perceptions of fairness are often based on social comparisons (Austin et al., 1980). Employees often make equity judgments based on comparisons with others who may be co-workers, or based on other similarities, such as organizational status (Greenberg et al., 2007). The problem is that an individual’s perceptions of inequities in pay can have a detrimental impact on an employee’s motivation and performance (Cowherd and Levine, 1992; Ryan and Deci, 2000a; Merchant et al., 2003). For example, the perception that one was overpaid or underpaid lowers intrinsic motivation (Carr et al., 1996). However, only a few studies have examined intrinsic and extrinsic motivation with pay fairness (Van Herpen et al., 2005; Zapata-Phelan et al., 2009).

Another important element in the design of pay-for-performance systems is goal clarity. Goal clarity has been held to be important, as it leads to increases in motivation (Emmanuel et al., 2008; Latham and Baldes, 1975; Locke and Latham, 1990). However, it is difficult to design clear goals that are ambitious and relevant (Igalens and Roussel, 1999). The combination of well-specified and clear goals is important, as employee behaviours that are associated with specific organizational goals can increase firm performance (Boswell et al., 2006; Marginson and Ogden, 2005), and can also give greater intrinsic meaning to the individual’s job (Boswell et al., 2006; Hackman and Oldman, 1976).

3. The case study

3.1 The case organization

This case study has been conducted at a retailer that is a large and fast-growing non-food retailer in Australasia[2]. The selection criteria for the case study were purposive in that it required an organization to have a pay-for-performance plan for front-line employees (Ferreira and Merchant, 1992; Miles and Huberman, 1994), and the researchers could gain access to the organization (Anderson and Widener, 2007; Eisenhardt and Graebner, 2007). Another reason why this organization was selected...
was that one of the researchers worked in the organization on a part-time basis for five years, and so was able to provide further insights into the pay-for-performance system.

This retailer pays a performance incentive payment (bonus) to all permanent employees, both part time and full time. The fact that this payment extends to the shop floor level is interesting, as well as its magnitude, which is equivalent, on average, to one week’s pay every six months for every employee. An internal company document states that the performance incentive payment is designed to reward people for achieving pre-established goals. The bonus is paid pro rata on the number of hours worked per week[3]. A period of three months is enforced before a team member is eligible to receive this payment.

In calculating the bonus payment, a maximum potential payment is set for a full-time employee working a 40-hour week. Deductions are made from this maximum potential payment based on the percentage of achievement of organizational, store, department, and individual goals. Goals relating to the performance incentive payment range from very broad companywide goals and standards to specific individual appraisals. An example of a companywide goal is the expectation that for every 1 percent over the targeted earnings before interest and tax (EBIT), an extra 2 percent is added to the potential incentive payment. Alternatively, for every 1 percent below the targeted company EBIT, 1 percent is deducted from the potential payment. Store goals relate to such measures as the budgeted sales figures, as well as the wage budget. Included in the goals to be assessed by area are the amount of write-offs and shrinkage. Departmental goals are also important, and, in the service department, such goals as the number of deleted lines and voided sales are considered. An individual performance-based appraisal is also conducted between the departmental manager and each employee for every bonus period.

In addition to fixed pay and bonuses, employees receive a number of other benefits. These benefits include a staff discount (including extended family), a day off on their birthday and a range of social activities (e.g. weekends away).

### 3.2 Sample

The survey data were collected using a sample of the retailer employees in seven stores in two regions. Participants were chosen based on accessibility and availability (Champion, 2002). The main advantage of this convenient sample was to achieve a larger response rate, so that each store was visited by one of the researchers, rather than posting the questionnaire. One area manager acted as a liaison for the researchers and enabled access to five stores in his region.

### 3.3 Data collection

We used a survey to collect quantitative data and had access to archival documents regarding bonuses, structure of the incentive program, as well as open-ended comments from employees at the retailer. In addition, one of the researchers worked part time at the retailer and was able to observe the pay-for-performance scheme, as well as having informal conversations during her work and while she was administering the survey.

Distributing the questionnaire involved a visit by one of the researchers to each store. Front-line employees were advised of the purpose of the questionnaire, given instructions on filling it out and were encouraged to ask questions. Special emphasis was placed on the fact that the survey was completely anonymous and confidential. In some stores,
the questionnaire had to be left for a few days, as employees were busy. Those stores
where the questionnaires were filled out while one of the researchers was on site had a
larger response than those stores where the questionnaires were left for several days.

In each store, we established an area for all shop floor employees to fill out the
questionnaire. This was to ensure that the employees felt comfortable in providing a
reply without the risk of a manager or another staff member reading their responses.
Employees were given the opportunity to complete the questionnaire during work
time. Several sealed boxes were located on site. The first box was utilised for completed
responses to ensure they remained confidential. Another box was made available for
those who did not wish to fill out the survey. A slip was provided with the
questionnaire for those individuals who wished to express their reasons for not taking
part, in order to provide a check on non-response bias. The final box was limited to
slips referring to feedback. The opportunity to receive a copy of the results was given
to all employees.

In total, 91 completed responses were obtained. The 17 percent response rate for this
survey was calculated based on the total number of all employees employed at each
store. See Table I for demographic details.

3.4 Instruments
We used three established instruments. The short form Minnesota Satisfaction
Questionnaire was used to measure job satisfaction (Weiss et al., 1967), Vroom’s (1964)
model by Nadler and Lawler (1977) and the Pay Satisfaction Questionnaire (PSQ)
developed by Heneman and Schwab (1985) were used to measure pay satisfaction. The
descriptive statistics for the variables are shown in Table II.

The correlation matrix in Table III identifies the Cronbach’ alpha as the leading
diagonal, and the correlation between constructs lie below that diagonal[4]. As the
matrix highlights, the Cronbach’ alphas are all above 0.8, which Nunnally (1978) views
as excellent. Furthermore, the Cronbach’ alphas are higher than the correlation
between constructs, which supports that each of the constructs are reliable and have
high discriminant validity. Table III shows that each of the variables are reliable and
also that they are distinct from each other.

<table>
<thead>
<tr>
<th>Gender</th>
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<tr>
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<tr>
<td>Male</td>
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<td>(32)</td>
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</table>

<table>
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<td>15-24</td>
<td>40</td>
<td>(44)</td>
</tr>
<tr>
<td>25-34</td>
<td>18</td>
<td>(20)</td>
</tr>
<tr>
<td>35-44</td>
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<td>(18)</td>
</tr>
<tr>
<td>Over 45</td>
<td>14</td>
<td>(15)</td>
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<td>(3)</td>
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<table>
<thead>
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<th>Type</th>
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<td>Full time</td>
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<td>(66)</td>
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<tr>
<td>Part time</td>
<td>26</td>
<td>(29)</td>
</tr>
<tr>
<td>No details</td>
<td>5</td>
<td>(5)</td>
</tr>
</tbody>
</table>

Table I.
Demographic details

Note: Percent values are represented in parenthesis
3.5 Analysis of constructs

The three constructs: pay satisfaction, motivation (intrinsic and extrinsic), and job satisfaction were initially examined as distinct from one another, as they were all measured through separate instruments (Igalens and Roussel, 1999).

Pay satisfaction. The PSQ was adapted from Heneman and Schwab (1985) to include four questions on bonuses. The mean score for all items was calculated for each respondent within the sample, and these were then combined to gain an overall mean of 3.1 for the total sample. Analysing the individual scores shows that the majority (87 percent) of employees were neither “very satisfied” nor “very dissatisfied” with their compensation package (ratings between 2 and 4). While this is not an ideal situation, one store manager noted that:

[...]

Work motivation – intrinsic and extrinsic. Analysis of the work motivation construct was calculated using the questions of ratings of importance of intrinsic and extrinsic rewards adapted from Nadler and Lawler (1977). Factor analysis shows that ratings of importance for pay, bonuses and benefits loaded onto one factor categorised as extrinsic motivation[5]. The importance of feeling good, gaining new skills and abilities, job security, chances to learn new things, promotion, accomplishment, freedom, praise from supervisor and friendship loaded onto a factor termed intrinsic motivation. Praise from supervisors loaded on both factors and was added to the intrinsic factor. The purpose of this analysis was not only to examine the research propositions but also to enable an understanding of the qualitative comments by classifying the intrinsic and extrinsic motivations of employees.

Job satisfaction. A mean job satisfaction score was calculated for each individual, and using this analysis, an overall job satisfaction score of 3.5 was then available for the whole sample. This is an outcome which illustrates that, in general, employees are moderately satisfied with their job. Those mean scores equal to or over 4.0 were deemed “very satisfied” (22 percent), those less than or equal to 2.0 were “very dissatisfied”

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Range (Likert scale 1-5)</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>SD</th>
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<tr>
<td>Job satisfaction</td>
<td>91</td>
<td>2.95</td>
<td>1.95</td>
<td>4.89</td>
<td>3.5</td>
<td>0.63</td>
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<tr>
<td>Intrinsic motivation</td>
<td>91</td>
<td>2.30</td>
<td>2.7</td>
<td>5.0</td>
<td>4.1</td>
<td>0.56</td>
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<tr>
<td>Extrinsic motivation</td>
<td>91</td>
<td>3.33</td>
<td>1.67</td>
<td>5.0</td>
<td>4.0</td>
<td>0.81</td>
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<tr>
<td>Pay satisfaction</td>
<td>91</td>
<td>4.0</td>
<td>1.0</td>
<td>5.0</td>
<td>3.1</td>
<td>0.72</td>
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Table II. Descriptive statistics

<table>
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<th></th>
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<th>Pay satisfaction</th>
<th>Intrinsic motivation</th>
<th>Extrinsic motivation</th>
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</thead>
<tbody>
<tr>
<td>Job satisfaction</td>
<td>0.921</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pay satisfaction</td>
<td>0.609 ** (0.000)</td>
<td>0.959</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td>0.233 * (0.012)</td>
<td>0.208 * (0.024)</td>
<td>0.850</td>
<td></td>
</tr>
<tr>
<td>Extrinsic motivation</td>
<td>−0.206 (0.050)</td>
<td>−0.191 (0.07)</td>
<td>0.384 ** (0.000)</td>
<td>0.8550</td>
</tr>
</tbody>
</table>

Table III. Correlation matrix

Notes: Correlation is significant at: *0.05 and **0.01 levels (one-tailed); Cronbach’s alphas are reported on the diagonal.
(1 percent), with neutral responses being obtained for any scores between 2.1 and 3.9 (77 percent). Similarly, Cimete et al. (2003) found a mean job satisfaction score of 3.2, which they termed "moderate satisfaction", and is consistent with the findings at this retailer. A slightly higher mean score of 3.8 was reported by Bodur (2002).

4. Results and discussion
4.1 Quantitative results
We use correlation analysis to examine $P1$ and $P2$, and we use regression analysis to examine $P3$ and $P4$[6].

Motivation and pay satisfaction. Table III shows there was no significant correlation between pay satisfaction and extrinsic motivation ($P1$). From agency theory, we would have expected extrinsic motivation to be significantly associated with pay satisfaction (Kreps, 1997). One reason we find the lack of significant results could be that retail is a low-wage industry (Carre´ and Tilly, 2008; Pacheco, 2007). These employees, while having varying levels of extrinsic motivation, may find the minimum wage just enough to live on, without having an impact on their aspirations or expectations.

We find a significant positive correlation between pay satisfaction and intrinsic motivation ($t = 0.208, p < 0.05$, Table III), which is contrary to the direction of $P2$. The correlation between pay satisfaction and intrinsic motivation warrants closer examination, as we had expected to find a negative correlation consistent with the crowding-out literature (Osterloh and Frey, 2002; Ryan and Deci, 2000a). However, the positive sign may be in line with the self-determination theory argument that extrinsic rewards can be internalised if they encourage employees' feelings of autonomy and self-esteem (Deci and Ryan, 2008; Gagne and Deci, 2005).

Motivation and job satisfaction. We examine the effect of intrinsic motivation, extrinsic motivation, and pay satisfaction as independent variables on job satisfaction after controlling for age, sex, store, length of service, and part/full time (Table IV)[7].

We find that pay satisfaction and intrinsic motivation have a positive association with job satisfaction, whereas extrinsic motivation has a negative association with job satisfaction (Table IV). The negative sign for extrinsic motivation and job satisfaction is a surprise ($P3$), as from expectancy theory we would have expected a positive association (Ferris, 1977; Igalens and Roussel, 1999; Porter and Lawler, 1968). Part of the explanation could be the mixed results from prior expectancy theory

<table>
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<th>Independent Variables</th>
<th>Job satisfaction</th>
<th>$t$-value</th>
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<tbody>
<tr>
<td>Intercept</td>
<td>1.246</td>
<td>2.235 ***</td>
</tr>
<tr>
<td>Pay satisfaction</td>
<td>0.450</td>
<td>5.274 *</td>
</tr>
<tr>
<td>Extrinsic motivation</td>
<td>-0.197</td>
<td>-2.455 ***</td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td>0.254</td>
<td>2.189 ***</td>
</tr>
<tr>
<td>Gender</td>
<td>0.100</td>
<td>0.834</td>
</tr>
<tr>
<td>Age</td>
<td>0.076</td>
<td>1.289</td>
</tr>
<tr>
<td>Part or full time</td>
<td>0.207</td>
<td>1.560</td>
</tr>
<tr>
<td>Years of service</td>
<td>0.001</td>
<td>0.040</td>
</tr>
<tr>
<td>Store</td>
<td>0.008</td>
<td>0.221</td>
</tr>
</tbody>
</table>

Adjusted $R^2$ | 42.9%

Note: Significance at: *$p < 0.001$, **$p < 0.01$ and ***$p < 0.05$ levels

Table IV.
Regression analysis: job satisfaction with dependent variables – pay satisfaction, extrinsic motivation, intrinsic motivation
(Kominis and Emmanuel, 2007). An alternate explanation is that this is a type of “crowding in” where optimising intrinsic motivation can decrease extrinsic motivation (Frey, 1997).

The significant positive correlation between intrinsic motivation and job satisfaction supports P4 (Table IV). This is consistent with self-determination theory because elements of intrinsic motivation, such as the feeling of well-being and enjoyment, are associated with the satisfaction of doing the job (Deci and Ryan, 2008; Gagne and Deci, 2005; Kunz and Pfaff, 2002).

Intrinsic and extrinsic motivation. The combination of a positive sign for intrinsic motivation and a negative sign for extrinsic motivation with job satisfaction in the correlation and regression analyses also demonstrates that extrinsic and intrinsic motivation are not additive in leading to job satisfaction. This challenges the view of prior literature that intrinsic plus extrinsic rewards would result in job satisfaction (Gagne and Deci, 2005; Porter and Lawler, 1968). Alternatively, the negative sign may mean that the extrinsic and intrinsic motivation are ends of a continuum; that is, extrinsic motivation is at one end and intrinsic motivation is at another end, as argued by self-determination theory (Deci and Ryan, 2008). We identify 42 employees (out of 91) with both high intrinsic and extrinsic motivation (i.e. four or more out of a five-point scale) [8]. For employees to score high on both intrinsic and extrinsic motivation would indicate that these two types of motivation are not ends of a continuum (Deci and Ryan, 2008), or additive (Porter and Lawler, 1968), but may be complementary (Kominis and Emmanuel, 2005, 2007; Kunz and Pfaff, 2002). We examine this cluster of 42 employees who are high on both intrinsic and extrinsic motivation to see if this may be explained by idiosyncratic characteristics, such as gender, age, store, or whether they are full or part time (Kominis and Emmanuel, 2007; Kunz and Pfaff, 2002). We find no significant differences [9]. Next, we analyse the qualitative data to provide further insights into intrinsic and extrinsic motivation.

4.2 Qualitative data and results
In addition to the survey instruments, this paper examines the qualitative comments from employees regarding goal clarity and pay fairness to gain insights into the research propositions (see Giraud et al. (2008) for a similar approach). The open-ended questions included:

- How clear are the goals set for your department and/or your store?
- How fair is your wage rate, your bonus payment and/or the benefits you receive?
- For the amount of pay you receive, how motivated are you?
- For the amount of work you do, how happy are you with your wage rate, your bonus payment and/or the benefits you receive?

Out of 91 employees, 77 provided some qualitative comments for at least one of these questions.

The research protocols used in the data analysis involved several matrices to display the data, as they are useful to highlight consistency and differences across employees (Miles and Huberman, 1994). The matrices have been developed so that contrasting patterns, if any, could be examined (Corbin and Strauss, 1990; Eisenhardt and Graebner, 2007). First, the qualitative comments for each of the questions were typed into a matrix.
Second, the questions relating to pay fairness, goal clarity, and motivation were analysed. This involved coding the themes from the qualitative comments as follows:

- goal clarity as clear goals/unclear goals;
- pay fairness was coded as fair/unfair; and
- motivation was coded as motivation has increased/decreased/remained unchanged.

To increase construct validity, two researchers independently coded the qualitative comments, and coding checks showed that the two raters agreed in over 98 percent of cases (this is over the 90 percent suggested by Miles and Huberman (1994)). A further reliability check was undertaken, whereby a random selection of qualitative comments was re-coded to ensure consistency between raters and over time.

We find that 82 percent of employees who commented perceived that store and department goals were clear. This may be a result of organizational structures and processes, such as a visual display of goals in the staff room. As most employees perceived that their goals were clear, we have focused on employee perceptions of pay fairness to categorise the groups.

For the high extrinsic/high intrinsic employees who have provided comments, we find 20 have commented that pay was fair (group 1), while 14 perceived pay was unfair (group 2). For comparison, we look at the other employees and we find that 17 employees felt that pay was unfair (group 3), whereas 19 employees perceived pay was fair (group 4) (Table V). We also found no differences between these four groups in relation to gender, age, store, and full- or part-time employment.

Insights into perceptions of pay fairness in the high intrinsic/high extrinsic motivation group. Of the 42 employees who have high intrinsic and high extrinsic motivation, we find that there are two groups within this cluster: those who feel pay was fair (group 1) and those who feel pay was unfair (group 2). Group 1 includes 20 employees who have perceived that pay was fair. The insights from employees who perceive that pay was fair showed that their comments on employee motivation has increased or was unchanged. These quotes reflect their views and typically they discussed how they were motivated intrinsically (e.g. challenge, work):

Motivated by the challenges each day brings. Reasonably happy with pay. [Goals] very clear (Respondent no. 19).

Regardless of what I receive my motivation is always high, i.e. I would love my job on $9 or $20 per hour. Pay is reasonably fair, although in retrospect feel I do more than the pay scale I am in allows. I actually feel the goals to some degree are redundant in respect of my dept. My goals are always to be the top whatever I do. I take pride in my job and performance but feel some of the goals are very pedantic again that is because the [retailer] is evolving and branching into different areas, i.e. sales and expertise in specialist areas (No. 55).

<table>
<thead>
<tr>
<th>Group</th>
<th>Pay fair</th>
<th>Pay unfair</th>
<th>Comments received((n))</th>
</tr>
</thead>
<tbody>
<tr>
<td>High intrinsic/high extrinsic ((n = 42))</td>
<td>Group 1 ((n = 20))</td>
<td>Group 2 ((n = 14))</td>
<td>34</td>
</tr>
<tr>
<td>Other employees (not high/high) ((n = 49))</td>
<td>Group 4 ((n = 19))</td>
<td>Group 3 ((n = 17))</td>
<td>36</td>
</tr>
<tr>
<td>Total ((n))</td>
<td>39</td>
<td>31</td>
<td>70</td>
</tr>
</tbody>
</table>

Table V. Classification of groups
The pay rate doesn’t motivate the intentionals, more of a small part of a lot of things that motivate me. Compared to other industries, pay’s great. Goals are very clear now that they have been established for me (No. 49).

We also find a group of 14 employees (group 2) who have high intrinsic/high extrinsic motivation and who perceive that pay is unfair. This was a surprise, as we had expected to find greater consistency in the responses of the high/high group. Where employees provided reasons, they tended to make comparisons of their pay with other employees who work less and/or perceived that their pay did not reflect their effort. These are indicative comments:

I’m motivated not because of the pay cause I believe I’m not paid enough it’s because I love my job and the ppl [people] in the store. Money is nice but being passionate about my job and being happy more important. I know ppl in same positions other stores make more money and work less and sometimes feel it’s not what you know but who. Not fair as I know others less motivated who make more it sucks. Goals are very clear, crystal in fact (No. 81).

Not fair as I believe team members not achieving goals are getting more $$ wise than myself. Strange but true! More motivated than I should be! Considering I am aware of other team members being paid more for the same role I am currently doing. I am not happy. [Goals] better now than previous goals. They are now more defined to my role & not just the “big overall” scheme of things (No. 34).

Wage is unfair, not based on your performance when it should be. Not happy for the amount of work I do & what I should do – should be paid more (No. 38).

Perceptions of fairness from other employees. To provide a comparison, we then examine the comments of those employees who did not place a high importance on either intrinsic or extrinsic motivation to see how many held the view that pay was unfair (group 3) or pay was fair (group 4). Group 3 includes 17 employees who have provided comments that pay was unfair. Their comments are similar to employees in group 2 in terms of comparisons of pay to others and pay compared to their effort. These are illustrative comments:

I would be more motivated if my pay reflected the rate of work I do. I am dissatisfied as I do other people’s jobs all the time with no financial recognition (No. 4).

Reasonably unfair. I do some of the same jobs as others do sometimes but those skills are not acknowledged in my pay, and because of the area I work in I get less pay than others. Would be more motivated if pay scales were fairer (No. 6).

People doing the same or less. But still getting more money. I know some people do a lot less work but get more pay than me! The amount of work I do, I do not get near enough pay (always doing something extra) (No. 91).

Group 4 includes 19 employees who perceived that pay was fair. These comments are similar to group 1, in that employees’ comments did not show that they were comparing their pay to other employees, or their contribution to the organization, and these employees were motivated by a range of factors. In addition, the first comment provides an explanation for why the goals were clear – they were posted on the wall in the staff room:

It is consistent among all staff, so I would say it is fair. I think the wage rate is consistent but would like a little more because after tax it is not a lot. The amount of pay does not
affect my motivation. [Goals are] very clear, we know what we have to do to reach our goals and what our goals are – they (our current success rates) are up on the wall in the staff room (No. 13).

I go to work cos [because] I like the job and now I have to pay the bills. Also I’d like to work more hours but not 6 days a week, so I could get more pay. I don’t get as much pay as I’d like but I’m really motivated to work as it makes me feel good and so I can work the most hours I can to get the most pay I can (No. 56).

While we find that most employees considered store and departmental goals were clear, what was surprising was that 40 percent of employees who provided comments felt that pay was unfair. Clearly, goal clarity was not explaining perceptions of pay fairness. We found that perceptions of fairness or unfairness cut across motivation levels and idiosyncratic variables (e.g. age, gender, store, or part- or full-time employment). This indicates that it is the individual’s perception of fairness that is important. Further, when employees perceive that pay is unfair, whether employees are highly motivated or not, there was a tendency to compare to others, or to consider that their pay did not reflect their contribution to the organization. Again, this is consistent with social comparison and equity theory (Adams, 1965; Austin et al., 1980; Festinger, 1954; Greenberg et al., 2007). The advantage of a single case site is that even though employees were on the same pay-for-performance system, we find they have different perceptions of fairness regardless of their levels of motivation.

5. Conclusions
This study examines the implications of a pay-for-performance system on intrinsic and extrinsic motivation and job satisfaction of front-line employees at a retailer. We find positive associations between pay and intrinsic motivation and intrinsic motivation and job satisfaction, while there was a negative association between extrinsic motivation and job satisfaction. Pay satisfaction had the strongest association with job satisfaction. The practical implications of this for managers are to pay their front-line employees well and job satisfaction will be high. While focusing on extrinsic rewards has merit, future agency theory research needs to draw on behavioural models from psychology and sociology to recognise the potential of intrinsic, as well as extrinsic rewards to motivate employees (Frey, 1997; Kreps, 1997; Merchant et al., 2003). We find pay satisfaction and intrinsic motivation are positively correlated and some evidence that “crowding in” does occur with intrinsic motivation increasing and extrinsic motivation decreasing. These findings are in contrast to the focus in the literature on “crowding out” (Frey, 1997). The relationship between intrinsic and extrinsic motivation needs to be the focus of future studies.

One of the most interesting findings is that around half of these front-line employees rate extrinsic and intrinsic motivation as of high importance. In a retail outlet where the minimum wage is the norm, to find employees that are high on both intrinsic and extrinsic motivation is a pleasant surprise. This evidence provides support for the argument in the management accounting literature that intrinsic and extrinsic motivation could be complementary in organizational settings (Dermer, 1975; Kominis and Emmanuel, 2005, 2007; Kunz and Pfaff, 2002; Ronen and Livingstone, 1975). Our findings also are in contrast to the self-determination theory literature that argues intrinsic and extrinsic motivation are on a continuum from autonomous to controlled motivation, which necessarily means that employees could not be high on both intrinsic
and extrinsic motivation (Deci and Ryan, 2008). Future research needs to focus on how intrinsic and extrinsic motivation can enhance employee performance at different levels in organizations (Bonner and Sprinkle, 2002; Merchant et al., 2003).

We find that 82 percent of the employees who provided qualitative comments considered store and departmental goals were clear, which is pleasing for the retailer. This is consistent with the literature that clear goals are important to ensure that employees understand what is expected from them; this enables them to focus their effort and leads to higher levels of motivation (Emmanuel et al., 2008; Latham and Baldes, 1975; Locke and Latham, 1990). We also find that a substantial number of employees who are high on both extrinsic and intrinsic motivation, who according to self-determination theory, exhibit high levels of autonomy, also perceive their pay is unfair. This indicates that pay fairness and equity are not determined by one’s motivation levels or even goal clarity. However, the 40 percent of employees who perceived that pay was unfair generally held views that this was driven by comparisons to others or that pay was not reflective of their effort. Our findings support social comparison and equity theory that pay inequities can have important outcomes (Adams, 1965; Festinger, 1954; Greenberg et al., 2007). Future research is needed to examine perceptions of fairness and the implications for employee motivation, as few studies have examined these issues in any depth (Van Herpen et al., 2005; Zapata-Phelan et al., 2009).

There are a number of limitations with this research. This study examines a pay-for-performance scheme in one organization for front-line employees, and care needs to be taken when generalizing to other contexts (e.g. managers). However, a single case site is appropriate when the unit of analysis is at the employee level (Anderson and Widener, 2007). The single site has the advantage of controlling for external factors and enables us to focus on differences at the employee level (Burney et al., 2009). While single case studies are useful and rich research sites, the challenge for future research will be to develop multiple case studies to provide a stronger base for theory building and testing (Yin, 1994; Eisenhardt and Graebner, 2007). Another limitation is that we were unable to test non-response bias, as employees were assured anonymity. As a surrogate, we have tested the responses between the stores where the researcher stayed for the whole time and the stores where questionnaires had to be left for staff to complete over several days. We find no significant differences with regard to all the key variables tested in the research propositions.

Despite these limitations, the paper extends our understanding of employee motivation with regard to the complementary nature of intrinsic and extrinsic motivation. Future papers are needed that extend this analysis, so organizations can design incentive systems to leverage the potential of intrinsic and extrinsic motivation and to take steps to improve employee perceptions of pay fairness.

Notes
1. This quote is from Locke et al. (1980) cited in Currall et al. (2005, p. 620).
2. Further information cannot be disclosed for confidentiality reasons.
3. If a team member leaves before the end of the bonus period, a payment will not be made; however, if the team member completes the bonus period but leaves before the date of the payment, the team member will still be eligible to receive the bonus.
4. We have used Spearman’s rho, as the distribution for extrinsic motivation was not normal and the sample size was larger than 20.
5. Principal components analysis with Promax rotation was used.

6. We have used correlation analysis for $P_1$ and $P_2$, as we are not arguing for a causal or directional relationship. Pay satisfaction may influence extrinsic or intrinsic motivation and vice versa (Gardner et al., 2004; Gerhart and Milkovich, 1992). The use of correlation analysis for hypothesis testing has held to be sufficient in prior papers (Merchant, 1990; Giraud et al., 2008).

7. The key assumptions of multiple regression were tested, and there was no evidence of multi-collinearity and heteroscedasticity and the residual plots were normal.

8. There were no employees who could be held as having low intrinsic motivation, that is, a score of below 2 on the scale.

9. We use the Mann-Whitney $U$ and Wilcoxon $W$ and find no significant difference between the 42 high extrinsic/high intrinsic and the 49 other employees.

10. The number given is attributed to an employee.

References


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