



Human resources administration processes in commercial restaurants and food safety: The actions of administrators

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ABSTRACT

The study analyzed of the human resources administration processes at commercial restaurants, focusing on the provision of safe foods to consumers. Interviews were conducted with 105 restaurant managers at the city of Florianópolis, Brazil. Three types of restaurants were studied; 45.7% were buffets by weight, 39.1% fast-food restaurants and 15.2% churrascarias. A questionnaire was used with close-ended questions to characterize the restaurants and identify the human resources administration processes for hiring, evaluation, training and provision of benefits to employees. It was found that 89.4% of the restaurants adopt criteria for hiring of employees and 81.9% conduct periodic evaluations. Benefits were offered by 85.7% of the restaurants and 74.3% of the establishments provided employee training. The results indicate that human resources management processes at restaurants can contribute to the provision of safe food, although some establishments still need to adopt professional procedures for recruitment, selection, evaluation and training of their employees.

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1. Introduction

The trend towards increased consumption of meals outside the home is found in many countries (ABS, 2000; Minister of Industry, 2003; Economic Research Service - USDA-ERS, 2009; IBGE, 2010). Nevertheless, it should be considered that consumers are increasingly demanding about their choices, and seek products that offer greater safety and quality (FAO/WHO, 2006).

The continued improvement of quality and productivity in services can be a competitive advantage that leads the client to prefer one service over another, making quality a tool for sustaining good management (Figueiredo and Neto, 2001). In food service, quality is related to various factors such as raw materials, physical and functional structure, equipment, human resources, proper food handling, the adoption of quality control systems, as well as the management of the establishment.

In the food sector, the activities of food handling and the quality of services are directly related to employees and owners, given that they are responsible for managing hygienic-sanitary quality and for providing safe food to clients (FDA, 2004).

On a national level, decisions about food safety administration should be related with competent designated authorities responsible for the protection of public health (Szabo et al., 2008). Nevertheless, establishments can add their own administrative mechanisms that contribute to the control of food safety and the adoption and implementation of food safety systems (Martinez et al., 2007).

Restaurant managers should understand the essential elements of providing safe food to consumers (Bolton et al., 2008). The analysis of this knowledge can be initiated, by verifying the processes adopted by these professionals in the conduct of human resources administration. Considering the relevance of the issue and the limitation of studies about human resources management as a focus in food safety, this study investigated human resources administration actions in commercial restaurants that can help provide safe food to customers.

2. Review of the literature

2.1. Human resources administration and food safety in commercial restaurants

It is estimated that millions of people have been afflicted at least once by food-borne diseases, although individuals often do not associate their symptoms to food (WHO, 2006, 2007). Studies by health agencies of food-borne diseases associate these diseases

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with restaurants. The Centers for Disease Control and Prevention (CDC), United States of America (USA), in 2007, reported 1097 cases of outbreaks of disease that originated in food, affecting 21,183 people, with 56% of the cases associated to restaurants, cafeterias and hotels.

People are the principle sources of food contamination. Various studies demonstrate the contamination of food by employees in commercial establishments, with the leading causes being poor personal hygiene of employees, handlers contaminated by intestinal parasites, improper food preparation practices, preparation of food too long before consumption or insufficient cooking or reheating of food and cross contamination (Hedberg et al., 2008; Kuo et al., 2009; Capuano et al., 2008; Malhotra et al., 2006; Adams and Motarjemi, 1999; FDA, 2004). Thus, proper practices by food handlers in restaurants are essential to providing safe food (Jones and Angulo, 2006).

Studies have demonstrated the importance of administrative activities in the services sector, such as the food sector, for the provision of a quality product. In restaurants, in addition to employees, a manager can contribute to providing food safety because the manager is responsible for the administration of the workers at the establishment and the quality of services (Cavalli and Salay, 2007). Enke et al. (2007) and Alvarez et al. (2008) affirm that managers and employees share responsibility for activities in the sector, and are responsible for good administration. Administration should be conducted permanently in every work situation, and in the service sector it is an intrinsic element of quality. The administrative actions most important to food safety according to Szabo et al. (2008) are commitment to administration, organizational structure, food safety policy, resources, documentations and communications.

Nevertheless, there is little research about the administration of these establishments and its relationship with food safety. The issues considered in the studies include human resources administration and food safety (Cavalli and Salay, 2004, 2007; Enz, 2004; Hedberg et al., 2006; Van Tonder et al., 2007); the management of quality in commercial restaurants (Violaris et al., 2008); the competence of food services administrators (Santolia, 2006; Alvarez et al., 2008; Oliveira et al., 2009); and employee training and the quality of services offered (Hocutt and Stone, 1998; Seaman and Eves, 2006; Pragle et al., 2007; Van Tonder et al., 2007; Bolton et al., 2008).

Cavalli and Salay (2004) conducted an exploratory study in commercial fast-food restaurants, churrascarias and buffets by weight. The authors, upon identifying the adoption or not of quality-control systems by companies and the professional qualification of the employees, noted the failure to apply Hazard Analysis and Critical Control Point (HACCP) and best practices, a lack of professional training of employees and an insufficient provision of courses and training. The results indicate a risk to the guarantee that safe food will be provided to consumers.

Upon studying the difficulties confronted in food services in the United States, Enz (2004) noted that the management of human resources is the greatest concern of administrators. The author found that the remuneration and benefits offered to these professionals, proper training and the image of the company in attracting and keeping talents can contribute to the presence of qualified employees at the organization.

Santolia (2006), in a study in Brazil conducted in buffet restaurants that sell food by weight, à la carte and self-service with fixed prices, found that the managers affirm that the presence of a good administrator is one of the factors important to the success of a company. In addition, among competencies, quality control and the management of human resources were the most valued among the technical-professional and social competencies, and they understood that it is essential that managers have knowledge of human relations.

The relationship between food safety and restaurant management was studied by Hedberg et al. (2006), who compared the practices of food handlers in the United States and the characteristics of restaurants that have had outbreaks of food origin and those that never have. He found that the establishments that had certified kitchen managers (CKM), had lower risk of food-borne diseases, as well as greater care in food handling.

Seeking improved quality in the sector, Macauslan (2003) affirms that in the 21st century it is essential that restaurants have leadership, training, team work, cultural awareness, influence, oversight and evaluation combined with competent administration of food hygiene. In addition, it is essential that a restaurant manager be concerned with human resources management at the organization, given that this is normally neglected at small companies. Table 1 shows the issues researched in studies about human resources management at commercial restaurants and the provision of safe food.

It is emphasized that managerial processes at commercial restaurants should focus on the recruitment, selection, hiring, training and evaluation of employees (Gottardo, 2000; National Restaurant Association, 2006; Seaman and Eves, 2006).

According to Gottardo (2000) the recruitment and selection of personnel can lead a company to success or lack of it, given that it is the employees who conduct the activities within the organization. Thus, it is essential to adopt pre-established criteria for the selection of employees, given that this information will contribute to the selection of individuals who better fill the position (Pfeffer, 1998; Gottardo, 2000). Niu (2010) affirms that the recruitment process should avoid selecting workers with low self-effectiveness, low self-confidence and employees who decide on their own what to do, given that these employees may not conduct their activities well, and not contribute to the performance of the organization.

The importance of restaurant management in the provision of training in food security will be more effective when it has the support of the organization according to Seaman and Eves (2006). In addition, the provision of resources suitable to the realization of this activity will contribute to better results in the intentions and behavior of food handlers. These actions will contribute to the realization of safe practices at all times.

The training of food handlers is one of the activities that should be undertaken for the administration of food safety (Medeiros et al., 2011), but it is necessary that the knowledge lead to desirable changes in the work behavior of these professionals (Seaman and Eves, 2006). Thus, the constant supervision of the activities conducted by these professional is indispensable for food safety, because this verifies if the knowledge acquired in the training is appropriate and being effectively applied (Clayton et al., 2002; Danchaivijit et al., 2005; Bolton et al., 2008; Acikel et al., 2008).

This evaluation is important, because it allows analyzing if the information that was presented in the training was correctly understood and if the actions of the employees are in accord with the information and practices of food safety that were presented in the training.

The evaluation, in addition to being an important process in the verification of the food safety practices, can be used by the company to: plan new training, conduct promotions, offer new benefits, verify employee performance, prepare an individual for another position, help in decisions about salary increases and assist in new goals and decisions at the company, such as new hiring and firing of employees. A study conducted by Cho et al. (2006) observed that the evaluation of employee performance was used as a criteria for promotions in restaurants.

For Murphy and Murrmann (2009), a high performance management system should include the dimensions of training and skill development, selection criteria and salary incentives based on performance evaluation.

Table 1
Considered topics in studies that relate management commercial restaurants and safe food supply.

Author, year, country	Topics researched						
	Human resources administration	Food safety	Management of quality	Competence of administrators	Business management	Employee training	Quality of service
Hocutt and Stone, 1998, United States of America						X	X
Cavalli and Salay, 2004, Brazil	X	X				X	
Enz, 2004, United States of America	X	X			X		
Hedberg et al., 2006, United States of America	X	X				X	
Santolia, 2006, Brazil				X			
Seaman and Eves, 2006, United Kingdom		X				X	
Cavalli and Salay, 2007, Brazil	X	X			X	X	
Pragle et al., 2007, United States of America						X	X
Oberkircher, 2007, Russia	X				X		
Van Tonder et al., 2007, South Africa	X	X				X	X
Alvarez et al., 2008, Brazil	X			X	X	X	
Bolton et al., 2008, Ireland						X	X
Violaris et al., 2008, United States of America	X		X				
Oliveira et al., 2009, Brazil	X			X	X		

3. Materials and methods

This study adopted procedures of a descriptive nature to analyze the management of human resources and food safety in commercial restaurants based on the actions of managers.

3.1. Sample and data collection

One hundred and five commercial restaurants were studied of three types; buffets that sell food by weight, churrascarias (Brazilian barbecues) and fast-food in the municipality of Florianópolis, Santa Catarina State, Brazil. The sample of restaurants represented approximately 100% of the churrascaria and fast-food restaurants and 50% of the buffets by weight operating in the city at the time of the study. The percentage of the total number of restaurants was determined by using information sources such as telephone lists, and the municipal secretariat of tourism. Later, the establishments were divided according to type.

In order to identify company policies related to human resources, the data collection used closed-ended questions prepared and validated by Cavalli (2003). Face to face interview was conducted with restaurant managers. To characterize the companies, the commercial restaurants were identified according to their type (fast-food, churrascarias, buffet by weight), the size of the company (micro, small, medium or large), its ownership structure (sole owner, a company with a number of partners or those that are part of a chain) and the number of meals served per day. The human resources management processes at the restaurants were identified by determining if the company adopted criteria for employee hiring, the reason if they were not adopted and the importance given to the adoption of these criteria. It was also asked if the company periodically evaluated its employees, the reasons for not doing so, and the importance given to this evaluation. The relationship of the adoption of these criteria with the presence in the restaurants of a professional with technical responsibility was observed. The “responsible technician” is an individual who assumes responsibility for the techniques used in an organization and who is competent to prepare and implement Best Manufacturing Practices and Service Provision, has knowledge of quality control methods and

command of the principles of the HACCP system (Brasil, 1993). The study also verified which benefits and compensations not foreseen in labor laws were offered by the companies to their employees, as well as the provision of training courses to employees.

To verify the opinion of the managers in relation to the processes of human resources management – hiring and evaluation – a 5-point scale was used: (1) highly important; (2) very important; (3) important; (4) low importance; (5) not important (Cavalli, 2003).

In relation to training, the subject of the course and or training offered was identified, as well as the number of participating employees, the class hours of the course, the cost to the company, the period and hour when the training was realized and if it was conducted by the restaurant itself.

The data was collected between November 2006 and July 2007 by trained collaborators who contacted the restaurants and scheduled an interview with the manager. Restaurants that were not located, or where the responsible person did not want to give an interview, were substituted, randomly, by other establishments of the same type.

3.2. Analyses

The research data were recorded with dual entries in a data base using *Microsoft Excel*, 2007 and the statistical analysis was conducted with *BioEstat* v. 5.0 software. The association between the variables was conducted using the Chi-square test of the nominal variables. The quantitative variables were handled statistically through a variance analysis and the Tukey test. The tests were conducted considering the level of significance of 5% ($p < 0.05$) and 1% ($p < 0.01$).

4. Results

In relation to the characterization of the restaurants, data from the 105 establishments were analyzed, with 45.7% of the group being buffets by weight, 39.1% fast-food and 15.2% churrascarias. Most were characterized as small and micro-companies (95.0%) that serve from 40 to 240 meals per day (65.7%). The most common legal structure was a corporation formed by more than one

Table 2
Percentage distribution according to type of restaurants, size of the company, ownership structure and number of meals served per day from commercial restaurants at the city of Florianópolis, Brazil.

Characteristics of restaurants	Restaurants				p-value
	Buffets by weight (%)	Churrascarias (%)	Fast-food (%)	Total (%)	
Size of the company					<0.510
Micro company	79.2	66.7	70.7	74.2	
Small company	18.8	33.3	19.5	20.8	
Medium company	2.0	0	4.9	3.0	
Large company	0	0	4.9	2.0	
Ownership structure					<0.000*
Sole owner	43.8	62.5	24.4	39.0	
Company with a number of partners	54.2	31.3	43.9	46.7	
Part of a chain	2.0	6.2	31.7	14.3	
Number of meals served per day					<0.000*
40–140	16.7	37.5	51.2	33.3	
140–240	43.8	31.2	19.5	32.4	
240–340	29.2	12.5	0	15.2	
340–440	8.3	18.8	9.8	10.5	
440–540	0	0	2.4	1.0	
>540	2.0	0	17.1	7.6	

* Statistically significant ($p < 0.01$) between the characteristic of the restaurant with the type of restaurants.

partner (46.7%). There was a statistically significant difference in the number of meals served and the legal form of the restaurant ($p < 0.000$), noting that many fast-food restaurants are parts of a chain (31.7%). No significant association was observed between the size of the company and the number of meals served ($p = 0.115$). While the ownership structure of a company and the number of meals served were significantly associated ($p = 0.018$). Most of the restaurants with an individual owner or with more than one partner served up to 240 meals a day (75.6%; 63.3%, respectively), while 53.4% of the restaurants that are part of a chain offered more than 240 meals per day. The characterization of the commercial restaurants analyzed is detailed in Table 2, according to the restaurants studied.

Below is an analysis of human resources management at the establishments considering the issues of employee hiring and evaluation, benefits and training.

Considering that the mounting and maintenance of a quality staff begins with the recruitment and selection of employees, it was found that 89.4% of the managers of the commercial restaurants adopt criteria in the hiring of employees and 81.9% conduct periodic evaluations. No statistical difference was found in relation to the adoption of these criteria by type of restaurant ($p = 0.497$; $p = 0.262$, respectively). This adoption was not significantly higher in restaurants with a “responsible technician” ($p = 0.811$, $p = 0.960$, respectively). Locations with a responsible technician conducted more employee evaluations, although not significantly more.

Among the reasons given for not adopting hiring criteria is that managers believe that it is better to train new employees than hire experienced people with existing habits, while evaluation is seen as an unnecessary procedure.

Table 3
Average value of the attributes of importance cited by restaurants for the hiring criteria of the employees.

Hiring criteria of the employees	Type of restaurants						Total	
	Buffets by weight		Churrascarias		Fast-food		Median	SD
	Median	SD	Median	SD	Median	SD		
Health exam upon admission	1.23 ^a	0.52	1.19 ^a	0.40	1.32 ^a	0.84	1.26	0.63
Personal presentation	1.89 ^a	0.91	1.56 ^a	0.63	1.74 ^a	0.9	1.78	0.87
Professional Experience	1.94 ^a	1.09	1.75 ^a	1.06	2.53 ^a	1.38	2.11	1.22
Courses and Training in the field	2.34 ^a	0.87	1.94 ^a	1.29	2.94 ^b	1.22	2.48	1.12
Technical and professional courses in the field	2.39 ^a	0.83	2.44 ^a	1.09	3.21 ^b	1.15	2.69	1.06
Education	3.02 ^{ab}	0.87	3.44 ^a	1.21	2.59 ^b	0.82	2.94	0.96
Age	3.21 ^a	0.88	3.44 ^a	0.96	3.24 ^a	1.39	3.26	1.09

Means followed by same letter horizontally do not differ by Tukey test, at 5% level of significance.

Table 3 indicates the degree of importance attributed by managers to the human resources management processes used for hiring employees. The issues considered to be more important were the “health exam upon admission” (1.26), followed by “personal presentation” (1.78). Meanwhile, the attribute managers considered least important was the “age” of the employees. It is emphasized that for fast-food restaurants, the “education” of employees was indicated as being very important or important while in the other types of restaurants this attribute was identified as being important to not very important. The opposite was also found in the attribute “technical and professional courses in the field,” that is, managers of fast-food restaurants found the importance of this criteria upon hiring of employees to be important or of low importance.

As seen in Table 4, in terms of the evaluation of employees by management, all of the attributes were considered as being highly important to very important for the three types of restaurants, highlighting “hygiene in food production,” “personal presentation” and “health exams” of the employees.

Benefits not required by Brazilian labor law were offered by 85.7% of the restaurants, and it was common to offer more than one benefit. The managers of the buffet restaurants offered more benefits to their employees (93.7%), followed by the fast food restaurants (90.2%) and the churrascarias (56.25%).

The benefits most offered to employees by the restaurants were: food (72.4%); followed by awards such as food, sneakers, clothes, perfumes (48.6%); transportation (46.7%) and a health plan (9.5%). Note that 4.8% of the restaurants offered time off as a form of benefit, 1.9% offered rewards in money, parties and professional development, and 1.0% offered life insurance, presents at Easter and

Table 4

Average value of the attributes of importance cited by restaurants for the conduction periodic evaluations of their workers.

Evaluation of employee performance	Type of restaurants						Total	
	Buffets by weight		Churrascarias		Fast-food		Median	SD
	Median	SD	Median	SD	Median	SD		
Hygiene in food production	1.23 ^a	0.52	1.00 ^{ab}	0.00	1.03 ^b	0.16	1.12	0.38
Personal presentation (hygiene, uniform, etc.)	1.26 ^a	0.49	1.13 ^a	0.34	1.10 ^a	0.38	1.17	0.43
Health exams	1.17 ^a	0.43	1.31 ^a	0.79	1.16 ^a	0.37	1.19	0.49
Responsibility	1.29 ^a	0.51	1.25 ^a	0.45	1.18 ^a	0.39	1.24	0.45
Attendance and punctuality	1.29 ^a	0.54	1.19 ^a	0.40	1.21 ^a	0.41	1.24	0.47
Cooperation (employee e customer)	1.31 ^a	0.51	1.56 ^a	0.51	1.28 ^a	0.46	1.34	0.50
Productivity	1.40 ^a	0.57	1.38 ^a	0.62	1.38 ^a	0.49	1.39	0.55
Knowledge work (function/position)	1.42 ^a	0.54	1.44 ^a	0.63	1.38 ^a	0.49	1.41	0.53
Creativity	1.67 ^a	0.75	1.94 ^{ab}	0.68	2.15 ^b	1.01	1.89	0.87

Means followed by same letter horizontally do not differ by Tukey test, at 5% level of significance.

Christmas, as well as a dental plan, and pharmaceutical discounts. There was no statistical difference among the benefits offered to the employees and the type of restaurant ($p = 0.129$).

The offer of training to employees was made by 74.3% of the restaurants analyzed. The fast-food restaurants trained their employees more, followed by the buffets (75.0%) and churrascarias (56.3%), although this difference was not significant ($p < 0.168$).

The training was conducted with an average number of 3 people, for 3.7 h. Most of the training was conducted by contracted companies (65.0%) and after the work shift (70.9%). The frequency of the training was usually by semester (33.6%), followed by annually (26.8%), every 2 years (15.3%) and monthly (13.5%). In addition, 6.8% of the restaurants offered single training sessions to their employees and 1.0% of the restaurants offered training weekly, occasionally, periodically or every 3 years.

The training most offered to employees at all of the restaurants was about food handling (47.5%). There was no significant difference among the subjects of the training and the types of restaurant ($p = 0.863$), however, it was found that at the buffets, more courses were offered in gastronomy and best practices, when compared with the other types. At the fast-food restaurants, in addition to training in food handling, they emphasize courses in client services, training in corporate management, sales and in how to be a barista.

The reasons most often alleged by managers for not offering training to employees were the lack of financial resources (23.7%), lack of time among employees (15.8%), perception that it is not necessary (13.0%), absence of professionals in the restaurant to provide a course (10.5%) and lack of interest among employees (10.5%). In addition, 7.9% of the managers did not offer training to their employees because of a lack of resources, 5.3% because of a lack of information and because they alleged that they themselves train their employees, while 2.6% said it was due to high turnover in the sector, because they think that employees do so on their own and because they think that their employees already had training.

5. Discussion and conclusion

The data concerning the processes of human resources management in commercial restaurants contribute to knowledge about the issue and help analyze the processes involved in offering safe food.

The data show the human resources management processes in three different types of restaurants: buffets, churrascarias and fast-food. Similarities between the characteristics of the restaurants and their human resources management processes were noted.

Many of the commercial restaurants adopt criteria for hiring employees (89.4%). Cho et al. (2006) investigated 76 restaurant and hotel companies and found that 76.9% of the companies indicate that less than 20% of their employees conducted some pre-testing before hiring. A study by Oliveira et al. (2009) noted that in family-

owned food services companies, the recruitment of employees is conducted by indication and the professional experience of the candidate is considered; then employees are selected based on interviews and practical tests in the field of activity.

Cho et al. (2006), note that the realization of pre-testing before hiring, the availability of incentive plans and participatory management can help decrease turnover rates in the hotel industry. A high turnover rate can increase a company's cost for training and recruiting. It can lower productivity (Cho et al., 2006) and increase the risk of food security if the professionals hired are not capable of conducting their functions due to insufficient training and a lack of knowledge. Some results of this study confirm the affirmation of Cho et al. (2006), because the high turnover in the sector was considered to restrict the provision of training to employees by a small proportion of the restaurant managers.

The restaurants in this study that adopted criteria for hiring new employees found that the most important attribute to be considered was the health examination upon admission, followed by personal presentation and professional experience, at the three types of restaurants studied. This reveals beneficial actions for the supply of safe food. Studies demonstrate that contaminated food handlers and poor personal hygiene habits can be responsible for the transmission of disease of food origin in food services (WHO, 2002; FDA, 2004; Malhotra et al., 2006; Seaman and Eves, 2006; Hedberg et al., 2008; Capuano et al., 2008; Kuo et al., 2009).

Among the less factors considered less important in the hiring of an employee was age, followed by schooling and the realization of technical and professional courses in the field. Based on the results, a need was identified to make commercial restaurant managers aware of the importance of these factors when hiring employees. It is emphasized that the education of the employee should be considered when hiring professionals for commercial restaurants, because it can influence in the final quality of the service provided. According to Bellizzi et al. (2005), a low level of education among restaurant employees can hamper the training essential to the provision of safe food. Alvarez et al. (2008) found that to maintain quality standards at a commercial restaurant chain, complete elementary education is required of newly hired employees.

By selecting employees who have taken technical and professional courses, a manager can be hiring professionals who are better qualified and who meet the basic needs for the position. It should be mentioned that the managers of fast-food restaurants interviewed gave less importance to this issue than those of churrascarias and buffets. This suggests that after the hiring of employees, greater attention would be needed in the qualification of these professionals, given that they may not have basic knowledge of the activities that contribute to food safety.

After the hiring of employees, whether or not criteria were adopted, it is essential to conduct training. In the training, it is

important that the responsible manager adjust the work project and include motivational techniques. The study found that 74.3% of the commercial restaurants trained their employees, with there being no significant difference between the types of restaurants studied ($p < 0.168$). The provision of training at the restaurants was greater than in other studies. Pontello et al. (2005) and Baş et al. (2007) found that only 31.4% and 31.0%, respectively, of the food service employees had received training that would contribute to the supply of safe food. A study conducted by Cavalli and Salay (2006), found the training at 28.7% of the commercial restaurants studied, given that 6.5% of the issues covered concerned food safety.

The higher training observed in this study can be related to the implementation of public policies in the sector. In the city of Florianópolis, where the study was conducted, municipal law n° 5980 of January 2, 2002, requires employees who handle food to receive practical training in hygiene, to enhance prevention and quality of the final product (Florianópolis, 2002). Also in Brazil, the Resolution of the Diretoria Colegiada n° 216 of the ANVISA/MS (National Agency of the Sanitary Surveillance, Health Ministry, Brazil), determined that since September 15, 2004, all establishments that produce food must train those responsible for food handling about food contaminants; food-borne diseases; the hygienic handling of foods; and best practices (Brasil, 2004). Therefore, considering the requirement for training, all of the restaurants should have offered training to their employees. These results indicate that there should be greater inspection by the part of the responsible agencies, contributing to legal compliance and the provision of safe and quality food. In Brazil, the agency for vigilance sanitary is responsible to make inspections in restaurant, but the consumers can contribute denouncing irregular restaurants in disagreement with law.

Medeiros et al. (2011), after analyzing the studies that provide training to food service employees, found that training of 5 h or more results in significant positive differences in the knowledge of employees after the intervention. Training of 4 h or less caused an improvement in knowledge and attitudes of employees, although not all of the improvements were significantly different. A study by Cho et al. (2006), found that the average time of training of the employees in restaurants was 30.5 h; a quantity much higher than the average found in this study, which was 3.7 h. No relationship was found between the number of hours and the frequency of training analyzed. Upon considering the average number of hours per training in the study and the quantity of information referring to food security that should be passed on to restaurant employees, it would be important for commercial restaurant managers to conduct more frequent training or with more course hours, even if there is no official recommendation in Brazil about the number of hours of training that food handlers should have.

The issue most presented in the trainings was food handling. This is probably due to compliance with municipal and federal policies for the sector, which determine that training in this issue is mandatory for these employees. Medeiros et al. (2011) found that the topics that are most often presented to food service employees during training are personal hygiene, food safety, best practices, the HACCP system, workplace hygiene, hand washing and basic microbiology. It is noted that the concern of the fast-food restaurants to provide other types of training such as client services, training in company management and sales, can be explained by the particular nature of this segment, given that they are normally franchises that seek speed and standardization of services.

In this study, 81.9% of the commercial restaurants conducted periodic evaluations of their workers. All of the criteria were considered “highly important” or “very important,” except the fast food restaurant managers who considered the attribute of “creativity” to be only “very important” or “important.” This is probably because standardization is common in fast-food restaurants.

As in the study by Cavalli and Salay (2007), significant differences were not found between the realization of periodic evaluations and the types of commercial restaurants. The authors also note that 66.7% and 60.7% of the commercial restaurants of Campinas and Porto Alegre, Brazil, respectively, used employee evaluation systems. The study conducted by Seaman and Eves (2008), found that continuous supervision in food handling appears to be absent in food services. The authors note that few managers formally monitor the success of food hygiene training. Other managers (60%), prefer informal monitoring through visual indicators and subjective interpretations.

Managers at the restaurants declared employee evaluations were not a necessary procedure. This conflicts with federal legislation and with recommendations of the World Health Organization, which find that control of food handling and hygiene activities is essential for food safety (Brasil, 2004; WHO, 2000, 2006).

Jevšnik et al. (2008) found dissatisfaction among food handlers in relation to their work, mainly regarding the opportunity for promotion, the precarious supervision of their work, the benefits offered by companies and salary. These results suggest the importance of human resources policies in the sector, given that the dissatisfaction of these employees can result in greater turnover at the establishments.

Benefits were offered by most of the commercial restaurants (85.7%), with the majority of the benefits provided in food (72.4%) and awards (48.6%). Benefits in money were only offered by 1.9% of the restaurants. The use of food as a benefit is relatively easy for this sector, given that food is a raw material in these establishments. Still in Brazil, the employees pay 6% of spending on transportation, according Brazilian labor law. Thus, the transportation was considered benefit (46.7%) when management not charged to employee or when the restaurant offers a car to transport the employee. Cavalli and Salay (2007) had similar findings and noted that the most common benefits offered by commercial restaurants were food and transportation. According to Seaman and Eves (2008), the provision of training to employees can be seen as a way to offer a benefit to the employee, given that employees could receive certificates of participation after trainings, as a form of recognition, in addition to increasing their knowledge about the issue taught in the training.

The results of the study suggest that human resources management processes at commercial restaurants are important for food safety. The commitment of human resources administrators in this sector to a focus on food safety is not only related to employee training, but also to periodic managerial processes. Although most managers have conducted actions that reflect a concern for human resources management, some commercial establishments need to adopt professional recruiting, selection, evaluation and training procedures for employees, thus contributing to food security and professionalization in the sector.

Although the study was conducted at commercial restaurants, the study presents issues that can be considered at institutional restaurants. The work conducted can serve as a basis for the determination of important issues in the management of people at restaurants. This management is already conducted by many professionals, including the nutritionist in institutional restaurants. Nutritionists are also gaining increasing space in commercial restaurants to conduct this task. Nevertheless, the importance is emphasized of a need to combine human resources management with the provision of safe food in restaurants.

Finally, the study emphasizes the importance of public policies to raise awareness about and standardize managerial processes, contributing to the provision of quality food. The study also indicates that the relevance of the issue is increasing, given the growing consumption of meals away from home, the increasing employability of the sector and the occurrence of outbreaks in restaurants.

There are some limitations in our study. First, it was conducted in only one Brazilian city, and may thus only represent the reality of the city of Florianópolis, and not the reality in the country. Second, the study was conducted with restaurant managers, and employees were not interviewed or the documents were not checked. Thus, there may be an overestimation of some criteria studied.

The research findings suggest that new studies should investigate the relationship between human resources administration and food safety. It is recommended that a study be conducted to analyze the human resources administration processes in commercial restaurants, with a focus on food safety, based on the knowledge and attitudes of managers and employees.

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