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**Assessing the Pay Communication, Knowledge and Satisfaction
of Exempt Employees at
Medtronic Vascular**

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1 Introduction

Medtronic Vascular is a US-based multinational that develops technologies to provide lifelong solutions for people with chronic diseases. Over 2,000 people are employed in Ireland with most of the company's employees working at the state-of-the-art facility in Galway. The company recently devoted considerable resources to branding its reward system. Changes made to its base pay and bonus scheme were communicated with greater transparency than before using new and enhanced information sources.

Before adding new elements to the reward system or changing the communication media, the company plans to administer a survey to all employees with the following objectives: to identify sources of pay information currently used by employees; to assess their effectiveness; to evaluate employees' knowledge of particular pay elements; and to identify attributes that are associated with employee satisfaction with their pay system. Medtronic Galway intends to use the survey results as a baseline to evaluate subsequent changes to its reward system and communication practices.

This paper reports the results of a pilot survey administered to the exempt employees in December 2008. Survey topics and statements were adapted primarily from *The Knowledge of Pay Study: E-mails from the Frontline* (Mulvey, LeBlanc, Heneman and McInerney, 2002a). This allows cautious comparisons with a broader-based survey administered in the US.

This paper has five sections. This introduction is followed by a literature review in section 2. Section 3 discusses the methodology. Section 4 reports the survey findings followed by the discussion in section 5.

2 Literature Review

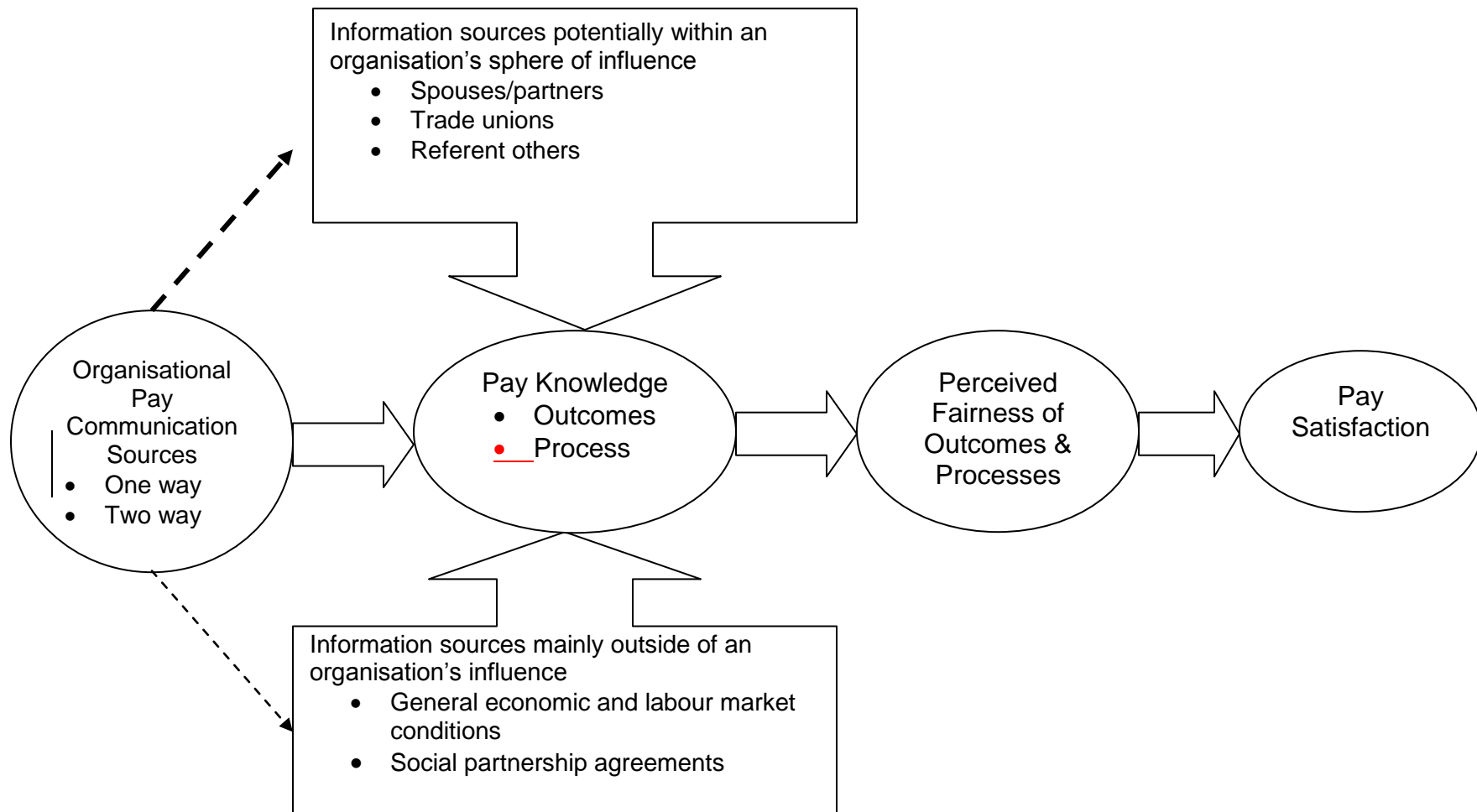
Pay satisfaction is examined in both practitioner and academic literature. Practitioner literature suggests that it is contingent on communication and knowledge about pay outcomes and processes, with passing reference to fairness. Most academic literature views pay satisfaction as multidimensional. Some studies, particularly those based on justice theories, consider communication, relationships with line managers and understanding of the pay system as variables associated directly with procedural and interactional justice but ultimately with pay satisfaction.

There is overlap between the literatures. However, the lack of theory in much of the practitioner literature and the lack of detail in much of the academic literature about how employees come to understand pay processes makes an examination of overall literature disjointed. Nonetheless, this literature review attempts to identify relevant research in both types of literature.

2.1 Pay Satisfaction Model

Figure 1 is an inductive model that illustrates the possible connections flowing from pay communication to pay satisfaction. It is used to organise the literature review. In the KOP survey, 'pay' was narrowly defined and includes fixed pay, bonus pay, pay structure, pay administration, long-term incentives and benefits.

Figure 1: Pay Satisfaction Model



2.2 Pay Communication

Organisational pay communication sources refer to all of the media used within an organisation to channel pay information to their employees. *One-way communication* sources are usually developed by the Human Resources (HR) department and distributed to all employees or to particular segments (managers, professionals). This communication is generally written and may be available in hard and/or soft copies. The organisation has a great deal of control over the content of these media which include: the organisation's web site, employee handbooks, newsletters and bulletin boards.

Two-way communication suggests interaction between the employee and another member of the organisation. Sources of information include supervisors/managers and HR department representatives. Group communication is generally formal and planned including new employee induction and classroom training. Usually this occurs face-to-face. When group sessions are conducted by HR professionals, the organisation has considerable control over them.

Individual two-way communication may be face-to-face, by phone or through e-mail. It can be formal, for example a salary review as part of an annual performance appraisal discussion between an employee and supervisor. An e-mail from an employee to an HR representative about a particular benefit or a conversation between an employee and supervisor concerning a bonus payment are examples of informal personal communication. Because this communication occurs between many members within the organisation, over various topics and in different circumstances, it can be more difficult for the organisation to control.

Articles in the practitioner literature suggest that pay communication should be segmented. Organisations need to carefully consider the most effective communication method for each element of the reward system and the target audience (Kantor & Kao, 2004; Kisilevitz, Debgupta & Metz, 2006).

Surveys reported in the practitioner literature indicate that the media used for pay communications is increasingly complex. Two surveys published after the millennium suggested that organisations were adopting one-way pay communication media but still relied primarily on two-way communication through management (Scott, Sperling, McMullen and Wallace, 2003; Mulvey, LeBlanc, Heneman and McInerney, 2002a). A series of surveys conducted bi-annually from 2001 to 2005 indicate that both general and personal pay information is increasingly available on-line (Marcotte, 2006). A recent survey of compensation specialists shows that organisations are using a wide range of one-way and two-way sources to communicate different parts of the pay system to employees (Scott, Sperling, McMillen & Bowbin, 2008).

Supervisors/managers are an important source of information and surveys in practitioner literature indicate that they are generally considered effective by employees (Mulvey, LeBlanc, Heneman and McInerney, 2002a) and compensation professionals (Scott, Sperling, McMillen & Bowbin, 2008). Brown and Perkins (2007) refer to CIPD research conducted in 2006 that indicates that the major barriers to the effective operation of reward strategies and changes are line managers' skills and abilities followed by insufficient communications.

Some practitioner literature directly links pay communication with pay satisfaction. For example, Vellas (2006, p. 26) states, 'Watson Wyatt's "WorkUSA 2004/2005 Study" of 12,703 U.S. workers across all job levels and in all major industries found that more employees are satisfied with a below-average benefits package that is communicated well than those with a above-average benefits package that is communicated poorly'.

2.3 Pay Knowledge

Pay knowledge encompasses both pay outcomes and processes. Pay outcomes include values of base pay, base pay increases, incentives, benefits and stock options. Pay process is defined '...as the decisions that lead to the distribution of pay' (Mulvey, Ledford, & LeBlanc, 2000) and include links between base pay increases and performance management, pay structures, market values and knowledge of measures used for incentive payments. The arrow linking pay communications and pay knowledge (Figure 1) indicates that pay communication is the principal and most direct way that organisations introduce or add to the existing knowledge and understanding of employees about their outcomes and processes.

A survey conducted by Wyatt Watson concerning strategic rewards and pay practices found that only 23% of employers reported that "to a great extent" or "to a very great extent" that employees understand their reward plans. This was a decrease of 2% since their 1996 survey (Watson Wyatt Worldwide, 2006, p. 8).

In the Knowledge of Pay (KOP) survey on which this study is based, employees were asked to assess their knowledge of elements of their reward system. The authors found '...knowledge of the pay process is generally lower than knowledge of pay outcomes' (Mulvey, LeBlanc, Heneman & McInerney, 2002a, p. 31).

Case studies in the practitioner literature illustrate the links between communication, knowledge and appreciation/satisfaction and/or behaviour (Kincaid, 2004; Parus, 2004; Kress, 2005). A case study about American Express reported that integrated marketing and communication initiatives about pay led to greater employee understanding and appreciation, supporting the pay-for-performance environment (Gagliardi, 2001). The Benefits Roundtable

consulting group's communication effectiveness model shows how '...communication directly influences behavior by driving knowledge and changing perceptions' (Benefits Roundtable Corporate Executive Board, 2005, p. 12a).

2.4 Other Sources Affecting Pay Knowledge

Figure 1 indicates that there are *information sources potentially within an organisation's sphere of influence* that add to the pay knowledge of employees including: spouse/partner (particularly for benefits), trade unions and referent others. These are not discussed in detail because the KOP survey used for this study does not examine the importance of these sources although studies found in both academic and practitioner literatures discuss their impact on pay satisfaction.

However, Satterfield (2008) encourages management to use communication, education and knowledge building to establish the context of pay and potentially minimise or neutralise the impact of other sources of pay information. Management needs to communicate '...the rationale under-lying the organization's pay practices' (Satterfield, 2008, p. 49) including the role of various pay components, the balance between internal and external equity and the influence of performance measurement on pay. Satterfield anticipates that pay satisfaction will increase when employee expectations are framed by their organisation.

Additionally, there are *information sources mainly outside of an organisation's influence* that add to employee knowledge, although the dotted line indicates that organisations may attempt to interpret these for their employees. Since 1988, Ireland has negotiated a series of wage agreements through the Social Partners that include government, employers' organisations, trade unions, farming organisations and the community and voluntary sector. Negotiations are widely publicised and effect employees' pay expectations. Organisations like Medtronic, belonging to the medical device industry, historically paid at or above the agreed rate.

News of labour market conditions in the wider economy can impact pay satisfaction. In a report on a national US-based *Rewards of Work Survey*, satisfaction with each element of rewards declined between 2003 with 2006 (Segal Sibson, 2006). The authors suggested that improving economic conditions may be responsible for the decline.

2.5 Perceived Fairness of Outcomes & Processes

Justice models are not used in the practitioner literature examined to date. However, some surveys include statements to assess employees' perception of

fairness with aspects of their reward system (Segal Sibson, 2006; Mulvey, LeBlanc, Heneman and McInerney, 2002a).

Academic researchers tend to view pay satisfaction as multidimensional. Some studies consider pay communication and relationships with supervisors among an array of variables related to pay satisfaction.

In a study by Jones, Scarpello and Bergmann (1999) the strongest predictor of pay satisfaction was process control followed by supervisory support. Process control refers to '...the extent to which individuals have opportunity to express their opinions about pay outcomes and procedures' while supervisory support describes '...the extent to which supervisors support their subordinates' pay interests and are open and honest with their subordinates' (Jones, Scarpello & Bergmann, 1999, pp. 135-136).

Fong and Shaffer (2003) found that interactional justice (the treatment received by the employee from their supervisor) was one factor that influenced pay raise and pay administration satisfaction. The findings of Folger and Konovsky (1989) indicate that the distributive justice index (based on the perceived fairness with the amount of the raise) and feedback from the supervisor were significantly related to satisfaction with pay raises. Cox (2003, p. 29) found that '...the quality of the relationship between employee and supervisor appears to be critical to employees' perception of the fairness and effectiveness of the pay system'.

There are a several studies that suggest a connection between perceived fairness of pay outcomes and processes and pay satisfaction (Heneman & Schwab, 1985; Greenberg, 1987; Welbourne, 1998; Sweeney & McFarlin, 1993; Berkowitz, Fraser, Treasure & Cochran, 1987). Some studies suggest that pay knowledge and pay understanding influence employees' perceptions of fairness. For example, Dulebohn and Martocchio (1998, p. 483) found, '...the higher the group members' understanding of the pay plan, the higher were their perceptions of fairness of the group pay plan processes.' Brown and Huber (1992) investigated the attitudes of 101 bank employees to their earnings-at-risk (EAR) plan. Both before and after the introduction of EAR, understanding the pay system was a significant determinant of pay satisfaction.

2.6 Conclusion

To summarise, practitioner literature recommends a segmented communication strategy using a variety of media determined by the pay element and the audience. Surveys indicate that organisations are using multiple sources of communication to convey pay information. Academic literature discusses communication as part of procedural and interactional justice. The communication media are not specified but appear to be two-way providing a genuine opportunity for employees to question pay processes and outcomes.

The line manager is identified as an important source of pay information in both literatures. Practitioner literature attempts to assess their effectiveness through survey questions and acknowledges that supervisors can be a barrier to the effective operation of the reward system. Both literatures acknowledge the importance of the supervisor in interpreting the pay system and explaining pay outcomes. Academic literature emphasises the line manager as both a critical information source and crucial relationship that affects the employee's perception of pay system fairness and pay satisfaction.

Surveys and case study reports in the practitioner literature indicate that improving the knowledge of pay primarily through organisational communication positively impacts employee satisfaction with their pay system. Research reported in academic journals suggests that pay knowledge and understanding underpin employees' perceptions of fairness and satisfaction with their pay system.

3 Methodology

This research was conducted at Medtronic Vascular, US-based multinational located in Galway. Medtronic's total reward programme includes a competitive salary with benefits, recognition, learning and development and work life balance initiatives. Four years ago, Medtronic adopted a *Total Rewards* philosophy encompassing everything valued by the employee within the employment relationship. Branding is an important part of the communications strategy and is used for all communication media.

Though employing a sophisticated reward strategy, Medtronic never evaluated the communication sources or checked to see if those sources were helping employees to understand their reward system. This research was conducted by a survey adapted from a published report entitled *The Knowledge of Pay Study: E-mails from the Frontline* (Mulvey, LeBlanc, Heneman and McInerney, 2002a). Statements cover a range of pay-related issues including employee evaluation of the effectiveness of sources of information about pay, their understanding of components of pay and benefits and their satisfaction with elements of their reward package, structure and administration. Because of the length of this survey, this report only reports on communication and base pay.

Before conducting the survey, semi-structured interviews were conducted with a convenience sample of five exempt employees to discuss their approach to answering pay-related questions. A draft of the on-line survey was circulated to four members of the same group of employees who provided written feedback by e-mail attachment and oral feedback through a focus group. Based on their comments, a final survey of 81 items was compiled.

Employees were asked to respond to most statements using a five-point Likert scale. Based on the pre-survey focus group discussion, for some statements

employees were given a sixth option of 'not utilised' or 'don't know/unsure'. Employees stated that they were unfamiliar with parts of their pay system. They felt that the sixth option conveyed a more appropriate meaning than the other choices.

In December 2008, the survey was administered to a group of professional salaried employees classified as 'exempt'. All exempt employees have a minimum of a degree qualification and can follow the individual contributor (non-supervisor) or people manager (supervisor) career paths. Departmental or functional managers were omitted from the survey sample.

The survey was administered on line. Two requests were sent by e-mail. Table 1 shows the response rates.

Table 1: Survey Response for Exempt Employees

	Completed survey	Total population	% response
Supervisors	71	156	46%
Non-supervisors	81	201	40%
Didn't specify	11		
Total	163	357	46%

The response rate for supervisors was somewhat higher than non-supervisors. The overall response rate was 46%. Employees who did not specify their supervisory status, are dropped from any analysis that splits the population between 'supervisors' and 'non-supervisors'. Otherwise, they are included. Supervisors responding to the survey were slightly older than non-supervisors and have slightly more years of service. However, the differences were not statistically significant.

Based on pre-survey interviews, it appeared that supervisors used different sources of pay information and had a broader knowledge of their pay system than non-supervisors. To date, we have not identified research that examines this possible difference. Therefore all statements examined as part of this research were tested to see if there is a significant difference between the two groups. The Mann-Whitney test was chosen because it is a non-parametric test appropriate for ordinal data. The responses of the two groups, defined by supervisory status, are considered to be significantly different if the p-value <.100.

There are differences between the Medtronic population and the Knowledge of Pay (KOP) population Mulvey, LeBlanc, Heneman and McInerney, 2002a, p.

15).¹ Because the broad-based KOP survey is one of the few surveys found that was completed by employees rather than compensation specialists, cautious comparisons are made.

The correlation between the 'satisfaction' statements and other statements concerning employee knowledge and/or evaluation of information sources were measured using Kendall's tau-b. This non-parametric statistic is often used for testing ordinal relationships and does not make any assumptions about the sample's distribution. Although a relationship can be determined as significant or not significant, causation cannot be established.

Data was analysed using SPSS for Windows (15.0) and Microsoft Excel.

4 Findings

Survey results are reported in three sections. The first section considers Medtronic employees' evaluation of information sources and their overall satisfaction with the openness of their pay information system. The second section assesses Medtronic employees' knowledge of different aspects of their reward system and their satisfaction with those aspects. The third section reports on correlations between communication effectiveness, base pay knowledge and overall satisfaction with Medtronic's reward system.

4.1 Pay Communications & Satisfaction

Table 2 outlines the information sources used by Medtronic.

¹ The KOP survey was administered to a wide range of employees in 26 public and private organizations in the US and Canada. The Medtronic survey considers only one classification of employees located at one location. The Medtronic population includes a larger percentage of supervisors (47%) than the Knowledge of Pay Study population (33.9%). For age and average length of service, the populations are not directly comparable. However, the following comparisons can be made. Survey respondents for Medtronic are younger and have a shorter length of service than the KOP Study population. There is a six year time difference between the administration of the two surveys.

Table 2: Pay Information Sources

Media	Type	Information
Email Notices	One-way / soft copy and hard copy	<ul style="list-style-type: none"> • Announcements • Benefits
Employee Benefits Booklet (Pension & Life).	One-way / soft copy and hard copy	<ul style="list-style-type: none"> • Benefits
Human Resource Department representative	Two-way	<ul style="list-style-type: none"> • General query handling • Consulting
HR Policies	One-way / soft copy	<ul style="list-style-type: none"> • Pay policies • Benefits (leave)
Supervisor or manager	Two-way	<ul style="list-style-type: none"> • Base pay • Career development • Work life balance
Total Rewards Newsletter	One-way / soft copy and hard copy	<ul style="list-style-type: none"> • Incentives • Benefits • Announcements
Total Rewards Statement	One-way / hard copy	<ul style="list-style-type: none"> • Base pay • Incentives • Benefits • Work Life balance • Stock
Total Reward Updates/Employee Benefits Days	Two-way / Presentations and information stands	<ul style="list-style-type: none"> • Base pay outcome & process • Pay philosophy • Benefits • Work life balance • Career development • Reward training for managers
Total Reward Website	One-way/ on-line	<ul style="list-style-type: none"> • Base pay • Incentives • Benefits • Surveys links • Announcements • Links to benefit providers • Archive of reward documents & presentations
Total Well Being Notice Board	One-way/ hard copy	<ul style="list-style-type: none"> • Benefits • Incentives • Functional newsletters • Benefit enrolment forms

Table 2 indicates that Medtronic uses 10 distinct pay information sources. Although not listed in the table, 'fellow employees' was included as an eleventh information source on the Medtronic survey. This two-way source of pay information, found to be important in other surveys, is unplanned and informal.

Six sources are one-way and written. Five of these sources convey general information while the 'Total Reward Statement' is personalised. The two-way sources of pay information are generally conducted between individuals.

Employees were asked to assess the effectiveness of each source of pay information. The results are shown in Table 3, aggregated by supervisory status. The 'mean' was calculated by assigning each response a number from 1 (very ineffective) to 5 (very effective) and dividing it by the number of individuals who utilised the source. While a true mean cannot be calculated for ordinal data, this statistic is used to compare responses.

Table 3: Effectiveness & Use of Sources of Pay Information at Medtronic

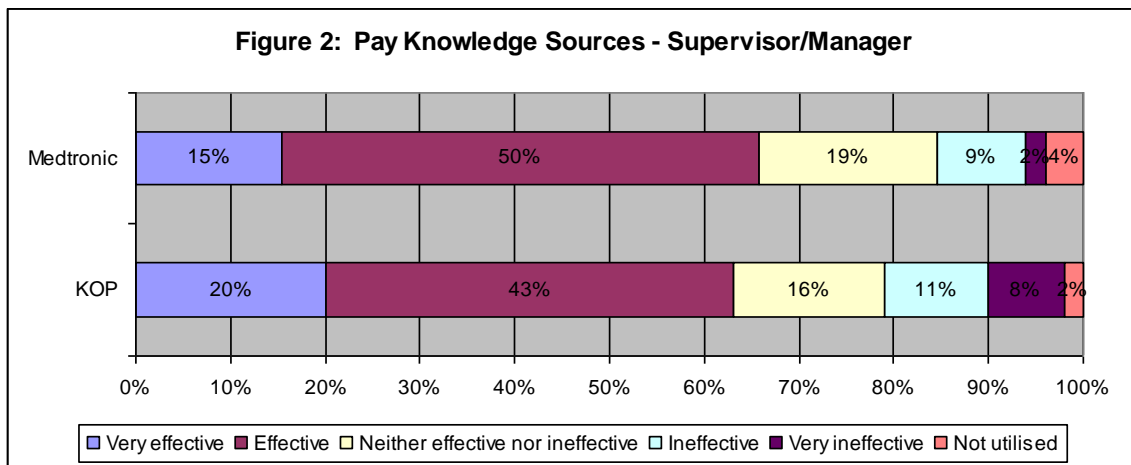
Communication sources	Total Mean (% utilized) n=162*	Non-supervisors Mean (% utilized) n=71	Supervisors Mean (% utilized) n=80	p-value
Total Reward Statements	4.08 (96%)	4.00 (99%)	4.20(100%)	.104
Email Notices	3.92 (95%)	3.97 (96%)	3.84 (99%)	.127
Employee Benefits Booklet (Pension & Life)	3.89 (93%)	3.78 (94%)	4.00 (99%)	.120
Total Reward Updates/Employee Benefits Days	3.81 (94%)	3.76 (96%)	3.94 (97%)	.237
Supervisor or manager	3.70 (94%)	3.77 (95%)	3.64 (97%)	.763
HR Department representative	3.66 (89%)	3.53 (90%)	3.83 (93%)	.052*
Total Rewards web site	3.63 (88%)	3.61 (92%)	3.69 (89%)	.573
Total Rewards Newsletter	3.62 (97%)	3.64 (99%)	3.61(100%)	.788
HR Policies	3.32 (97%)	3.23 (94%)	3.42(100%)	.169
Fellow employee(s)	3.23 (91%)	3.29 (93%)	3.20 (94%)	.484
Total Well Being Noticeboard	3.05 (80%)	3.02 (80%)	3.08 (86%)	.536

Table 3 indicates high usage; each information source was used by 80% or more of the respondents. Also, the means indicate that most employees perceive the sources of information either as neutral or effective.

At Medtronic, the top three information sources in terms of effectiveness for the total population were one-way. For the KOP survey, two-way sources were preferred. The supervisor or manager was ranked first followed by the HR department representative (Mulvey, LeBlanc, Heneman and McInerney, 2002a, p. 29).

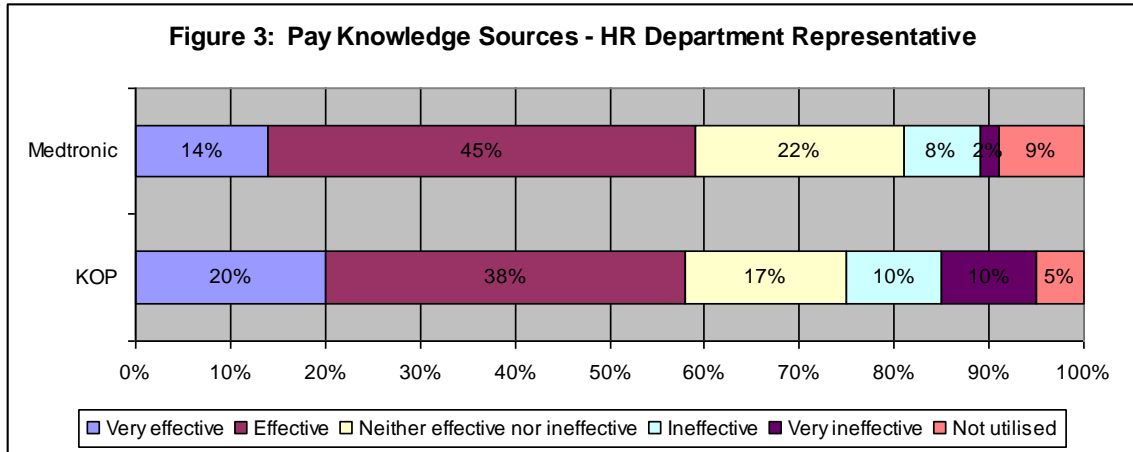
There are differences between the two groups, defined by supervisory status. However, the results p-values indicate only HR department representative is significant (.052), though the Total Rewards Statements (.104) is very close. In both cases, the means of supervisors are higher than non-supervisors.

Figure 2 compares the results for the two surveys for respondents' assessments of the effectiveness of their 'Supervisor/Manager' as a source of pay information.



Source: Mulvey, LeBlanc, Heneman and McInerney, 2002a, p. 29)

The vast majority of both populations used this source (94% for Medtronic and 98% for KOP). Although respondents to the KOP survey are more extreme in their assessments, a slightly larger majority of Medtronic employees rate their supervisor or manager as a very effective or effective source of pay information (65% for Medtronic vs 63% for KOP) and a smaller minority rates them as ineffective or very ineffective (11% for Medtronic vs 19% for KOP). Figure 3 shows the results for 'HR Department Representatives'.



Source: Mulvey, LeBlanc, Heneman and McInerneya, 2002, p. 29)

This shows a similar pattern. Medtronic respondents evaluate these two-way information sources as relatively less effective than one-way sources. However, their absolute evaluation is more positive than the broad-based KOP survey.

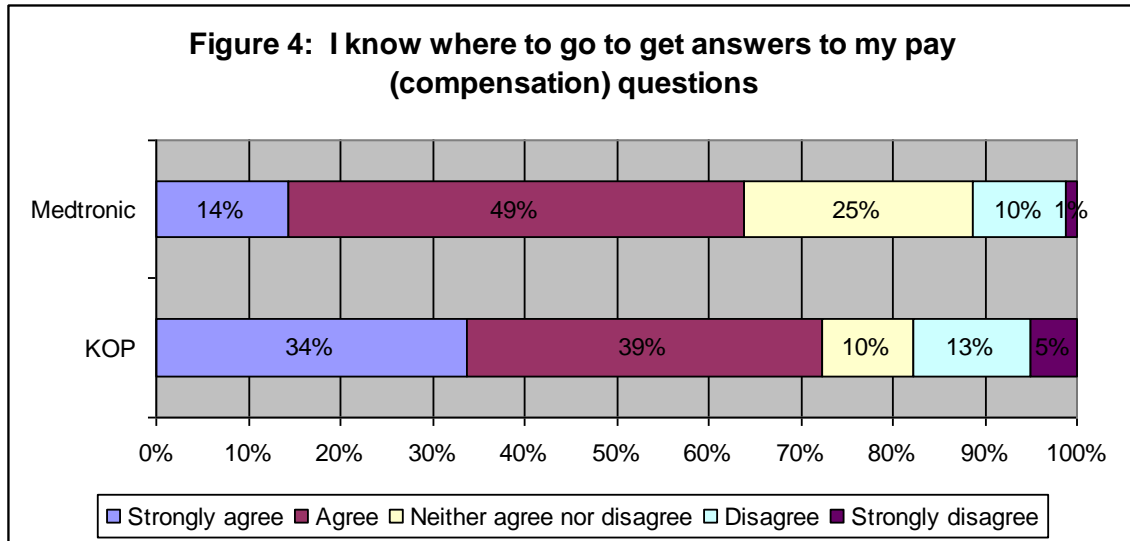
Two statements gauged employee reactions to Medtronic’s overall pay communication programme. Table 4 shows their responses.

Table 4: Employee Reactions to Medtronic’s Pay Communication Programme

Statement	Response choices	Supervisor Mean (n=71)	Non-supervisor Mean (n=78)	p-value
Medtronic’s overall communication of Total Reward info	Very effective to very ineffective	3.97	3.71	.019*
I know where to go to get answers to my pay questions	Strongly agree to strongly disagree	4.04	3.94	.587

These results indicate that supervisors are more positive about both the effectiveness of Medtronic’s overall pay communication programme and their access to pay-related information. However, the p-values indicate that the difference between the two groups is only significant for the first statement.

The statement ‘I know where to get answers to my compensation questions’ appeared on the KOP survey. The results are compared with the Medtronic population in Figure 4.



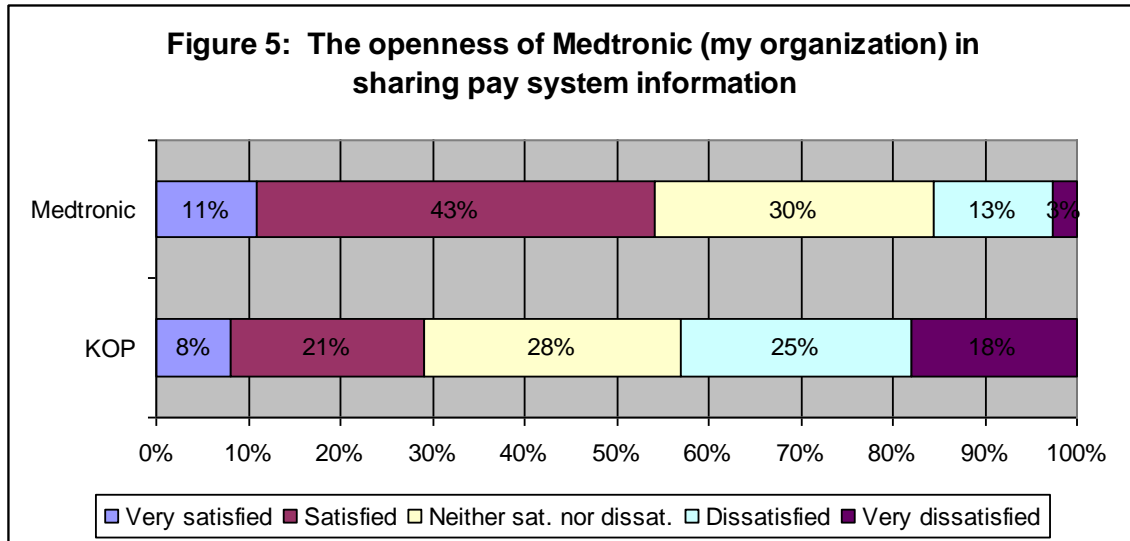
Source: Mulvey, LeBlanc, Heneman and McInerneya, 2002, p. 26.

This figure shows that the Medtronic population is less positive, less negative and more undecided than respondents to the KOP survey. Responses to a statement aimed at assessing Medtronic employees' satisfaction with pay communication are shown in Table 5.

Table 5: Medtronic Employees' Satisfaction with Pay Communication

Statement	Non-supervisor Mean (n=77)	Supervisor Mean (n=71)	p-value
The openness of Medtronic in sharing pay system information	3.35	3.59	.108

The mean for supervisors is somewhat higher than for non-supervisors. The p-value is slightly above .1, the standard used to determine if the differences between the two groups are statistically significant. Figure 5 compares the responses of Medtronic employees with KOP respondents.



Source: Mulvey, LeBlanc, Heneman and McInerney, 2002, p. 26.

Clearly, Medtronic employees are better satisfied and less dissatisfied with the openness of their system than the respondents of the broader-based KOP survey.

Table 6 details the correlation between satisfaction with Medtronic’s pay communication system and statements concerning its effectiveness and accessibility.

Table 6: Correlations Concerning Medtronic’s Pay Communication

			The openness of Medtronic in sharing pay system information.	Medtronic's overall communication of Total Rewards Info	I know where to go to get answers to my pay questions.
Kendall's tau_b	The openness of Medtronic in sharing pay system information.	Correlation Coefficient	1.000	.480(**)	.470(**)
		Sig. (2-tailed)	.	.000	.000
		N	157	157	157

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

Employees’ satisfaction with Medtronic’s openness in sharing pay system information is positively and significantly correlated with their evaluation of the effectiveness of that system and their belief that they can get the answers that they need to pay questions.

4.2 Knowledge & Satisfaction with Base Pay

This section is divided into four parts: performance management, base pay increases, base pay level and base pay structure.

4.21 Performance Management

Over the past four years Medtronic introduced a performance-related pay system at its Galway facility based in part on an employee's performance evaluation. This system was implemented on a phased basis and is underpinned by openness and transparency. Initially department managers were trained to implement the system, however responsibility for determining and communicating increases is now shifting to supervisors.

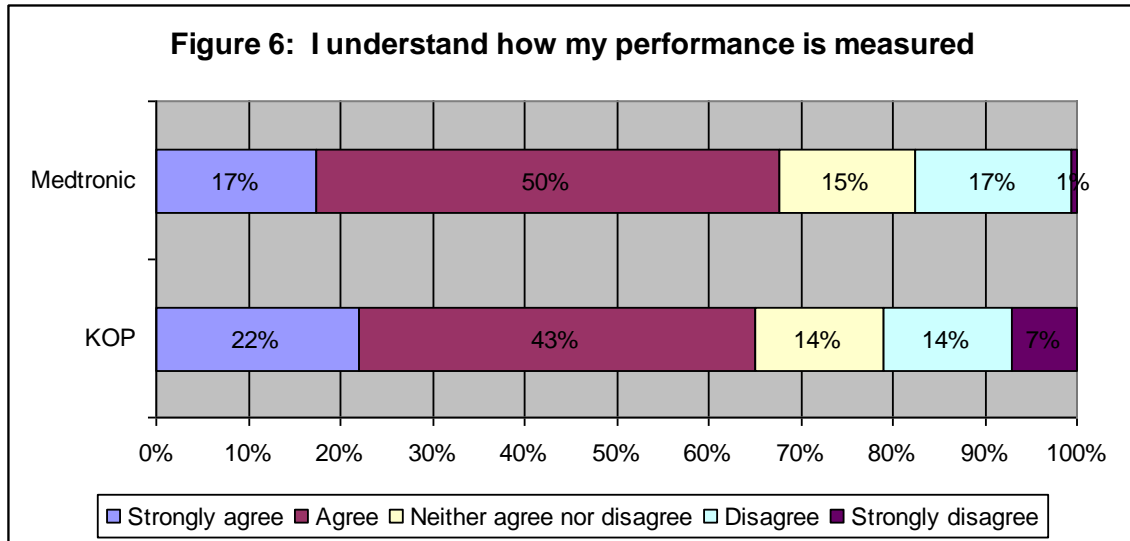
After a performance review between the supervisor and report is completed and approved, managers meet with supervisors to determine the individual base pay raises. There are three options available: market adjustment, promotion and most commonly a merit increase where the manager and/or supervisor determines the increase from a range which is impacted by the score on the performance evaluation. All increases are communicated to employees before they are processed.

The survey included two statements concerning performance management shown in Table 7. Employees responded to 'knowledge' statements using a five-point Likert scale (strongly agree to strongly disagree).

Table 7: Medtronic Employee Responses to Performance Management Statements

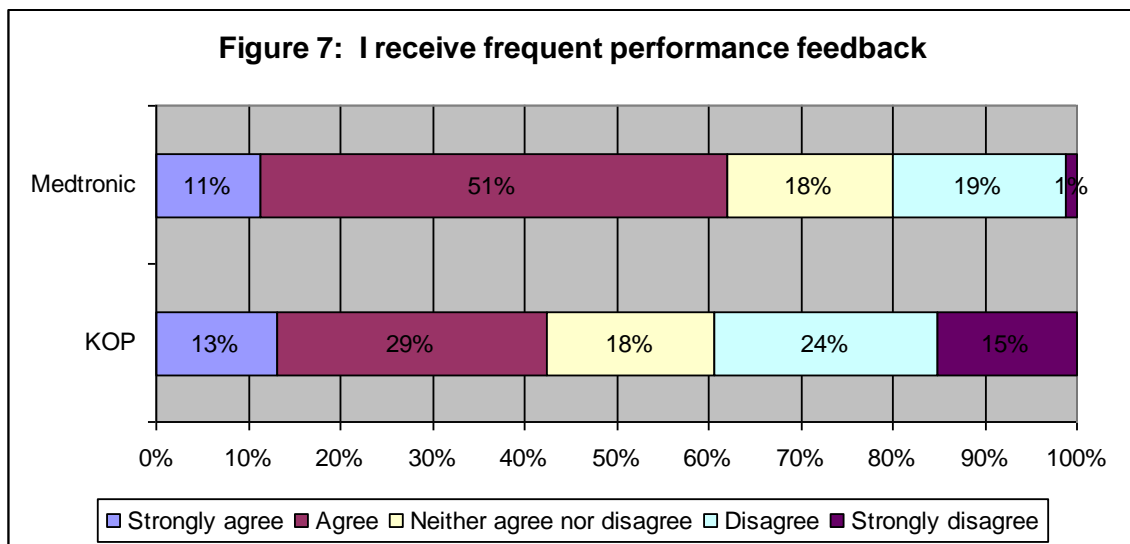
Statement	Non-supervisor Mean (n=78)	Supervisor Mean (n=71)	p-value
I understand how my performance is measured.	3.67	3.68	.959
I receive frequent performance feedback.	3.51	3.51	.975

The means show that the majority of Medtronic employees understand their performance management system and receive frequent feedback. The performance management responses of Medtronic employees were compared with the KOP survey. These results are shown in Figures 6 & 7.



Source: Mulvey, LeBlanc, Heneman and McInerney, 2002a, p. 20.

Figure 6 indicates that Medtronic employees report a better understanding of the way that their performance is measured than respondents to the broader-based KOP survey.



Source: Mulvey, LeBlanc, Heneman and McInerney, 2002a, p. 20.

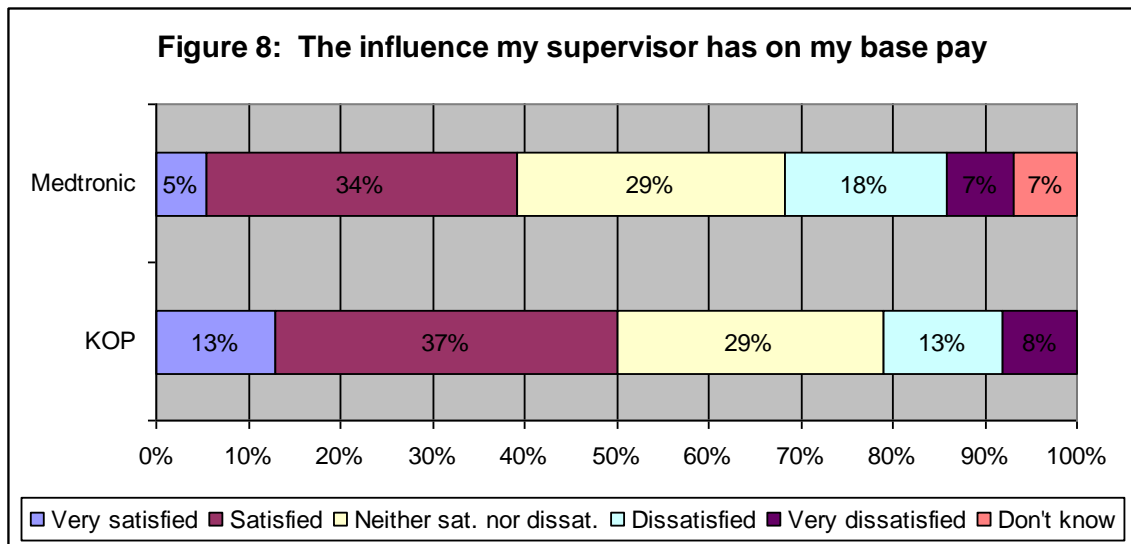
Figure 7 suggests that Medtronic employees are considerably more positive about the frequency of feedback than KOP respondents. Table 8 considers the satisfaction of Medtronic employees with their supervisor's influence on base pay.

Table 8: Medtronic Employees' Satisfaction with Supervisor's Influence on Base Pay

Statement	Non-supervisor Mean (n=78) {don't know=}	Supervisor Mean (n=71)	p-value
The influence my supervisor has on my base pay	3.18 {don't know=7}	3.07 {don't know=3}	.587

The means for employee satisfaction with their supervisor's influence on base pay are lower than the knowledge statement and about 7% of the total population responded 'don't know'.

Figure 8 compares Medtronic responses with KOP responses concerning the influence of the supervisor on base pay.



Source: Mulvey, LeBlanc, Heneman and McInerney, 2002a, p. 34.

Medtronic employees (39%) are less positive in their expression of satisfaction than KOP respondents (50%). Almost 30% of both groups indicate that they are 'neither satisfied nor dissatisfied'.

The low satisfaction of Medtronic employees may indicate a lack of consistency with supervisory involvement. Although all supervisors communicate pay increases, some are not involved in the determination of salary increases. Table 9 shows the correlations between satisfaction with a supervisor's influence on base pay, understanding of how performance is measured and frequency of performance feedback.

Table 9: Correlations Concerning Performance Management

			The influence my supervisor has on my base pay	I understand how my performance is measured.	I receive frequent performance feedback.
Kendall's tau_b	The influence my supervisor has on my base pay	Correlation Coefficient	1.000	.404(**)	.441(**)
		Sig. (2-tailed)	.	.000	.000
		N	149	149	149
	I understand how my performance is measured.	Correlation Coefficient	.404(**)	1.000	.517(**)
		Sig. (2-tailed)	.000	.	.000
		N	149	160	160

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

The two 'knowledge' statements are significantly correlated (Kendall's tau_b=.517) indicating that frequency of feedback and understanding of performance measurement are strongly and positively associated. Both 'knowledge' statements are positively and significantly associated with satisfaction concerning the supervisor's influence on base pay. Although causation cannot be determined, these findings suggest that when understanding about how performance is measured increases and performance feedback is more frequent, employees are more satisfied with their supervisor's influence on base pay.

4.22 Base Pay Increases

Base pay increases are linked to performance evaluation. It is also affected by the position of an employee's salary against their market value (comparatio). The primary media for communicating these topics are the Total Reward Updates and group training sessions. In most instances it is the supervisors who attend these sessions and communicate the relevant messages to employees under their supervision.

The survey included four statements to assess employee understanding of base pay increases. The mean and standard deviations of two of those statements are shown in Table 10.

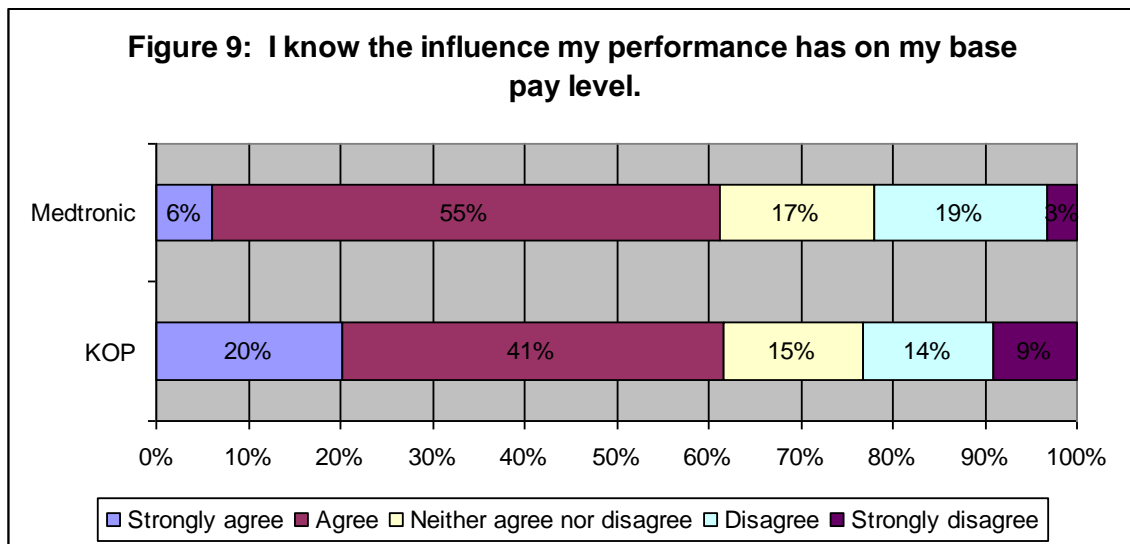
Table 10: Medtronic Employee Responses to Knowledge of Base Pay Increases Statements

Statement	Non-supervisor Mean (n=78)	Supervisor Mean (n=71)	p-value
I know the influence my performance has on my base pay level.	3.37	3.48	.408
I understand how my base pay increases are determined.	2.90	3.18	.077*

The first statement links performance and base pay level. The means of both groups are lower than for the performance management statements.

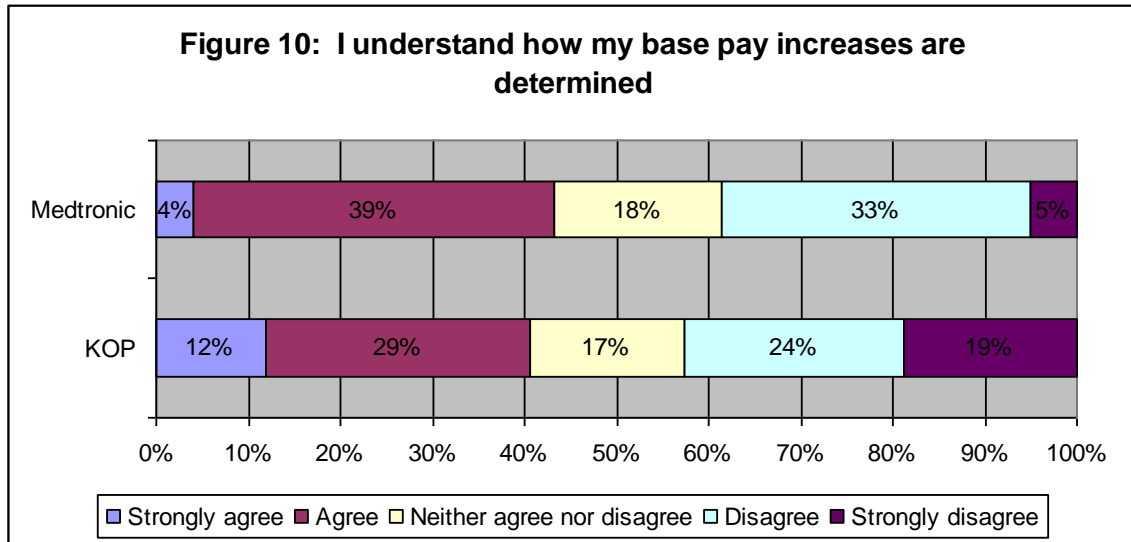
The second statement concerns knowledge of the process of base pay increases. The lower means for this statement suggest that a minority of Medtronic employees understand how their base pay increases are determined. There is a significant difference between the two groups, based on supervisory status, for the second statement. This probably reflects the difference in their information sources. Only supervisors receive training about the determination of base pay increases. Information on actual increases is communicated to employees by supervisors.

Figure 9 compares the responses of Medtronic employees and KOP respondents concerning their understanding of the connection between performance and base pay.



Source: Mulvey, LeBlanc, Heneman and McInerney, 2002a, p. 20.

Figure 9 indicates a similar pattern of response between the Medtronic and KOP respondents in linking performance and base pay level. Figure 10 compares responses to the statement about how increases to base pay are determined.



Source: Mulvey, LeBlanc, Heneman and McInerney, 2002a, p. 21.

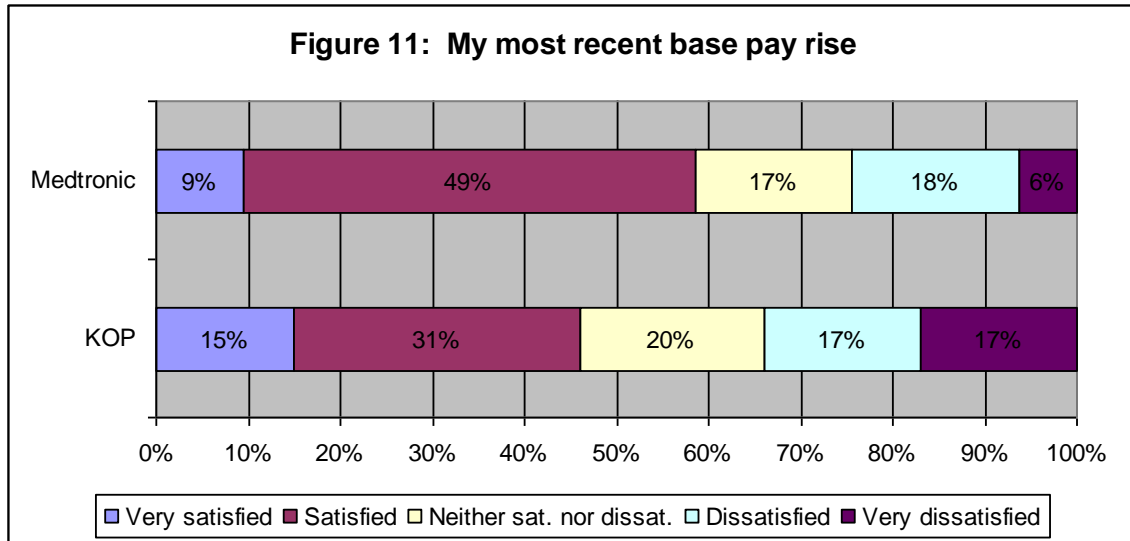
Figure 10 indicates that Medtronic employee responses are slightly more positive and less negative than KOP respondents. However, a minority of both populations report that they understand how their base pay increases are determined.

Medtronic employees were asked to express their satisfaction with their most recent pay increases. The findings are shown in table 11.

Table 11: Medtronic Employees' Satisfaction with Recent Base Pay Increase

Statement	Non-supervisor Mean (n=78) {don't know=}	Supervisor Mean (n=71)	p-value
My most recent base pay raise.	3.30 {don't know=1}	3.45	.429

Supervisors are slightly more positive but the differences between the two groups are not statistically significant. Medtronic employees (58%) express greater satisfaction with their most recent pay rise than the KOP population (46%) as shown in Figure 11.



Source: Mulvey, LeBlanc, Heneman and McInerney, 2002a, p. 34.

Table 12 shows the correlation between satisfaction with the recent pay increase and knowledge of the way the increase was determined.

Table 12: Correlations Concerning Base Pay Increases

			My most recent base pay raise	I know the influence my performance has on my base pay level.	I understand how my base pay increases are determined.
Kendall's tau_b	My most recent base pay raise	Correlation Coefficient	1.000	.247(**)	.260(**)
		Sig. (2-tailed)	.	.001	.000
		N	159	148	148

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

Although the correlations between satisfaction with the recent pay raise is positive and significantly correlated with the 'knowledge' statements, the coefficients are smaller than for performance management suggesting a weaker performance-to-reward link.

4.23 Base Pay

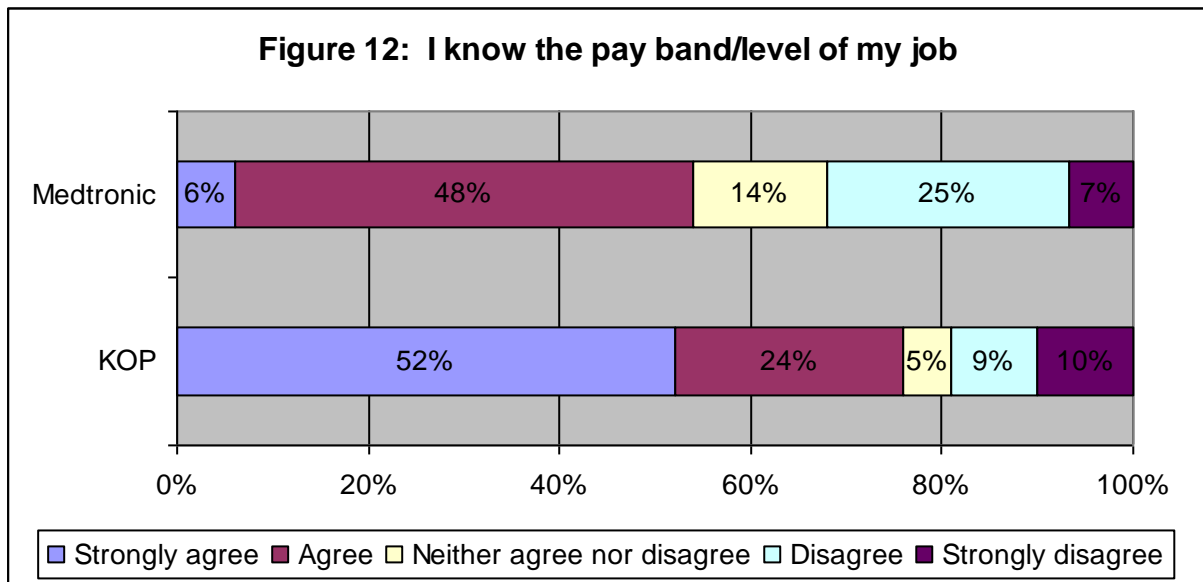
The base pay structure for exempt employees at Medtronic is determined by internal ranking based on job classification combined with external US market values. Each role in Medtronic Galway is benchmarked to a job code in this structure and assigned a relevant pay band. Employees are able to access their pay bands through one-way communication sources, but they are not discussed as part of their performance review or included within the Total Reward Statement. Two statements related to base pay level are shown in table 13.

Table 13: Medtronic Employees Responses to Knowledge of Base Pay Statements

Statement	Non-supervisor Mean (n=79)	Supervisor Mean (n=71)	p-value
I know the pay band/level of my job.	3.15	3.28	.479
I understand the rationale for my job being placed in its pay band/level.	2.89	2.87	.972

The first statement concerns the pay outcome for the employee’s own job. The second statement concerns the process used to place an employee’s job into a particular band. The means for the outcome statement are higher than for the process statement. Similarly, KOP respondents reported better understanding for base pay outcomes than the base pay process (Mulvey, LeBlanc, Heneman and McInerney, 2002a, p. 21).

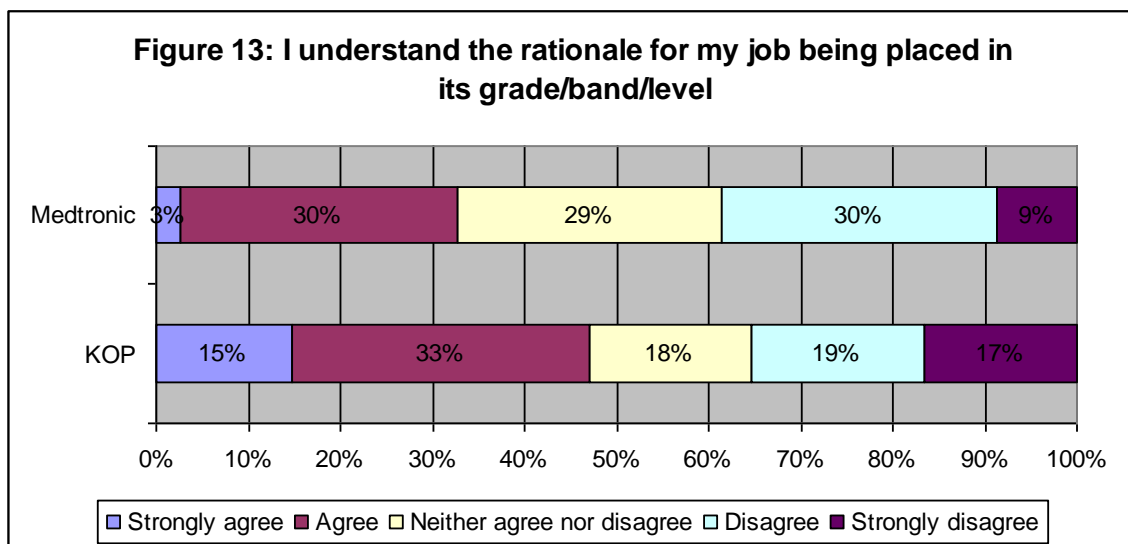
The comparison between Medtronic and KOP concerning knowledge of the employee’s pay band/level is shown in figure 12.



Source: Mulvey, LeBlanc, Heneman and McInerney, 2002a, p. 21.

The percentage of Medtronic employees (54%) agreeing with the statement is far lower than for the KOP population (76%).² Figure 13 compares the two groups’ understanding of the rationale for placing their job into a particular grade.

² The low means for this statement lead us to believe that employees may have found this question ambiguous. At Medtronic, ‘level’ can refer to status (exempt, hourly, manager) rather



Source: Mulvey, LeBlanc, Heneman and McInerney, 2002a, p. 21.

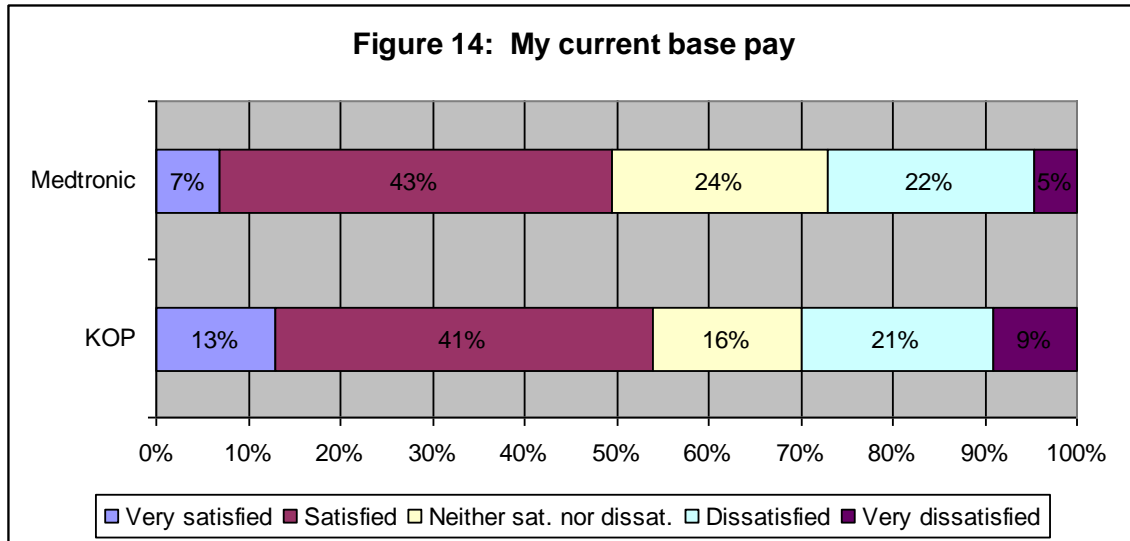
Figure 13 shows that a smaller percentage of Medtronic employees (33%) report that they understand the rationale for placing their job within its grade as compared to KOP respondents (48%). Table 14 indicates that all Medtronic employees report similar satisfaction with their base pay.

Table 14: Medtronic Employees' Satisfaction with Base Pay

Statement	Non-supervisor Mean (n=77) {don't know=}	Supervisor Mean (n=71)	p-value
My current base pay	3.22	3.27	.783

Figure 14 compares Medtronic responses with KOP responses.

than amount. Pay band refers to pay range. In future surveys, the composition of this group of these statements will be specifically reconsidered.



Source: Mulvey, LeBlanc, Heneman and McInerney, 2002a, p. 33.

KOP respondents (54%) are slightly more satisfied with their current base pay than Medtronic employees (50%). Almost a quarter of Medtronic employees (24%) were neither satisfied nor dissatisfied.

Table 15 shows the correlation between base pay satisfaction and base pay knowledge.

Table 15: Correlations Concerning Base Pay

			My current base pay	I know the pay band / level of my job.	I understand the rationale for my job being placed in its pay band / level.
Kendall's tau_b	My current base pay	Correlation Coefficient	1.000	.063	.283(**)
		Sig. (2-tailed)	.	.369	.000
		N	159	148	148

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

The only significant correlation is between current base pay satisfaction and understanding the rationale for placing the job into its pay band/level.³ Although these results are relatively low, they are not unexpected since they reflect a conscious choice on the part of Medtronic management not to formally communicate the impact of pay band on total rewards.

³ The lack of correlation between satisfaction with 'my current base pay' and agreement with 'I know the pay band/level of my job' may be a result of the ambiguity of the knowledge statement.

4.24 Base Pay Structure

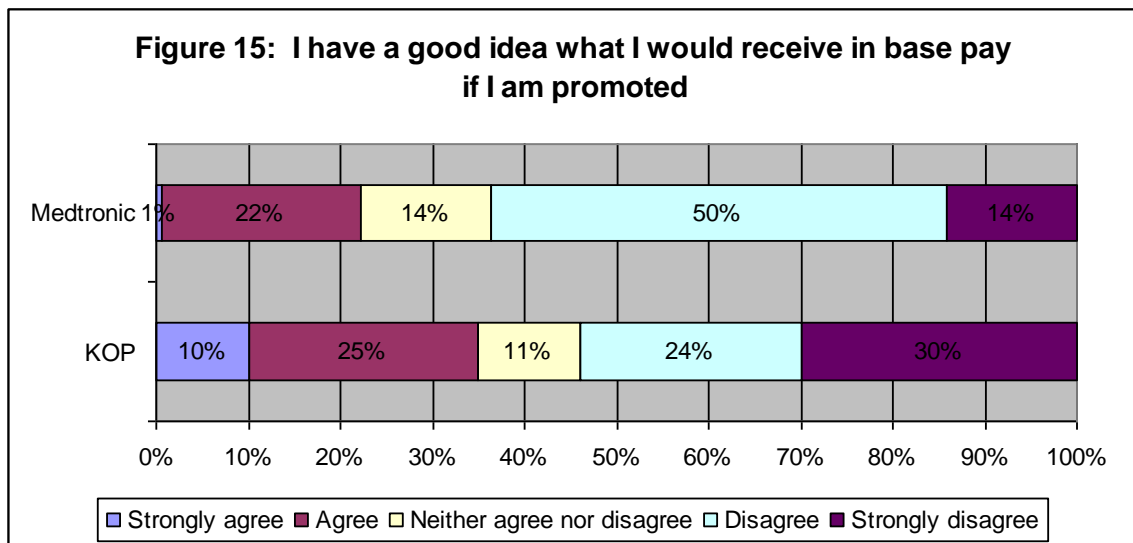
The pay band structure at Medtronic Galway is based on US market values. Because this is difficult to explain to non US employees, it is not formally communicated. Statements related to knowledge of base pay structure are shown in table 16.

Table 16: Medtronic Employees Responses to Knowledge of Base Pay Structure Statements

Statement	Non-supervisor Mean (n=79)	Supervisor Mean (n=71)	p-value
I have a good idea what I would receive in base pay if I am promoted.	2.47	2.42	.770
I know the pay band/level for other jobs in the organisation.	2.25	2.21	.860

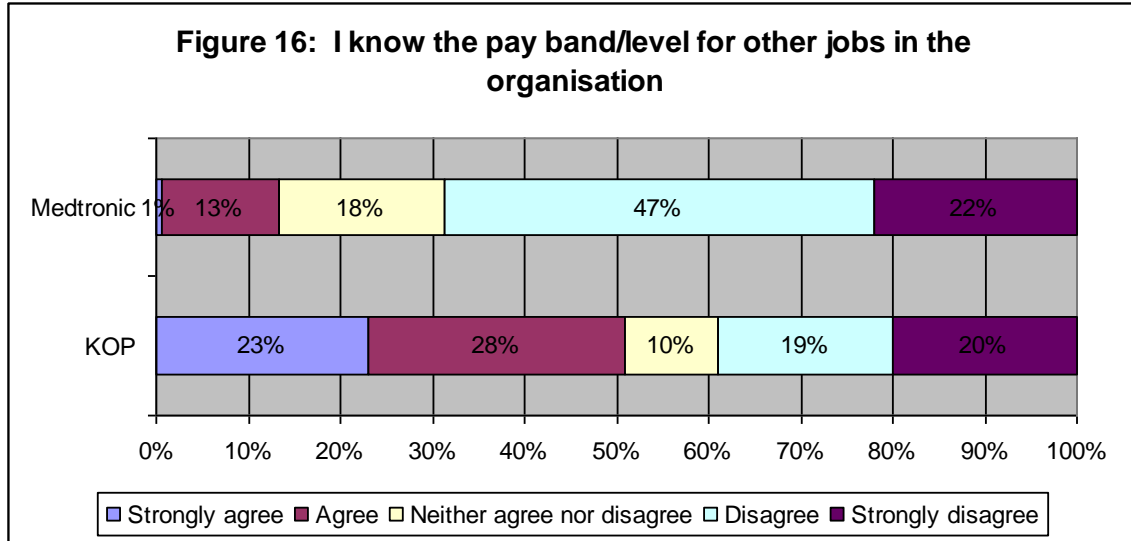
The means of both groups for both statements are below three indicating that a majority of employees did not agree with these statements. The p-values confirm that there is very little difference based on supervisory status in responses to these statements. While the understanding of the rationale for the placement of an employee's own job into a band is relatively low (see table 12), employees report less knowledge of pay structure as they move away from their own job to other jobs within the organisation.

Figure 15 shows that majority of respondents of both cohorts disagreed with the statement that they have an idea of the pay they would receive if promoted.



Source: Mulvey, LeBlanc, Heneman and McInerney, 2002a, p. 25.

However, the percentage disagreeing is higher for Medtronic (64%) than KOP respondents (54%). Figure 16 compares knowledge of the two groups about other jobs in their organisations.



Source: Mulvey, LeBlanc, Heneman and McInerney, 2002a, p. 21.

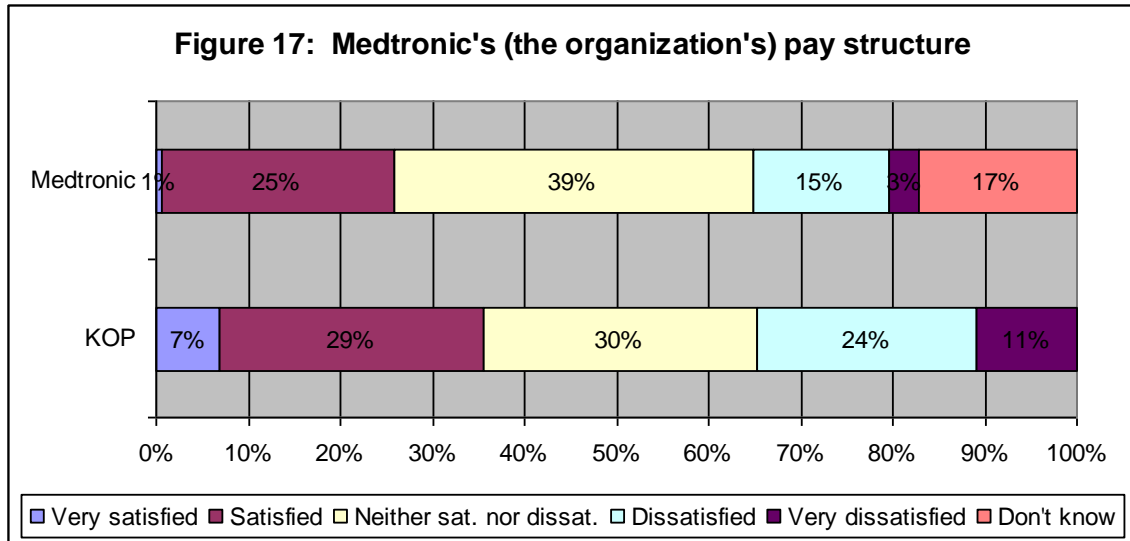
While just over half (51%) of KOP respondents knew the pay band/level for other jobs in the organisation, only 14% of Medtronic employees agreed with that statement. Medtronic employees are clearly less knowledgeable about their pay structure than KOP respondents. However, these findings are not surprising since this information is not formally communicated to employees.

Two statements on the survey were designed to gauge Medtronic employees' satisfaction with their pay structure. The response to the more general statement is shown in table 17.

Table 17: Medtronic Employees' Satisfaction with Base Pay Structure

Statement	Non-supervisor Mean (n=79) {don't know=}	Supervisor Mean (n=71)	p-value
Medtronic's pay structure	3.11 {don't know=17}	3.02 {don't know=6}	.515

The means for both groups, though relatively low and over 15% of the total population responded 'don't know'.



Source: Mulvey, LeBlanc, Heneman and McInerney, 2002a, p. 38.

The results are not directly comparable because KOP respondents were not given the 'don't know' option. Figure 17 illustrates that for both populations considering their pay structure, 'neither satisfied nor dissatisfied' is the most popular response. KOP respondents were more positive (36% vs 26% for Medtronic employees). The correlation between pay structure satisfaction and knowledge of pay structure are shown in Table 18.

Table 18: Correlations Concerning Pay Structure

			Medtronic's pay structure	I have a good idea what I would receive in base pay if I am promoted.	I know the pay band / level for other jobs in the organisation.
Kendall's tau_b	Medtronic's pay structure	Correlation Coefficient	1.000	.246(**)	.149
		Sig. (2-tailed)	.	.002	.056
		N	125	123	124
	I have a good idea what I would receive in base pay if I am promoted.	Correlation Coefficient	.246(**)	1.000	.503(**)
		Sig. (2-tailed)	.002	.	.000
		N	123	151	151

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

The two 'knowledge' statements are strongly correlated. This positive association appears logical since knowledge of pay bands for *other* jobs within the organisation includes knowledge of the *next* job in the employee's promotional hierarchy.

The correlation statistics between pay structure knowledge and pay structure satisfaction suggest that only one pair of statements is correlated. The statement 'I have a good idea what I would receive in base pay if I am promoted' is positively and significantly correlated with pay structure satisfaction.

4.3 Communication Effectiveness, Base Pay Knowledge and Reward Satisfaction

Medtronic employees were asked about their satisfaction with their overall level of rewards. Responses are shown in table 19.

Table 19: Medtronic Employees' Satisfaction with Their Overall Level of Rewards

Statement	Non-supervisor Mean [SD] (n=78)	Supervisor Mean [SD] (n=71)	Mann-Whitney Test Asymp. Sig. (2-tailed)
My overall level of rewards	3.71 [.870]	3.79 [.791]	.493

Satisfaction, as indicated by the means, is higher for the overall level of rewards than for base pay level (table 13), base pay increases (table 10) and base pay structure (table 16). In an attempt to identify the variables most closely associated with overall pay satisfaction, correlations were calculated for 'overall level of rewards' and overall communication, access to information, information sources and all knowledge statements discussed in this paper. All results that were statistically significant are shown in Table 20.

Table 20: Summary of correlations with 'Overall level of rewards'

Category	Statement	Kendall's tau-b Correlation Coefficient	Sig (2-tailed)
Overall Communication	Medtronic's overall communication of Total Rewards information	.415**	.000
Access to Pay Info	I know where to go to get answers to my pay questions	.363**	.000
Information Source	Human Resource department representative	.325**	.000
Perf. Man. Knowledge	I understand how my performance is measured	.298**	.000
Information Source	Total Rewards Statement	.285**	.000
Base Pay Increase Knowledge	I know the influence my performance has on my base pay	.279**	.000
Information Source	Employee Benefits Booklet (Pension & Life)	.273**	.000
Information Source	Total Reward Updates/ Employee Benefit Days	.270**	.000
Information Source	E-mail notices	.262**	.000
Base Pay Increase Knowledge	I understand how my base pay increases are determined	.260**	.000
Information Source	Total Rewards Website	.257**	.001
Information Source	Total Wellbeing Noticeboard	.241**	.002
Base Pay Knowledge	I understand the rationale for my job being placed in pay band/level	.238**	.001
Perf. Man. Knowledge	I receive frequent performance feedback	.201**	.004
Information Source	HR policies	.200**	.005
Information Source	Total Reward Newsletter	.198**	.005
Information Source	Supervisor/manager	.155*	.028

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

* Correlation is significant at the 0.05 level (2-tailed).

Medtronic developed a sophisticated pay communication strategy. Table 19 shows that 'Medtronic's overall communication of Total Rewards information' has the largest correlation coefficient (Kendall's tau-b=.415**) with overall level of reward satisfaction. The second largest correlation concerns access to pay information (Kendall's tau-b=.363**). Nine of the eleven pay information sources are positively and significantly associated with the overall level of reward satisfaction.

Medtronic chose an open and transparent information strategy concerning performance management and base pay increases. All four statements concerning knowledge and frequency of feedback are positively and significantly correlated with overall level of reward satisfaction.

Medtronic chose to limit information concerning base pay and structure and this is reflected in these correlations. In terms of base pay level, only one knowledge statement 'I understand the rationale for my job being placed in pay band/level' is positively correlated (.238**) with overall reward satisfaction. Neither base pay structure statement is significantly correlated with overall reward satisfaction.

5.0 Discussion

This paper reports the findings of a survey administered to exempt employees at the Galway facility of Medtronic Vascular. Because of the size of the survey (81 items), the findings only consider communication effectiveness, base pay knowledge and overall satisfaction with rewards. It is divided into three sections: communication and information source effectiveness; pay knowledge; and reward satisfaction.

5.1 Communication and Information Source Effectiveness

Two of the objectives of this research were to identify sources of pay information currently used by employees and to assess their effectiveness.

Medtronic communicates pay information with their employees using ten distinct information sources (table 2). The use of numerous information sources is reported in several surveys (Scott, Sperling, McMullen and Wallace, 2003; Mulvey, LeBlanc, Heneman and McInerney, 2002b; Kisilevitz, Debgupta & Metz, 2006; Marcotte, 2006; Scott, Sperling, McMillen & Bowbin, 2008). The only unusual aspect of Medtronic's media choices is that pay information at the Galway facility is not communicated through new employee orientation or formal classroom training, methods of communications used by a majority of organisations responding to the KOP survey (Mulvey, LeBlanc, Heneman and McInerney, 2002b, p. 29).

Seven of these communication sources are one-way. Of these sources, one source the 'Total Reward Statement' is individualised while the other six sources

provide general pay system information. These survey results confirm the effectiveness of one-way, individual information sources. (table 3). Medtronic employees rated the 'Total Reward Statement' as the most effective information source, a finding that corresponds with a recent survey of compensation professionals in the US (Scott, Sperling, McMillen & Bowbin, 2008).

However, Medtronic employees also rated one-way, general information sources as effective. E-mail notices and the Employee Benefits Booklet ranked second and third respectively. Although the website and newsletter are lower in the ranking, they are still considered to be effective by a majority of Medtronic employees. These employee assessments, taken at a particular point in time, reflect positively on Medtronic's one-way pay communication media.

However, the importance of two-way communications should not be underestimated. The HR department representatives were ranked sixth in terms of information source effectiveness (table 3). There was a statistically significant difference between the views of employees defined by supervisory status with supervisors rating HR as more effective than non-supervisors. These differences are probably explained by greater exposure of supervisors to the HR department.

In terms of 'overall level of rewards' satisfaction, HR department representatives had the third highest correlation coefficient (.325**) and were the highest ranking information source. The HR department is also directly responsible for 'Medtronic's overall communication of Total Rewards information' and for providing access to pay information. These were the items with the highest and second highest correlations with 'overall level of rewards' satisfaction. Therefore, the results of this survey point to the significant, positive contribution of HR department representatives to reward satisfaction.

The contribution of supervisors is less clear. Academic and practitioner literature highlight the importance of the line manager in operationalising reward systems. At Medtronic, supervisors are given a significant role in rewarding individual performance through performance-related pay increases that follow performance evaluations. The majority of Medtronic employees report that they understand how their performance is measured and receive frequent feedback (table 7). On the other hand, less than 43% of Medtronic employees agreed to statement 'I understand how my base pay increases are determined' (table 10). Therefore, it appears that supervisors are more successful at the performance evaluation part of the performance-related pay system, than linking performance to pay.

All four statements related to performance-related pay (performance management and base pay increase) have correlation coefficients between .298** and .201** indicating significant associations at the 0.01 level with 'overall level of rewards' satisfaction (table 20). Although these aspects of the reward system are primarily administered through the employee's supervisor, the correlation coefficient indicating the association between supervisor's

effectiveness as an information source with 'overall level of rewards' satisfaction is the smallest of all the correlations (.155**) and significant at the 0.05 level.

These mixed findings suggest that Medtronic supervisors are more effective in some aspects of operationalising the reward system than others.

5.2 Pay Knowledge

Another objective of this research was to evaluate employees' knowledge of particular pay elements. Medtronic is transparent with information for some parts of their pay system but not for others. In general, for the parts of the reward system that are open (performance-related pay), employees reported greater understanding (tables 7 and 10) and satisfaction (table 11). For parts of the pay system that are not transparent (base pay level and structure), employees were less knowledgeable (tables 13 and 16) and less satisfied (tables 14 and 17).

Lawler (1996, p. 543) acknowledged that 'Open systems put considerable pressure on organizations to do an effective job of administering rewards.' Even commentators that promote pay system transparency acknowledge a need to communicate enough for employees to understand reward programmes while keeping some information private (Scott, Sperling, McMullen, and Bowbin, 2008).

However, Medtronic's success in opening up parts of their pay system may lead to greater disclosure in other parts. This survey gives some insights for future change. There was a positive and significant relationship (at the .01 level) between 'I understand the rationale for my job being placed in its pay band/level' and satisfaction with 'my current base pay' (.283) and satisfaction with 'overall level of rewards' (.238).

The majority of Medtronic employees did not agree with the statement, 'I have a good idea what I would receive in base pay if I am promoted (table 16).' However, this statement is positively and significantly correlated with satisfaction with 'Medtronic's pay structure' (.246) while the correlation for 'I know the pay band/level for other jobs in the organisation' was not significant. These findings suggest that greater transparency concerning the employee's own job and the next job in the pay structure may enhance pay system satisfaction as well as help to motivate employees to improve performance in their own jobs and to seek promotion.

5.3 Reward Satisfaction

The final objective of this paper was to identify elements of the pay system that are associated with employee satisfaction. Satisfaction with 'overall level of rewards' (table 20) is higher than satisfaction with base pay increases (table 11) or base pay (table 14). When this analysis is complete, there will be more information about the contribution of incentives, benefits and stock options to

reward satisfaction. At this point, it is clear that employees are defining 'rewards' more broadly than base pay. This may indicate employee acceptance of Medtronic's 'Total Reward philosophy' that encompasses everything valued by the employees within the employment relationship.

This preliminary analysis suggests that for Medtronic, pay communication is more significantly related with reward satisfaction than pay knowledge (table 20). Employees' positive assessments of the effectiveness of 'Medtronic's overall communication of Total Rewards information' (table 4) is significantly correlated with 'overall level of rewards' (.415**). This is the item with the strongest association with overall reward satisfaction followed by access to pay information (.363**). Nine of 10 pay information sources are significantly correlated with total reward satisfaction. It appears that the concentration on pay system communication exhibited by Medtronic and promoted in practitioner literature is warranted.

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