

Herzberg's Two-Factor Theory of work motivation tested empirically on seasonal workers in hospitality and tourism

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ABSTRACT

The objective of this study was to understand work motivation in a sample of seasonal workers at a tourism destination strongly steered by seasonality. Furthermore, it was investigated whether seasonal workers could be divided into worker subgroups on the basis of their work motivation. A structural equations model tested Herzberg's Two-Factor Theory of work motivation empirically. The findings of the study support the Two-Factor Theory of work motivation. Furthermore, results indicated that a migrant community of workers was significantly less concerned about wage level as well as significantly more concerned about meeting new people than resident workers. As a result of these findings, it is suggested that management of businesses in hospitality and tourism need to consider that the seasonal workforce consists of different kinds of worker subgroups, which have different needs to be satisfied.

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1. Introduction

The objective of this study is to understand work motivation in a sample of seasonal workers at a ski-resort strongly steered by seasonality, situated in northern Sweden.

Tourism is strongly steered by seasonality. An international definition of seasonality in the hospitality and tourism industries is, seen in the strictest sense, a peaking of demand at different times of the year (Kennedy, 1999). Even though all destinations are subject to some form of seasonality, research indicates that peripheral destinations, in both the southern and northern hemispheres, have the greatest difficulty in overcoming the problems caused by seasonality (Lundtorp, Rassing, & Wanhill, 1999). Both coastal and winter sport resorts are the most heavily affected by seasonal fluctuations (Pearce, 1989; Murphy, 1997). Urban areas are less affected because of the wide variety of attractions. These attractions are in most cases not dependent on climatic conditions and therefore not as vulnerable to climatic changes (Butler & Mao, 1997).

Baum (1999) suggests that the impact of demand variation is one of the major operational and policy concerns of the hospitality

and tourism industries. The supply-side behavior is affected in all aspects including marketing (packaging, pricing, distribution), business finance (cash flow, attracting investment) and the labor market (sustainability of employment, nature and quality of employment, skills availability) (Baum, 1999; Cooper, Fletcher, Gilberg, & Wanhill, 1993).

Vaughan and Andriotis (2000) suggest that one major characteristic of employment in hospitality and tourism is its seasonal and part-time nature, which can result in seasonal employment, underemployment, and unemployment (Jolliffe & Farnsworth, 2003). Furthermore, the negative employment image within the sector affects the recruitment and retention of qualified employees. This image is created by the generally perceived idea that work within the hospitality and tourism industries only offers limited opportunity for promotion and progression (Baum, Amoha, & Spivack, 1997; Hjalager & Andersen, 2000), and that work is characterized by anti-social working conditions and casualized remuneration (Baum, Amoha, & Spivack, 1997).

This is problematic since tourist perceived quality is closely related to employee performance. An essential feature of any successful organization is motivated employees. Therefore, the extent to which an employer is able to motivate employees is important for the overall success of the organization on its markets. One of the most important challenges facing managers is the

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creation of a context within which employees feel motivated and will act in order to achieve the goals of the organization. Managers may, by influencing the context, affect the degree of work motivation among the employees. Maybe nowhere is the understanding of employee work motivation more important than in a customer service oriented business such as the hospitality and tourism industries.

Furthermore, it has been argued that seasonal workers within the industry can be divided into different subgroups on the basis of their attitudes towards seasonal jobs as well as their behavior as seasonal workers (Lee & Moreo, 2007; Lee-Ross, 1999a,b) since employee work motivation varies between individuals, and individuals respond differently to the same motivational stimulus in different situations (Lee-Ross, 1999a). The individual differences of employees have important implications for managerial practice. Motivational theories are useful when studying the range of human motives to explain how the motives affect human behavior. However, the theories do not provide an insight of what motivates a particular individual or group. Therefore, when searching for the specific work motivators of a particular individual or group of individuals there is no other way than finding out what actually motivates that particular individual or group (Wright, 1989). In the light of the above, it is here argued that seasonal workers in hospitality and tourism constitute an important group with which to study work motivation.

The aim of the study is to address the issue of how seasonal workers in hospitality and tourism are motivated in their work. This aim will be achieved through the following objectives:

1. To understand work motivation in a sample of seasonal workers by testing a context-adapted version of Herzberg's Two-Factor Theory of work motivation empirically by a structural equations model.
2. To investigate whether seasonal workers can be divided into worker subgroups on the basis of their work motivation.

2. Work motivation

People are motivated by a great variety of needs, which in turn vary in order of importance and over time or in different situations. The understanding of human needs is, according to Wright (1989), only the first step towards predicting and influencing work behavior. There is no single definition of work motivation due to the complexity of the concept. Some theorists have found it more useful to concentrate on physiological aspects, whilst some stress the behavioral aspects and others the rationality of human beings (Pinder, 1998). Pinder (1998, p. 11) describes motivation as:

“a set of energetic forces that originate both within as well as beyond an individual's being, to initiate work-related behavior, and to determine its form, direction, intensity, and duration”.

This definition recognizes the influence on work-related behavior of both environmental forces (e.g. organizational reward systems) and forces inherent in the person (e.g. individual needs and motives). This definition views work motivation as an “invisible, internal, hypothetical construct” (Ambrose & Kulik, 1999, p. 231). Work motivation cannot actually be seen nor can it be measured directly. Therefore, we use established theories when measuring the observable manifestations of work motivation (Ambrose & Kulik, 1999).

2.1. Herzberg's Two-Factor Theory of work motivation

When reviewing the literature, there are two main types of work motivation theory that have been used to explain motivational issues like levels of work motivation, job satisfaction and what effects these aspects have on work behavior. These theories are called need theories and process theories. While need theories concentrate on the emotional aspects of motivation, process theories of motivation emphasize the role of cognitive processes (however emotional factors are not ignored) (Wright, 1989). Process theories are suitable for in-depth case-studies whereas we believe that need theories provide a more suitable approach in order to reach our objective “... to understand work motivation in a sample of seasonal workers at a ski-resort ...” at a general level. In this study need theories of motivation will therefore be used. Need theories are based on the assumption that people's needs provide the force, which directs action towards fulfillment of these needs (Wright, 1989; Pinder, 1998). Need theories stress the identification of different needs which motivate behavior. By identifying the needs and by fulfilling them it is assumed that people will become motivated at work (Wright, 1989).

Herzberg's influential need theory of the 1960's, the *Two-Factor Theory*, suggests that humans have two different sets of needs and that the different elements of the work situation satisfies or dissatisfies these needs (Wright, 1989). The first set concerns the basic survival needs of a person – the *hygiene factors* (Herzberg, 1971; Herzberg, Mausner, & Bloch Snyderman, 2005). These factors are not directly related to the job itself, but concern the conditions that surround performing that job. The factors are company policy such as for example reward system, salary, and interpersonal relations (Herzberg, 1971; Herzberg, Mausner, & Bloch Snyderman, 2005; Tietjen & Myers, 1998). According to Herzberg, these factors can cause dissatisfaction when not satisfied. However, when satisfied these factors do not motivate or cause satisfaction, they only prevent dissatisfaction (Herzberg, 1971; Herzberg, Mausner, & Bloch Snyderman, 2005).

The second set of needs is *growth needs*, which refers to factors intrinsic within the work itself, for example recognition of a task completed, achievement, responsibility, advancement and work itself. These factors are according to Herzberg, the motivating factors, which implies that humans try to become all that they are capable of becoming and when satisfied they work as motivators (Herzberg, 1971, Herzberg, Mausner, & Bloch Snyderman, 2005). According to Herzberg, content of work, (e.g. opportunities for responsibility and advancement) is the only way to increase satisfaction and thereby enhance work motivation (Wright, 1989). However, when the growth factors are missing this does not cause dissatisfaction, simply an absence of satisfaction (Herzberg, 1971; Herzberg, Mausner, & Bloch Snyderman, 2005).

2.1.1. Herzberg's theory adapted and applied in different contexts

Several studies using Herzberg's Two-Factor Theory have been adapted to better suit the specific context studied. One example of a context-adapted study is Parsons and Broadbride's (2006) study of work motivation in a retail setting. In their study, key factors for job motivation and satisfaction for charity shop managers were examined. Herzberg's division of intrinsic and extrinsic factors was employed and examples of intrinsic job characteristics used were responsibility, work itself, self development (i.e. possibility to growth) and recognition. Extrinsic job characteristics examined were for example location of work, job security, hours of work, salary and working conditions. In addition to this, communication and organizational climate were

examined in the form of factors as working relationships (with volunteers, shop staff, other shop managers, area managers and head office), support (from area management and head office management) and opportunity to influence organizational policies. The main findings of the study support Herzberg's theory in that the managers exhibit high levels of satisfaction with intrinsic factors (e.g. variety and challenge of the job, high degree of control) and lower levels of satisfaction with extrinsic factors (e.g. pay, job status, working conditions).

Another adapted version of Herzberg's motivation model was employed in DeShields, Kara, and Kaynak' (2005) study of determinants of business student satisfaction and retention. In this higher education context, Herzberg's growth factors were translated into faculty performance variables (e.g. understanding, accessible, professional, and helpful) and classes (real-world relevance, course scheduling and project/cases). Hygiene factors were constituted by advising staff (e.g. accessible, reliable, helpful, and responsive). The principal findings of this study also supported Herzberg's Two-Factor Theory.

Herzberg's Two-Factor Theory has also been applied context-adapted in studies of the hospitality industry. One example is Balmer and Baum's (1993) study of guest satisfaction in the accommodation environment. In their study, hygiene (or maintenance) factors employed were pricing, facilities (cleanliness, size, variety) and "freebies"/extras. Motivators/satisfiers employed were recognition of staff, sense of belonging, flexibility by hotel and "service orientation". Their findings indicate that Herzberg's model also poses as a relevant theory when attempting to understand guest motivation in hospitality.

2.1.2. Work motivation and individual differences

Several work motivation studies have emphasized individual differences and their affect on work motivation. One of the earliest works on work motivation and individual differences was McClelland's need theory, presented in the 1960s. According to this theory, needs are reflections of an individual's personal traits. According to McClelland, there are three needs that may differ between individuals, which need to be addressed by the work environment: achievement, power and affiliation (McClelland, 1985). In 1991, Barrick and Mount presented the Big Five Model which showed that personality measures could predict job performance. This model has been adapted in recent research on work motivation and personal traits. One example is Tett and Burnettes' (2003) use of the model for developing a personality trait-based interactionist model of job performance. In this model the Big Five was linked to situational taxonomies. The Big Five was also used in Wang and Erdheim's (2007) study, which explored the linkages between the model and goal orientation. Their findings show that "personality has a significant impact on performance motivation" (Wang & Erdheim, 2007, p. 1502) It has recently been argued that "research on personality is the fastest growing area in the motivation literature" (Latham & Pinder, 2005, p. 488). This claim is supported by the numerous recent studies conducted on personality/traits and work motivation (see e.g. Baum & Locke, 2004; Tett & Burnett, 2003; Witt & Ferris, 2003). One example is Furnham, Forde, and Ferrari's (1999) application of Herzberg's Two-Factor Theory in a study of personality and work motivation. In their study respondents completed the Eysenck Personality Profiler (EPP) and a Work Values Questionnaire. It was found that extraverts stressed the importance of growth factors in the workplace, while introverts rated hygiene factors as more important to them in choosing a particular job. Furnham, Forde, and Ferrari (1999) stress that the results have implications for

both selecting employees and managing them and that it may be useful for managers to introduce different performance management schemes to different groups of workers.

2.1.3. Criticism of Herzberg's theory

The Two-Factor Theory has attracted a lot of attention and criticism has been put forward regarding the distinction between motivators and hygiene factors. For example, the Two-Factor Theory claims that job content or job enrichment by for example responsibility, achievement, recognition and advancement is the only way to increase work motivation (Furnham, Forde, & Ferrari, 1999; Parson & Broadbride, 2006; Wright, 1989). Pinder claims that hygiene factors, like salary, interpersonal relations and working conditions may also act as motivators (Pinder, 1998). In addition, the Two-Factor Theory has been criticized for not taking individual differences of needs and values into account when explaining work motivation (Parson & Broadbride, 2006; Tietjen & Myers, 1998).

Method dependency is another problem and variation in methodology, (questionnaires, interviews or behavioral observations) implies that different results are obtained. Also, when respondents answer critical incident questions, they may selectively recall situational factors and projecting failures to external factors. Evidence also questions how well the theory applies to individual variations like gender, culture and age categories not to mention organizational differences (Furnham, Forde, & Ferrari, 1999). However, according to Furnham, Forde, and Ferrari (1999), the theory and its applications remain influential within the domain of organizational theory.

3. Methodology

3.1. The setting

The field research was carried out in a ski-resort and its surrounding villages situated in the northwest of Sweden. The destination is situated in a peripheral area and like many other such areas suffering in demand from a high level of out-migration among its inhabitants. The region is exposed to seasonal fluctuations and has only one significant season. Since the internal labor market is weak and labor a scarce resource workers are often recruited from external markets. A large group of mostly young people moves to the region for work during the winter season.

3.2. Sample

Data was collected through questionnaires and in-depth interviews. The collection of data began with six in-depth interviews selected from the sample. Since one of the objectives of the study was to investigate whether the sample of seasonal workers could be divided into worker subgroups on the basis of work motivation, the selection of respondents for the interviews was made to get an even distribution between people moving to the region in order to work as seasonal workers as well as people living in the area on a permanent basis taking on seasonal jobs. An even distribution of respondents was also sought on a gender basis.

The sample for the questionnaire consisted of 613 seasonally employed individuals in the region. Contact addresses for respondents were obtained from their places of work all of which kept records of their employees' addresses. It should be noted that those companies who were willing to supply employee information were also interested in participating in the study.

There are no data on the actual number of seasonal workers at the ski-resort. The scarcity of research conducted on seasonal work mobility in Sweden due to the difficulty of obtaining these types of data has been pointed out by for example Lundmark (2006).

Our definition of a seasonal employee is a person who has a contract with an end date – a temporary working engagement within the sector and who is involved in the business operation on a daily basis. This definition covers thereby both residents and in-migrants and also all the different occupational groups one can have as seasonally employed (e.g. qualified occupations such as ski-patrollers, ski-instructors and chiefs as well as non-qualified occupations as janitors and jobs in housekeeping).

The sample consisted of individuals working within the hospitality and tourism industries. The hospitality industry is here defined as “all the business that provide food, beverages and lodging to people who are away from home” (Kusluvan, 2003, p. 4) while the tourism industry “refers broadly to firms, organizations and facilities providing goods and services wholly or mainly for specific needs and wants of visitors” (Kusluvan, 2003, p. 3). Forty five per cent of the respondents consisted of individuals working within the hospitality industry while the remaining 55 % worked in the more broadly defined tourism industry.

3.3. Data collection

The questions used during the interviews were of the ‘open-end’ type. This method was used due to the researchers’ wish to draw a rich picture of how the respondents viewed their working and non-working lives. The interviewers guided the respondents around such themes as work, leisure, place of residence, work motivation and fellow workers and allowed the respondents to speak freely about the highlighted themes. A tape recorder was used during the in-depth interviews to facilitate analysis of the data. The questionnaire was distributed to all the obtained addresses of the employees ($N = 613$).

There were three reminders, the first contained a letter, the second contained a letter and a questionnaire and finally the last reminder contained a letter. A total of 266 questionnaires were returned, of which 263 were usable. This provided a response rate of 43 %.

3.4. Data analysis

An exploratory approach was used when collecting and analyzing the study’s qualitative data. The analysis and interpretation of the qualitative data followed Miles and Huberman’s (1994) division of qualitative data analysis. The first part of the analysis was data reduction, when the collected data was ‘reduced’. The second part of the analysis was data display. During this phase data was ‘put on display’ (i.e. data is presented in a more compact form by for example the usage of matrices, graphs or charts). The final phase of the analysis – conclusion drawing and verification – it was found that seasonal workers could be divided into distinct worker subgroups on the basis of work motivation. The quantitative data of this study tested Herzberg’s Two-Factor Theory, which suggests that *hygiene factors* and *growth factors* (described in Fig. 1) explain work motivation. The answers to the questionnaire were used to identify and measure work motivation: hygiene factors and growth factors in the presented model.

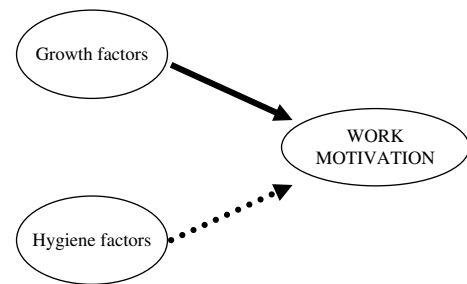


Fig. 1. Herzberg’s Two-Factor Theory of work motivation. Note: When needs are met, result in work motivation →. When needs are met, result in satisfaction →.

3.4.1. Using structural equations modeling for analysis of data

Structural equations modeling (SEM) is particularly suited to test the relevance of the Two-Factor Theory of work motivation since the three major concepts work motivation, growth factors, and hygiene factors all are latent variables that need to be anchored in measurable manifest variables in order to be tested for statistical significance. The technique has been applied in a previous study of work motivation among nurses (Janssen, de Jonge, & Bakker, 1999). The SEM technique is based on a two-step procedure where initially the connection between theoretical constructs (latent variables) and observable data (manifest variables) is established through measurement models.

Secondly, the relations between (via measurement models measurable) theoretical constructs are analysed by a structural model. SEM is confirmatory in nature and the measurement models as well as the structural model should consequently be based on theory. In this study, the computer programme LISREL 8 (Jöreskog & Sörbom, 1993a,b) was used to compute the estimated covariance matrix implied by the hypothesized models and compared this covariance matrix to the covariance matrix based on empirical data.

In the questions (cf. Table 3 for questions and Fig. 2 for measurement model) used for indicating work motivation and growth factors, a 5-point Likert-type scale format, ranging from ‘strongly agree’ to ‘strongly disagree’ was used for 13 of the 16 factors and a 4-point Likert-type scale format, ranging from ‘very important’ to ‘not at all important’ were used for the remaining three factors (FEED26P, KUNSK26B and INFO26A cf. Table 3). By using the 5-point Likert-type scale format the respondents could choose a neutral position.

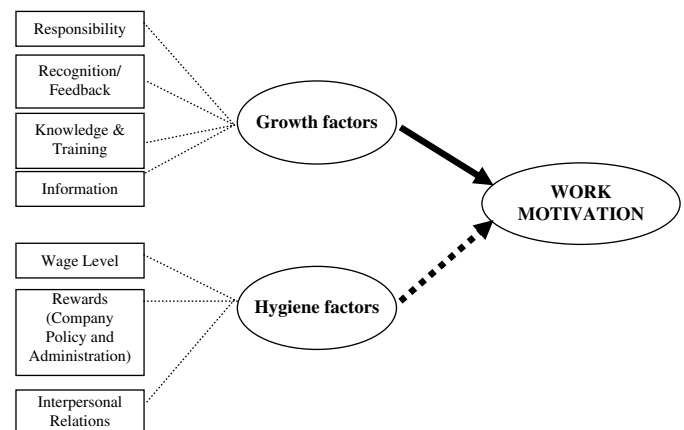


Fig. 2. Measurement model of the constructs of work motivation.

In the questions used for indicating hygiene factors, a 4-point Likert-type scale format, ranging from 'very important' to 'not at all important' was used for all three factors. By using a 4-point Likert-type scale format, the respondents were forced to make a statement, not being able to choose a neutral position. The Likert-type scale questions all contained the option 'don't know'. This strategy might, according to Ryan (1995), induce in a nil response where attitudinal responses are required. In this study this was found to be untrue, as there were very few nil responses.

3.4.2. *Constructs included in the measurement model*

The model tested was a context-adapted version of Herzberg's Two-Factor Theory, adjusted to better suit the seasonal context in which the study takes place (described in Fig. 2). Herzberg (1971) included factors as *responsibility, recognition, achievement, possibility of growth and advancement* in the construct *growth factors*. In this study, responsibility was measured by statements such as "having responsibility at work" and "authority to make one's own decisions at work". Recognition was measured by statements such as: "finding a ready listener for one's ideas, thoughts and suggestions" and "receiving encouragement when set goals had been attained". In this construct feedback as well as one dimension of Herzberg's achievement was included.

Herzberg's (1971) construct possibility of growth was measured by statements such as "receiving training for work tasks" and "receiving on-the-job training" (in the study's model described as "Knowledge & Training"). This interpretation of the construct was made on the basis of Herzberg's own description of possibility of growth as a person's possibility "to advance in his own skills and his profession" (Herzberg, 1971, p. 194). This definition of the construct possibility of growth also includes, in some aspects, perceptions of advancements. However, advancement in the form of a persons' possibility of changing his/her own status of position was not measured in this study, since it was not considered relevant in a seasonal context (i.e. seasonal employees having short-term engagements with an organization and changes of employment status during the season is usually not realistic). In this study the construct information was also included in the measurement model. An example of statement measuring this construct was "receiving information regarding the company (e.g. goals and visions)". This inclusion of information as a construct in the model was made on the basis of Herzberg's description of a person's need of knowing more "Even if these new facts are not essential or even directly related to the task at hand, they may nevertheless be useful for later tasks" (Herzberg, 1971, p. 59) being an important part of psychological growth. In a seasonal context, such information was considered important due to the temporary working conditions of seasonal employment, including the need for workers to swiftly get introduced to their work and the organization they work for.

Salary, interpersonal relations and company policy and administration, the latter in the form of reward systems, measured Herzberg's construct hygiene factors. Other, in literature, suggested constructs for measuring hygiene factors are for example factors in personal life (i.e. some aspect of the job affecting the individual's personal life), status (i.e. the job giving the person a sense of "status"), and job security (Herzberg, Mausner, & Bloch Snyderman, 2005). None of these constructs were included in the study since they were not considered relevant in the seasonal context under study.

3.5. *Profile of sample*

As a result of the interviews, a division of the seasonal workers was made into two distinct worker subgroups: a *migrant*

Table 1
Profile of migrant and resident community.

	Migrants	Residents
<i>Age, gender and civil status</i>		
Age	25 years	29 years
Male	50%	52%
Female	50%	48%
Single	72%	47%
<i>Education and experience</i>		
Worked two or more seasons in the region	46%	87%
Comprehensive school certificate (9 years)	78%	78%
Upper secondary school qualification (12 years)	54%	38%
Vocational training	42%	45%
University attendance	23%	10%
Neither experience nor training in hospitality and/or tourism	9%	8%

Note: n = 243.

community and a resident community. The migrant community consisted of individuals who normally live in other areas but come to live and work in the ski-resort during the tourism season. The resident community consisted of individuals who lived in the area all year around but only worked on a seasonal basis in hospitality and tourism. In Table 1, a brief description of some of the characteristics of the two worker subgroups is presented.

Within the two worker subgroups there were equal proportions of men and women. However, seven out of 10 of the migrant community were single, in contrast to five out of 10 of the resident community. There was also a difference between the two worker subgroups concerning age. Members of the migrant community were, on average, younger (mean = 24.7; median = 23.0) than those from the resident community (mean = 29.3; median = 28.5). A large proportion of the members of the resident community had worked several seasons in the region, while only half of the members of the migrant community had done this. As regards the number of times seasonal workers had worked in the region, members of the resident community had worked many more seasons in the region (mean = 5.4; median = 3.5) than their counterparts in the migrant community (mean = 1.6; median = 0.0).

Regarding educational level, eight out of 10 had comprehensive school certificates in the two worker subgroups. Half of the members of the migrant community had upper secondary qualifications, while four out of 10 of members from the resident community had this qualification. Four out of 10 had had vocational

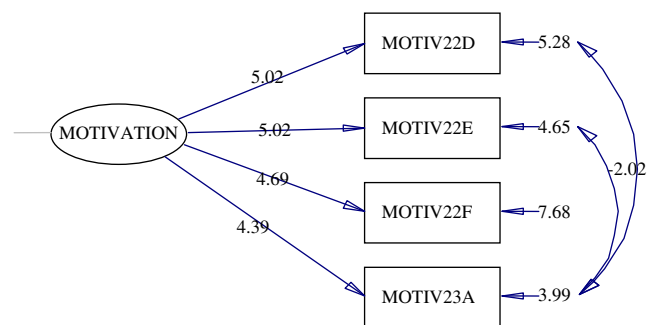


Fig. 3. The measurement model uses four manifest variables to measure the latent variable work motivation. T-values are indicated. Note: MOTIV22D: receiving motivation from management. MOTIV22E: receiving motivation from managers. MOTIV22F: receiving motivation from co-workers. MOTIV23A: motivated in one's work.

Table 2
Summary table of statements.

Theoretical dimensions	Constructs	Statements used
Hygiene factors	Wage level (1)	How important is wage level for you to do a good job?
	Rewards (1)	How important are reward systems for you to do a good job?
	Interpersonal relations (1)	How important was 'meeting new people' as a motive when applying for the job?
Growth factors	Responsibility (2)	Do you feel that you are given responsibility in your job?
	Recognition/feedback (3)	Do you have necessary knowledge to make own decisions in your job?
		Do you communicate your ideas, thoughts and suggestions regarding your job?
		Do you feel that you have a ready listener for your ideas, thoughts and suggestions?
	Knowledge/training (4)	Do you feel that you receive encouragement when set goals have been attained?
		Do you feel that you have received training for your work tasks?
		Do you feel that you have the necessary skills to perform your work tasks?
		Do you feel that you have the knowledge needed to make your own decisions in your work?
Information (3)	Do you feel that you receive vocational education at your place of work?	
	Do you feel that your company has a well defined mission statement?	
	Do you feel that you have received the necessary information for you to perform your work tasks?	
	Do you feel that you have knowledge regarding your company (e.g. objectives, visions)?	
Motivation	Motivation (4)	Do you feel that you are motivated by management?
		Do you feel that you are motivated by your line manager?
		Do you feel that you are motivated by your co-workers?
		Do you feel that you are motivated by performing your job (i.e. the job itself)?

training in the two worker subgroups. However, there were some differences between the two groups concerning their university attendance. Two out of 10 of migrant community members had attended university, while only one of 10 of resident community workers had attended university. Only a small proportion of workers from both subgroups had neither experience nor training in hospitality and/or tourism.

4. Results

As a result of the study's initial in-depth interviews with seasonal workers, a division between a migrant community and a resident community was made. From the in-depth interviews it became clear that social interaction between seasonal workers had a strong impact on work motivation. This social interaction seemed to be particularly important for the migrant community.

Results from the survey also indicate differences between the migrant community and the resident community (that live in the region the year around). Table 3 describes differences in mean values calculated from answers given on a 5 (or 4) point Likert scale. Migrant workers score higher in most answers, but only two were significantly different according to a *t*-test of the difference of means at a 5% level of significance. The two items where there were significant differences are:

- The migrant community was significantly less concerned about wage level than its counterpart – the resident community.
- The migrant community was also significantly more concerned about meeting new people than its counterpart – the resident community.

4.1. Measurements of latent variables

In order to measure the latent variable *work motivation* for the total sample, answers to four questions were used as manifest variables (cf. Fig. 3). The underlying logic is that the latent variable influences the manifest variables, that is if a worker is motivated, the answers to these questions will be positive. This is why the arrows in Fig. 3 go from the latent to the manifest variables. The figures indicate *t*-values, which show that all manifest variables are

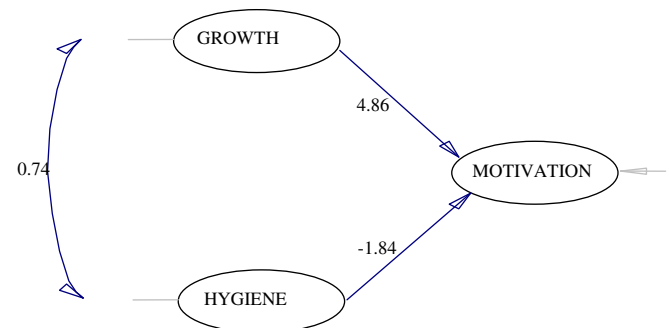
significantly related to the latent construct work motivation. To the right are the *t*-values for the error terms and these are also all significant.

The latent *hygiene factors* were measured (cf. Appendix) by answers to three questions related to wage level, rewards and interpersonal relations (see Table 2). All three had significant *t*-values.

The latent *growth factors* were measured by answers to 12 questions (cf. Appendix) related to responsibility, information, recognition/feedback and knowledge/training (see Table 2). All 12 had significant *t*-values.

4.2. The first structural model – measuring work motivation among seasonal workers

The results of the structural model strongly support the Two-Factor Theory of work motivation. Fig. 4 shows *t*-values which is a measure of the number of standard errors that the coefficient is from zero. A general rule states that a *t*-value larger than +1.96 or smaller than –1.96 is required at the 5% level of significance (Jöreskog & Sörbom, 1993a,b). A higher absolute *t*-value indicates a greater confidence in the predictive power of the coefficient.



Chi-Square=207.52, df=180, P-value=0.07821, RMSEA0.035

Fig. 4. The first structural model describing *t*-values of the factors which influence the concept work motivation.

The most important factors to explain work motivation are growth factors comprising issues such as feedback, information, responsibility and training/knowledge. The t -value of “GROWTH” is 4.86 which is well above the critical level +1.96 for 5% significance (Jöreskog & Sörbom, 1993a,b). Hygiene factors are not significant. Although the measurement model is able to measure both concepts, the structural model cannot detect any significant relation between hygiene factors and the dependent concept work motivation. The t -value for this relation is -1.84 which is not enough for the critical level -1.96 . The structural model is also “clean” since there is no strong interdependence between growth factors and hygiene factors as indicated by the t -value 0.74 in Fig. 4.

The estimates of the structural model are described in Fig. 4. The total fit of the model is quite acceptable. Jöreskog and Sörbom (1993a,b) suggest several indices to use for assessing the overall fit of a model, chi-square and goodness of fit index (GFI) being frequently used. RMSEA measures the discrepancy per degree of freedom of the model and the index must according to Browne and Cudeck (1993) be lower than 0.05. The first structural model run results in a fit with normal theory weighted least squares chi-square = 207 at 180 degrees of freedom. The root mean square error of approximation (RMSEA) = 0.035, and the goodness of fit index (GFI) = 0.88.

4.3. The second structural model – measuring work motivation for worker subgroups

Since one of the study's objectives was to investigate whether the sample of seasonal workers could be divided into worker subgroups on the basis of their work motivation and since the results of the in-depth interviews led to a division of the seasonal workers into two distinct worker subgroups a third variable *resident* was included in the second structural model. This variable is treated as a latent variable, although it is measured by one single manifest dichotomous variable indicating if a seasonal worker is a year around resident in the region.

The elaborated model has a much better fit to the data (i.e. the covariance matrix). The estimates of the elaborated structural model are described in Fig. 5. The total fit of the model is considerably improved with normal theory weighted least squares chi-square = 171.1 at 174 degrees of freedom. The root mean square error of approximation (RMSEA) = 0.0, and the goodness of fit index (GFI) = 0.90.

The model continues to support the Two-Factor Theory of work motivation by the strong and significant influence on work motivation from the growth factors and a non-significant influence from the hygiene factors. This is indicated by a t -value of

3.99 which is well above the critical value +1.96 for the relation between “GROWTH” and “MOTIVATION” and an insignificant t -value of -1.13 for the relation between “HYGIENE” and “MOTIVATION”. The introduced factor “RESIDENT” indicates an expected positive albeit insignificant (t -value 0.85) effect on “MOTIVATION” from being a seasonal worker resident all year around in the region. The factor “RESIDENT” also has a significant negative effect (t -value -2.7) on the importance of growth factors.

5. Discussion and conclusions

In this study the objective was to understand work motivation in a sample of seasonal workers in hospitality and tourism and Herzberg's Two-Factor Theory of work motivation was tested empirically. The findings support Herzberg's Two-Factor Theory and show that it still has validity. The essence of Herzberg's Two-Factor Theory of work motivation, as understood in this study, is that work motivation is grounded in the satisfaction of ‘higher’ needs or ‘self fulfillment needs’ (Pinder, 1998) and not in more mundane needs such as wage level.

This point is nicely brought out by the SEM model where ‘wage level’ and ‘rewards’ load on hygiene factors, which has a very weak and insignificant influence on work motivation. Out of the three manifest variables, ‘meeting new people’ loads strongest that further plays down the importance of monetary rewards to explain work motivation.

Furthermore, the study investigated whether seasonal workers could be divided into workers subgroups on the basis of their work motivation. The answer to this question was positive. An interesting difference among seasonal workers is that ‘meeting new people’ is significantly more important for the migrant community than it is for their counterparts in the resident community.

Another hygiene factor – wage level – was of greater importance to the resident community members than to those of the migrant community. This hints at a possible compensation between the two factors, that is ‘meeting new people’ seems to make up for a low wage level among the migrant community and vice versa for the resident community, which is less enchanted by meeting new people but more concerned about wage level. This relation is probably the reason why resident loads negatively on hygiene factors in the SEM model presented in Fig. 5. The negative sign indicates that for non-residents (migrants) hygiene factors, and particularly ‘meeting new people’, are more important. This line of reasoning corresponds well with deLeon and Taher's (1996) findings that extrinsic rewards (i.e. hygiene factors) are of two types: organizational (e.g. pay, working conditions) and social (e.g. friendship, dealing with others).

The growth factors were measured by the following manifest variables: responsibility, information, feedback, knowledge and training. It was found that feedback and responsibility, to the greatest extent, had an effect on work motivation. Information, knowledge and training had a lesser impact on work motivation, when comparing the components of the construct growth factors. However, it should be emphasized that all of these components were of significant importance for the enhancement of work motivation among the seasonal workers. Consequently, the seasonal workers' work motivation is derived from intrinsic rewards when experiencing self-control in their work situation.

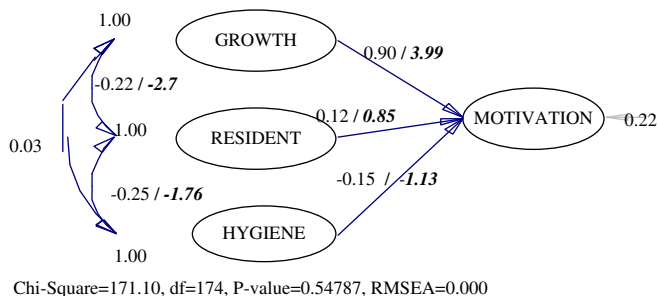


Fig. 5. The second structural model describing the estimates and the t -values (in italics) of the factors which influence the concept work motivation.

Based on the in-depth interviews, special focus was set on the importance of social factors. One of the conclusions that was made, was that there were differences between the two worker subgroups as regards what made the workers enjoy their jobs. Migrant workers tended to live in occupational communities (Lee-Ross, 1999b). Findings indicated that the members of the migrant community defined themselves as seasonal workers and that their present self-image was based on their occupational role as seasonal workers. It was also found that members of the migrant community shared attitudes, viewpoints and values as regards, for example, their view of work and leisure. They also often had work-based friends, which they spent most of their waking hours together with and shared interest and hobbies together with. This may also be a result of the fact that the members of the migrant community also lived together. These findings support Lee-Ross' (1999b) argument that staff residency plays an important role in the formation of informal work groups. Members of the migrant community described their relationship with co-workers as very close and that they, in some cases, were like a family away from home. There was a strong sense of camaraderie and inter-group support within the migrant community based on both leisure and non-work activities (i.e. a fusion of work and leisure time) and team working at their place of work. The results also support Lee-Ross (1999b, p. 239)

findings that seasonal work is characterized by "job importance is replaced by work situations characterized by hedonism and close social bonding".

Based on the conclusions from the in-depth interviews, the issue of 'occupational community' was brought into the model. This was made through the manifest variable indicating whether a seasonal worker was registered as a year around inhabitant in the region or not. The result was a better fit of the model, but the results did not indicate significant influences from the variable resident, neither on work motivation nor on hygiene factors. This is further supported by a simple comparison (Table 3) of answers given to Likert-scale questions regarding work motivation, where there were no differences regarding how the two worker subgroups were motivated in their work.

The clear evidence of how worker subgroup influences work motivation contributes to our understanding of how individual variations apply to the theory. The need for more evidence on how well the theory applies to individual variations like gender, culture and age categories not to mention organizational differences has been pointed out by Furnham, Forde, and Ferrari (1999). These results also shed light on how individual differences of needs and values explain work motivation which is an issue that the Two-Factor Theory has been criticized for not taking into consideration (Parson & Broadbride, 2006; Tietjen & Myers, 1998).

Table 3

Differences in perceptions of work motivation factors among migrant and resident community.

Hygiene factors	Migrants	Residents
Wage level (FORM24C)	3.22*	3.50*
Rewards (company policy and administration) (FORM24G)	2.91	3.08
Interpersonal relations (NYAM)	3.41*	3.06*
<i>Growth factors</i>		
<i>Responsibility</i>		
– Having responsibility at work (ANSV22C)	4.43	4.54
– Authority to make own's own decisions at work (ANSV23G)	4.37	4.45
<i>Recognition/feedback</i>		
– Bringing up one's ideas, thoughts and suggestions (FEED23H)	4.41	4.37
– Finding a ready listener for one's ideas, thoughts and suggestions (FEED23I)	3.91	3.83
– Receiving encouragement when set goals have been attained (FEED26P)	3.61	3.51
<i>Knowledge & training</i>		
– Receiving training for work tasks (KUNSK22J)	3.47	3.04
– Having the competence needed for work tasks (KUNSK23E)	4.74	4.61
– Having the knowledge needed to make own's own decisions (KUNSK23F)	4.66	4.61
– Receiving on-the-job training (KUNSK26B)	3.61	3.32
<i>Information</i>		
– The company has clear goals (INFO22A)	4.18	4.28
– Receiving necessary information for work tasks (INFO22K)	3.97	3.75
– Receiving information regarding the company (e.g. goals and visions) (INFO26A)	3.79	3.73
<i>Motivation</i>		
– Motivated in one's work (MOTIV23A)	4.38	4.30
– Receiving motivation from management (MOTIV22D)	3.74	3.42
– Receiving motivation from managers (MOTIV22E)	3.93	3.71
– Receiving motivation from co-workers (MOTIV22F)	4.13	4.10

Note: $n = 243$. Figures specify the mean response to items. Figures in italics: 4-point Likert-type scale used for the factors FORM24C, FORM24G, NYAM, FEED26P, KUNSK26B AND INFO26A. * : Statistically significant differences between the two groups according to t -tests (5%). (XX): represents variables in the measurement model (cf. Appendix).

6. Management implications

So what are the implications of these results for business in hospitality and tourism? It was shown that hygiene factors were of importance for the general satisfaction of the workers at their place of work, and therefore it is central for management of businesses to meet these needs. However, in order to motivate employees, the results suggest that the growth needs needed to be fulfilled as well. This implies that in order to get motivated employees, management needs to give their employees responsibility and create platforms for feedback. By creating such a context, employees' intrinsic value is likely to improve and they will be able to develop themselves in their occupational role. It is also of importance to provide the employees with information, knowledge and training.

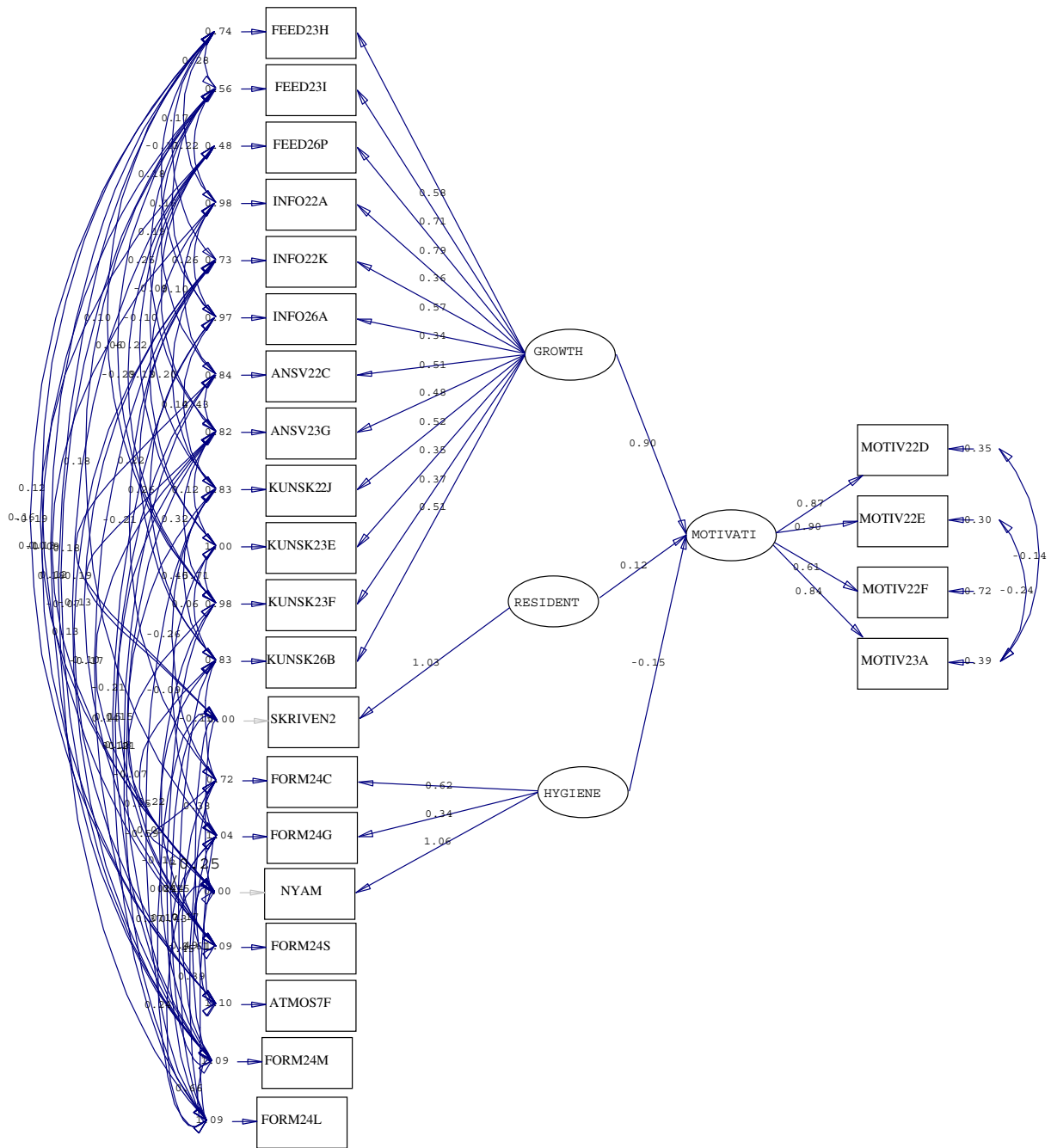
The results also indicate that management of businesses need to consider that the seasonal workforce consists of different kinds of workgroups, which in some cases have different needs. It was shown in this study that close interpersonal relations were significant for the wellbeing of migrant community members. Management could, by creating the necessary conditions for such relations, both on and off work, improve the general satisfaction among these individuals. Examples of activities which could help develop such relations are joint living conditions for seasonal workers supplied by employers, teambuilding training investments on e.g. handling service encounters, discounted recreational activities and kick-off events for seasonal workers. In contrast to this group, the members of the resident community found wage-level to be more important for their wellbeing at their place of work.

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A. Appendix

The SEM results using 20 manifest variables (cf. Table 3 for explanations) and four latent variables used in the structural models.



Chi-Square=171.10, df=174, P-value=0.54787, RMSEA=0.000

References

Ambrose, M. L., & Kulik, C. T. (1999). Old friends, new faces: motivation research in the 1990s. *Journal of Management*, 25(3), 231–292.

Balmer, S., & Baum, T. (1993). Applying Herzberg's hygiene factors to the changing accommodation environment. *International Journal of Contemporary Hospitality Management*, 5(2), 32–35.

Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: a meta-analysis. *Personnel Psychology*, 44, 1–26.

Baum, T. (1999). Seasonality in tourism: understanding the challenges. *Tourism Economics – The Business and Finance of Tourism and Recreation*, 5(1), 5–8.

Baum, T., Amoha, V., & Spivack, S. (1997). Policy dimensions of human resource management in the tourism and hospitality industries. *International Journal of Contemporary Hospitality Management*, 9(5/6), 221–229.

Baum, J. R., & Locke, E. A. (2004). The relationship of entrepreneurial traits, skill and motivation to subsequent venture. *The Journal of Applied Psychology*, 89(4), 587–599.

Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen, & S. Long (Eds.), *Testing structural equation models*. Newbury Park: SAGE Publications.

Butler, R. W., & Mao, B. (1997). Seasonality in tourism: problems and measurement. In P. E. Murphy (Ed.), *Quality management in urban tourism* (pp. 9–23). Chichester: John Wiley & Sons.

- Cooper, C., Fletcher, J., Gilbert, D., & Wanhill, S. (1993). *Tourism – principles & practice*. Harlow: Longman Group Ltd.
- deLeon, L., & Taher, W. (1996). Expectations and job satisfaction of local-government professionals. *The American Review of Public Administration*, 26(4), 401–416.
- deShields, O. W., Jr., Kara, A., & Kaynak, E. (2005). Determinants of business student satisfaction and retention in higher education: applying Herzberg's Two-Factor Theory. *International Journal of Educational Management*, 19(2), 128–139.
- Furnham, A., Forde, L., & Ferrari, K. (1999). Personality and work motivation. *Personality and Individual Differences*, 26(6), 1035–1043.
- Herzberg, F. (1971). *Work and the nature of man*. New York: World Publishing.
- Herzberg, F., Mausner, B., & Bloch Snyderman, B. (2005). *The motivation to work*. New Jersey: Transaction Publishers.
- Hjalager, A., & Andersen, S. (2000). Tourism employment: contingent work or professional career?. Paper for the 7th ATLAS International Conference, in Savonlinna, Finland.
- Janssen, P. P. M., de Jonge, J., & Bakker, A. B. (1999). Specific determinants of intrinsic work motivation, burnout and turnover intentions: a study among nurses. *Journal of Advanced Nursing*, 26(6), 1360–1369.
- Jolliffe, L., & Farnsworth, R. (2003). Seasonality in tourism employment: human resources challenges. *International Journal of Contemporary Hospitality Management*, 15(6), 312–316.
- Jöreskog, K. G., & Sörbom, D. (1993a). *LISREL 8: structural equation modeling with the SIMPLIS command language*. Chicago: Scientific Software International.
- Jöreskog, K. G., & Sörbom, D. (1993b). *LISREL 8: structural equation modeling with the SIMPLIS command language*. Hillside, NJ: Lawrence Erlbaum Associates Publishers.
- Kennedy, E. (1999). Seasonality in Irish tourism, 1973–1995. *Tourism Economics – The Business and Finance of Tourism and Recreation*, 5(1), 25–47.
- Kusluvan, S. (2003). Characteristics of employment and human resource management in the tourism and hospitality industry. In S. Kusluvan (Ed.), *Managing employee attitudes and behaviors in the tourism and hospitality industry* (pp. 3–24). New York: Nova Science.
- Latham, G. P., & Pinder, C. C. (2005). Work motivation theory and research at the dawn of the twenty-first century. *Annual Review of Psychology*, 56, 485–516.
- Lee, C., & Moreo, P. (2007). What do seasonal lodging operators need to know about seasonal workers? *International Journal of Hospitality Management*, 26(1), 148–160.
- Lee-Ross, D. (1999a). *HRM in tourism & hospitality – international perspectives in small to medium-sized Enterprises*. UK: Cassell.
- Lee-Ross, D. (1999b). Seasonal hotel jobs: an occupation and a way of life. *International Journal of Tourism Research*, 1(4), 239–253.
- Lundmark, L. (2006). Mobility, migration and seasonal tourism employment: evidence from Swedish mountain municipalities. *Scandinavian Journal of Hospitality and Tourism*, 6(3), 197–213.
- Lundtorp, S., Rassing, C. R., & Wanhill, S. (1999). The off-season is 'no season': the case of the Danish Island of Bornholm. *Tourism Economics – The Business and Finance of Tourism and Recreation*, 5(1), 49–68.
- McClelland, D. C. (1985). *Human Motivation*. Glenview, IL: Scott Foresman & Co.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis*. USA: SAGE Publications.
- Murphy, P. E. (Ed.). (1997). *Quality management in urban tourism*. Chichester: John Wiley & Sons.
- Parsons, E., & Broadbride, A. (2006). Job motivation and satisfaction: unpacking the key factors for charity shop managers. *Journal of Retailing and Consumer Services*, 13(2), 121–131.
- Pearce, D. (1989). *Tourist development*. Harlow: Longman Group.
- Pinder, C. C. (1998). *Work motivation in organizational behaviour*. USA: Prentice Hall.
- Ryan, C. (1995). *Researching tourist satisfaction – issues, concepts, problems*. London: Routledge.
- Tett, R. P., & Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology*, 88(3), 500–517.
- Tietjen, M. A., & Myers, R. M. (1998). Motivation and job satisfaction. *Management Decision*, 36(4), 226–231.
- Vaughan, R., & Andriotis, K. (2000). The characteristics of the tourism workforce: the case of Crete. Paper for the 7th ATLAS International Conference, in Savonlinna, Finland.
- Wang, M., & Erdheim, J. (2007). Does the five-factor model of personality relate to goal orientation? *Personality and Individual Differences*, 43, 1493–1505.
- Witt, L. A., & Ferris, G. R. (2003). Social skill as a moderator of the conscientiousness-performance relationship: convergent results across four studies. *Journal of Applied Psychology*, 88(5), 809–821.
- Wright, P. (1989). Motivation and job satisfaction. In C. Molander (Ed.), *Human resource management*. Lund, Sweden: Studentlitteratur.