

Chefs' perceptions of convenience food products in university food service operations

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(ABSTRACT)

The decision regarding when and to what extent to use convenience food products is a perennial issue in the hospitality industry. Despite the pertinence of this issue in the industry, it has never been explicitly examined in the hospitality literature. Potential advantages of adopting convenience food products in food-service operations include: savings in time and costs, better portion and cost control, ease of training and evaluation, superior customer relationships through product consistency, increased safety, ease of storage, and added eye appeal. On the other hand, noticeable disadvantages may include: staff motivation problems, facilitated labor mobility, increased emotional labor for supervisor, health and nutrition down-sides, and more waste. Therefore, to further explore this issue, a paper and pencil survey was administered to culinary managers in a large university dining setting. Respondents included 132 chefs representing ten dining facilities. The results indicate that even though the time and labor cost savings brought about by the use of convenience food products are perceived as advantageous, the implied consistency of the final product and superior portion control are not as important. Furthermore, customer relationships, catering to special groups, and final products' eye appeal appear to be better facilitated by non-convenience foods. Even though it is easier to train chefs/ cooks/ employees to use convenience food products rather than non-convenience ones and these employees appear to be under less psychological pressure in their jobs, they will conversely be less motivated and worse paid. The theoretical and practical implications of these findings are discussed herein.

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CHAPTER I: Introduction

Introduction

The food service industry has changed tremendously over the past couple of decades (Belasco, 2007). Demographic changes are a driving force in the evolution of the foodservice industry (Friddle, Mangaraj, Kinsey, 2001). As noted in the latest Standard & Poor's report on the restaurant industry, "graying baby boomers" with high disposable incomes have the propensity to dine out (Shand, 2008; Puccia, 2012); they do not seem to have the time to cook, and their children and grandchildren seem to lack the interest (Friddle et al., 2001; Belasco, 2007). The contemporary changes in labor markets and customer needs, technological advances, increased competition, and globalization, all present us with important patterns to consider when rethinking how hospitality entities do business and organize themselves in the more-than-ever dynamic environment (Blum, 1996). Innovation in the food service industry is a combination of technological innovation with social and cultural innovation (Earle, 1997). Classical cuisine knowledge and skills are being challenged on a daily basis by competing chains and independent outlets pressured to simultaneously improve delivery speed and reduce costs, all the while providing quality. Preparing food "from scratch" is more and more often considered counter-productive and impractical, and traded for the use of "convenience foods" (Frei, 1996; Belasco, 2007).

Unanimous agreement on the definition of "convenience food" is absent, however, the terms "prepackaged", "quick"/"fast", and "little/easy/no preparation" seem to be reoccurring

throughout the extant conceptualization attempts. With these staples in mind, subcategories and exemplars of convenience foods can be placed on a continuum based on their value in terms of health and nutrition, with a “comforting” fried-chicken-and-gravy-(and-mashed-potatoes, -and -corn, -and-a-brownie) frozen dinner at one end, and a no-sugar-added fruit compote at the other, to give just an example. Convenience food is not just fast food, nor is it just ready-made dishes – it can be a precooked pizza crust or a box of pasta, even canned tuna or a jar of apricot jam -- as Jacques Pepinⁱ would explain as part of his quick recipes.

Opinions about convenience foods in the industry seem to be divided, but three major clusters stand out: there are the ones that reject convenience foods in principle, typically by tradition or due to other personal beliefs, the ones that embrace the novelty 100%, believing that convenience foods are the future, and the compromisers, who believe that certain foods are still best made from scratch, but partly use convenience foods because of the speed and consistency benefits they provide. There appears to be no empirical research in the academic literature on the implications that substituting fresh products with convenience ones might have.

The college student market growth has been bringing about an expansion of university food service operations and an increasing demand of diverse, fresh, healthy, tasty, and readily-deliverable on-campus food options (Kim, Ng, Kim, 2009). The use of convenience foods in university food service operations is also increasing, intuitively, since convenience foods are the ones to facilitate timely mass delivery of culinary diversity with minimized production efforts. According to On Campus Hospitality (2013), university dining facilities in the US make up a \$21.9 billion market in continuous evolution and revolution; paradoxically, very few explorations of this sub-market exist.

The scarce research in the setting of university food-service operations along with the lack of research on the topic of convenience foods are the driving factors behind the current study. The results of the study should shed some light on actual contemporary perceptions and opinions on convenience food products and their use in food-service operations. The hope is that this study will benefit not only the university food-services sub-industry but the food-services industry as a whole.

Statement of the issue

Certain advantages and disadvantages, as well as situational factors of using convenience products in food-service operations stand out when attempting to explore the issue. The present study terms “apparent advantages/ disadvantages” those advantages/ disadvantages identified in the literature as potentially accompanying the use of convenience items in food production; the term “situational factors” comprises the areas identified in the literature as potentially bearing both advantages and disadvantages through the involvement of convenience items, depending on the perspective or the reference point. Apparent advantages of adopting convenience products in food-service operations include: savings in time and costs, better portion and cost control, ease of training and evaluation, added eye appeal, superior customer relationships through product consistency, increased safety, and ease of storage. On the other hand, apparent disadvantages include: more waste, staff motivation problems, facilitated labor mobility, increased emotional labor for supervisor, and health and nutrition down-sides. Situational factors appear in relation to attributes change, customer delight, changes in the traditional back-of-the-house hierarchy and the traditional advancement and promotion approaches, and food authenticity themes.

The topic of convenience foods has never been explicitly examined in the hospitality literature and filling this gap ought to mutually benefit academia and industry professionals. A

clear understanding of various sides of the subject matter should help replace (educated) guesses with informed decisions, and better predict possible consequences of choosing one path or another. An exploration of this issue in a university dining facilities context should be particularly beneficial given this sub-market's idiosyncrasy of rapid growth and accelerated novel concepts adaptation (including the adaptation of convenience foods). This study attempts to start filling the above-mentioned gap by investigating advantages and disadvantages of using convenience products in university food-service operations as perceived by the chefs in these operations. Given the fact that it is impossible to investigate all advantages, disadvantages, and situational factors at the same time, the study is going to limit the empirical part to critical issues identified in relation to the use of convenience food products.

Research questions and objectives of the study

This study is aimed at examining the opinions that chefs from a university dining facilities setting have on using convenience food products versus fresh/ non-convenience food products. The research questions attempted to be answered by the study are:

1. What are the benefits that the chefs perceive from using convenience foods in the university dining facilities in terms of:
 - a. Time saved?
 - b. Cost and product/ portion control?
 - c. Customer relationship through product consistency and ability to cater to special groups?
 - d. Added eye-appeal and culinary creativity?
 - e. Training and evaluation?

2. What are the disadvantages that the chefs perceive when using convenience foods in the university dining facilities in terms of:
 - a. Employee motivation?
 - b. Labor mobility?
 - c. Waste?
3. What are the benefits that the chefs perceive from using non-convenience foods in the university dining facilities in terms of:
 - a. Time saved?
 - b. Cost and product/ portion control?
 - c. Customer relationship through product consistency and ability to cater to special groups?
 - d. Added eye-appeal and culinary creativity?
 - e. Training and evaluation?
4. What are the disadvantages that the chefs perceive when using non-convenience foods in the university dining facilities in terms of:
 - a. Employee motivation?
 - b. Labor mobility?
 - c. Waste?
5. What are the resulting differences of perceptions of using convenience foods versus non-convenience foods that the chefs from the university dining facilities have?

To address these questions, the following research objectives have been developed:

- 1) Identify perceived benefits of using convenience foods in terms of:
 - a. Time saved

- b. Cost and product/ portion control
 - c. Customer relationship through product consistency and ability to cater to special groups
 - d. Added eye-appeal and culinary creativity
 - e. Training and evaluation
- 2) Identify perceived disadvantages of using convenience foods in terms of:
- a. Employee motivation
 - b. Labor mobility
 - c. Waste
- 3) Identify perceived benefits of using non-convenience foods in terms of:
- a. Time saved
 - b. Cost and product/ portion control
 - c. Customer relationship through product consistency and ability to cater to special groups
 - d. Added eye-appeal and culinary creativity
 - e. Training and evaluation
- 4) Identify perceived disadvantages of using non-convenience foods in terms of:
- a. Employee motivation
 - b. Labor mobility
 - c. Waste
- 5) Compare resulting differences of perceptions of using convenience foods versus non-convenience foods.
- 6) Identify theoretical and managerial implications of the study.

Definitions of terms

While many of the constructs used in this research are complex and lack consistent definitions across disciplines, the following definitions have been listed to aid in the theoretical conceptualization:

Convenience food: “(Cookery) food that needs little preparation, especially food that has been pre-prepared and preserved for long-term storage” (the Collins English Dictionary, 2009).

Food safety: the condition which ensures that foods will not cause harm to the consumer when prepared and/or eaten according to their intended use; one of four basic groups of features along with nutrition, the organoleptic, and commercial make up of food quality. (Grunert, 2005)

Labor cost: the cost of wages paid to workers during an accounting period on daily, weekly, monthly, or job basis, plus payroll and related taxes and benefits, if any (BusinessDictionary.com, 2013)

Portion control: the control of portion sizes from an operational costing standpoint (Dopson and Hayes, 2011)

Eye appeal: visual attractiveness (Merriam-Webster.com, 2013)

Culinary creativity: a combination of science and art, novelty and value in the culinary product (Horng and Lin, 2009); the confluence of intrinsic motivation, domain-relevant knowledge, and creativity-relevant skills (Horng and Lee, 2006 citing Amabile, 1983 in a culinary context); a function of knowledge, intelligence, thinking style, personality, motivation, and environment (Horng and Lee, 2006 citing Sternberg and Lubart, 1995 in a culinary context). Balazs (2002) enumerates the characteristics of [culinary] creative chefs: professional knowledge, passion for their work, curiosity and desire for new knowledge, a visionary

tendency, ambition, a tendency to strategize, confidence, a risk-taking tendency, decisiveness, perseverance, and charisma.

Special groups: populations at high risk for food borne illness, i.e. elderly people, infants and pre-school children, pregnant women, people with cancer or on chemotherapy, people with HIV/AIDS, transplant recipients (Educational Foundation (National Restaurant Association), 2010).

Training transfer: ability of a trainee to apply the behavior, knowledge, and skills acquired in one learning situation to another (BusinessDictionary.com, 2013)

[Employee] Motivation: “those psychological process that cause the arousal, direction, and persistence of voluntary actions that are goal oriented” (Mitchell, 1982, p.81); the “willingness to exert high levels of effort toward organizational goals, conditioned by the effort’s ability to satisfy some individual need” (Ramlall, 2004 citing Robbins, 1993).

Job satisfaction: “positive emotional state resulting from the appraisal of one’s job” (Locke, 1976, p.1300).

Labor mobility: Inter-occupational turnover, or chefs and cooks seeking employment as cooks elsewhere in the hospitality industry, and intra-occupational turnover, or attrition (Robinson and Barron, 2007).

Emotional labor: “the management of feelings to create a publicly observable facial and bodily display intended to produce a particular state of mind in others” (Hochschild, 1983, p.7); “the labor involved in dealing with other people’s feelings, a core component of which is the regulation of emotions” (James, 1989 cited in Steinberg & Figart, 1999, p.11).

Search attributes: those product characteristics that “the consumer can determine by inspection prior to purchase” (Nelson, 1974, p. 730)

Experience attributes: those product characteristics that “are not determined prior to purchase” (Nelson, 1974, p. 730)

Customer delight: the combination of joy and surprise in the customer’s experience (i.e. encounter) (Plutchick, 1980).

Food authenticity: food as a medium that allows an immediately authentic relationship with a culture or tradition; a food experience produced by and/or in a specific culture (“native authenticity”), or a food made by a chef’s efforts to produce food as it is somewhere else or sometime else (“replicable authenticity”) (Robinson and Clifford, 2012 citing Heldke, 2003)

Justification of the study

There is an ongoing debate in the hospitality industry with regard to the potential advantages and disadvantages brought about by the use of convenience items in food production (Frei, 1996; Riley, 2005; Belasco, 2007; Robinson and Barron, 2007). However, there is no empirical research on these aspects yet. The current study’s attempt to fill this gap ought to benefit both academia and industry professionals by offering essential guidance through the potential critical advantageous and disadvantageous impacts and implications that choosing one path or the other could have in a food service operation, in order to ease the decision making processes and help better predict possible consequences of available choices. The expansion of the college student market has been leading to a rapid development and growth of university food service operations. Considering the implications of convenience products, a university food service setting has been chosen for the present study given this sub-industry’s pervasiveness, its increasing impacts on the hospitality bottom line, and surprising paradoxical lack of research revolving around it.

Summary

The food service industry has been facing a tremendous amount of changes over the past couple of decades (Belasco, 2007). Food preparation “from scratch” is more and more often considered counter-productive and impractical, and the use of increasing proportions of “convenience foods” is often replacing it (Frei, 1996; Belasco, 2007). No empirical research on the implications that substituting fresh products with convenience ones might have on a food service operation exists. A clearer understanding of various sides of the subject matter that this study attempts to provide would help both practitioners and academes replace educated guesses with informed decisions, and better predict possible consequences of choosing one type of product versus the other. The college student market growth has been stimulating an expansion of university food service operations. Exploring the issue of convenience foods in a university dining facilities context should prove particularly useful given the sub-market’s rapidly increasing dimensions and growing pressures to swiftly adapt novelty (e.g. convenience foods) in order to fulfill an ever higher demand for diverse products (Kim et al., 2009).

CHAPTER II: Review of the literature

Introduction

As indicated in the previous chapter, the current research has not empirically examined the potential impacts that the use of convenience products can have on a food service operation. This study is designed to examine the opinions of chefs on the critical positive and negative aspects of using convenience foods in university dining services operations. In order to accomplish this objective, this section reviews the relevant literature to the study of convenience foods. The components included in this literature review discuss time, cost, and portion control aspects, consistency and customer relationships, food esthetics and culinary creativity, safety, transportation and storage issues, training and staff evaluation, diversity, motivation, labor mobility issues, waste issues, emotional labor, health issues, changes in product attributes, customer delight, changes in the traditional brigade system and advancement and promotion systems, and food authenticity. The critical components are identified throughout.

Potential advantages of using convenience products in food-service operations

1. Time, costs, and portion control

Convenience food is typically presented as more expensive than raw food by the food & beverage non-academic literature (Hunter, 1996, Walker, 2011). The balance for the customer (consumer) from both academic and non-academic standpoints is that it saves time (i.e. convenience food or food prepared using convenience items takes less time to be completed and

delivered), whereas for the user (restaurant) it congruently saves time (a central issue in most commercial kitchens according to Fine's (1992) in depth conceptual study on aesthetic choices and constraints in culinary work) and labor costs (Riley, 2005; Dopson and Haynes, 2011; Walker, 2011) while ensuring consistency (Robinson and Barron, 2007). Riley's (2005) academic review of change of food and beverage management mentions the decision as a "balancing act" that food outlets have to make to surrender part of the freshness of their offerings for convenience products that save labor cost. In Robinson and Barron's (2007) framework for understanding the impact of deskilling and standardization on the turnover and attrition of chefs, standardization in foodservice is considered as "aimed to guarantee consistent output while controlling the production process" (Robinson and Barron, 2007, p.918), in line with the contemporary trend toward recipe and menu standardization and aided by the homogenization of the hospitality industry.

With the time to feed a person/party diminished by using convenience food (shorter waiting times), an operation has potential of greater revenues due to the ability to turnover more covers, faster. Also, cost control per portion appears a lot easier to attain when using convenience products (Dopson and Haynes, 2011), as culinary skilled interventions required under these circumstances are minimal, if at all existent. These are all critical issues in a food-service operation.

2. Customer relationships, consistency, and special groups

Zeng, Go, and de Vries's (2012) case study on the paradox of authenticity versus standardization (in relation to local expansion strategies of Chinese restaurant groups) shows how authenticity and standardization can be examined from a managerial perspective, and presents a widespread point in the food service industry: customers often expect and prefer

consistency. It can be thus argued that with the use of convenience foods restaurants are better able to build customer relationships (a critical component in the food-service industry), given the incumbent guarantee of consistency (Belasco, 2007) that convenience foods carry. Take for example the case of a “regular” who always comes in on Tuesdays because that is when a certain chef prepares the broccoli-cheese soup; this regular likes the soup prepared by the Tuesday chef better than the one prepared by any other chefs during the week, even though the recipe is standardized. We can argue that our “regular” could come in daily for the broccoli-cheese soup made from a frozen packet without any skilled labor (chef) intervention – because it would taste the same every day. Consistency through standardization is believed to build customer confidence (Zeng et al., 2012), by assuring security, safety, durability, and ease of use. Labor aside, consistency is supposedly easier to assure with convenience products due to their decreased dependence on crops. It can be thus concluded that consistency appears as another critical component of the food-service industry.

Now on a completely different track, convenience food is the one that caters to special groups (e.g. people with allergies, elderly people, infants and pre-school children, pregnant women), so it could be argued that the customer pool can be increased when using convenience foods as the options provided are more “friendly to the public”/safer.

3. Eye appeal

Still in favor of convenience foods, in terms of physical evidence, it can be argued that convenience food actually facilitates added eye appeal (e.g. consistent texture of sauces and glazes like those offered by RC Fine Foods, or innovative pastry decorations for example). Especially when the choice is a combination of raw materials and convenience foods (i.e. skilled labor is present), the product has greater potential of saving the chef’s time from the actual

cooking process, in return for more time to focus on presentation, partly solving the appeal versus productivity dilemma called on by Riley (2005).

The sensory characteristics of food products have particular (critical) values both among customers and chefs. According to Fine's (1992) in depth conceptual study on aesthetic choices and constraints in culinary work chefs hope to present what they believe to be appealing dishes in which they take pride, dishes that will appeal to their clientele's senses, not just food that will satiate or maintain the health of the customers. The higher the position of a chef, the greater the assembly of conflicting ideologies he/she must endure, that push him/her to be an artist, experts, businessman, and manual laborer, all at the same time (according to Fine's 1992 or Riley's 2005 conceptual articles, and also according to Pratten's 2003 qualitative study on the training and retention of chefs). A conceptual study by Balaz (2002) on the leadership factors that contribute to the success of prestigious French restaurants shows that most chefs bare long hours and harsh working conditions because they see themselves as contributing to something special, and the most successful restaurants are those that allow their employees to be creative. Bloisi and Hoel's (2008) literature review of the abusive work practices and bullying among chefs argues that employers should take care of the welfare of their [kitchen] staff both from a moral and a financial perspective, as happy employees are likely to be more productive and drive the recruitment and retention costs to a minimum. This is in line with Knight and Kotschevar's (2000) opinion and with Back, Lee, and Abbot's (2011) findings that internal service quality dimensions have a positive impact on job satisfaction, which subsequently influences self-esteem and organizational commitment. Back et al.'s (2011) study examined the relationship between internal service quality, self-efficacy, job satisfaction, self-esteem, and organizational commitment in an attempt to identify ways to improve hospitality (i.e. casino) employees' job

satisfaction and possibly decrease their job turnover intentions. The findings show that both self-efficacy and all internal service quality dimensions (i.e. training, perceived benefits, and communication) have a positive influence on job satisfaction, and, furthermore, job satisfaction then in tandem influences self-esteem and organizational commitment.

The notion that employee job performance can be improved by enhancing employees job satisfaction has been ardently criticized (Judge, Bono, Thoresen, Patton, 2001; Bowling, 2007), and has found little support within the hospitality industry (Way, Sturman, Raab, 2010). Judge et al.'s (2001) combined qualitative and quantitative review of the relationship between job satisfaction and job performance (i.e. seven models that characterize previous research combined with two meta-analyses of the job satisfaction – job performance relationship) calls for a reconsideration of this relationship and the reconceptualization of both constructs. Bowling's 2007 meta-analysis suggests that the satisfaction-performance relationship is largely spurious and can be partly eliminated by controlling for either general personality traits or for work locus of control, and almost completely eliminated by controlling for organization-based self-esteem. In Way et al.'s (2010) research weak connections between job satisfaction and job performance are underscored through the examination of eighty four food and beverage manager groups from forty Asian hotel properties owned and managed by a single multinational hotel chain, and, in turn, group service climate emerges with positive effects on supervisor ratings of group job performance behaviors. Furthermore, the fact that managers may improve their employees' job performance and job satisfaction by ensuring that employees understand what is expected of them and how their performance will be appraised and rewarded by the organization is shown.

Martin's 2004 qualitative study on hospitality employees across four small independent restaurants suggests that hospitality industry employees tend to experience higher levels of job

satisfaction than those seen in any other industry due to team structure and also due to the nature of the job itself. Craft types of positions are seen as an end in themselves, so increased satisfaction results simply from a job well done, because of the importance attached to preserving skills and maintaining reputation and prestige. Pratten's (2003) qualitative study on the training and retention of chefs also mentions the weight reputation has in the world of chefs, and its obvious dependence on the quality of food leaving the kitchen. Job satisfaction may hence impact job performance differently in the culinary world than in hospitality in general, so this issue deserves its own separate investigation.

4. Training and evaluation

Foodservice is a very people-intensive and people-oriented industry (Knight and Kotschevar 2000). Dornenburg and Page (2003) explain that even though the palate allows a chef to learn what he/she finds most enjoyable, the need for training to distinguish subtleties in flavor combinations is critical. The authors stress the importance of classroom education for chefs (e.g. cooking schools and culinary programs) and continuing education, but options are simply not available sometimes due to budget, time, location, or other personal problems. It is typically exponentially more difficult to instruct people who solely rely on on-the-job training, but convenience foods could represent a solution to this problem, as it takes little to no effort to teach someone to open a bag of frozen breaded mushrooms and 'cook' them in a deep-fryer, to give just an example. We can hence opionate that cooks who will be predominantly working with convenience foods are easier to train than cooks making foods from scratch.

Continuous training within the culinary industry appears particularly important no matter the staples used for production. Riley's (2005) review of change in food and beverage management considers maintaining skilled labor in each unit as crucial for the future of cuisine.

Product differentiation is vital, and the fact that restaurants and their chefs/cooks have different statuses and variable amounts of cultural capital is a function of both the market niche to which the restaurant aspires to, and of the “background culture” of the cook; the preoccupation for aesthetic issues has variable salience at different stages of a chef’s career (Fine, 1992). Training is further expected to triage those who lack technical abilities for coping with kitchen work as well as those not committed to the culinary vocation (Pratten, 2003). Also, there is a further call for on-the-job culinary training to include the development of interpersonal (Zopiatis, 2010), administrative, and managerial skills (Pratten, 2003), arguably in line with Tracey and Tews’s (1995) propositions. Zopiatis’s (2010) investigated five distinct competency domains (i.e. conceptual-creative, leadership, interpersonal, administrative, and technical) for chefs working in Cyprus, revealing that technical (or culinary-specific) competencies were considered as the most important, followed by leadership-management competencies. The researcher’s call was for stakeholders attention to be directed towards competencies such as professionalism and verbal and written skills (i.e. interpersonal skills) however. Tracey and Tew’s 1995 conceptual article also concluded that in order to ensure training programs’ effectiveness, hospitality managers should look beyond the usual factors (i.e. needs analysis, program design and implementation) towards external matters such as the work environment and the personal characteristic of the trainees.

Commitment to staff training and development is not enough in and on itself however. Clement’s (1982) pretest-posttest control group design tested a hierarchical model of training evaluation focusing on variables preserved from Hamblin’s 1974 model to include: reactions, learning, improvements in job behavior, and improvements in organizational variables, on a fifty first-level supervisors group from the various departments of a Midwest state government and

twenty one of their peers who were scheduled to take the same training at a later date, as the control group. Clement's (1982) study concluded that beneficial changes in business performance deriving from training should not be centered on positive learning outcomes solely, but also focus on the [positive] transfer of those learning outcomes. A 1998 study by Olsen addressed the methods organizations use to evaluate their training efforts and what particular approaches or strategies seem to produce the best results in aiding transfer. After surveying 445 different organizations times four employees (filling one of the four job categories defined as: executive/manager, training director, trainer, and first-line supervisor) Olsen (1998) stressed the fact that the assumption that transfer is an automatic extension of learning outcomes is profoundly flawed. According to Frash, Antun, Kline, and Almanza's (2010) field study there is tremendous support in the literature of the influence of complex impact factors on the process of transfer of training. Examining factors that influence hotel employees' ability to transfer the concepts that they learned in job training when they return to work, Frash et al.'s (2010) study results suggest that proper management of impact factors (i.e. trainee characteristics, training design, and work environment) can foster enhanced transfer of training in hotels. Baldwin and Ford's 1988 transfer process model that posits intrinsic characteristics of the training participant, training design parameters, and features of the organization's work environment to be the three impact-factor categories influencing training outputs and transfer of training is heavily supported by Frash et al.'s 2010 research. So when adequately managed, impact-factors can enable training interventions to take in a progression of more expansive skills across diverse tasks (Frash et al., 2010); building the individual's motivation to transfer, designing training interventions with the trainee in mind, making performance expectations clear and attainable and rewarding them when

achieved, and including a substantial amount of later feedback opportunities on-the-job in the training initiative are the authors' suggestions for positively influencing the training transfer.

5. Safety, transportation, and storage

The industry is close to unanimity that the more processed a food product is, the safer it is; so by and large, convenience foods are safer than raw foods (see for example Zink, 1997; Farber and Todd, 2000; Grunert, 2005; Hoffmann and Taylor, 2005; Belasco, 2007). Zink's (1997) article reviews an entire range of processing and preservation technologies increasingly used by food processors in order to respond to the market's demand for fresh, "clean-label", healthy foods: ohmic heating which enhances food quality by limiting heat damage that could occur to the sauce and food particles, pulsed electric field processing which disrupts microbial cells and pasteurizes the food, bright light processing to kill bacteria on the surface of food, aseptic processing, and the use of food preservatives coming from natural sources (e.g. bacteriocins, dimethyl dicarbonate, controlled and modified atmospheres, irradiation). Grunert's (2005) study analyzes food safety and quality perceptions in relation to food choice and consumer demand (through price perception and willingness-to-pay), and concludes that food quality and safety are central issues in the contemporary food economics and customers' perceptions of food safety in particular are skewed and challenging for both food producers and public policy. Farber and Todd's (2005) book "Safe Handling of Foods" presents safety practices in relation to various food groups, both in production (i.e. farms or factories) and delivery facilities (i.e. restaurants, catering establishments, institutions, homes). Several chapters mention the control of pathogenic microorganisms as inherent in the technologies of processing and preserving foods. The chapter on "Safe handling of fruits and vegetables" raises the alarm on the augmented challenges that processors of fresh produce must deal with due to the dynamism of

their product and associated microbial issues, and shows how the more processing oriented a facility, the safer the final product is. Hoffmann and Taylor's (2005) book "Toward safer food" is centered on risk-based food safety regulatory management, and shows a wide range of federal and state approaches and policies intended to minimize food-related risks and increase food safety, more often than not through processing. Warren J. Belasco's (2007) "Appetite for Change: How the Counterculture took on the Food Industry" depicts the changes that turned the "processing ideology" into "moral panic" and the subsequent measures taken by the food production industry towards "safer" and "healthier" offerings.

One must note that many innovations in the convenience food industry have occurred in tandem with innovations in packaging (e.g. aluminum cans, laminated packaging, or active packaging, to name just a few) as well as advancements in food science and technology (Hunter, 1996; Ozdemir and Floros, 2004; Brody, Bugusu, Han, Sand, Mchugh, 2008; Rodgers, 2008). Transportation and storage are both getting ever easier for convenience foods compared to traditional perishables (Walker, 2011).

Given the complexity of these issues, the study of safety aspects of convenience foods will be revisited in a future study.

Potential disadvantages of using convenience products in food-service operations

1. Motivation, routine, and challenges

Certain attitudes like eagerness and willingness to share have been found to positively mediate the relationship of communication styles and performance beliefs with knowledge collecting and knowledge donating behaviors. This was, for example, the case in de Vries, van den Hoff, and Ridder's (2006) study on a sample of 424 participants from a variety of

organizations investigating the relationships between team communication styles and job-related cognitions on one hand and knowledge-sharing attitudes and behaviors on the other. The relationship between eagerness to share knowledge and knowledge donating is not stronger than the one between eagerness and knowledge collecting (de Vries et al., 2006), but because in the long run the only sustainable competitive advantage is the organization's ability to learn faster than its competition (Senge, 2006), the transfer of knowledge both within (i.e., transfer of training) and between the members of the teams in the organization appears crucial.

Knowledge management strategies such as codification and personalization apparently reflect higher levels of new service development knowledge, as shown in Storey and Kahn's 2010 empirical research investigating 385 service businesses' ability to generate a sustainable competitive advantage by enacting strategies to manage new service development. Storey and Kahn's (2010) findings indicate that a blend of a codification strategy promoting new service development proficiency and a personalization strategy promoting increased new service development innovativeness appears optimal for service companies seeking to build a long-term sustainable competitive advantage. The authors found that this blend of knowledge strategies is particularly important for heterogeneous services which are highly dependent on the tacit knowledge of the service providers (e.g. food provision services). The authors further argue that those seeking to achieve innovative new service development capabilities or to prompt [novel] innovation should facilitate personal interaction, invest in personalization knowledge management strategies, and put rewards in place for sharing information, particularly for documenting lessons learned from past experiences (Storey and Kahn, 2010).

One critical, major problem that kitchens adopting convenience products have however is that of motivating their staff, particularly the staff primarily dealing with the convenience

products. Motivation is fundamental for organizational learning and growth (Senge, 2006), knowledge management practices (Foss and Mahnke, 2011), and successful training (Tracey and Tews, 1995). Osterloh and Frey's (2000) in depth conceptual research shows how in the sharing of tacit knowledge in particular, intrinsic motivation (i.e. through the activity itself) outweighs extrinsic motivation (i.e. derived from incentives such as money). Material incentives appear incapable of making people change their interest in codifying and sharing their tacit knowledge.

Designing job features that enhance the work variety of chefs is likely to increase both motivation and interest in the job itself (as shown by Murray-Gibbons and Gibbons in their 2007 empirical study investigating occupational stress in the chef position through forty General Health Questionnaires, for example), but it is nearly impossible to see or make variety a part of convenience products' handling and preparation. Through Hackman and Oldham's (1980) job diagnostic survey, Lee-Ross (1999) investigated the core job dimensions and motivating potential of the job of chef in 14 hospitals, and found that it is relatively easy for the work of chefs to become repetitive and unchallenging. Such factors can constitute additional sources of job dissatisfaction (Robinson, Barron, 2007).

Robinson and Barron (2007) (in their attempt to develop a framework for understanding the impact of deskilling and standardization on the turnover and attrition of chefs) explain that candidates select an occupation based on their socio-economic status, their education, and their psychological predisposition, and creativity, skill, and artistry are all embedded in a common occupational culture of cooks and chefs. Motivation must above all come from within (Walker, 2011), but managers have the potential and opportunity to enhance employees' motivation by understanding and addressing their needs and values (Tracey and Tews, 1995; Dopson and Hayes, 2011; Walker, 2011). It appears exponentially more difficult to perceive the expectations

and aspirations of people [especially repeatedly] pursuing low skill jobs; nonetheless it is not impossible and should be attempted according to some authors (see Dopson and Hayes, 2011, for example). Employing means of extrinsic motivation which would most likely engage these low-[or no-] skill employees would however lessen [or even cancel] the financial gain achieved through diminished labor costs.

2. Labor mobility

Among contemporary hospitality problems, the high labor mobility behavior of chefs is amid the top ones and the pooled influence of deskilling and standardization has an apparently relatively unexplored contribution to it (Wood, 1997).

Robinson and Barron (2007) further break down labor mobility into the constructs of turnover and attrition (also known as inter-occupational turnover). As catalysts for attrition, the abovementioned authors conclude that there appears to be general consensus that perceived poor working conditions occupy the leading position, just as with hospitality and tourism employees in general (Robinson and Barron, 2007). Unsociable and irregular working hours (Balazs, 2002; Pratten, 2003; Bloisi and Hoel, 2008; Walker, 2011), low pay (Fine, 1992; Pratten, 2003; Robinson and Barron, 2007), and physically and mentally straining work environments (Murray-Gibbons and Gibbons, 2007; Robinson and Barron, 2007; Bloisi and Hoel, 2008) are some recurrent examples of such 'perceived poor working conditions'. Whereas the working hours are typical to the industry no matter what the type of venue is (e.g. Fine's 1996 ethnographic study stresses that the restaurant trade possesses temporal eccentricity by nature), low pay becomes even worse in the case of low skilled laborers who only [or mostly] handle convenience foods. However, it can be argued that both physical and psychological work conditions are improving for those adopting convenience food options in their operations, those operating the actual pre-

prepared products themselves apparently not needing to possess particular culinary skills. The current study will be investigating labor mobility through these two critical dimensions (pay and work conditions) given the particularities that they present in the case of convenience foods handlers.

3. Waste

One last critical negative aspect of convenience foods calling for attention is that of waste. Convenience foods are more often than not individually packed for portioning purposes (as shown for example in Hunter's 1996; or Ozdemir and Floros's 2004 conceptual articles) and more often than not these packages are not the sustainable type (Brody et al., 2008); hence the packaging waste of these products is greater than that of raw products (most commonly available and purchased in bulk).

4. Emotional labor

A more in-depth look opens a completely different perspective: those hired to handle the pre-prepared products more often than not lack culinary skills, so the strain on those who do possess the skills and are in charge of supervising the low-skilled ones is exponentially harder (now not only having to deal with their main culinary duties but also oftentimes repairing mishaps of those who simply do not know better).

This is also compatible with the construct of emotional labor, coined by sociologist Arlie R. Hochschild in 1983 in what would become a classic book, *The Managed Heart*; Hochschild first defined emotional labor as "the management of feelings to create a publicly observable facial and bodily display intended to produce a particular state of mind in others" (Hochschild, 1983, p.7). An alternate preliminary definition of emotional labor stipulates that "emotional labor involves efforts made to understand others, to have empathy with their situation, to feel their

feelings as part of one's own" (Paula England and George Farkas, 1986, as cited in Steinberg and Figart's 1999 meta-analysis, p.11). Similarly, Nicky James was defining emotional labor as "the labor involved in dealing with other people's feelings, a core component of which is the regulation of emotions" in 1989 (cited in Steinberg & Figart, 1999, p.11). Ronnie Steinberg noted: "Emotional labor is relational work. It involves managing the emotions of others to achieve a desired state of mind or a desired course of action in them. It also involves managing one's own emotions to project the appropriate emotions for the situation at hand" (Steinberg, 1999, p.149).

The expectation of certain emotions from the employees was pinpointed by the term "feeling rules" by Hochschild (1983) or "display rules" by Ashforth and Humphrey (1993); these rules are postulated to have a potential to cause emotional conflict or 'dissonance' for employees if the emotional expectations are different from the employees' actual emotional inclinations (Hochschild, 1983). Emotive or emotional dissonance can be simply defined as the difference between felt emotions and external expectations of emotional display (considering Brotheridge and Lee's (2003) development and validation of the emotional labor scale research); 'emotive effort' is the effort involved in displaying a certain emotion required by the emotional labor process.

Some authors posit that emotional labor is performed in all service jobs (for example Leidner in her 1999 conceptual article, or Chu & Murrmann in their 2006 development and validation of the hospitality emotional labor scale research) and even outside service jobs; even if the actual job does not involve customer interaction, there are still rules of interaction with coworkers, superiors, and subordinates, which involve the emotional dimensions. Emotional labor may be expressed to clients and customers but it is not limited to the entities who seek the

services provided; emotional labor expressed among coworkers and with supervisors and subordinates is a component of job performance (Steinberg & Figart, 1999). The extent to which emotional labor is exercised is dependent on different contexts and stressors: whether the employee performing emotional labor has to build trust relationships or not, whether the interactions last several minutes or they will be spanning many years, whether he/she has to commonly deal with a lack of closure or usually involves in interactions having closure, etc. All these factors (and more) make it very unlikely that the consequences of emotional labor will be consistent in all contexts (as shown by Wharton's 1999 meta-analysis of the psychological consequences of emotional labor, or by Guy, Newman, and Mastracci's 2004 conceptual paper on sex segregation and emotional labor). Hence we can opine that both emotional dissonance and emotive effort are potentially more intense for chefs in charge of supervising low-skilled employees than for chefs working with more educated chefs or cooks.

A relatively recent study by Kim (2008), examining the antecedents and consequences of two emotional labor strategies (i.e. deep and surface acting) through questionnaires administered to a convenience sample of 197 hotel service employees, revealed that hotel personnel who feign emotions are more likely to be emotionally exhausted than those who strive to invoke the appropriate feelings; this contradicts Hochschild's opinions but is consistent with other empirical studies (e.g. Kruml and Geddes 1997; Brotheridge and Lee 2003). The results of Kim's (2008) study thus suggest that emotional labor may not necessarily cause employees' burnout if they choose to make sincere efforts to experience the appropriate emotions, and share a new outlook on the relationship between emotional labor and burnout. The issue of "appropriate emotions" amongst chefs has long been a controversial one however, as giving and receiving abuse in commercial kitchens is popularly considered a part of the socialization process, part of becoming

a chef (Dornenburg and Page, 2003; Bourdain, 2007; Bloisi and Hoel, 2008; or Palmer, Cooper, and Burns's 2010 qualitative study exploring the social and cultural processes supporting the formation of the chef identity of fifteen head chefs of Michelin-starred restaurants and celebrity chefs). The extent to which chefs are to feign their emotions for the kitchen's wellbeing as a whole remains debatable.

Contrary to the traditional belief, a recent empirical study by Chu, Baker, and Murrmann (2012), surveying 285 front-line employees from seventeen hotels in an attempt to measure emotional labor through emotive dissonance and emotive effort, three of its antecedents (i.e. affectivity, emotional contagion, and empathic concern) and two of its consequent constructs (i.e. job satisfaction and emotional exhaustion), found that when hiring candidates with high positive affect for their ability to provide excellent service, companies also run the risk of losing them quickly, because persons with high positive affect suffer more of the negative effects of emotional labor and are thus very likely to leave the industry early. It might prove very useful to empirically investigate whether chefs with high positive affect react congruently to front-of-the-house employees under the pressures of emotional labor, especially in light of Balazs's (2002) previously mentioned conclusions.

A study by Karatepe (2011), investigating the perceived organizational support and job autonomy as moderators between emotional dissonance and burnout together with the effects of emotional dissonance on exhaustion and disengagement, found a significant positive correlation between the last three, along with the fact that perceived organizational support is a buffer for the impact of emotional dissonance on disengagement. Job autonomy was found to also reduce the impact of emotional dissonance on disengagement. Interestingly, more educated employees appeared to experience less burnout, and females and employees with longer tenure appeared to

be confronted with less exhaustion; these findings are particularly debatable in the culinary world, and further investigation is warranted.

A recent quantitative study by Gursoy, Boylu, and Avci (2011) used a structural equation modeling approach to identify the relationships inherent among emotional labor and other factors (i.e. personality, culture, work experience, job autonomy, and job satisfaction) and showed that an employee's culture is likely to influence his/her personality traits of extroversion and neuroticism, which are suspected to influence an employee's behavior, attitude and performance. These authors wonder if certain cultures have an innate tendency for better emotional performance, and thus can be preferred for employment in the hospitality industry. Cultural values, including some individualistic and hedonistic values and some collective and holistic values, were found to have positive relationships with extraversion but negative relationship with neuroticism, so the authors could not conclude whether collective eastern cultures or individualistic western cultures are better candidates for employment in the hospitality industry, but nevertheless determined that measuring the importance of cultural values might be a useful determinant in the selection-hiring process. Some believe that the job role of a chef has a particular culture in and of itself however, to which those who successfully survive the work adhere no matter what their individual cultures or personalities are (Palmer et al., 2010). Cameron's 2001 study analyzed eight interviews with chefs for differences and similarities within a grid-group analysis framework addressing organizational, individual, and group phenomena, and discussed deskilling and standardization along with technological innovations, access to pre-prepared foods, and the trend towards menu standardization, considering all these elements to be responsible for the decaying of artistic and creative ambitions once critical to the primary reason one used to have for joining the vocation of chef.

In light of the revealed intricacy of the construct of emotional labor, its dimensions revolving around skilled chefs in charge of supervising employees primarily preparing foods with convenience products will be explored in a future study.

5. Health

In further evaluating the downside of using convenience products, one cannot avoid the health issue most frequently mentioned when opposing these products to fresh ones. Even if we are to temporarily ignore the TV-dinner types of foods from the convenience product category, salt remains a particularly important component of most processed foods. These foods rely heavily on salt as shelf-life prolonger and/or as replacement of other flavors which more often than not are lost during manufacturing (as shown in Gibson, Armstrong, and McIlveen's 2000 meta-analysis, for example). The intake of sodium being very commonly believed to be negatively correlated to blood pressure levels, the consumption of processed pre-prepared food products appears highly ill-recommended (e.g. Knight and Kotschevar, 2000; or Hu, Leong, Wei, Yeh, 2005, in their empirical investigation of the impacts of culinary training programs in chefs' nutrition education, attitude toward healthful food preparation, and practices of healthful food preparation). The healthy versus tasty dilemma is a long debated one in the culinary world and deserves its own separate investigation in the context of convenience foods.

Situational factors of using convenience products in food-service operations

The review of the literature revealed some situational factors of using convenience products in food-service operations. These factors are highly dependent on the rapport between the amount of convenience and non-convenience product used when preparing a dish. Hence, they will be separately empirically explored in future research, but are presented here in an attempt to provide a broad understanding of the issue of convenience foods.

1. Attributes change

An essential question is that of whether the changes that occur in the search attributes (i.e., appearance) and [especially] in the experience attributes (i.e., taste, texture) can be perceived when it comes to a food/meal prepared using convenience products; furthermore, do consumers understand (Dopson and Hayes, 2011) and show concern for these differences if they do perceive them? The majority of consumers appear to consider convenience as a desirable attribute of a good food product, but paradoxically popularly believe that ‘convenience goods are typically of low quality’ (Grunert, 2005). So since “quality is in the eye of the beholder” there could be at least three different streams of debate (corresponding to the three clusters initially identified in this paper).

Brady and Cronin’s 2001 hierarchical approach to conceptualizing perceived service quality combined qualitative and quantitative research to explain that quality [of a service] is a multidimensional and hierarchical construct, and in order to improve quality perceptions, the quality received needs to be perceived as reliable, responsive, and empathetic. In their study, an open ended survey coded by inductive categorization revealed nine sub dimensions of service quality (i.e. attitude, behavior, expertise, ambient conditions, design, social factors, waiting time, tangibles, and valence) and further repositioned the SERVQUAL factors as modifiers of the 9 sub dimensions; a scale subsequently developed tested and supported the authors’ conceptualization across four different service industries, concluding that the service quality construct conforms to the structure of a third-order factor model that links service quality perceptions to distinct and actionable dimensions (i.e. outcome, interaction, and environmental quality).

Dagger and Sweeney's 2007 cohort analysis showed that overall service quality perceptions are different for novice- compared to long-term-customers, and suggested that the importance of service attributes in developing service quality perceptions is different depending on the customer's standing in terms of consumption experience. How is a chef to know whether what he/she produces is perceived as quality? How is he/she to know what the customer understands by quality? Education and reputation appear to most definitely count, and Fine (1992) recommends reliance on a typification of the audience given the understanding of the market niche in which the restaurant is present.

It is fundamental to distinguish between quality and satisfaction however, even though there is unanimity that both service quality and customer satisfaction have measurable impacts on customer retention, profits, and market share (see for example Rust, Zahorik, and Keiningham's 1995 "return on quality" approach). Quality is considered to be an antecedent of satisfaction, and besides requiring consumption in order to exist, satisfaction judgments are known to be dependent on one's value perceptions. When formulating levels of satisfaction, consumers can potentially arrive to different conclusions depending on what reference they used (as Szymanski and Henard's 2001 meta-analysis of the empirical evidence on the construct of customer satisfaction concludes). As cooks develop techniques to deal with the vagaries of customer taste [such as slightly undercooking meats] (Fine, 1992), the Return on Quality approach developed by Rust et al. (1995) should most certainly benefit managers. Observing frequent cases in which returns to expenditures in quality are in fact diminishing, Rust et al. (1995) first and foremost recommend considering quality as an investment, and making quality efforts financially accountable; management must be aware of the fact that it is possible to spend too much on quality, and that not all expenditures are equally valid. Following these steps,

choosing between convenience and raw materials and unskilled versus educated labor for the back-of-the-house should become easier.

2. Customer delight

Another question is whether food prepared [partly or whole] from convenience products has the potential to delight the customers. While customers are typically satisfied through exceeding [or sometimes simply meeting] expectations (as shown in Berman's 2005 meta-analysis of the customer delight construct, for example), delight requires a fusion of joy and surprise (Plutchick, 1980).

As such, delight appears to be incompatible with the notion of standardization that convenience products come to offer; however, the assumption of a linear relationship among dissatisfaction, satisfaction and delight being erroneous (Berman, 2005), and considering the additional time that chefs can dedicate to their dish presentation by using convenience products, there is potential for providing the customer with both joy and surprise. Attention must be paid in this last stance nevertheless, arguably similarly to any situation involving the notion of customer delight, as the "hit-and-run" type of delight is considered more detrimental than no delight at all, the customers' expectations being raised (as shown in Rust and Oliver's 2000 investigation of the relationship between delighting and customer expectations through a mathematical model of delight, based on assumptions gathered from the consumer satisfaction literature). If an establishment chooses to delight its customers it must continuously do so and constantly find ways to reinvent itself; if a chef chooses to provide customer delight through his/her dishes, he/she must repeatedly do so and regularly derive new ideas and combinations.

3. Back-of-the-house hierarchy

One observation worth mentioning is that the whole back-of-the-house hierarchical system is oftentimes reinvented when convenience food comes into play. The traditional “brigade system” instituted by Escoffier in order to eliminate chaos and effort duplication in the kitchen by assigning specific positions and stations with defined tasks (CIA, 1996) is oftentimes abbreviated, and oftentimes positions are confounded (Pratten, 2003; Riley, 2005), combined, or completely eliminated. Whether this is a problem or not remains debatable, and besides there are still many places where the costs of substituting labor (ex. butcher) for convenience food (ex. ready-cut meat) is still not justified, nor desired.

4. Advancement and promotion

One follow-up question would be how are advancement and promotion affected by the use of convenience products and the modification of the classic brigade system? How can chefs develop their repertoires by moving between different establishments?, which is a frequent practice according to Rowley and Purcell’s 2001 qualitative study attempting to reveal the antecedents and consequences of labor churn in the hospitality industry, and the coping strategies and counter-measures used by employees. How can a cook ‘skilled’ in deep-frying frozen chicken tenders move up on the career ladder with ‘experience’?

5. Food authenticity

One last grey area worth mentioning in light of the introduction of convenience products in the culinary world is that of food authenticity. Zeng et al. (2012) talk about this in terms of expansion strategies of restaurants, debating the so called standardization versus authenticity paradox. Authenticity is a universal value, and authentic restaurants have the potential to serve as a tourist’s primary or sole contact with a regional culture (as shown both in Cohen and Avieli’s

2004 conceptual article and in Zeng et al., 2012). A restaurant which offers an authentic foodservice experience is seen as a cultural disseminator, since modern tourists do not just purchase food, but are also interested in consuming the attributes which are ingrained in a particular food (Nam and Lee, 2011; Robinson and Clifford 2012). Nam and Lee's 2011 empirical study investigated the factors that influence tourists' satisfaction with traditional Korean restaurants through a modified SERVQUAL, and revealed three dimensions of service quality (i.e. intangibles, tangibles, and food) as well as expectation and value for money as representing positive influences on foreign tourists' satisfaction with traditional Korean restaurants; in turn, foreign tourists' satisfaction appeared to positively influence both their intention to revisit and their intention to recommend. Robinson and Clifford's 2012 empirical research examined how a medieval festival visitors' foodservice experience may augment negotiated aspects of event authenticity and prompt the intention to revisit; the results of the measurements uncovered significant differences between overall perceived authenticity and foodservice and event servicescape, and revealed associations between perceived authenticity and intentions to revisit. Attempts to measure authenticity dimensions of food service have been made (Robinson and Clifford, 2012) since various differences in how individual customers perceive food authenticity have been found (as shown for example in Wood and Munoz's 2007 qualitative research study on the role of themed restaurants as cultural ambassadors for US and Australian subjects).

There have been various suggestions in the literature that regions should use locally cultivated foods as a central principle in the promotion directed to attracting tourists (Zeng et al., 2012; or Sims's 2009 qualitative study, for example, which argues that local food can play an important part in the sustainable tourism experience because it appeals to the tourists' desire for

authenticity). The question is whether dishes prepared using convenience products can be perceived as authentic and if so, to what extent (i.e. how far can a chef go in using convenience foods while preserving authenticity?). And how is the so called “truth in menu” [or accuracy in menu according to Walker (2011)] affected by the use of convenience food items? Zeng et al.’s (2012) arguments that standardization of authenticity is possible and functional, and that the restaurants capable of perceiving the attributes of authenticity and standardization on a sliding continuum relevant to the nature of their activity and market niche can derive benefits from configuring interrelationships of diverse attributes, appear at least partly helpful.

Summary

The above literature review attempts to support the research questions posed in the previous chapter. The overarching research question (i.e. “What are the perceptions, opinions, and practices when using convenience versus non-convenience foods in a university dining setting?”) is broken down into more specific questions that address issues identified in the literature as tangential to the concept of convenience foods. Savings in time and costs, better portion and cost control, added eye appeal, superior customer relationships through product consistency, ease of training and evaluation, increased safety, and ease of storage, appear as advantages of adopting convenience products in food-service operations after reviewing the literature. On the other hand, apparent disadvantages emerging from the literature include: staff motivation problems, facilitated labor mobility, more waste, increased emotional labor for supervisor, and health and nutrition down-sides. Areas identified in the literature as potentially bearing both advantages and disadvantages through the involvement of convenience items, depending on the perspective or the reference point include: attributes change, customer delight,

changes in the traditional back-of-the-house hierarchy and the traditional advancement and promotion approaches, and food authenticity themes.

CHAPTER III: Methodology

Introduction

The primary purpose of this study is to examine chefs' opinions on convenience food products versus non-convenience food products in a university dining setting. In addition, the study seeks to identify implications of choosing one type of product versus the other in the above-mentioned setting, as perceived by the chefs. To this end, to achieve this purpose Chapter III describes the methods employed to carry out the research process. This chapter is divided into the following sections: research design and procedure, instrumentation, sample and data selection, and data analysis.

Research Design and Procedure

In order to address the research objectives of this study, self-reported surveys were utilized. The survey instrument was developed based on comprehensive reviews of the literature on food safety, commercial food storing, food quality, food cost, training and evaluation, training transfer, employee motivation, job satisfaction, food-services management, and labor mobility. Where scales were not available, questions were created using the available literature as well as input from culinary experts.

Instrumentation

The self-administered questionnaire with closed-ended items (See Appendix A) was divided into four sections. The first section gauged chefs' opinions on convenience products implications and consisted of 32 questions, divided amongst the following sub-sections: time, cost, portion control, customer relationships, consistency, special groups, the pay conditions

antecedent of labor mobility, and waste (first eight questions); eye appeal and culinary creativity (the following six questions); training and evaluation (the next seven questions); motivation (the next nine questions); and the psychological conditions antecedent of labor mobility (the following two questions). A quality check item was added at the end of this section. The second section mirrored the first one, inquiring chefs' opinions on non-convenience products implications (under the same conditions) through 32 questions (same sub-sections). The third section was comprised of two open-ended items, and the last section asked respondents for demographic information (seven questions).

1. Time, cost, and portion control

The questions in the first sub-section were developed in collaboration with culinary experts. The question capturing time perceptions emerged after reviewing Fine's (1992) study:

“Using convenience/ non-convenience foods saves me time.”

The question addressing labor costs arose after analyzing Riley (2005), Dopson and Haynes (2011), and Walker (2011):

“Using convenience/ non-convenience foods allows me to reduce labor costs.”

The question addressing portion control also came after reviewing Dopson and Haynes (2011):

“Using convenience/ non-convenience foods allows me to better control cost per portion.”

For consistency purposes, all these questions were measured using the same 7-point Likert-type scale (1 “strongly disagree”/ 7 “strongly agree”).

2. Customer relationships, consistency, and special groups

The questions capturing customer relationships and consistency were adapted from Zeng et al. (2012) and further refined with the input of culinary experts. The same 7-point Likert-type scale (1 “strongly disagree”/ 7 “strongly agree”) was used to measure all the questions in this sub-section as well, for consistency purposes.

“Using convenience/ non-convenience foods helps me build good customer relationships.”

“Using convenience/ non-convenience foods allows me to provide consistency of the final product.”

“Using convenience/ non-convenience foods facilitates my catering to special groups (ex. people with allergies).”

3. Waste

The question soliciting chefs’ opinions on waste issues in relation to convenience/ non-convenience foods emerged from the works of Hunter (1996), Ozdemir and Floros (2004), and Brody et al. (2008), and was generated in collaboration with the culinary experts:

“Using convenience/ non-convenience foods creates a lot of waste.”

The 7-point Likert-type scale (1 “strongly disagree”/ 7 “strongly agree”) approach was preserved for consistency purposes.

4. Eye appeal and culinary creativity

The questions exploring eye appeal and culinary creativity are part of the scale developed by Horng and Lin (2009) designed to evaluate creative culinary products. The authors scored the items with 1 to 5 points, but for consistency purposes the 7-point Likert-type scale (1 “strongly disagree”/ 7 “strongly agree”) was preserved in the present study:

“By using convenience/ non-convenience foods, my final product has”

- balance (in preparation, cutting technique, size of portion, and garnish).
- unique aroma, taste, and texture.
- natural flavors.
- appetizing colors.
- unique use of colors.
- unique modeling, arrangement, and shapes.

Hornig and Lin’s (2009) scale was chosen due to its demonstrated high degree of validity and objectivity as opposed to a Creative Product Semantic Scale (CPSS) for example, or other subjective existent methods commonly used in creativity evaluation.

5. Training, training transfer, evaluation

The questions referring to training, training-transfer, and evaluation are part of the scale developed by Clemenz (2001) to measure perceived quality of training in the hospitality industry (the same 7-point Likert-type scale (1 “strongly disagree”/ 7 “strongly agree”) was used instead of Clemenz’s (2001) 5-point Likert-type scale, for consistency purposes):

“When training my staff to use convenience/ non-convenience foods”

- training involves active learning.
- trainees can learn from one-another.
- printed materials are comprehensive.
- the training environment is informal.
- mood during training is supportive.
- follow-up to the training is expected after returning to work.
- training includes tests to evaluate what was learned.

6. Motivation

No tools that measure motivation in the culinary world specifically being available, a variation of Kovach (1987) and Wiley's (1997) studies was chosen for the current investigation. The 7-point Likert-type scale (1 "strongly disagree"/ 7 "strongly agree") was used in an attempt to assess the depth of the dimensions of employee motivation found by Wiley (1997).

Wiley's (1997) study was designed following Kovach's (1987) exploration, and began by analyzing motivation surveys administered over a period of 46 years along with the different responses that resulted. In an attempt to take a step further from the simple question "Why do workers work?" Wiley (1997) designed a new survey exploring factors that motivate employees in their jobs; the survey was then administered to employees from a wide array of industries. This was a unique approach since previous motivation surveys primarily (if not solely) consisted of rankings of "job reward" factors that industrial employees found appropriate at certain times. Wiley's (1997) research conclusions included an interpretation of recurring dimensions of motivation, which was considered as particularly valuable for the present study and helped shape the questions:

"When primarily cooking with convenience/ non-convenience foods, chefs/ cooks/ employees experience"

- a full appreciation of work done.
- the feeling of being in on things.
- sympathetic help with personal problems.
- job security.
- good wages.
- interesting work.

- easy access to promotion and growth in the organization.
- company loyalty.
- good working conditions.

7. Labor mobility

Labor mobility was investigated through pay conditions and physical and psychological work conditions, as these dimensions emerged as circumstantial for low-skill kitchen labor cases (Fine, 1992; Pratten, 2003; Robinson and Barron, 2007; Murray-Gibbons and Gibbons, 2007; Bloisi and Hoel, 2008).

The question investigating pay conditions was addressed through the concept of labor cost and was developed using input from the culinary experts consulted. Measurement on the 7-point Likert-type scale (i.e. 1 “strongly disagree”/ 7 “strongly agree”) was preserved for consistency purposes. The question was included in the first sub-section due to its resemblance to the item measuring the impacts of one type of product versus the other (i.e. convenience versus non-convenience foods) on labor costs:

”Using convenience/ non-convenience foods increases labor costs.”

Lopes, Araya, Werneck, Chor, and Faerstein’s (2010) study following Karasek (1979) was adapted (preserving the 7-point Likert-type scale (i.e. 1 “strongly disagree”/ 7 “strongly agree”) for consistency purposes) to inquire levels of physical and psychological work conditions (specifically job strain and psychological distress). Lopes et al.’s (2010) scale was chosen because of its dual value: it stems from a cross-sectional study and it represents a purification of Karasek’s (1979) widely-used measurement of job demand, job control, and mental strain. The questions used to investigate physical and psychological work conditions in the present study are thus:

“When primarily cooking with convenience/ non-convenience foods, chefs/ cooks/ employees experience”

- support at work
- psychological distress.

8. Open ended items

Two open-ended questions were asked in an attempt to identify potential further dimensions on which the conversation on convenience versus non-convenience foods could be held in future research.

“What is the greatest positive aspect of using convenience foods in food production?”

“What is the greatest downside of using convenience foods in food production?”

9. Demographics

The final section asked respondents to provide demographic information similarly to Condasky, Ledikwe, Flood, and Rolls’s (2012) study on chefs’ opinions of restaurant portion sizes, comprising: age, time employed in the food-service industry (in food production), current position, and level of culinary training/ education. Percentage of time spent cooking versus supervising staff who are cooking was also questioned for the varying positions, as well as the fact of whether the current position held involves training other employees or not (in an attempt to better understand the potential variation in response on the training related questions):

- “In what year were you born?”
- “How many years have you been working in food production? (less than 5 years/ 5 to 9 years/ 10 to 14 years/ 15 to 19 years/20 or more years)”

- “What is your current position? (Executive Chef/ Chef de Cuisine/ Food Production Supervisor/ Food Service Assistance Senior/ Other (please specify))”
- “What percentage of your time, in your current position, do you spend cooking?”
- “What percentage of your time, in your current position, do you spend supervising other staff under you who are cooking?”
- “Does your current position involve training other employees? (Yes/ No)”
- “Which category best describes your culinary training/ education? (On-the-job/ Apprenticeship/ Culinary school/ BA/BS in culinary sciences/ Graduate degree in culinary sciences)”

Sample and data selection

The wide and varied assortment of dining options available in the food-service industry makes focusing on this single, defined context preferred because of the otherwise extensive array of circumstantial opinions that may intercede.

University food-service operations represent an interesting sub-market of the food-service industry through their idiosyncrasy of rapid growth and hastened novel concepts adaptation (including the adaptation of convenience foods). The college student market expansion has been bringing about the development of university food service operations and an increasing demand of diverse, tasty, readily-deliverable, fresh, and healthy on-campus food options (Kim, Ng, Kim, 2009). The utilization of convenience foods in university food service operations is also increasing, intuitively, as convenience foods are the ones that make possible timely mass delivery of culinary diversity with minimal production efforts. Investigating the perceptions of chefs working in university food-service operations on convenience foods appears thus particularly valuable.

The data were collected from 132 chefs and cooks from ten different dining facilities present on campus. The Director of Dining Services identified the potential respondents based on the qualifications and knowledge necessary for and duties implied by particular positions available within the department; the respondents hence held either the executive chef, the chef de cuisine, the food production supervisor (equivalent to Cook1), the food service assistance senior (equivalent to Cook2) or equivalent position. Of the 132 questionnaires sent, 73 were returned (55% response rate) and 62 were usable (47% response rate).

Analysis

To address the research questions, the data were coded and analyzed using SPSS 20 for Windows. To check for nonresponse bias, the sample was separated into two groups: (I) those responding in the first two weeks and (II) those responding after the first two weeks. There were no statistically significant differences between the early and late respondents, consequently reducing the likelihood of nonresponse bias (Armstrong and Overton, 1977).

Descriptive statistical procedures were conducted as well as a paired samples t-test. In order to determine the benefits that chefs perceive from using convenience foods in the university dining facilities (in terms of the components mentioned in the first research question) the mean scores of the following individual items were considered initially: time saved, cost control, portion control, customer relationships, consistency, catering to special groups. The reliability coefficients for Likert-type scales (Cronbach's alpha) were computed for the items measuring the eye-appeal and culinary creativity construct (six questions), the training, training transfer and evaluation constructs (seven questions), and the motivation construct (nine questions). A widespread principle in research is that the Cronbach's alpha should be .7 or higher and items with correlations of .3 or lower should be deleted from the scale (Nunnally, 1978). All

the items measuring the above-mentioned constructs were summated, as all three reliability coefficients were above .7. A summated scale for eye appeal and culinary creativity, one for training, training transfer and evaluation, and one for motivation were thus formed in order to address research questions 1 d., 1 e., and 2 a. Because they did not originate from a summated scale (Lopes et al.'s, 2009, that is) the three items identified to measure labor mobility (pay conditions and physical and psychological conditions) were not summated but rather considered individually (looking at mean scores) when addressing to research question 2 b. The item pertaining to waste issues was also considered individually (the eighth question in the survey) with its mean score in the attempt to address research question 2 c.

For determining the benefits that chefs perceive from using non-convenience foods in the university dining facilities (in terms of the components mentioned in the third research question) the mean scores of the following individual items were considered initially: time saved, cost control, portion control, customer relationships, consistency, catering to special groups. The reliability coefficients for Likert-type scales (Cronbach's alpha) were computed for the items measuring the eye-appeal and culinary creativity construct, the training, training transfer and evaluation constructs, and the motivation construct. Because all three reliability coefficients were above .7, all the items measuring the above-mentioned constructs were summated. A summated scale for eye appeal and culinary creativity, one for training, training transfer and evaluation, and one for motivation were thus formed in the case of non-convenience foods as well, in order to address research questions 3 d., 3 e., and 4 a. The three items identified to measure labor mobility (pay conditions and physical and psychological conditions) were again not summated but rather considered individually (looking at mean scores) when addressing research question 4

b. For addressing research question 4 c. individual mean scores of answers to the question regarding waste created when using non-convenience foods were considered.

Finally, to determine the resulting differences of perceptions of using convenience foods versus non-convenience foods that the chefs from the university dining facilities have, (addressing the last research question), a paired-samples t-test was performed for questions investigating opinions on convenience foods (from the first section of the questionnaire) in comparison with the questions investigating opinions on non-convenience foods (from the second section of the questionnaire).

CHAPTER IV: Results

Introduction

The purpose of this study was to identify benefits and disadvantages of using convenience and non-convenience foods as perceived by chefs, as well as the resulting differences of perceptions of using convenience foods versus non-convenience foods. This chapter presents the results of the data analyses performed to achieve the research objectives. The remainder of the chapter is divided into the following sections: individual items' pertaining to convenience foods investigation results, individual items' pertaining to non-convenience foods investigation results, scale reliability and summated items' investigation results, paired samples t-test results, open ended items investigation results, and demographics analyses results.

Individual items' pertaining to convenience foods investigation results

Table 4.1 presents the results of the investigation of the individual items pertaining to convenience foods. The majority of respondents strongly agreed that using convenience foods saves them time (mean = 5.62, s. d. = 1.16) and allows them to reduce labor costs (mean = 5.39, s. d. = 1.05) and to provide consistency of the final product (mean = 5.08, s. d. = 1.19). The majority of perceptions were not as strong concerning the other potential benefits or downsides of using convenience foods, however the respondents tended to agree that using these products (i.e. convenience foods) allows them to better control cost per portion (mean = 4.77, s. d. = 1.51) and facilitates their catering to special groups (mean = 4.52, s. d. = 1.68). There was no dominant perception regarding the experience of support at work when primarily cooking with convenience foods, but the respondents tended to agree in this case as well (mean = 4.56, s. d. = 1.26). The majority of respondents somewhat disagreed that using convenience foods increases labor costs (mean = 3.00, s. d. = 1.51), helps them build good customer relationships (mean =

3.94, s. d. = 1.57), and creates a lot of waste (mean = 3.81, s. d. 1.51), and also somewhat disagreed that when primarily cooking with convenience foods chefs/ cooks/ employees experience psychological distress (mean = 3.65, s. d. = 1.52).

Table 4.1. Individual items pertaining to convenience foods investigation results

Convenience foods	MEAN	N	Std. Deviation
Time saved	5.62	61	1.16
Ability to reduce labor costs	5.39	62	1.05
Portion control	4.77	62	1.51
Customer relationships	3.94	62	1.57
Consistency of the final product	5.08	62	1.19
Catering to special groups	4.52	62	1.68
Labor mobility 1 (pay conditions/ increases labor costs)	3.00	61	1.51
Labor mobility 2 (psychological conditions/ support at work)	4.56	62	1.26
Labor mobility 3 (psychological conditions/ psychological distress)	3.65	62	1.52
Waste	3.81	62	1.51

Individual items' pertaining to non-convenience foods investigation results

Table 4.2 presents the results of the investigation of the individual items pertaining to non-convenience foods. The majority of respondents strongly agreed that using non-convenience foods helps them build good customer relationships (mean = 5.16, s. d. = 1.50) and facilitates their catering to special groups (mean = 5.44, s. d. = 1.41), and that when primarily cooking with non-convenience foods chefs/ cooks/ employees experience support at work (mean = 5.06, s. d. = 1.16). The majority of opinions were not as strong concerning the other potential benefits or downsides of using non-convenience foods, but the respondents tended to agree that using non-convenience foods allows them to provide consistency of the final product (mean = 4.85, s. d. = 1.48) and good portion control (mean = 4.42, s. d. = 1.40), but also increases labor costs (mean =

4.80, s. d. = 1.28). The opinion regarding the psychological distress experienced by chefs when primarily cooking with non-convenience foods was very weak in the sense of disagreement (they mostly neither agreed nor disagreed) (mean = 4.19, s. d. = 1.11). The majority of respondents somewhat disagreed that using non-convenience foods allows them to reduce labor costs (mean = 3.45, s. d. = 1.35) and creates a lot of waste (mean = 3.81, s. d. = 1.38), and even more strongly disagreed that using these products (i.e. non-convenience foods) saves them time (mean = 2.93, s. d. = 1.36).

Table 4.2. Individual items pertaining to non-convenience foods investigation results

Non-convenience foods	MEAN	N	Std. Deviation
Time saved	2.93	61	1.36
Ability to reduce labor costs	3.45	62	1.35
Portion control	4.42	62	1.40
Customer relationships	5.16	62	1.50
Consistency of the final product	4.85	62	1.48
Catering to special groups	5.44	62	1.41
Labor mobility 1 (pay conditions/ increases labor costs)	4.80	61	1.28
Labor mobility 2 (psychological conditions/ support at work)	5.06	62	1.16
Labor mobility 3 (psychological conditions/ psychological distress)	4.19	62	1.11
Waste	3.81	62	1.38

Scale reliability and summated items' investigation results

When items are used from a scale they need to have internal reliability. Nunnally (1967, as cited by Cortina, 1993) has defined reliability as “the extent to which [measurements] are repeatable” and explained that “any random influence which tends to make measurements different from occasion to occasion is a source of measurement error (p. 206)” but there are many factors that have the capacity to prevent measurements from being repeated in a

perfect manner. Cronbach’s alpha is often referred to as “the” estimate of reliability as it takes into account both the variance attributable to subjects and the variance attributable to the interaction between the subjects and the items (Cortina, 1993). Research frequently suggests that the Cronbach’s alpha should be .7 or higher and items with correlation of .3 or lower should be deleted from the scale (Nunnally, 1978). Table 4.3 presents the mean scores and computed Cronbach’s alpha of the items measuring eye appeal and culinary creativity in the case of convenience foods. The majority of respondents somewhat agreed that the use of convenience foods provides the final product with balance (mean = 4.98, s. d. = 1.39) but somewhat disagreed that the final product made with convenience foods has unique aroma, taste, and texture (mean = 3.87, s. d. = 1.63), natural flavors (mean = 3.50, s. d. = 1.63), appetizing colors (mean = 3.94, s. d. = 1.61), unique use of colors (mean = 3.92, s. d. = 1.47), or unique modeling, arrangement, and shapes (mean = 3.99, s. d. = 1.55); reliability resulted at .907.

Table 4.3. Measures of eye appeal and culinary creativity – convenience foods

By using convenience foods, my final product has	MEAN	Std. Deviation	Cronbach's alpha
balance (in preparation, cutting technique, size of portion, and garnish)	4.98	1.39	0.907
unique aroma, taste, and texture	3.87	1.63	
natural flavors	3.50	1.63	
appetizing colors	3.94	1.61	
unique use of colors	3.92	1.47	
unique modeling, arrangement, and shapes	3.99	1.55	

Table 4.4 presents the mean scores and computed Cronbach’s alpha of the items measuring eye appeal and culinary creativity in the case of non-convenience foods. The perception of the balance of the final product when using non-convenience foods was the

weakest but still towards agreement (mean = 4.90, s. d. = 1.18) while all other perceptions related to the components of eye appeal and culinary creativity in the case of products made with non-convenience foods averaged around agreement: mean = 5.73, s. d. = 1.01 for unique aroma, taste, and texture, mean = 5.77, s. d. = 1.12 for natural flavors, mean = 5.65, s. d. = 1.20 for appetizing colors, mean = 5.58, s. d. = 1.09 for unique use of colors, and mean = 5.50, s. d. = 1.07 for unique modeling, arrangement, and shapes. Cronbach's alpha indicated a .931 reliability of the items measuring eye appeal and culinary creativity in the case of non-convenience foods.

Table 4.4. Measures of eye appeal and culinary creativity – non-convenience foods

By using convenience foods, my final product has	MEAN	Std. Deviation	Cronbach's alpha
balance (in preparation, cutting technique, size of portion, and garnish)	4.90	1.18	0.931
unique aroma, taste, and texture	5.73	1.01	
natural flavors	5.77	1.12	
appetizing colors	5.65	1.20	
unique use of colors	5.58	1.09	
unique modeling, arrangement, and shapes	5.50	1.07	

Table 4.5 presents the mean scores and computed Cronbach's alpha of the items measuring training, training transfer and evaluation in the case of convenience foods.

Respondents mostly agreed that when training their staff to use convenience foods training involves active learning (mean = 5.00, s. d. = 1.62), trainees can learn from one another (mean = 5.42, s. d. = 1.31), the mood during training is supportive (mean = 5.31, s. d. = 1.41), and follow up to the training is expected after returning to work (mean = 5.08, s. d. = 1.43), and less strongly agreed that when training the staff to use convenience foods printed materials are comprehensive (mean = 4.98, s. d. = 1.21), the training environment is informal (mean = 4.89, s. d. = 1.13), and training includes tests to evaluate what was learned (mean = 4.61, s. d. = 1.66). Reliability, as

indicated by Cronbach's alpha, resulted at .841 for the items measuring training, training transfer and evaluation in the case of convenience foods.

Table 4.5. Measures of training, training transfer and evaluation – convenience foods

When training my staff to use convenience foods	MEAN	Std. Deviation	Cronbach's alpha
training involves active learning	5.00	1.62	0.841
trainees can learn from one another	5.42	1.31	
printed materials are comprehensive	4.98	1.21	
the training environment is informal	4.89	1.13	
the mood during training is supportive	5.31	1.41	
follow-up to the training is expected after returning to work	5.08	1.43	
training includes tests to evaluate what was learned	4.61	1.66	

Table 4.6 presents the mean scores and computed Cronbach's alpha of the items measuring training, training transfer and evaluation in the case of non-convenience foods. Respondents mostly agreed that when training their staff to use non-convenience foods training involves active learning (mean = 5.76, s. d. = 1.05), trainees can learn from one another (mean = 5.40, s. d. = 1.40), printed materials are comprehensive (mean = 5.15, s. d. = 1.29), the mood during training is supportive (mean = 5.62, s. d. = 1.00), follow up to the training is expected after returning to work (mean = 5.63, 1. 04) and training includes tests to evaluate what was learned (mean = 5.16, s. d. = 1.35), and less strongly agreed that when training their staff to use non-convenience foods the training environment is informal (mean = 4.47, s. d. = 1.49). Reliability, as indicated by Cronbach's alpha, resulted at .720 for the items measuring training, training transfer and evaluation in the case of non-convenience foods.

Table 4.6. Measures of training, training transfer and evaluation – non-convenience foods

When training my staff to use non-convenience foods	MEAN	Std. Deviation	Cronbach's alpha
training involves active learning	5.76	1.05	0.720
trainees can learn from one another	5.40	1.40	
printed materials are comprehensive	5.15	1.29	
the training environment is informal	4.47	1.49	
the mood during training is supportive	5.62	1.00	
follow-up to the training is expected after returning to work	5.63	1.04	
training includes tests to evaluate what was learned	5.16	1.35	

Table 4.7 presents the mean scores and computed Cronbach’s alpha of the items measuring motivation in the case of convenience foods. The majority of respondents mostly disagreed that when primarily cooking with convenience foods chefs/ cooks/ employees experience a full appreciation of work done (mean = 3.76, s. d. = 1.77), the feeling of being in on things (mean = 3.85, s. d. = 1.64), sympathetic help with personal problems (mean = 3.73, s. d. = 1.38), job security (mean = 3.90, s. d. = 1.65), good wages (mean = 3.81, s. d. = 1.70), interesting work (mean = 3.59, s. d. = 1.65), and easy access to promotion and growth in the organization (mean = 3.81, s. d. = 1.46). The opinions regarding company loyalty and good working conditions when primarily cooking with convenience foods were very weak in the sense of disagreement in the company loyalty case (mean = 4.19, s. d. = 1.35) and agreement in the case of good working conditions (mean = 4.56, s. d. = 1.33); respondents they mostly neither agreed nor disagreed on these two items. Cronbach’s alpha indicated a .914 reliability of the items measuring motivation in the case of convenience foods.

Table 4.7. Measures of motivation – convenience foods

When primarily cooking with convenience foods, chefs/ cooks/ employees experience:	MEAN	Std. Deviation	Cronbach's alpha
a full appreciation of work done	3.76	1.77	0.914
the feeling of being in on things	3.85	1.64	
sympathetic help with personal problems	3.73	1.38	
job security	3.90	1.65	
good wages	3.81	1.70	
interesting work	3.59	1.65	
easy access to promotion and growth in the organization	3.81	1.46	
company loyalty	4.19	1.35	
good working conditions	4.56	1.33	

Table 4.8 presents the mean scores and computed Cronbach’s alpha of the items measuring motivation in the case of non-convenience foods. The majority of respondents mostly agreed that when primarily cooking with non-convenience foods chefs experience a full appreciation of work done (mean = 5.71, s. d. = 1.08), the feeling of being in on things (mean = 5.64, s. d. = 1.05), job security (mean = 5.08, s. d. = 1.24), and interesting work (mean = 5.66, s. d. = 1.08). The opinions related to the chefs’ experiencing good wages (mean = 4.55, s. d. = 1.29), easy access to promotion and growth in the organization (mean = 4.82, s. d. = 1.22), company loyalty (mean = 4.82, s. d. = 1.22), and good working conditions (mean = 4.95, s. d. = 1.15) when primarily cooking with non-convenience foods were not as strong but still towards agreement. The opinions on chefs’ experiencing sympathetic help with personal problems when primarily cooking with non-convenience foods was also weak but towards disagreement (mean = 4.33, s. d. = 1.22). Reliability resulted at .934 in the case of the items measuring motivation in the case of non-convenience foods, as indicated by Cronbach’s alpha.

Table 4.8. Measures of motivation – non-convenience foods

When primarily cooking with non-convenience foods, chefs/ cooks/ employees experience:	MEAN	Std. Deviation	Cronbach's alpha
a full appreciation of work done	5.71	1.08	0.934
the feeling of being in on things	5.64	1.05	
sympathetic help with personal problems	4.33	1.22	
job security	5.08	1.24	
good wages	4.55	1.29	
interesting work	5.66	1.08	
easy access to promotion and growth in the organization	4.82	1.22	
company loyalty	4.82	1.22	
good working conditions	4.95	1.15	

Paired samples t-test results

Mean differences, standard deviations, and results of the t-test are presented in table 4.9. Mean scores were statistically significant in the case of convenience foods when considering the time saved by using this product and the implied reduction in labor costs (5.62 compared to 2.93 in the case of non-convenience foods for time saved/ 5.39 compared to 3.45 in the case of non-convenience foods for reduction in labor costs). The results of the paired samples t-test indicate the mean difference to be statistically significant in both cases ($t = 10.89$ for time saved, $t = 8.42$ for reduction in labor costs, and $p < .001$ in both cases). Dissimilarly, the results of the paired samples t-test indicated the mean difference to be statistically insignificant in the case of portion control and consistency in the final product ($t = 1.2$, $p > .05$, with a mean = 4.77 in the case of convenience foods and 4.43 in the case of non-convenience foods for portion control, and $t = 0.86$, $p > .05$, with a mean score of 5.08 in the case of convenience foods and 4.85 in the case of non-convenience foods for final product consistency).

The mean difference was statistically significant when chefs' perceptions of the help in building good customer relationships brought about by the use of convenience foods versus non-convenience foods was considered (mean = 3.94 in the case of convenience foods versus 5.16 in the case of non-convenience foods), as indicated by the results of the paired samples t-test ($t = -3.82$, $p < .001$). The results of the paired samples t-test also indicated the mean difference to be statistically significant in the case of the ease in catering to special groups found by the chefs when using one type of product versus the other (i.e. convenience foods or non-convenience foods) ($t = -2.95$, $p < .01$, with a mean score of 4.52 for convenience foods versus a 5.44 in the case of non-convenience foods).

In the case of eye appeal and culinary creativity, the computed mean scores were higher in the case of non-convenience foods compared to convenience foods (5.52 in the case of non-convenience foods versus 4.03 in the case of convenience foods), that is respondents considered the use of non-convenience foods to bring more eye appeal to their final product and to represent a better opportunity of expressing culinary creativity. Results of the paired samples t-test indicate the mean difference to be statistically significant ($t = -6.17$, $p < .001$). Even if in the case of training, training transfer and culinary creativity the differences in means were not that great (5.31 in the case of non-convenience foods versus 5.04 in the case of convenience foods), the results of the paired samples t-test still indicate the mean difference to be statistically significant ($t = -2.18$, $p < .05$). In the case of motivation, differences were considerable (mean = 5.06 when non-convenience foods are involved compared to a 3.91 when convenience foods are involved), and the results of the paired samples t-test indicate the mean difference to be statistically significant ($t = -5.94$, $p < .001$).

In the case of the items related to labor mobility the differences in means were the greatest when addressing pay conditions (4.80 when using non-convenience foods versus 3.00 when using convenience foods) and the results of the paired samples t-test indicate the mean difference to be statistically significant ($t = -6.43$, $p < .001$). For support at work and psychological distress the mean differences were not as far apart (5.06 for support at work experienced when primarily cooking with non-convenience foods versus 4.56 when primarily cooking with convenience foods/ 4.19 for psychological distress experienced when primarily cooking with non-convenience foods versus 3.65 when primarily cooking with convenience foods) but still statistically significant as indicated by the results of the paired samples t-test ($t = -2.62$ for support at work, $t = -2.61$ for psychological distress, and $p < .05$ in both cases). Lastly, the results of the paired samples t-test indicated the mean difference to be statistically insignificant in the case of waste, with the t-value = 0.00 ($p > .05$), and mean = 3.81 both in the case of convenience foods and non-convenience foods.

Table 4.9. Paired samples t-test results

Convenience Food (CF) vs. Non-Convenience Food (NCF)	CF Mean	NCF Mean	CF minus NCF	Std. Dev.	Std. Error Mean	95% confidence interval of the difference		T	Df	Sig. (2-tailed)
						Lower	Upper			
Time saved	5.62	2.93	2.69	1.93	0.25	2.19	3.18	10.89	60	***0.000
Ability to reduce labor costs	5.39	3.45	1.94	1.81	0.23	1.48	2.40	8.42	61	***0.000
Portion control	4.77	4.42	0.35	2.33	0.30	-0.24	0.95	1.20	61	0.236
Customer relationships	3.94	5.16	-1.23	2.52	0.32	-1.87	-0.58	-3.82	61	***0.000
Consistency of the final product	5.08	4.85	0.23	2.06	0.26	-0.30	0.75	0.86	61	0.391
Catering to special groups	4.52	5.44	-0.92	2.25	0.31	-1.54	-0.30	-2.95	61	**0.004
Eye appeal & culinary creativity (ss)	4.03	5.52	-1.49	1.90	0.24	-1.97	-1.01	-6.17	61	***0.000
Training, training transfer, and evaluation (ss)	5.04	5.31	-0.27	0.98	0.13	-0.52	-0.02	-2.18	61	*0.034
Motivation (ss)	3.91	5.06	-1.14	1.51	0.19	-1.53	-0.76	-5.94	61	***0.000
Labor mobility 1 (pay conditions/ increases labor costs)	3	4.80	-1.80	2.19	0.28	-2.36	-1.24	-6.43	60	***0.000
Labor mobility 2 (psychological conditions/ support at work)	4.56	5.06	-0.5	1.50	0.19	-0.88	-0.12	-2.62	61	*0.011
Labor mobility 3 (psychological conditions/ psychological distress)	3.65	4.19	-0.55	1.66	0.21	-0.97	-0.13	-2.61	61	*0.011
Waste	3.81	3.81	0	2.35	0.30	-0.60	0.60	0	61	1.000

*** Sig @ .001 (.000<.001)

** Sig @ .01 (<.01 but >.001)

*Sig @ .05 (<.05 but >.01)

(ss) Summated scale

Open ended items investigation results

When asked what the greatest positive aspect of using convenience foods in food production was, the many chefs mentioned ease of preparation (“easy to make”, “work is easier”, “easy to work with”, “little to no prep”), and speed (“speed with which you can serve your customers”, “quick to make”, “quick prep”). “Elimination of certain steps of cooking” and the ability to “sell more product at a time” were also mentioned repeatedly. Other answers include: “regularity of production time”, “production can be done with less experienced cooks and chefs”, “most convenience foods are easily recognizable to customers”, “stays good longer”, and “allows spending more time on final appearance”.

In considering the greatest downside of using convenience foods in food production “lack of quality” dominated the chefs’ responses. “Taste”, health issues (“nutrition”, “not as healthy”, “preservatives”, “not being fresh”), “appearance” (“not being as appealing”), lack of control over what goes into the product, and over its taste, its color, and its aroma, food cost, and the fact that cooks have less pride in the food they produce were also repeatedly stated as principal downsides of using convenience foods in food production. Facts like “the ingredients cannot be altered to accommodate allergies”, “shipped in bulk they may be too much for one batch”, “they make the workers lazy”, or simply “not as good as cooking from scratch” also emerged.

Contradictory answers also appeared, like “the food quality is a lot better” (in the case of convenience foods), or “not the same consistency” (when referring to convenience foods), or “sometimes convenience food is more work” (the respondent goes on explaining a situation in which he had to re-trim pre-cut celery to fit a recipe, and states that it would have been easier to cut the celery from a whole stalk than from the given smaller “convenience” pieces).

Demographics analyses results

The average age of the respondents was 38 years old, the youngest chef being 20 and the oldest 70 years old. There were 18 respondents with 20 or more years of work experience in food production, seven that had been working in food production for 15 to 19 years, 13 for 10 to 14 years, 14 for five to nine years, and 10 for less than five years. There were two chefs de cuisine, 27 food production supervisors, and 22 food service assistance seniors that responded; the remaining 10 respondents marked “other” as their current position, but the mentioned job titles were all equivalents of the above-mentioned positions: “first cook”, “first baker”, “lead cook”, “food tech. II”, or “kitchen manager”. Both the percentage of time spent cooking and the percentage of time spent supervising other staff (in the current position) ranged from 0% to 100%, with an average of 56.69% of time spent cooking and an average of 56.45% of time spent supervising other staff. 61 of the respondents said that their current position involves training other employees, and only one said that his/her position did not involve training others. The majority of respondents (53) considered the “on-the-job category” as best describing their culinary training/ education; two respondents selected the “apprenticeship category”, five “culinary school”, and two “BA/ BS in culinary sciences”.

Table 4.10. Demographics/ work profiles of respondents (n = 62)

Variable	N	%
Age		
Minimum	20	n/a
Maximum	70	n/a
Average	38	n/a
Years employed in food production		
< 5	10	16.13
5 -9	14	22.58
10 -14	13	20.97
15-19	7	11.29
≥ 20	18	29.03
Current position		
Chef de Cuisine	2	3.23
Food Production Supervisor	27	43.55
Food Service Assistance Senior	22	35.48
Other	10	16.13
Current position involves training others		
Yes	61	98.39
No	1	1.61
Category that best describes personal culinary training/ education		
On-the-job	53	85.48
Apprenticeship	2	3.23
Culinary school	5	8.06
BA/ BS in culinary sciences	2	3.23

Summary

This chapter presented the individual items' pertaining to convenience foods investigation results, the individual items' pertaining to non-convenience foods investigation results, and then the scale reliability and summated items' investigation results. The paired samples t-test results followed, revealing the differences between convenience foods and non-convenience foods to be statistically significant at the .001 level in the cases of eye appeal and culinary creativity, motivation, time saving, reduction in labor costs, customer relationship building, and pay conditions (in relation to labor mobility), the differences between convenience foods and non-convenience foods to be statistically significant at the .01 level in the case of the facilitation of catering to special groups, and the differences between convenience foods and non-convenience foods to be statistically significant at the .05 level in the cases of training, training transfer and evaluation, and psychological conditions (in relation to labor mobility). The differences between convenience foods and non-convenience foods were statistically insignificant in the cases of portion control, consistency of the final product, and waste, as revealed by the paired samples t-test. The open ended items investigation results and the demographics analyses results were presented at the end of the chapter.

CHAPTER V: Discussion of findings, Conclusions, Limitations, and Recommendations

Introduction

The purpose of this study was to examine the perceptions that chefs from a university dining facilities setting have on using convenience food products versus fresh/ non-convenience food products. Descriptive statistical procedures were conducted as well as a paired samples t-test, as discussed in the previous chapter. The final chapter will discuss the findings, implications, conclusions, and limitations of the study, as well as some recommendations for future research.

Discussion of Findings

This section will discuss the findings of the research according to the research objectives set in the first chapter.

1st objective: Identify perceived benefits of using convenience foods in terms of:

- a. Time saved
- b. Cost and product/ portion control
- c. Customer relationship through product consistency and ability to cater to special groups
- d. Added eye-appeal and culinary creativity
- e. Training and evaluation

The majority of respondents strongly agreed that using convenience foods saves them time and allows them to reduce (thus control) [labor] cost, in line with Riley's (2005), Dopson and Haynes's (2011) and Walker's (2011) opinions. Respondents tended to agree that using these

products (i.e. convenience foods) allows them to better control cost per portion, again, similarly with Dopson and Haynes's (2011) remarks. Even though product consistency was seen as facilitated by the use of convenience foods (similarly to what Belasco (2007) was saying) and the respondents tended to agree that the use of convenience foods helps in their catering to special groups, the general opinion leaned towards disagreement on the ability of convenience foods to help chefs build good customer relationships, contrary to our argument. Most likely this discrepancy is due to the complexity of the customer relationship construct and the fact that things other than consistency better define or describe the construct in the minds of our respondents and thus the link between consistency and customer relationships is less obvious.

The majority of respondents also tended to disagree that by using convenience foods their final product has eye appeal and culinary creativity, divergent from the proposed assumptions. If considering the measured dimensions of these constructs (i.e. eye appeal and culinary creativity) there was some agreement that the use of convenience foods provides the final product with balance, but mostly disagreement that the final product made with convenience foods has a unique aroma, taste, and texture, natural flavors, appetizing and/or unique use of colors, or unique modeling, arrangement, and shapes. The discrepancy between initial arguments and the respondents' opinions here is most likely due to the nature of the segment in which the respondents operate: casual dining in a university setting, where the product is not a sophisticated one by definition.

All the items measuring training and evaluation had relatively strong support from the chefs when considering training their staff to use convenience foods. Respondents mostly agreed that when training their staff to use convenience foods training involves active learning, the trainees can learn from one another, the mood during training is supportive, and follow up to the training

is expected after returning to work; respondents less strongly agreed that when training their staff to use convenience foods printed materials are comprehensive, the training environment is informal, and training includes tests to evaluate what was learned.

2nd objective: Identify perceived disadvantages of using convenience foods in terms of:

- a. Employee motivation
- b. Labor mobility
- c. Waste

The respondents disagreed that when primarily cooking with convenience foods chefs/ cooks/ employees are motivated, congruent to the observations drawn from the literature. The majority of respondents generally disagreed that when primarily cooking with convenience foods chefs/ cooks/ employees experience a full appreciation of work done, or the feeling of being in on things, or sympathetic help with personal problems, job security, good wages, interesting work, or easy access to promotion and growth in the organization. The opinions regarding company loyalty and good working conditions when primarily cooking with convenience foods were very weak in the sense of disagreement in the company loyalty case and agreement in the case of good working conditions; respondents typically neither agreed nor disagreed on these two items. The chefs' opinions regarding the labor mobility antecedents chosen to be observed in the current study supported the observations made in the review of the literature about the particularities that these antecedents present in the case of convenience food handlers. The majority of respondents somewhat disagreed that the use of convenience foods increase labor costs and that when primarily cooking with convenience foods chefs/ cooks/employees experience psychological distress; the respondents on average neither agreed nor disagreed that when primarily cooking with convenience foods chefs/ cooks/employees have [moral] support at

work, but more opinions revolved around agreement than disagreement. The majority of respondents somewhat disagreed that using convenience foods creates a lot of waste, but since the question did not specify what was meant by waste it is likely that the chefs were envisioning trim loss rather than packaging.

3rd objective: Identify perceived benefits of using non-convenience foods in terms of:

- a. Time saved
- b. Cost and product/ portion control
- c. Customer relationship through product consistency and ability to cater to special groups
- d. Added eye-appeal and culinary creativity
- e. Training and evaluation

The majority of respondents most strongly disagreed that using non-convenience foods saves them time, again, congruently with the assumptions drawn from the literature. They somewhat disagreed that using these products (i.e. non-convenience foods) allows them to reduce labor costs, and neither agreed nor disagreed (with a tendency to disagree) that non-convenience foods facilitate portion control. The majority of respondents most strongly agreed that using non-convenience foods helps them build good customer relationships and facilitates their catering to special groups, and tended to agree that using non-convenience foods allows them to provide consistency of the final product. The latter results reinforce the assumption that the link between consistency and good customer relationships is not obvious to the chefs in the study. The opinion regarding the balance of the final product when using non-convenience foods was the weakest but still towards agreement while all other opinions related to the measured components of eye appeal and culinary creativity in the case of products made with non-convenience foods averaged

around agreement; an explanation for this will be provided when discussing the accomplishment of the 5th objective. Respondents generally agreed that when training their staff to use non-convenience foods training involves active learning, the trainees can learn from one another, the printed materials are comprehensive, the mood during training is supportive, also that follow up to the training is expected after returning to work, and that training includes tests to evaluate what was learned; the respondents neither agreed nor disagreed, on average, that when training their staff to use non-convenience foods the training environment is informal.

4th objective: Identify perceived disadvantages of using non-convenience foods in terms of:

- a. Employee motivation
- b. Labor mobility
- c. Waste

Parallel to the observations strained from the literature, the majority of respondents mostly agreed that when primarily cooking with non-convenience foods chefs are motivated: they experience a full appreciation of work done, the feeling of being in on things, job security, and interesting work. The perceptions related to the chefs' experiencing good wages, easy access to promotion and growth in the organization, company loyalty, and good working conditions when primarily cooking with non-convenience foods were not as strong but still towards agreement. The perceptions about chefs' experiencing sympathetic help with personal problems when primarily cooking with non-convenience foods were weak towards disagreement. One of the items on which the respondents most strongly agreed on was that when primarily cooking with non-convenience foods chefs/ cooks/ employees experience support at work. The other two antecedents of labor mobility investigated did not yield results as strong, the respondents tending

to not agree nor disagree on these items, although towards agreement in the case of the convenience foods' potential to increase labor costs and disagreement in the case of the psychological distress experienced by chefs when primarily cooking with non-convenience foods. The majority of respondents somewhat disagreed that using non-convenience foods creates a lot of waste, which, again, we believe is due to the difference in conceptualization of the term.

5th objective: Compare resulting differences of perceptions of using convenience foods versus non-convenience foods.

The most statistically significant differences in opinions of using convenience versus non-convenience foods were related to time saving, labor cost reduction, customer relationships, eye appeal and culinary creativity, motivation, and labor mobility (through pay conditions). The differences related to time saving, labor cost reduction, motivation, and labor mobility were in the suspected direction. That is, the respondents agreed that convenience foods save them time and allow them to reduce labor costs and disagreed that non-convenience foods save them time and labor costs; respondents also considered chefs/ cooks/ employees primarily working with convenience foods to be less motivated than those primarily handling non-convenience foods. Contrary to the point made in the review of the literature however, convenience foods did not appear as customer relationship facilitators in the minds of the respondents, who mostly disagreed that convenience foods help them build good customer relationships (and mostly agreed that non-convenience foods help them build good customer relationships). The argument that convenience foods could better the relationship with the customer through the incumbent guarantee of consistency that these products carry was made in the review of the literature. Since there was no significant difference between the responses in the case of convenience foods

versus non-convenience foods on the question inquiring product consistency (i.e. “Using convenience/ non-convenience foods allows me to provide consistency of the final product”), it can be inferred that the respondents did not see an association between consistency and customer relationships. The differences in perceptions regarding the eye appeal and culinary creativity of products prepared with convenience versus non-convenience foods also contradicted the arguments made in the literature review. Even though a couple of respondents did mention that convenience foods “allow spending more time on final appearance” (in line with the argument from the literature review), the majority neither agreed nor disagreed on the potential of these products (i.e. convenience foods) to enhance eye appeal and culinary creativity, but rather agreed on the potential of non-convenience foods to boost these areas (i.e. eye appeal and culinary creativity). These differences can be explained through the dominant answer provided by the respondents when asked to consider the greatest downside of using convenience foods in food production, that is “lack of quality”; the suspicion is that the convenience products used by the respondents, and, in general, in such niches (i.e. casual dining in a university setting), are of lower quality than those used in upper scale settings (which were born in mind in the review of literature when mentioning innovative pastries decorations and RC Fine Foods sauces). So, again, the discrepancy between the argument made in the review of the literature and the respondents’ opinions can be explained by the nature of the segment in which the respondents operate (i.e. casual dining in a university setting), where the product is by definition not a sophisticated one.

The second greatest statistically significant differences between perceptions about using convenience versus non-convenience foods were related to the products’ ability to facilitate catering to special groups. The respondents, on average, neither agreed nor disagreed that using

convenience foods facilitates their catering to special groups, and the majority agreed that using non-convenience foods does facilitate their catering to special groups instead. These responses came as a surprise, since the literature review pointed that it is easier to cater to people with allergies or to young children and other special groups with convenience foods. An unexpected amount of respondents mentioned “lack of control over what goes into the product” as major disadvantage of using convenience foods in food production (in the open-ended questions section), which could serve as an explanation for the unforeseen results just mentioned and prompt future research.

The final statistically significant differences of perceptions about using convenience versus non-convenience foods were related to training and labor mobility (particularly through the physical and psychological dimensions of work conditions investigated in relation to the later construct). Respondents perceived the quality of training that staff supposed to use non-convenience foods receive higher, on average, than the quality of training given to the staff supposed to use primarily convenience foods. This partly confirms the opinion that the cooks who will be predominantly working with convenience foods are easier to train than cooks making foods from scratch. As a reminder, given the particularities the labor mobility construct presents in the case of convenience food handlers, the present study investigated only those aspects supposedly manifesting dissimilarities compared to the classic performance (i.e. in the hospitality industry as a whole) of items making up this construct; that is, pay conditions and work conditions (both physical and psychological) were investigated here. The argument was that pay conditions worsen in the case of convenience foods handlers and that work conditions have potential of improving for those adopting convenience food options in their operations, as staff primarily handling convenience foods are exposed to less physical strain and less

psychological distress. The suppositions related to pay were powerfully confirmed, as discussed above, as were the statements related to work conditions. Both dimensions of psychological distress tested performed in the direction expected, that is the majority of respondents agreed more strongly that when primarily cooking with non-convenience foods chefs/ cooks/ employees experience psychological distress than they did in the case of chefs/ cooks/ employees primarily cooking with convenience foods.

The differences of perceptions of using convenience foods versus non-convenience foods in relation to portion control, consistency of the final product, and waste were statistically insignificant. The issue of the term “waste” not being clearly defined in the survey was already explained, and could be the reason for these results. There is an explanation for the in-existent differences with regard to portion control as well: the fact that all chefs/ cooks/ employees in the investigated setting receive basic culinary training which most likely includes portion control. There is uncertainty about the explanation for the insignificant differences between using convenience versus non-convenience foods allowing provision of consistency of the final product, but a social desirability bias is alleged.

6th objective: Identify theoretical and managerial implications of the study.

The belief is that a clear understanding of diverse aspects of convenience foods will help replace (educated) guesses in the industry with informed decisions, and better anticipate possible consequences of choosing one type of product versus the other. An exploration of industry professionals’ opinions on the use of convenience versus non-convenience foods in a university dining facilities context was seen as particularly beneficial given this sub-market’s idiosyncrasy of quick expansion and accelerated novel concepts implementation (including the adaptation of convenience foods). This study represents an attempt to start filling a gap in the literature by

investigating advantages and disadvantages of using convenience food products in university food-service operations [as perceived by the chefs in these operations]. The empirical investigation was limited to critical issues identified in relation to the use of convenience food products, and although the study does not grant itself to generalizability, it confirms some assumptions drawn from the literature and raises some important points. The main advantages of using convenience foods as perceived by the respondents were: both the time and labor cost savings identified in the literature, along with speed and ease of use. Better portion control was not perceived as an advantage of using convenience foods (as was pointed in the review of the literature due to the fact that culinary skilled intervention required in such cases is minimal, if at all existent), but it was not perceived as an advantage of using non-convenience foods either. The suggestion is that this means that the chefs in the study did not consider portion control to be tied to the nature of the ingredients or components of the product. Another missing link identified in the study was that between product consistency and customer relationships. The point was that convenience foods, guaranteeing consistency, are facilitators of good customer relationships. The respondents did not have significant differences of opinion regarding one type of product versus the other (i.e. convenience versus non-convenience foods) being better at allowing consistency of the final product, and, interestingly, believed non-convenience foods to be better facilitators of good customer relationships. This can be explained through culinary pride: as Fine (1992) was noting, chefs hope to present what they believe to be attractive dishes that will appeal to their clientele's senses, not just food that will satiate, and they take pride in what they do; since culinary intervention is minimal in the case of convenience food products, the chef's signature is barely visible, if at all, so "cooks have less pride in the food they produce" (as one of the respondents stated). In addition to the justification already provided, culinary pride can explain

another of the surprising findings, that is, the fact that the majority of respondents considered non-convenience foods to form final products with more eye appeal and culinary creativity than convenience foods.

One of the most surprising verdicts from the respondents was related to products' (i.e. convenience/ non-convenience) facilitation of catering to special groups: on average, the chefs neither agreed nor disagreed that using convenience foods facilitates their catering to special groups, while the majority agreed that using non-convenience foods does facilitate their catering to special groups instead. Drawn from the open-ended items, the explanation would be that the chefs do not get complete lists of the ingredients that go into most convenience foods they use, and hence they have no control over these ingredients. Less unexpected results were obtained relative to training, motivation, and the dimensions investigated in relation to labor mobility: that is, as deducted and predicted from the literature, training was [advantageously] perceived not as complex (thus easier) in the case of convenience foods, while motivation was [disadvantageously] perceived as more absent in the case of chefs/ cooks/ employees primarily handling the same type of foods (i.e. convenience); while pay conditions appeared more aggravating (worse) in the case of convenience food handlers, the same cooks/ chefs/ employees (i.e. primarily handling convenience foods) appeared to benefit from better work conditions, that is were believed to experience less physical and psychological strain.

From a theoretical standpoint, the present study represents a minute step ahead in the process of understanding the complexities and implications of using convenience foods in volume food production, but there is tremendous room for research. From an industry standpoint, the study serves as reinforcement to some opinions and caution signal to some aspects. One main piece of advice is to preserve and value at least some amount of skilled labor, in line with

Riley's (2005) suggestions. Food operators can once more draw the suggestion of using convenience foods in their establishments because these products save them time and labor costs, are easy to use and easy to train on, and they even represent the potential for reduced labor mobility (implying better work conditions from a psychological stand point). Besides the obvious disadvantage of weakened motivation in the case of chefs/ cooks/ employees primarily handling convenience foods, industry professionals are also cautioned about the fact that convenience foods' lists of ingredients are more often than not unclear and incomplete, thus making these products (i.e. convenience foods) not the best option for catering to special groups; also, the fact that culinary pride is apparently negatively affected by the use of convenience foods should not be ignored, since it is most likely linked to chefs' perceptions of culinary creativity and eye appeal of products, besides motivation, as well as to customer relationships. The negative aspects of using convenience foods presented here ought to encourage decision makers to question and carefully weigh multiple aspects before choosing one path or the other. When deciding whether the cost savings in labor are worth trading for the use of convenience food products, and whether to use convenience foods at all, (in principle), evaluations based on Rust et al.'s (1995) return-on-quality model should become helpful.

Conclusions

The topic of convenience foods has never been explicitly examined in the hospitality literature hence filling this gap should mutually benefit academia and industry professionals. The present exploratory study reinforces some findings from the literature and contradicts other, and also raises some new questions; several areas beg further investigation, as described in the following section. Time and labor cost saving appeared once more as the major advantages of using convenience foods in volume food production, and, similarly, motivation appeared as the

main disadvantage; these areas presented the greatest discrepancies compared to non-convenience foods.

Whether the components of the final product were primarily convenience or non-convenience foods did not seem to matter to the respondents for portion control, and even though consistency was seen as slightly higher for convenience foods, the differences (compared to non-convenience foods) were insignificant. Both ability to cater to special groups and customer relationships in general appeared to be better for the respondents when non-convenience foods were into question. The chefs mentioned their inability to control the constituents of convenience foods and a vagary of the lists of ingredients of these products (i.e. convenience foods), which was served as an explanation to their preferring non-convenience foods to cater to special groups. This can be either a general characteristic of convenience foods that has escaped when reviewing the literature or a particular characteristic of the products used in the university dining facilities setting investigated in the present study. The chefs' perceived better ability to build good customer relationships with non-convenience foods (compared with convenience foods) was explained through culinary pride, and further investigation of this facet was proposed, especially because the respondents did not seem to notice a link between product consistency and good customer relationships like the literature indicates; the question would be whether this link was not obvious to just the subjects in the present study or it is not obvious to industry professionals in general.

The fact that eye appeal was believed to be higher for products primarily prepared with non-convenience foods can also be explained in relation with culinary pride as well as through the characteristics of the investigated setting (which does not fundamentally center itself around a sophisticated product). A different instrument for measuring this construct may serve it more

justice in the discussion on convenience foods. On a different note, the results obtained in relation with training and evaluation as well as with the aspects associated to labor mobility (i.e. pay and work conditions) were in the direction expected, that is, training chefs/ cooks/ employees to primarily work with convenience foods appears easier than training them to primarily work with non-convenience foods, and, even though chefs/ cooks/ employees who primarily handle convenience foods are worse paid than their counterparts (i.e. chefs/ cooks/ employees who primarily handle non-convenience foods) they seem to experience less psychological distress in their job. These latter findings can represent a disguised characteristic of the investigated setting, so, for various reasons, replicating the study in different settings appears necessary. Since some issues that were not considered critical (and thus were not included in the empirical investigation) emerged in the open ended responses, a more in depth study of convenience foods, including more of the aspects identified in the review of the literature than the present investigation was limited to, appears functional and constructive.

Limitations of the study and recommendations for future research

The lack of generalizability of the present study, through the small convenience sample utilized, is probably its greatest and most obvious limitation. Future research should thus replicate the study in different settings, perhaps starting with different university dining facilities and then moving on to different food industry sub-sectors. Certain items might benefit from elucidation or rephrasing/ rewording, like the terms “waste”, or “customer relationships”, as the suspicion that certain answers received took the direction they did due to certain terms being misinterpreted or unclear lays within the present study. The second major recommendation is to design and implement research that comprises all the advantages, disadvantages, as well as situational factors identified in the beginning of this study, especially since aspects mentioned as

secondary and thus not analyzed in the present study reemerged in the open-ended section (e.g. safety issues, health issues, food authenticity, etc.).

The present study, particularly through the review initially made, has brought forth a broad range of advantages and disadvantages that food-service operations can attain and face by introducing convenience products into the food production process. The extent to which both authenticity and the artistic features of the job, on the one hand, and financial aspects, on the other, are affected by the use of convenience foods remains unclear however, and apparently intrinsically dependent on the amount and quality of qualified labor preserved as well as the degree to which convenience products are utilized. The conclusion worth considering by the academic world is that there is tremendous room for research involving convenience foods. Further, in depth empirical research on the actual benefits brought about by the time saved by substituting fresh products with convenience ones appears highly necessary: How many more covers are turned per meal period? Does the increase in revenue balance the cost implied by the new product? Are in fact chefs taking advantage of the time gained and being creative or just changing pace on repetitive and unchallenging tasks?

Another area worth of empirical investigation is that involving consistency of the new product. Does it really benefit customer retention and improve the overall customer relationship? Maybe more importantly from here – do the customers perceive the difference in the product prepared in part or whole with convenience food items? If they do perceive the difference, what are the basic reactions? Do guests return/ become loyal? Do “regulars” maintain their position? Is there a new customer base? If so, how is it different from the customer base the operation used to have when preparing the food from scratch?

An entire range of questions begging testing relate to the human resource: Does job satisfaction relate to job performance differently in back-of-the-house staff compared to front-of-the-house? How do low- [or no-] skill positions of convenience foods handlers affect the other positions and the people in those other positions in a kitchen? How can convenience food handlers be motivated? Can variety be created for low-skill back-of-the-house positions? Does the modification or destruction of the traditional brigade system brought about by the use of convenience foods affect the flow of things in the kitchen? What about employee morale?

Whether general opinions on convenience foods are being shaped appropriately is debatable – the majority of users (mostly end-consumers but oftentimes restaurateurs and chefs also) only get information on convenience foods indirectly and more than half the time from media depicting horror stories about breaded deep fried items increasing obesity rates or carcinogen additives and preservatives. Many (mostly end-) users do not even realize that they are using convenience food, and associate the term solely with the above mentioned negative representations. Better educating consumers can only benefit. An overview of the descriptions and operationalization of the concept of convenience food versus processed food might also be useful.

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APPENDIX A (questionnaire)

Virginia Tech Chef Opinions on the Use of Convenience and Non-convenience Foods

We are very interested in your experiences and opinions on using convenience versus non-convenience food products. Therefore, we are asking that you complete the following survey. If you do not hold a managerial/decision-making position, please give your answer as if you had decisional power (wherever applicable). Your participation is voluntary and you can withdraw from the study at any time. The questionnaire should take no more than **15 minutes to complete.**

Virginia Tech and the Department of Hospitality & Tourism Management support the practice of protecting research participants' rights. Accordingly, this project was reviewed and approved by the Virginia Tech Institutional Review Board (IRB). All answers are strictly anonymous.

If you have any questions or concerns about the study, you may contact Ioana Dallinger at kioana@vt.edu.

We thank you for your time!

Ioana Dallinger
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I. Opinions on the use of convenience foods in food production:

Please consider convenience food as: “(Cookery) food that needs little preparation, especially food that has been pre-prepared and preserved for long-term storage” (for example: frozen peas, instant potatoes/ soups, breaded cheese-sticks).

Please indicate your agreement with the following statements:

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
Using convenience foods:							
saves me time							
allows me to reduce labor costs							
allows me to better control cost per portion							
helps me build good customer relationships							
allows me to provide consistency of the final product							
facilitates my catering to special groups (ex. people with allergies)							
increases labor costs							
creates a lot of waste							

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
By using convenience foods, my final product has:							
balance (in preparation, cutting technique, size of portion, and garnish)							
unique aroma, taste, and texture							
natural flavors							
appetizing colors							
unique use of colors							
unique modeling, arrangement, and shapes							

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
When training my staff to use convenience foods:							
training involves active learning							
trainees can learn from one another							
printed materials are comprehensive							
the training environment is informal							
the mood during training is supportive							
follow-up to the training is expected after returning to work							
training includes tests to evaluate what was learned							

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
When primarily cooking with convenience foods, chefs/ cooks/ employees experience:							
a full appreciation of work done							
the feeling of being in on things							
sympathetic help with personal problems							
job security							
good wages							
interesting work							
easy access to promotion and growth in the organization							
company loyalty							
good working conditions							
support at work							
psychological distress							
For quality check purposes, please check "Disagree" as a response to this item							

II. Opinions on the use of non-convenience foods in food production:

Please consider non-convenience food as: any basic ingredients used in cooking from scratch (for example: fresh vegetables, a block of cheese, a whole chicken)

Please indicate your agreement with the following statements:

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
Using non-convenience foods:							
saves me time							
allows me to reduce labor costs							
allows me to better control cost per portion							
helps me build good customer relationships							
allows me to provide consistency of the final product							
facilitates my catering to special groups (ex. people with allergies)							
increases labor costs							
creates a lot of waste							

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
By using non-convenience foods, my final product has:							
balance (in preparation, cutting technique, size of portion, and garnish)							
unique aroma, taste, and texture							
natural flavors							
appetizing colors							
unique use of colors							
unique modeling, arrangement, and shapes							

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
When training my staff to use non-convenience foods:							
training involves active learning							
trainees can learn from one another							
printed materials are comprehensive							
the training environment is informal							
the mood during training is supportive							
follow-up to the training is expected after returning to work							
training includes tests to evaluate what was learned							

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
When primarily cooking with non-convenience foods, chefs/ cooks/ employees experience:							
a full appreciation of work done							
the feeling of being in on things							
sympathetic help with personal problems							
job security							
good wages							
interesting work							
easy access to promotion and growth in the organization							
company loyalty							
good working conditions							
support at work							
psychological distress							

III. Open ended items:

1.) What is the greatest positive aspect of using convenience foods in food production?

2.) What is the greatest downside of using convenience foods in food production?

IV. Demographics:

1. In what year were you born? _____

2. How many years have you been working in food production?
 - less than 5 years
 - 5 to 9 years
 - 10 to 14 years
 - 15 to 19 years
 - 20 or more years

3. What is your current position?
 - Executive Chef
 - Chef de Cuisine
 - Food Production Supervisor
 - Food Service Assistance Senior
 - Other (please specify _____)

4. What percentage of your time, in your current position, do you spend cooking? _____%

5. What percentage of your time, in your current position, do you spend supervising other staff under you who are cooking? _____%

6. Does your current position involve training other employees?
 - Yes
 - No

7. Which category best describes your culinary training/ education?
 - On-the-job
 - Apprenticeship
 - Culinary school
 - BA/BS in culinary sciences
 - Graduate degree in culinary sciences

APPENDIX B (IRB approval)

Virginia Tech IRB Approval Letter

Office of Research Compliance

Institutional Review Board
North End Center, Suite 4120, Virginia Tech
300 Turner Street NW
Blacksburg, Virginia 24061
540/231-4606 Fax 540/231-0959
email irb@vt.edu
website <http://www.irb.vt.edu>

MEMORANDUM

DATE: April 26, 2013

TO: Suzanne K Murrmann, Ioana Dallinger

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires April 25, 2018)

PROTOCOL TITLE: MS thesis convenience products in VT food-service operations

IRB NUMBER: 13-403

Effective April 26, 2013, the Virginia Tech Institution Review Board (IRB) Chair, David M Moore, approved the Amendment request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others. All investigators (listed above) are required to comply with the researcher requirements outlined at:

<http://www.irb.vt.edu/pages/responsibilities.htm>

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As: **Exempt, under 45 CFR 46.110 category(ies) 2**

Protocol Approval Date: **April 22, 2013**

Protocol Expiration Date: **N/A**

Continuing Review Due Date*: **N/A**

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

IRB Number 13-403 page 2 of 2 Virginia Tech Institutional Review Board

Date* OSP Number Sponsor Grant Comparison Conducted?

* Date this proposal number was compared, assessed as not requiring comparison, or comparison information was revised.
If this IRB protocol is to cover any other grant proposals, please contact the IRB office (irbadmin@vt.edu) immediately.

ⁱ Jacques Pépin is world renowned as the host of his acclaimed and popular cooking programs on public television, and as a prolific author and respected instructor. Pépin is the host of many popular public television programs, including his latest series Jacques Pépin: More Fast Food My Way, which premiered in October, 2008. Featuring recipes for fast, healthy meals, this was the twelfth series hosted by Pépin and produced by KQED Public Media in San Francisco. His memoir, *The Apprentice: My Life in the Kitchen*, was published by Houghton Mifflin in 2003 and in paperback in May, 2004. Pépin's most recent book, published by Stewart Tabori & Chang in April 2007, is a visual biography, *Chez Jacques: Traditions and Rituals of a Cook*.

Born in France, Pépin began his formal apprenticeship at the distinguished Grand Hotel de L'Europe at age thirteen. He subsequently worked in Paris, training under Lucien Diat at the Plaza Athénée. From 1956 to 1958, Pépin was the personal chef to three French heads of state, including Charles de Gaulle. Moving to the United States in 1959, Pépin worked first at New York's historic Le Pavillon restaurant, then served for ten years as director of research and new development for the Howard Johnson Company, a position that taught him about mass production, marketing, food chemistry, and American food tastes. He graduated from Columbia University and shared the spotlight with Julia Child in an earlier PBS-TV series that still is shown occasionally on public television stations. This twenty-two show series, *Julia and Jacques Cooking at Home*, was the winner of The James Beard Foundation's Award for Best National Cooking Show—2001, and the duo received a 2001 Daytime Emmy Award from The National Academy of Television Arts and Sciences. There is a companion cookbook to the series he did with Child and also to two earlier public television series he co-hosted with his daughter, *Jacques Pépin's Kitchen: Encore with Claudine* (1998) and *Jacques Pépin's Kitchen: Cooking with Claudine* (1998).

A former columnist for *The New York Times*, Pépin writes a quarterly column for *Food & Wine*. He also participates regularly in that magazine's prestigious *Food & Wine Classic in Aspen* and at other culinary festivals and fund-raising events worldwide. Pépin is the recipient of three of the French government's highest honors: he is a Chevalier de L'Ordre National de la Legion d'Honneur, Chevalier de L'Ordre des Arts et des Lettres (1997) and a Chevalier de L'Ordre du Mérite Agricole (1992). The Dean of Special Programs at The French Culinary Institute (New York), he also is an adjunct faculty member at Boston University. He is a founder of The American Institute of Wine and Food, a member of the International Association of Cooking Professionals, and is on the board of trustees of James Beard Foundation. (PBS food, 2013).