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Job Attitudes of Agricultural Middle Managers

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Selected Paper prepared for presentation at the American Agricultural Economics Association Annual Meeting, Long Beach, California, July 23-26, 2006

Acknowledgements: Funding for this project was provided in part by Project GREEN (Generating Research and Extension to meet Economic and Environmental Needs) at Michigan State University and by the North Central Risk Management Education Center at University of Nebraska. The author wishes to thank the employees who agreed to be interviewed and openly shared their experiences, and their managers who volunteered their organizations to participate, provided facilities, and contributed their time. Elaine Yakura at Michigan State University has provided her invaluable input and advice during multiple stages of this project.

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Abstract

The paper analyzes middle managers' job attitudes, in particular job satisfaction, based on case studies. Employees' job satisfaction is expected to reduce human resource management risks, leading to higher loyalty, organizational commitment and motivation and resulting in less turnover. Components of job satisfaction include achievement, recognition, work itself, job security, supervision, interpersonal relationships, compensation, organization, personal life and working conditions. They cause both satisfaction and dissatisfaction, which contradicts Herzberg's theory of job satisfaction and leads to different recommendations for management practice, namely focus improvement where it makes the most difference. An example is limiting work hours during peak season.

Introduction

About a third of agricultural work is done by hired labor. In 2004, American farmers spent \$23 billion on labor (USDA). Hired labor is paramount to many farms' success, and its significance is increasing with increasing farm sizes. As agribusinesses, farm managers, and owners are hiring more supervisory and middle management personnel, they are noticing a lack of related research and research-based advice. While there is little research on employees' job attitudes in agriculture and agribusiness, there is virtually none on supervisors and middle managers. In general, middle management-specific issues are practically absent from agribusiness and agricultural economics journals. Considering the extent to which growing agricultural and agribusiness operations rely on supervisory personnel to ensure the smooth flow of work and solve production problems, this is an important research gap and needs to be addressed.

However, as the general business middle management literature is very broad and seems largely not applicable to the agricultural context, it will not be discussed in this paper.

Job satisfaction is considered to play a significant role in retention and motivation of employees at any level. Job satisfaction is believed to be closely associated with numerous work related behaviors, including performance, absenteeism, turnover, and organizational citizenship behavior (Fisher and Locke, 1992; Locke 1976) and should therefore be expected to reduce human resource management risks. Although job satisfaction is likely the most studied attitude in organizational behavior (Cranny, Smith, and Stone, 1992), different theories coexist and the applicability of empirical results and recommendations based on these results in agricultural contexts has not been determined. In addition, job satisfaction researchers discuss the use of unconventional research methods to provide new perspectives on job satisfaction. As early as 1976, reviewing the state of job satisfaction research, Locke (p. 1343) concluded that research on job satisfaction has relied too much on rating scales and too little on interviews and has relied too heavily on correlational studies and could benefit from more case studies and in-depth interview studies. However, research methods have not much changed since then. This study is, therefore, taking a novel approach in both, research methods (case studies, in-depth interviews) and empirical field (horticultural middle managers).

Few studies of agricultural employees' job satisfaction have been published. Of those that have been published, very few appeared in peer reviewed journals, but rather in trade magazines or conference papers. Clegg (1963) studied county extension administrators as a replication of Herzberg, Mausner, and Snyderman (1959). He interpreted the results as supporting the Herzberg model. Also, Bitsch (1996) studied horticultural apprentices in Germany and compared results to Herzberg, Mausner, and Snyderman's theory of job

satisfaction. She found commonalities, as well as differences to the Herzberg model for the studied population. Fogleman et al. (1999) analyzed employees' job satisfaction on dairy farms based on Lawler (1973). Darboe (2003) studied job satisfaction among plant science graduates based on Vroom (1964). Billikopf (2001) interviewed agricultural supervisors, but did not contrast his findings with a theoretical model. Bitsch and Hogberg (2005) analyzed job satisfaction of non-supervisory employees and first-line supervisors in horticultural businesses based on the Herzberg model. This paper will follow a similar approach, analyzing middle managers.

With respect to management practice, the Herzberg model has been the most influential of the above named approaches, as evidenced by a recent re-publication in the *Harvard Business Review* series "Ideas with Impact" (Herzberg 2003). The formative theoretical and empirical work on job satisfaction is mostly situated in the 1960s and 1970s and the Herzberg model has been very prominent during this time. Although recent developments in human resource management theory, such as Pfeffer's notion of putting people first (1998) and the focus on high involvement management practices (e.g., Delaney and Huselid, 1996; Ichniowski, Shaw and Prennushi, 1997; Godard 2001), would fit well with the Herzberg model, few recent studies have used it as a framework. Lately, however, Bassett-Jones and Lloyd (2006) have analyzed employees' willingness to contribute ideas in the context of work-based suggestion schemes with the purpose to address the staying power of Herzberg's model. Their research provided strong support for the basic model, although they did use a different research method, namely surveys, and argued for the necessity to update the role of certain job factors, e.g., recognition.

Based on a literature review of job attitude research, Herzberg, Mausner, and Snyderman (1959) developed a model of job satisfaction, which assumed that job satisfaction and

dissatisfaction are not on opposite ends of a continuum, but are separate attitudes. They proposed that job satisfaction and dissatisfaction are caused by different underlying job factors and cannot substitute for each other for practical purposes. Their empirical study identified five factors as strong determinants of job satisfaction: achievement, recognition, work itself, responsibility, and advancement. These factors are called motivators. Another group of factors caused or prevented dissatisfaction: company policy and administration, technical aspects of supervision, salary, interpersonal relationships with superiors, and working conditions. These factors are called hygiene factors. Later replications of the seminal study found evidence for these and additional factors that the Herzberg model had postulated (Herzberg 1966). But job factors presented in research results varied widely, depending on the researched population.

Herzberg's theory implies that employees refer to motivators more often in a positive manner, reporting pleasing events, and indicating job satisfaction. They refer to hygiene factors more often in a negative manner, reporting disagreeable experiences, and indicating dissatisfaction. Similarly to Bitsch and Hogberg (2005), the Herzberg model will be tested in this study by (a) comparing the total number of statements about motivators implying job satisfaction with the number of statements implying dissatisfaction and (b) comparing the total number of statements about hygiene factors implying dissatisfaction with the number of statements implying satisfaction. In addition to this general hypothesis tested through aggregated analysis, the theory also suggests that analogous hypotheses will hold for each individual motivator and hygiene factor, which will also be discussed in the results sections.

This paper analyzes the job satisfaction of horticultural employees as an outcome variable, which employers seek to influence through their management practices. The Herzberg model is used to frame the reporting of the results. In the process, the applicability of the

Herzberg model is tested by applying it to an under-researched workforce (horticultural middle managers) and using a different research method. The original study employed the critical incident method, which is a semi-structured open-ended interview technique, focusing on exceptional experiences of the research participants (Herzberg, Mauner, and Snyderman, 1959). A more detailed discussion of the applicability of the Herzberg model to non-supervisory employees and first-line supervisors is provided in Bitsch and Hogberg (2005).

Material and Methods

This paper is based on a set of 14 case studies of human resource management practices in horticultural businesses (four greenhouse operations, four landscape contractors, and six nurseries). All participating operations were located in Michigan and were visited between March and May 2003. The analysis is based on in-depth interviews with 16 supervisors and middle managers of 13 businesses. In determining, which employees to interview, the researcher requested to talk to “a supervisor, someone who manages others, is in charge of managing employees.” In most cases, these interviewees did not include first-line supervisors, who were more likely to be included in the group of non-supervisory employees. But the interviewee of the 14th business had to be re-classified as a senior manager after reviewing his interview and was, therefore, not included in the analysis. Four interviewees were female; 12 interviewees were male.

Interviewers used an interview schedule with open-ended questions on different aspects of human resource management practices. Interviews lasted between 45 minutes and over 90 minutes. Respondents were encouraged to provide in-depth answers through probing. The order of questions was adapted to the interview flow. Themes brought up by the respondents were

explored by the interviewers. In addition to questions directly related to job satisfaction, such as what respondents liked or disliked about their jobs, a number of questions on specific human resource management practices, such as training and employee evaluation, also yielded answers relevant to job satisfaction.

All interviews were tape-recorded and transcribed. Data analysis and coding were based on the transcripts, using the ATLAS.ti software package. The purpose of coding is to allow the comparative analysis of data by assigning data pertaining to the topic researched a specific label. The software serves as a data management tool to enable the inclusion of all occurrences of a specific job factor within each interview and their retrieval. Different from questionnaires and structured interviews, where answers to a specific question follow immediately, data pertaining to any job factor could appear anywhere in an interview, even after seemingly unrelated questions.

Coding is iterative. A coder reads through a transcript several times and will attach as many different codes as appropriate to each speech turn. The coder re-reads and re-codes as often as necessary should later evidence suggest a different interpretation. The final decision on the appropriate code is postponed until all transcripts have been coded and each speech turn has been compared to all other speech turns with the same or a similar code. While the parallel study of non-supervisory employees and first-line supervisors (Bitsch and Hogberg, 2005) had used two independent coders, this was not deemed necessary here, as the coding scheme had proved to be sufficiently stable. However, coding was spot-checked by an outside researcher to ensure consistency.

The initial coding scheme had been modeled after the Herzberg model. In addition to the primary job attitudes, satisfaction and dissatisfaction, ambivalence was included to allow for

inner conflicts in job attitudes. Although ambivalence could be resolved by coding very small units, this category was included to extend Herzberg's bipolar approach to a more realistic coding scheme. But the number of ambivalent speech turns was too small to warrant further analysis, considering the small sample size.

Several of the job factors outlined by Herzberg, Mausner, and Snyderman (1959) were collapsed to better adapt the coding scheme to the data, e.g., advancement, achievement, and possibility of growth were all coded as 'achievement' and responsibility was included in 'work itself.' Status was omitted from the coding scheme, because interviewees did not refer to status. Salary was relabeled as compensation, as Herzberg, Mausner, and Snyderman's original coding scheme (1959) suggested the inclusion of benefits and perquisites. Company policy and administration was relabeled organization.

As discussed in Bitsch and Hogberg (2005), the initial open coding of the transcripts of the non-supervisory employees and first-line supervisors led to additional factors relevant to job satisfaction and dissatisfaction, which broadened the Herzberg model: family-business values, involvement, information, and safety. While these factors overlapped in part with the Herzberg model, factors, such as information and involvement, served to better connect the research on job satisfaction to other discourses in management research, e.g., high-involvement work practices, and regulatory practices, e.g., safety. The family-business values factor, on the other hand, appeared to not have been discussed in the literature previously and may be genuine to the agricultural context. These four factors were included in this analysis to provide additional evidence regarding their persistence, but they were not included in testing the general Herzberg hypothesis.

The comparison and analysis of the job factors was based on the number of speech turns, not the number of respondents. Thus, when an interviewee talked about a specific factor at different times during the interview, each relevant speech turn was counted. Extended speech turns were broken into smaller units for comparability across factors and across respondents. This type of analysis assumes that factors mentioned more often are more important to respondents.

Results

Results are presented in three sections: (1) aggregated findings on job attitudes of middle managers, (2) specific results for each motivator and hygiene factor, (3) additional results for job factors introduced in Bitsch and Hogberg (2005). Results are presented in percentages of total citations. Specific percentages cannot be generalized to the population of all horticultural middle managers, because the number of interviewees is relatively small ($n=16$). However, the percentages show trends regarding the job attitudes of the researched group of employees. Results for non-supervisory employees and first-line supervisors (Bitsch and Hogberg, 2005) are discussed for comparison purposes.

Overall Satisfaction and Dissatisfaction

Middle managers and non-supervisory employees are similar in their overall attitudes towards their jobs (Table 1). Both groups of employees are more likely to talk about job satisfaction than to talk about dissatisfaction. Supervisors are slightly less likely to mention dissatisfying aspects of their jobs compared to non-supervisory employees; they are more likely to be ambivalent.

Table 1. Overall job attitudes of middle managers and non-supervisory employees (Percentage of total citations)

	Satisfaction (%)	Dissatisfaction (%)	Ambivalence (%)
Middle managers (n=16)	59	23	18
Non-supervisory employees (n=15)*	63	31	6

*Results by Bitsch and Hogberg (2005)

Table 2 shows the aggregated results of for the motivators and the hygiene factors for the middle managers, mirroring earlier results by Bitsch and Hogberg (2005) for non-supervisory employees and first-line supervisors, both in direction of effects and magnitude. Part (a) of the general hypothesis is corroborated with positive speech turns being 45% higher in percentage of total citations than negative speech turns in the context of motivators. For the hygiene factors, however, the percentage of positive remarks was also higher than the percentage of negative remarks, by 32%. Differences between the way interviewees talk about motivators and hygiene factors are minor, with dissatisfied remarks being only 10% higher for hygiene factors than for motivators. While these results confirm the Herzberg model for the motivators, they do not support the second part of the model of hygiene factors leading primarily to dissatisfaction.

Table 2. Attitudes related to aggregated job factors (Percentage of total citations)*

	Satisfaction (%)	Dissatisfaction (%)	Difference (%)
Motivators	61	16	45
Hygiene factors	58	26	32
Difference	3	-10	13

*Job attitudes (satisfaction, dissatisfaction) do not necessarily add up to 100% because ambiguity has been omitted from the table.

Specific Results for Motivators and Hygiene Factors

The results of this study of middle managers' attitudes toward individual job factors are very similar to results reported in Bitsch and Hogberg (2005) for non-supervisory employees and first-line supervisors. Table 3 shows middle managers' attitudes towards specific motivators. Achievement shows support of the Herzberg model, namely the expected dominance of satisfied comments over dissatisfied comments (Table 3). Therefore, achievement can be considered a strong motivator.

Table 3. Attitudes related to motivators (Percentage of citations)*

	Satisfaction (%)	Dissatisfaction (%)	Difference (%)
Achievement	74	14	60
Recognition	59	35	24
Work itself	58	15	43

*Job attitudes (satisfaction, dissatisfaction) do not necessarily add up to 100% because ambiguity has been omitted from the table.

Recognition, although showing a dominance of satisfied comments over dissatisfied comments in line with the Herzberg model, seems somewhat more like a hygiene factor when compared to Table 2. This finding is in line with the suggestion of Bassett-Jones and Lloyd (2006) that recognition is becoming a hygiene factor in the contemporary work context. However, the evidence for this is weak, and it did not hold for non-supervisory employees and first-line supervisors who had a higher percentage of satisfactory comments (70%) and a lower percentage of dissatisfactory comments (22%). Therefore, if the Herzberg model is accepted as a premise, recognition is likely to still be a motivator rather than a hygiene factor for the agricultural workforce. Whether employees are satisfied with recognition will depend, though,

on how and how often it is provided, and middle manager may be focusing more on recognizing employees than their superiors.

Work itself, although lower in the frequency of satisfied comments, shows a strong dominance of satisfied comments over dissatisfied comments, which supports its role as a motivator at the workplace. As seen with overall job attitudes (table 1), non-supervisory employees are somewhat more likely to voice dissatisfaction than middle managers. For work itself, it could be expected that supervisors and middle managers find their work more challenging and score higher in terms of responsibility as by default they are responsible for the work of others in the operation. The empirical results are, however, not quite as clear, showing only a reduction in dissatisfaction, but no corresponding increase in satisfaction compared to non-supervisory employees.

In a nutshell, corresponding to the results for non-supervisory employees, the empirical findings for middle managers support the Herzberg model for the motivators (Table 2 and 3), which suggests a higher frequency of satisfied comments than dissatisfied comments for motivating job factors. Therefore, the Herzberg model seems valid for motivators.

In contrast to what the Herzberg model would suggest, the hygiene factors show a similar picture than the motivators, except for working conditions where dissatisfied comments are somewhat higher than satisfied comments (Table 4). Although personal life, organization, and compensation also show a lower percentage of satisfied comments than each individual motivator, the Herzberg model is not supported for the majority of the individual hygiene factors.

Middle managers show an even stronger positive attitude toward job security (Table 4) than non-supervisory employees. Middle managers see their jobs as completely secure and are very satisfied about this fact. Over a third of them cannot even imagine a situation where they

would look for a different job, except if their current operation would not exist any more, which seems highly unlikely to them. Based on this result and previous findings for non-supervisory employees (Bitsch and Hogberg, 2005), job security should be interpreted as a strong motivator for agricultural employees.

Table 4. Attitudes related to hygiene factors (Percentage of citations)*

	Satisfaction (%)	Dissatisfaction (%)	Difference (%)
Job security	100	0	100
Supervision	71	20	51
Interpersonal relations	69	19	50
Personal life	56	19	37
Organization	56	24	32
Compensation	52	29	23
Working conditions	39	45	-6

*Job attitudes (satisfaction, dissatisfaction) do not necessarily add up to 100% because ambiguity has been omitted from the table.

Middle managers' attitudes toward the technical aspects of supervision (Table 4) are similar to the attitudes of non-supervisory employees. This factor includes communication, competence, and fairness of upper management. In general, middle managers perceive their superiors as doing a good job in managing them, with positive comments being more than three times more frequent than negative comments. Therefore, supervision is more likely to act as a motivator than as a hygiene factor.

Interpersonal relations at the workplace also draw satisfied comments more than three times as frequently than dissatisfied comments (Table 4). Bitsch and Hogberg (2005) had found a somewhat higher percentage of dissatisfied comments for non-supervisory employees, originating from two sources: relations with peers and relations with subordinates. The latter is a

problem particular to first-line supervisors who are at times given responsibilities, but do not have the training or the experience to comfortably function as supervisors and are not accepted by their former peers as such. As a group, the middle managers interviewed were more experienced and hence, more comfortable with their management role. Even more so than for non-supervisory employees, interpersonal relations are more likely to act as a motivator than as a hygiene factor for them. Also, there were no significant differences between their satisfaction with relationships with different groups (superiors, peers, subordinates).

The interaction between personal life and work, which Herzberg, Mausner, and Snyderman (1959) saw as a source of conflict and dissatisfaction, was seen very positive by non-supervisory employees (Bitsch and Hogberg, 2005). They had friends and family at work, and felt free to take time off when needed. Although middle managers are less satisfied, they are still positive overall (Table 4). Supervisors often have to work longer hours and cannot be accommodated as easily, if they need to take care of personal issues during work hours. This is more strongly reflected in attitudes regarding working conditions than in attitudes regarding personal life.

In addition, eleven of the sixteen interviewees think it is important to keep their personal life separate from their workplace relationships. Only five interviewees have or have had relationships with subordinates beyond the workplace and see those as positive and enriching, and even one of them cautions that a supervisor should not try to be “best buddies” with subordinates. The majority of the interviewees thought that for the sake of productivity and having to be able to discipline employees, and also because their limited time would not allow them to have relationships with each one of their subordinates, they should forgo close relationships with subordinates outside of the workplace.

Regarding the organization, its procedures and policies the percentage of positive comments is more than double the percentage of negative comments for middle managers (Table 4). Non-supervisory employees had shown the same percentage of satisfied comments, but more dissatisfied comments than middle managers (Bitsch and Hogberg, 2005). In general, organizational policies and procedures are accepted, as long as they leave enough room for individual cases. Dissatisfaction stems from policies and procedures not being enforced or not having been established in the first place. Several middle managers commented that they would prefer upper management to institute a discipline procedure or enforce an existing procedure more stringently.

While positive comments are still more frequent than negative comments regarding compensation, it is falling off compared to the previous job factors (Table 4). Wages are often seen as too low, although middle managers are less dissatisfied with wages than non-supervisory employees—wages or salaries on the management level typically are considerably higher than for general labor. Half of the interviewees would consider accepting a different job offer, if they made (a lot) more money than in their current position. Some middle managers and many non-supervisory employees would prefer to have more benefits, although middle managers are more likely to receive benefits, such as health insurance and retirement benefits, than non-supervisory employees (Bitsch and Harsh, 2004). On the other hand, perquisites, such as lunches, end-of-season picnics, and work-related presents, are valued. Another valued perquisite is the use of machinery for private purposes.

Compared to non-supervisory employees who are more positive regarding their working conditions (Bitsch and Hogberg, 2005), middle managers showed a higher percentage of dissatisfied comments than satisfied comments regarding working conditions (Table 4).

Typically middle managers were more stressed and dissatisfied with long hours. Dissatisfaction with working conditions also relates to weather influences and low-quality facilities. This is the only job factor where middle managers show a higher percentage of dissatisfied comments than satisfied comments as suggested by the Herzberg model. According to the strict interpretation of the Herzberg model of dissatisfied comments having to be more frequent than satisfied comments for a factor to be considered a hygiene factor, working conditions appear to be the only hygiene factor in this study. However, as the findings for non-supervisory employees do not correspond with this finding, evidence for the Herzberg model is weak.

Findings Regarding Factors Introduced by Bitsch and Hogberg (2005)

Job factors introduced by Bitsch and Hogberg (2005) for non-supervisory employees and first-line supervisors were included in this study to uncover whether they would be reproduced with middle managers. If middle managers' interviews would provide evidence of these factors playing a role in their job satisfaction, this would be a first validation of the applicability of these factors beyond the small group of employees originally studied. Table 5 shows middle managers' attitudes towards these job factors.

Table 5. Attitudes with respect to factors introduced by Bitsch and Hogberg (2005) (Percentage of citations)*

	Satisfaction (%)	Dissatisfaction (%)	Difference (%)
Safety	73	9	64
Family-business values	75	13	62
Involvement	70	11	59
Information	50	25	25

*Job attitudes (satisfaction, dissatisfaction) do not necessarily add up to 100% because ambiguity has been omitted from the table.

While there is evidence for each of the additional factors suggested by Bitsch and Hogberg (2005), attitudes towards them are somewhat different for middle managers than for non-supervisory employees. Family-business values, which were seen as highly satisfactory by non-supervisory employee (95% satisfied comments), were brought up without a prompting question by 11 of the 16 middle managers interviewed, and in a mostly positive manner. Many middle managers felt they were part of a management family and felt taken good care of by upper management. One manager said, the business owner and his wife were “like another set of parents” to him. There are also some negative aspects to family-business values, such a preference given to family members, which are more of a problem to middle managers than to non-supervisory employees, because family members may compete for positions with middle managers or may exert more influence on decision-making than the interviewee feels is called for. All things considered, family-business values seem to function as a strong motivator.

Regarding involvement and participation in workplace decisions, middle managers’ proportion of satisfied and dissatisfied comments (Table 5) is similar to non-supervisory employees. This result is somewhat surprising as middle managers are expected to have more input in work-related decisions and therefore, to be more satisfied. Middle managers seem to involve their subordinates as much as they are asked for input by management above, which seems to lead to similar satisfaction levels. Considering these results, the role of involvement as a strong motivator is supported.

Non-supervisory employees were concerned about safety, but the number of positive comments was almost double the number of negative comments (Bitsch and Hogberg, 2005). Middle managers have an even more positive view of the workplace situation regarding accidents and work-related illnesses. They do not perceive as many problems as non-supervisory

employees and see their operation (and themselves) as doing enough about workplace safety.

Bringing together the results for the middle managers and the non-supervisory employees, safety might be considered a motivator.

Of this group of newly introduced job factors, information was the factor with the highest number of dissatisfied comments and the lowest number of satisfied comments for the non-supervisory employees. This is also the case for the middle managers. But while the proportion of dissatisfied and satisfied comments was almost the same (4% difference) for the non-supervisory employees, middle managers provided twice as many satisfied comments than dissatisfied comments. This result was expected, considering that middle managers are more likely to be kept current with respect to information beyond their immediate workplace needs, because of their rank in the organizational hierarchy. But some upper level managers keep financial information and long-term plans from their middle managers, which spurs dissatisfaction.

Discussion and Conclusions

Both Bitsch and Hogberg (2005) and this study provide only weak support for the Herzberg model of job context factors causing dissatisfaction or the absence of dissatisfaction when in a positive state versus job content factors causing satisfaction or no satisfaction depending on their state. Even though the number of cases in both studies is small, in-depth studies of individuals can serve to qualify a theory, in particular when repeatedly showing similar results. The critical incident method may be the cause behind job factors falling into the two clusters predicted by the Herzberg model. In contrast, the in-depth interview approach does not result in clear-cut boundaries between clusters of job factors.

The Herzberg model of job satisfaction and dissatisfaction has provided a structured approach to analyzing employees' job satisfaction and classifying their job-related attitudes. This organizing function of the Herzberg model has proved useful for coding and data analysis, as well as for comparing employees on different hierarchical levels, such as non-supervisory employees and first-line supervisors to middle managers. Therefore, while the Herzberg model will continue to be useful in determining which factors of a job and its context to focus on and how to structure the multi-faceted work experience, Herzberg's (2003) specific recommendations how to provide a motivating work place and context will continue to be challenged.

Regarding implications of the Herzberg model, namely motivators being more likely to cause job satisfaction and hygiene factors being more likely to cause dissatisfaction, the results of this study corroborate findings by Bitsch and Hogberg (2005) that overall, employees are much less likely to emphasize negative aspects of their work than positive ones. Eliciting negative comments required intense probing, while interviewees liked to dwell on the positive. This corresponds with typical findings in job satisfaction studies of 70-90% satisfied employees, and does not necessarily indicate high satisfaction levels, but social expectations and response tendencies. The results of these analyses also correspond with findings on horticultural apprentices in Germany (Bitsch, 1996).

When accounting for interviewees' tendency to talk in a positive way about their jobs and job context through comparing percentage of positive attitude expressions for specific factors to overall frequency of positive attitude expression, some factors which Herzberg, Mausner, and Snyderman (1959) grouped as hygiene factors seem to function as motivators and some factors grouped as motivators are ambiguous for the interviewed agricultural employees. Taking the

overall attitudes of middle managers as a mean value and classifying factors with a percentage of satisfied comments notably above the mean as motivators, factors near the mean as ambiguous, and factors notably below the mean as hygiene factor, job factors fall into the following groups: (1) job security, achievement, supervision, and interpersonal relationships at the workplace are motivators; (2) work itself, recognition, organization, and personal life are ambiguous; (3) compensation and working conditions are hygiene factors.

For non-supervisory employees, the percentage of satisfied comments indicates the following job factor groups (Bitsch and Hogberg, 2005): (1) personal life, job security, achievement, recognition, supervision, and interpersonal relationships at the workplace are motivators; (2) work itself, organization, and working conditions are ambiguous; (3) compensation is a hygiene factor. In addition, non-supervisory employees and first-line supervisors voice more dissatisfied comments than middle managers regarding compensation, organization, work itself, interpersonal relations, and job security. These differences between job factors are more likely to depend on the specific jobs and their contexts, or even the type of industry, than to be caused by conceptual differences between two (or three) clusters of job factors. In addition, individuals may react differently to similar circumstances, which introduces another source of variation.

Middle managers and non-supervisory employees are similar in perceiving job security, achievement, supervision, and interpersonal relationships at the workplace as mostly satisfying; work itself and organization as ambiguous; and compensation as rather dissatisfying, less so for middle managers than for non-supervisory employees. Non-supervisory employees perceive the interface between their job and their personal life more positive than middle managers and recognition also plays a more positive role for them. Working conditions play a more negative

role for middle managers. Different from Herzberg's (2003), suggestions to focus changes on the work content, fostering intrinsic motivation, these results suggest changes in factors where the number of dissatisfied comments is relatively high. For example, middle managers would value less hours, in particular during the season, when their personal life is most restricted. As some of these managers had admitted that they would accept a different job offer, if it entailed less hours with other job components being equal, reducing their hours during peak season would likely decrease the turnover risk. Another example is information. Although many middle managers are rather well-informed on what is happening in their organization, there is room for improvement from their perspective. Both the turnover risk and the risk of these managers not performing at the level they could perform would likely be reduced by letting them know about the financial situation of the operation and the long-term planning.

This latter job factor constitutes one of the additional factors introduced by Bitsch and Hogberg (2005), for which additional evidence was found in this study. Although, this factor could be construed as being included partly in supervision and partly in organization, its establishment as a separate factor leads to a more detailed analysis and more specific recommendations. This study also found ample evidence for the other three factors, safety, involvement, and family-business values. Involvement clearly has a mostly positive role in the participating organizations, which supports the more general discussion on high-involvement management practices. The consequences of family-business values, which seem particular to agriculture and potentially other sectors with mostly family-owned and -operated businesses, were seen almost all positive by lower-ranked employees, but received some critique by middle managers. Explicit organizational policies and procedures in conjunction with an effort to treat all managers fair and equally, independent of their relationship with the owner(s) may be

adequate remedies. There is also an overlap with information and involvement, as family members are likely to have more opportunities for both. Again, explicit policies and a conscious effort by upper management will help address that.

These results should not be interpreted to support an over-reliance on extrinsic rewards, against which Herzberg (2003) has argued (see also Bassett-Jones and Lloyd, 2006), as results of this study also show that intrinsic aspects of their jobs are important to employees on all levels. Potentially some aspects of work need to be re-conceptualized, namely relationships at the workplace and the intercept between personal life and professional life. Based on this study, as well as Bitsch and Hogberg (2003), it may be oversimplifying to categorize these factors as extrinsic. The emotional aspects of relationships seem to carry over to organizational commitment, loyalty, and willingness to contribute.

Further research is needed to clarify many of the relationships uncovered on a larger scale. Representative surveys with employees at different organizational levels and in different agricultural subsectors would be useful to establish whether the results described are typical for all of agriculture or differ between subsectors and regions. Beyond agriculture, the function of family-business values in employees' job attitudes is worth further exploration, considering the pervasiveness of small business in the U.S. and many other states. In a similar vein, bringing the mostly separate literatures on high-involvement management practices and job satisfaction together to analyze workplaces of the 21st century, is likely another promising line of research.

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