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Secrets of a Head Chef: Exploring Factors Influencing Success in Irish Kitchens

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ABSTRACT

One-hundred and seventy head chefs from the Republic of Ireland scored 59 variables for success on two scales: (a) competencies needed for success (NS), and (b) personal ownership of these competencies (PO). Results showed that variables were rated with means of 1.18 (extremely important) to 3.23 (moderately important). The top three were an ability to work hard, commitment to quality, and knowledge of Hazard Analysis and Critical Control Points (HACCP). Variables rated lower in ownership than importance highlight areas for culinary educators to develop training programs. Average wages of head chefs (objective success) mirror the average industrial wage, but higher wages were gained with longer time working. Eighty percent of head chefs were satisfied (subjective success) in their current jobs. Factor analysis showed the factors needed to succeed in the culinary industry include professionalism, individual characteristics, leadership skills, management skills, and interaction with the job context. Applications for industry include talent management, mentoring future leaders, reducing staff turnover, and curriculum development.

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Introduction

The hospitality sector is one of the most important services sectors in the Irish economy. It directly employs 158,000 persons within 16,000 enterprises. This represents 8% of current economy-wide employment. The sector contributes €3 billion gross value added to the economy. On a comparative level, Ireland was ranked fifth in the EU in relation to the proportion of overall economy-wide employment accounted for by the hospitality-related accommodation and food services sector, behind Greece, Spain, Cyprus, and Malta, representing 7.3% of economy-wide employment. Ireland is currently experiencing a chronic severe shortage of chefs (EGFSN, 2015).

The aim of this study was to examine what it takes to succeed in the culinary industry. Head chefs have succeeded at the top of their profession and therefore have gained valuable experiences and insights into what it takes

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to succeed in the culinary world. Research on chefs is under-represented in the hospitality literature, with research on head chefs particularly rare. Birdir and Pearson (2000) carried out a competencies based study on research chefs, however this sample population represents a small subgroup of the profession of chefs. Balazs' (2001, 2002) qualitative study concentrated on three-starred Michelin chefs in France, examining lessons for leadership. Again, this was a very narrowly defined study, presenting more of a narrative on leadership rather than what it takes to succeed, where the scope of the study was different to the current aim of this study. Another study by Zopiatis (2010) examined the competencies for success but used a sample population of the entire kitchen brigade. By sampling the entire kitchen brigade, opinions about competencies for success may differ with experience and progression within the industry. Therefore the current research fills a gap in the literature by using data gathered from those who have already objectively succeeded in the industry, namely head chefs.

Another issue in exploring the factors for success within the culinary industry is which measures of success to use. Previous research has found that success can be defined objectively by attainments such as pay, promotions, and occupational status (Dries, Pepermans, & Carlier, 2008). Alternatively it can also be defined subjectively using a person's own perception of his accomplishments, future prospects, and sense of career satisfaction (Dries et al., 2008), although, many researchers (Arthur, Khapova, & Wilderom, 2005; Johnston & Phelan, 2016; Nicholson & De Waal-Andrews, 2005) propose that both objective and subjective success are interdependent. Therefore the current research seeks to include both objective and subjective measures of success within the culinary industry.

A common measure of what it takes to succeed is a competency model. Katz (1955) was the first to examine managerial competencies and developed a three-category model that included technical, human, and conceptual competencies. Sandwith (1993) expanded this model by elaborating and dividing the human competencies into interpersonal, leadership, and administrative competencies. However, in developing a competency model Sandwith (1993) argued that any organization using a competency model would have to adapt it to competencies that are relevant for that business. Zopiatis (2010) successfully developed a competency model for use within the culinary industry. However, in reviewing the literature on competencies and success, it can be seen that more variables have been found to influence success than the ones included in the study by Zopiatis (2010). For example Wang, Horng, Cheng, and Killman (2011) found that the factors influencing food and beverage employees' career success in Taiwan can be broadened to include Bronfenbrenner's (1979) ecology of career development. Wang et al. (2011) demonstrated that it is not just the internal competencies of an individual that enables them to succeed but there is also an interaction with the environment or context in which that individual is placed.

Another factor to be considered on influencing success, which is not adequately covered by any competency model, is the issue of personality. The literature shows that personality plays a role in mediating the individual's perceptions about his own career success (Judge, Higgins, Thoresen, & Barrick, 1999; Melamed, 1996; Seibert & Kraimer, 2001; Wu, Foo, & Turban, 2008). Therefore the current study was envisioned to have a theoretical framework that was broad enough to take account of competencies, environmental factors, and personality factors in order to examine what it takes to succeed as a chef.

The current research furthers our understanding and knowledge of the factors needed to succeed within the professional kitchen by surveying those who have already objectively succeeded within the industry, namely head chefs. This knowledge will benefit future culinary arts students, educators, and current employees in highlighting the factors needed for culinary success. Findings can be used in selecting, developing, coaching, or mentoring tomorrow's industry leaders (Chung-Herrera, Enz, & Lankau, 2003) by providing insight for employers wishing to identify suitable candidates for promotion to senior positions based on recognition of important characteristics for success. In this regard, they are essential for companies that hope to remain competitive as they can be used to plan for management succession or the selection, recruitment, and training of staff (Sengupta, Venkatesh, & Sinha, 2013). Understanding the factors contributing to culinary success may also help reduce high levels of turnover within the industry (Allen & Mac Con Iomaire, 2016; EGFSN, 2015; Lydon, 2012; Robinson & Beesley, 2010; Sheehan, 2014; Wang et al., 2011), which is a regular issue for employers in the sector and a particular hot topic in the current Irish hospitality industry.

Literature review

This section sets out the conceptual framework within which the study is set. Research on chefs is underrepresented in the hospitality literature. Historical research on chefs and restaurants has increased in recent years (Davis, 2013; Mac Con Iomaire, 2013, 2014; Mennell, 1996; Spang, 2000). Sociological research on chefs began with Whyte's (1948) study of Chicago restaurants. Wood (1997) noted the lack of methodological work of chefs since Whyte's study as remarkable. Chivers' (1972) doctoral thesis stands out as one of the first to focus particularly on chefs and cooks in the UK, until the work of Fine (1996) in a U.S. context, based on fieldwork in restaurants in Minnesota in the 1980s. Both works are now considerably dated. Research has begun on various aspects of the chef's occupation and culture, including work on kitchen violence and bullying (Alexander, MacLaren, O'Gorman, & Taheri, 2012; Bloisi & Hoel, 2008; Johns & Menzels, 1999), occupational stress (Murray-Gibbons & Gibbons, 2007), retention and training (Pratten, 2003; Robinson & Beesley, 2010), liberal education (Hegarty, 2004; Magnusson

Sporre, Johnson, & Ekström, 2015), and gender (Bartholomew & Garey, 1996; Harris & Giuffre, 2015). However, specific research on head chefs remains extremely rare (Allen & Mac Con Iomaire, 2016). With this in mind, a thorough analysis of the literature on chefs and career success was carried out, as can be seen in the discussion below and in Table 2.

Situating the research in an Irish context

The Irish hospitality industry experienced unprecedented growth during the “Celtic Tiger” years (1994–2007), when dining out moved from an occasional occurrence to a regular pastime. Despite the recession (2008–2014), the numbers of restaurants managed to survive and grow (Mac Con Iomaire, 2014). Ireland has been to the forefront globally in transforming culinary education from a vocational to a liberal paradigm (Hegarty, 2004), with the inauguration of the first BA (hons) in culinary arts in 1999 and the first MSc in culinary innovation in 2007, both at the Dublin Institute of Technology. A culinary arts degree graduate, Mark Moriarty, was crowned San Pellegrino Young Chef 2015, putting Ireland on the global dining map. This was no surprise, as in 2011, the editor of *Le Guide du Routard* noted, “the Irish dining experience is now as good if not better than anywhere in the world” (Mac Con Iomaire, 2015, p. 371).

However, no precise and comprehensive definition of employment in the hospitality sector exists in official statistical publications, an issue highlighted by Allen and Mac Con Iomaire (2016). The Expert Group on Future Skills Needs report (EGFSN, 2015) provides the latest and most comprehensive figures to date. It is estimated that 157,990 persons were employed in hospitality-related roles in the Irish economy during 2014 (based on a quarterly average). This is presented in Table 1 at a detailed occupation

Table 1. Employment figures in the Irish hospitality sector.

Estimate of employment in hospitality sector in Ireland by occupation— 2014 hospitality-related occupation	2014 (Quarterly average)	Percentage of total
Waiters and waitresses	27,509	17.4%
Chefs	23,948	15.2%
Kitchen and catering assistants	23,255	14.7%
Bar staff	18,719	11.8%
Hotel and accommodation managers and proprietors	8,242	5.2%
Restaurant and catering managers and proprietors	6,299	4%
Catering and bar managers	5,724	3.6%
Sales and retail Assistants	5,504	3.5%
Cleaners and domestics	3,810	2.4%
Publicans and managers of licensed premises	3,436	2.2%
Receptionists	3,087	1.9%
Other occupations*	28,457	18%
Total Hospitality Sector	157,990	

Table 2. Studies on career success.

Success variable	Source from literature
Ability to delegate	Butler and Skipper (1983)
Ability to get along with others and form relationships	Steinberg (2010); Balazs (2002)
Ability to motivate others	Zopiatis (2010); Balazs (2002)
Ability to motivate self	Bueno and Tubbs (2004); Zopiatis and Constanti (2007)
Ability to organise	Zopiatis (2010); Balazs (2002)
Adaptation to difficult circumstances	Collins (2001); Murray-Gibbons & Gibbons (2007); Zopiatis (2010)
Agreeable	Judge et al. (1999)
Appreciation of cost management	Gilbert and Guerrier (1997); Zopiatis (2010)
Budgeting	Gilbert and Guerrier (1997); Zopiatis (2010)
Career planning	Pratten (2003)
Careful	Judge et al. (1999)
Commitment to company	Robinson and Beesley (2010); Wang et al. (2011); Iverson and Deery (1997)
Commitment to quality	Balazs (2001); Martin (2004)
Communication skills	Collins (2001); Bueno and Tubbs (2004); Harrington (2005); LeVine (2007); Zopiatis (2010)
Computer skills	Zopiatis (2010)
Confidence	Melamed (1996); Horng and Lee (2006)
Conscientious/Attention to Detail/Diligent	Judge et al. (1999); Cheng (2011)
Critical thinking	Nordhaug (1998); Ko (2012); Harrington (2005)
Culinary skill	Balazs (2001); Lee-Ross (2001); Birdir & Pearson (2000); Antun and Salazar (2005); Zopiatis and Constanti (2007); Johnston and Phelan (2016)
Dealing with change	Zopiatis (2010); Stierand and Lynch (2008)
Decision making	Harrington (2005); Steinberg (2010)
Desire to remain in the job	Antun and Salazar (2005)
Education	Feingold, Wagner, and Mason (2000); Goyette (2008); Steinberg (2010); Hertzman and Maas (2012)
Family support	Kuijpers et al. (2006); Horng and Lee (2009); Wang et al. (2011)
Flexibility	Balazs (2001); Bueno and Tubbs (2004); Akrivos et al. (2007); Lydon (2012)
Fostering teamwork	Balazs (2002); Mac Con Iomaire (2008)
Having a mentor	Aryee and Chay (1994); Joiner et al. (2004); Mac Con Iomaire (2008); Bozionelos (2008)
Having emotional control	Zopiatis (2010)
Having received job training	Lydon (2012); LeVine (2007); Wang et al. (2011)
Innovation	Caraher (2012); Robinson and Barron (2007); Stierand and Lynch (2008); Lydon (2012);
Internalisation of company goals and objectives	Antun and Salazar (2005)
Keeping up to date with current trends	Zopiatis (2010)
Knowledge of culinary flavours	Zopiatis (2010)
Knowledge of food safety systems and law e.g. HACCP	Zopiatis (2010)
Knowledge of profit and loss	Gilbert and Guerrier (1997); Zopiatis (2010)
Knowledge of recipe and menu development	Zopiatis (2010)
Length of time with employer	Wang et al. (2011); Antun and Salazar (2005)
Open minded	Judge et al. (1999); Balazs (2001); Seibert and Kraimer (2001); Bueno and Tubbs (2004); Cheng (2011)
Opportunity to progress with the company	Collins (2001); Wang et al. (2011)
Other job opportunities in the market	Hui (1988); Iverson and Deery (1997); Brien (2004); Jauhari (2006)
Outgoing/Extroverted	Melamed (1996); Judge et al. (1999); Cheng (2011)

(Continued)

Table 2. (Continued).

Success variable	Source from literature
Passion	Parseghian (1995); Horng and Lee (2006); Akrivos et al. (2007)
Perseverance	Dreher and Bretz (1991); Pratten (2003); Horng and Lee (2006)
Person—Job fit	Judge et al. (1999); Wang et al. (2011)
Physical fitness	Akrivos et al. (2007)
Positive attitude	Collins (2001); Zopiatis and Constanti (2007); Iverson and Deery (1997)
Positive atmosphere at work	Collins (2001); Horng and Lee (2009); Wang et al. (2011)
Previous work experience	Seibert and Kraimer (2001); Mesch (2012)
Problem solving	Steinberg (2010)
Professionalism	Zopiatis (2010); Ko (2012)
Respect for others	Bueno and Tubbs (2004); Balazs (2002)
Satisfaction with company	Robinson and Beesley (2010); Iverson and Deery (1997)
Self discipline	Zopiatis and Constanti (2007)
Sensitivity to others	Bueno and Tubbs (2004); Horng and Lee (2006)
Social networking	Dreher and Bretz (1991); Kuijpers et al. (2006); Stierand and Lynch (2008)
Strategic planning	Raybould and Wilkins (2005); Harrington (2005)
Time management	Zopiatis (2010)
Willingness to work hard	Dreher and Bretz (1991); Judge et al. (1995); Pratten (2003); Antun and Salazar (2005)
Work pleasure (enjoying your job) or enthusiasm	Wang et al. (2011)

level. EGFSN (2015) highlighted that the chefs and catering assistants comprised of 47,203 employees, representing 29.9% of hospitality-related employment during 2014. However while figures are given on restaurant, hotel, and catering managers and proprietors, no specific data was available on the number of head chefs employed in the sector.

There is also a 31% turnover of staff in the Irish hospitality industry (Sheehan, 2014), and Ireland has continued to experience a severe chronic shortage of chefs, forcing employers to source chefs from abroad (MRCI, 2008; RAI, 2013). Irish nationals accounted for 69% of employees in the sector during 2014. This is lower than the proportion of Irish employees in the wider economy (85%), signaling the importance of factoring migration into the assessment of possible sources of future skills supply in the hospitality sector. A main skills shortage identified in the EGFSN (2015) report by hospitality businesses was for suitably qualified chefs. Shortages of commis chefs feed into shortages at higher and specialist levels, e.g., demi chef, chef de partie, and pastry chef. The EGFSN (2015) forecasted that between 10,593 and 12,869 new chefs were required to fill future demand from 2015–2020, based on two different scenarios, concluding that if drastic action was not taken in the short to medium term, significant skills shortages were likely to emerge. It is within this Irish context that the current research aims to investigate the factors for success as a head chef in Ireland.

The head chef

The organization of the kitchen is usually quite defined by the progression of roles based on seniority using the *partie system*, which is attributed to Auguste Escoffier (1846–1935). Under this structure, the head chef or *chef de cuisine* was in charge, assisted by a number of *sous chefs* and *chef de partie*, each of which would be in charge of a section in the kitchen and would have a number of *commis chefs* or apprentices working with them. In a large hotel, the head chef could be in charge of up to 100 staff, whereas in a small restaurant, they might only have two or three other chefs in the kitchen (Taylor & Taylor, 1990).

Harrington (2005) sees the head chef as CEO and team members as the board of directors in a business, which is the kitchen. Additionally, Fine (1996) uses images of a professional, an artist, a business man, a manual laborer, a craftsperson, a scientist, a humanist, and a philosopher, thus showing the multifaceted roles that a head chef must possess. A detailed profile of the average head chef has also recently been documented (Allen & Mac Con Iomaire, 2016), which shows the background and demographics of what the average head chef is like. However, most managers rise through the ranks in the workplace (Jauhari, 2006), and many head chefs will have entered their profession at the bottom and worked their way up the occupational ladder (Berta, 2003; Hertzman & Maas, 2012). Balazs (2002) studied three-star Michelin chefs in France and found that they were extremely charismatic and attracted loyalty from their team, which was willing to work long hours, often for little or no pay, to feel part of something special. While there is a rising trend for attaining third level education (Allen & Mac Con Iomaire, 2016; Goyette, 2008), Mac Con Iomaire (2008) noted how in a UK context, Heston Blumenthal and Raymond Blanc achieved culinary greatness without following the traditional apprenticeship or college training. This diversity of training background was also evident in a New York study (Parkhurst Ferguson & Zukin, 1998). However, these individuals and others like Gordon Ramsay possessed such drive, determination, and hard work that they succeeded. Head chefs then merit special attention since they are in a better position than other members of a kitchen brigade to understand what it takes to succeed and progress within the culinary world, having already attained this advancement.

Defining career success

Career success can be viewed as the “positive psychological or work related outcomes or achievements one has accumulated as a result of one’s work experiences” (Judge, Cable, Boudreau, & Bretz, 1995, p. 486). In general, career success is defined by two broad measures, objective career success and subjective career success. Objective career success involves the observable,

measurable, and verifiable attainments such as pay, promotion, occupational status, and skill acquisition or competencies (Dries et al., 2008; Johnston & Phelan, 2016). Nicholson and De Waal-Andrews (2005) outlined six objective success outcomes as being status, material success, social reputation and prestige, knowledge and skills, networks, and health/well being. Subjective career success involves a person's own perception of his accomplishments or self-efficacy, professionalism, future prospects, and sense of career satisfaction (Dries et al., 2008; Johnston & Phelan, 2016). It is more a measure of how an individual assesses his own personal meaning of career success for themselves (Arthur et al., 2005). Nicholson and De Waal-Andrews (2005) outlined six subjective success outcomes as pride in achievement, job satisfaction, self worth, commitment to work, fulfilling relationships, and moral satisfaction. Arthur et al. (2005) proposed that both objective and subjective career success are interdependent, and therefore in this current study, we have aimed to include both measures of career success as the literature demonstrates.

Competency models

Many studies that have looked at factors influencing career success also use competency models, first developed by Katz (1955) and then Sandwith (1993). An individual's competency denotes the "ability to respond to the demands placed on them by [his] environment" (Bueno & Tubbs, 2004, p. 80).

Bueno and Tubbs (2004) interviewed 40 business leaders with international experience and outlined six global leadership competencies. Dries et al. (2008) interviewed 22 managers from banking, food, medical, metal, and tobacco industries and proposed that there were nine regions of career success. However, in developing a competency model, Sandwith (1993) argued that any organization using a competency model would have to adapt it to competencies that are relevant for that particular business.

Whilst a wide variety of data exists on the broader hospitality and tourism industry (Agut, Grau, & Peiro, 2003; Chung-Herrera et al., 2003; Jauhari, 2006; Akrivos, Ladkin, & Reklitis, 2007; Wang et al., 2011), specific research on the culinary world remains proportionally underrepresented. Only four journal articles that examined competencies for success of chefs could be found from database searches (Balazs, 2001, 2002; Birdir & Pearson, 2000; Zopiatis, 2010). The range of variables contributing to success varied greatly between studies, and therefore a broader search in the literature was carried out to identify all the possible variables associated with culinary career success.

Technical skills

Lee-Ross (2001) has proposed that the job of a chef is very technical where one is required to work with speed and accuracy under imposed time

constraints. Strong practical culinary skills are therefore very important in the role of a chef (Antun & Salazar, 2005; Birdir & Pearson, 2000; Zopiatis & Constanti, 2007). These skills may be acquired through education and training or through on the job work experience. The lack of cooking skills is something that has been mentioned as to the state of culinary affairs in the UK, which in itself highlights their importance (Caraher, 2012). Along with practical culinary skills, Zopiatis (2010) has outlined that a knowledge of culinary flavors, recipe and menu development, food safety systems and law (e.g. HACCP), food service operations, and keeping up to date with current international trends are all part of the technical skills required by a chef.

Cognitive skills

Ko (2012) found a significant positive correlation between professional culinary competence and effective learning. This study highlights the importance of general mental abilities and cognitive skills such as critical thinking. It has generally been found that having greater cognitive skills or general mental ability leads to greater career success (Antun & Salazar, 2005; Dreher & Bretz, 1991; Judge et al., 1999; Melamed, 1996). One study by Jepsen & Dickson (2003) even found that cognitive career exploration and early cognitive coping success predicted later success in life.

However, no matter what a person's cognitive ability, having received a good education also aids later success. Despite arguing the case for not going to college, Steinberg (2010) concedes that people who have a college education usually earn more and have less risk of unemployment. Judge et al. (1995) also found that people who had gained a large amount of objective career success generally had impressive education credentials. There is also an increasing trend within the food service industry for those working in the field to attain degrees (Allen & Mac Con Iomaire, 2016; Goyette, 2008).

Education within college is not the only form that is available. On the job training is one of the factors that is listed by Wang et al. (2011) for career success. Le Vine (2007) also advocates the advantages of continuous training for chefs. The aim of training is to improve knowledge, skills, and attitudes to develop new competencies and thus benefit job performance (Agut et al., 2003). Getz (1994) even found that the absence of training made a job more undesirable to potential employees. Therefore training is an important part of the development of career success for an individual (Dreher & Bretz, 1991).

Creativity

Research has demonstrated that there is an increasing demand for creativity within the culinary trade (Caraher, 2012). Indeed Robinson and Barron (2007) have listed creativity as one of the defining features of chef culture. In another study by Robinson and Beesley (2010), they propose that creativity is essential for the success of an organization, as it needs to adapt and change in response

to an ever-changing market environment. Some dimensions of culinary innovation include the artistic aspiration, learning and networking, adaption and diffusion, perceived newness, and change, with continuous and discontinuous change (Stierand & Lynch, 2008). Those with higher levels of creativity also usually are more intrinsically motivated for their work (Wong & Ladkin, 2008).

Despite claims for the essential nature of creativity, Hu (2010) found that creativity was ranked the second least important core competency in innovative culinary development. In another study by Zopiatis (2010) into the core competencies of chefs in Cyprus, it was also found that the least important ranked competency was creativity. Therefore questions remain to the importance of creativity.

Business skills

Gilbert and Guerrier (1997) noticed a new trend beginning to emerge where there was a shift from an operational to a business focus in managers. This involved a new emphasis to reach financial targets, save on costs, and use technology to reduce labor time. Raybould and Wilkins (2005) also noted a decreasing importance in operational and technical skills with an increase in emphasis on corporate and strategic skills in the hospitality industry. Strategy and strategic decision making is seen as important at the position of CEO and at the top management level (Harrington, 2005). The rise of business skills in importance (Ladkin, 2000) and also the advantage of strong entrepreneurial skills (Mac Con Iomaire, 2008) have brought with them a focus also on managerial skills.

Managerial skills

While there may have been a shift away from technical skills towards more business skills in the preceding couple of decades, Ladkin (2000) has also noted a shifting emphasis from craft to managerial skills training, although Birdir and Pearson (2000) noted that some chefs are more focused on the technical skills and others more on management. This has perhaps evolved because of the demand from industry for individuals who are able to solve problems, make decisions, resolve conflict and negotiate, co-operate with others, and listen actively (Steinberg, 2010). Both Agut et al. (2003) and Hu (2010) have differentiated between two core managerial competencies, and these are technical managerial competencies and generic managerial competencies. Ideally leaders within the kitchen have strong practical skills and “soft” people management skills (Zopiatis & Constanti, 2007). While management encompasses leadership with skills and with the people working alongside them, it also involves meeting the need of the company to conform to regulations and legislation (Gilbert & Guerrier, 1997).

Motivational skills

Zetie, Sparrow, Woodfield, and Kilmartin (1994) saw the role of management as creating the environment where everyone can enjoy his work, thus highlighting also the motivational skills needed in leaders within the kitchen environment. People need to get along to boost the bottom line of a company (Amer, 2005), and motivating people to work together and resolve conflicts is part of the job of a manager. Along with being able to motivate others, those who lead in the kitchen have to be able to motivate themselves (Zopiatis & Constanti, 2007) and have a sense of self-efficacy (Antun & Salazar, 2005). Another way of expressing this could be the sense of professionalism that an individual incorporates into his job (Zopiatis, 2010). Research reports on those who have succeeded within the culinary world have also noted the “gritty determination, obsession and tenacity” (Mac Con Iomaire, 2008, p. 55) that they possess. This ability to persevere and work hard (Dreher & Bretz, 1991) defines those who have succeeded within the culinary workplace. Indeed, Pratten (2003) noted that the formula for success from his study was having gone to college and entered the work force at the bottom, many head chefs work their way up through the ranks (e.g. Berta, 2003). Therefore, in addition to the determination to succeed and work for it, there is also a need to be passionate about the job (Parseghian, 1995). Wang et al. (2011) have also named the ability to be passionate about the job as taking “work pleasure.”

One final point to consider in motivating an individual to succeed is the role of having a mentor. Aryee and Chay (1994) found that having a mentor resulted in more job involvement, more organizational commitment, and increased job satisfaction. Joiner, Baartram, and Garreffa (2004) and Bozionelos (2008) also found that having a mentor increases perceived career success. However, even having a network of support, be that informal friendships (Bozionelos, 2008; Iverson & Deery, 1997) or the support of a spouse (Judge et al., 1995) or the wider family (Wang et al., 2011) at home, increases the career success of an individual.

Environmental factors

Wang et al. (2011) demonstrated that it is not just the internal competencies of an individual that enables them to succeed; there is also an interaction with the environment or context in which that individual is placed. In order for a person to succeed at his place of work, there must be a good person–job fit (Judge et al., 1999). Other factors include how the size of a person’s salary was related to the size of the place in which they worked (Melamed, 1996; Seibert & Kraimer, 2001). Another study found that an employee’s position within a company affected his level of career satisfaction (Tu, Forret, & Sullivan, 2006). Iverson and Deery (1997) found that routinization, role

conflict, promotion opportunities, and a negative work atmosphere all affected job satisfaction. Mobility possibilities and dynamics of the current job have also been significantly related to subjective career success (Hui, 1988; Iverson & Deery, 1997; Kuijpers, Schyns, & Scheerens, 2006). Therefore variables measured in the current study have been broadened to include contextual or environmental factors that influence culinary success.

Personality factors

While the models developed by Katz (1955) and Sandwith (1993) both included interpersonal or human competencies, the personality of the individual was not fully considered since it is not a competency. The literature shows that personality plays a role in mediating the individual's perceptions about his own career success (Judge et al., 1999; Melamed, 1996; Seibert & Kraimer, 2001; Wu et al., 2008). These studies show that conscientiousness, extraversion, positivity, independence, and confidence are traits that aid career success while neuroticism and openness are barriers.

Other personality factors or attitudes found to have an influence on career success include a sense of self-efficacy (Antun & Salazar, 2005; Johnston & Phelan, 2016), a protean career attitude (De Vos & Soens, 2008), an ability to persevere and work hard (Dreher & Bretz, 1991), and passion or "work pleasure" (Wang et al., 2011). Therefore this study developed a theoretical framework that was broad enough to take account of competencies, environmental factors, and personality factors in order to examine what it takes to succeed as a chef.

Demographic factors

Gender

Different studies in different cultures have found varying results of the impact of gender on career success. In general, white Western males had higher levels of objective career success (Judge et al., 1995; Melamed, 1996). However, a Chinese study found that women had higher total compensation (Tu et al., 2006), while another study by Seibert and Kraimer (2001) found a non-significant relationship of gender and salary. However an interesting study by Valcour and Ladge (2008) found that among women, those who began childbearing at relatively older ages, those who had fewer children, and those whose childbearing commenced longer ago earned higher incomes. There is also a mixed bag of results in regard to subjective career success, with Ng and Pine (2003) only reporting gender differences on 3 of 14 factors that they investigated. While Hofmans, Dries, and Pepermans (2008) reported that men gave higher ratings of career satisfaction than women on almost all ratings of questionnaire items. Therefore it would be interesting to see the effects of gender on ratings in an Irish context.

Age

Generally the literature seems to suggest higher ratings of subjective career success with increasing age (Hertzman & Maas, 2012; Tu et al., 2006). Gursoy, Maier, and Chi (2008) offered an interesting explanation where they suggest that older generations are more willing to wait their turn rather than expect immediate recognition of the younger generations. Other studies have also proposed that differences in expectations, values, attitudes, and behavior between generational cohorts may be explained by the different cultures prevalent in society at different eras in time (Davidson, McPhail, & Barry, 2011; Lub, Bijvank, Bal, Blomme, & Schalk, 2012).

Perceptions of success

Having examined the literature to find the variables that would influence the career success of a head chef, it was considered how to measure these variables. The format used by Zopiatis (2010) seemed effective, where chefs rated each of the variables on a scale both for importance and also for the level of development personally, and this was the outline used in the current study. By using these two scales of measures, it can be determined if opinions about what is important to succeed actually match the performance and personal ownership of these variables in head chefs or where differences lie. Hansson (2001) questioned the reliability of self-estimates, as it is suggested that they lack the objectivity of a neutral bystander. Indeed, Gunz and Heslin (2005) also suggested that participants may not portray their situation honestly but inadvertently introduce some bias. Therefore a number of internal measures were introduced that measured the same variable in the two sections of the questionnaire and then could be statistically checked that responses matched.

Research question 1 (RQ1)

What are the objective and subjective measures of success for head chefs working in Ireland?

Research question 2 (RQ2)

How do head chefs rate the importance of the variables needed to succeed within the Irish culinary context? And how do they rate themselves on personal ownership of these variables?

Research question 3 (RQ3)

How do perceptions of the variables needed for success (NS) and personal ownership (PO) of these variables compare and are there any significant differences?

Research question 4 (RQ4)

Can the variables for success be grouped together to show the factors needed for career success within the culinary industry?

Methodology

Research instrument

A new questionnaire was devised that followed the format of Zopiatis (2010) but with the addition of some more variables to include competencies for success, personality factors, and environmental factors. The development of the list of variables used in this study (see Table 2) was based on a review of relevant literature from database searches using the search terms of “competencies,” “success,” and “chef”.

The variables are listed in alphabetical order as per the study by Zopiatis (2010) and rated on both needed for success (NS) and personal ownership (PO) scales. Each variable was rated on an Osgood semantic differential rating scale (Osgood, 1964) with seven points rather than the five-point Likert rating scale used by Zopiatis (2010) to avoid central tendency error and to increase the validity of data. The current study also expanded the demographics section used by Zopiatis (2010) to include further detailed measures of the background of head chefs and also measures of both objective and subjective success based on points mentioned in the literature review. An overview of the 19 questions on demographics and success measures is presented in the results section with their findings (Table 3).

Sampling method

A pilot test of the questionnaire was carried out with 10 participant head chefs recruited through a mixture of personal contacts and emails to local establishments. Following this only a few minor adjustments to the questionnaire with wordings and typographical errors were made. The final question from the pilot study asked if anything was unclear or could be improved and was then dropped in the main study. Scale reliability of the pilot test had an alpha coefficient of 0.96, which shows a very high degree of reliability (De Vaus, 1993). Since there were no major changes after the pilot study, these 10 responses were included in the overall findings of the main study.

Table 3. Importance performance grid.

Possible Overkill Quadrant	Low Priority Quadrant
Low Importance	Low Importance
High Performance	Low Performance
Keep up the Good Work Quadrant	Concentrate Here Quadrant
High Importance	High Importance
High Performance	Low Performance

In obtaining the population sample of head chefs, two official bodies, the Restaurants Association of Ireland (RAI) and the Irish Hotels Federation (IHF), were contacted, informed as to the nature of the research, asked for their endorsement and access to their databases of contacts. Two sponsored prizes from food businesses were secured to increase response rates (Oppenheim, 1992). Cover letters were then drawn up that introduced the study, mentioned endorsement of trade bodies, and offered the incentive of a prize-draw for all completed questionnaires (De Vaus, 1993).

Due to the high costs of sending a postal questionnaire, it was decided to send the questionnaire via e-mail, along with a cover letter. E-mails were sent to head chefs all around the Republic of Ireland, a follow-up e-mail was sent two weeks later, and a final e-mail three weeks after to remind participants that the closing date for responses was soon due.

There was quite a low response rate (7.47%) to the e-mailed surveys, 71 returned from about 950 valid addresses. However, a contact was secured from a contract catering firm that runs a number of restaurants in the corporate sector and the survey was sent internally to all 70 of its head chefs via e-mail, and 20 of these were returned (28.57%). To ensure a robust sample size, it was then decided to also personally call in to premises and ask the head chef to fill in the questionnaire and arrange a time to collect the questionnaires. Most of these walk-in collections were in Dublin city but some were also from Wexford, Galway, Sligo, Wicklow, and the greater Dublin region.

Data analysis

In order to answer each of the research questions, a number of tests and statistics were planned as follows and computed using SPSS, version 22.

Research question 1 (RQ1)

What are the objective and subjective measures of success for head chefs working in Ireland?

Descriptive statistics including simple frequencies and mean ratings were computed on head chefs' answers in the demographics section. Since the data cannot be assumed to be normally distributed, non-parametric statistics using Chi-squared tests were used to assess how each of the independent variables in the demographics section related to each of the other independent variables in the demographics section in order to assess any interactions.

Research question 2 (RQ2)

How do head chefs rate the importance of the variables needed to succeed within the Irish culinary context? And how do they rate themselves on personal ownership of these variables?

Each of the 59 variables was rated by head chefs on a scale of 1–7, firstly for its perceived importance to success and then secondly on how they rated their own personal ownership of these variables. Following the method used by Zopiatis (2010), mean ratings for scores on each of the variables on each of the scales were computed and then ranked in order.

Research question 3 (RQ3)

How do perceptions of the variables NS and PO of these variables compare and are there any significant differences?

Importance–performance analysis (Martilla & James, 1977) following the format used by Zopiatis (2010) was used to analyze results in comparing ratings on each of the scales. This test uses the median values of scores given for each variable on each of the two scales and plots them on a two-dimensional grid for performance (PO scale) on the x-axis and importance (NS scale) on the y-axis (see Table 3). High importance and high performance ratings given by the head chefs are denoted by low values on the scales (i.e., closer to 1) while low importance and low performance ratings are denoted by higher values on the scales (i.e., closer to 3). The intersection of the axes in the analysis is determined by obtaining the midpoint (or mean) of all of the median values on each of the scales. The resulting graph highlights where results show “to concentrate,” “where to keep up the good work,” which results have “low priority,” and those that may have “possible overkill.”

Research question 4 (RQ4)

Can the variables for success be grouped together to show the factors needed for career success within the culinary industry?

Factor analysis was planned to assess whether variables on each of the scales could be summarized into key areas.

Results

Demographics

One-hundred and seventy head chefs from around the Republic of Ireland completed the survey. Table 4 shows the demographic profile of the respondents. There were 19 different nationalities represented in the sample, so the data was recoded to having five different areas of the world represented: Ireland, the rest of Europe, Africa, the Americas, and the East (including China, Thailand, Malaysia, Australia, India, and Iran).

Career success

In order to ascertain answers to RQ1, specific measures on the questionnaire were analyzed and cross-referenced. Figure 1 as follows shows a measure of

Table 4. Demographics.

Demographic description	Frequency	Percentage	Demographic description	Frequency	Percentage
Gender			How Data Gathered		
Male	143	84.1%	Email	71	41.8%
Female	25	14.7%	Recruited	20	11.8%
Missing	2	1.2%	Walk In	79	46.5%
Age			Wages		
Under 30	22	13.1%	Under 20k	8	4.7%
31–40	82	48.8%	20–30k	21	12.4%
41–50	54	31.8%	30–40k	48	28.2%
51–60	9	5.3%	40–50k	32	18.8%
61+	1	0.6%	50k+	38	22.4%
Missing	2	1.2%	Missing	23	13.5%
Nationality			Wage Satisfaction		
Irish	114	67%	Totally Agree	33	19.4%
European	28	16.5%	Somewhat Agree	42	24.7%
Eastern	13	7.6%	Neutral	47	27.6%
African	2	1.2%	Somewhat Disagree	27	15.9%
American	2	1.2%	Totally Disagree	15	8.8%
Missing	11	6.5%	Missing	6	3.5%
Marital Status			Current Workplace		
Single	53	31.2%	Hotel	45	26.5%
Married	89	52.4%	Restaurant	111	65.3%
Divorced	13	7.6%	Bakery	7	4.1%
Other	14	8.2%	Missing	7	4.1%
Missing	1	0.6%	Location		
Years Working			Connaught	23	13.5%
0–5	4	2.4%	Ulster	4	2.4%
6–10	24	14.1%	Munster	18	10.6%
11–15	35	20.6%	Leinster (except Dublin)	24	14.1%
16–20	37	21.8%	Dublin	97	57.1%
21–25	41	24.1%	Missing	4	2.4%
26+	28	16.5%	Achievement Felt in Job		
Missing	1	0.6%	Totally Agree	85	50%
Job Satisfaction			Somewhat Agree	57	33.5%
Totally Agree	65	38.2%	Neutral	16	9.4%
Somewhat Agree	71	41.8%	Somewhat Disagree	4	2.4%
Neutral	13	7.6%	Totally Disagree	3	1.8%
Somewhat Disagree	11	6.5%	Missing	5	2.9%
Totally Disagree	5	2.9%	Highest Educational Achievement		
Missing	5	2.9%	Secondary School	19	11.2%
See Work As			Apprenticeship	32	18.8%
Identity	33	19.4%	FETAC course	33	19.4%
Calling	7	4.1%	Degree	60	35.3%
Means to End	7	4.1%	Master's	7	4.1%
Self-Realization	16	9.4%	Other	15	8.8%
Journey	77	45.3%	Missing	4	2.4%
Investment of Skills for	20	11.8%			
Good Society					
Missing	10	5.9%

Figure 1. Wages of head chefs.

the objective success of head chefs, namely their wages. The national average wages of head chefs working in Ireland was an income of €30,001–€40,000. However, Figure 2 shows that those who were earning the highest wages were also working the greatest amount of years ($\chi^2 = 52.835$, $df = 20$, $p = 0.00$). Standardized residuals also showed that those observed to earn more than €50k were significantly more than the expected at 21–25 years.

A measure of the subjective success of head chefs was recorded in their ratings of job satisfaction (see Figure 3). There was a significant relationship ($\chi^2 = 45.628$, $df = 20$, $p = 0.001$) between job satisfaction and years working (see Figure 4). Dissatisfaction was high among those working less than 10 years, with standard residuals for those working less than 5 years at 2.5 for those totally dissatisfied and 3.4 for those somewhat dissatisfied. Standard residuals for those somewhat dissatisfied and working 6–10 years were also of

Figure 2. Wages earned by years working.

Job Satisfaction

Figure 3. Job satisfaction.

Figure 4. Job satisfaction and years working.

note at 2.8. Therefore this suggests a higher than expected amount of dissatisfaction in the early years of work, however job satisfaction then picks up again long term.

Interestingly, job satisfaction was also significantly related to wages earned ($\chi^2 = 30.686$, $df = 16$, $p = 0.015$), as Figure 5 shows. This graph shows that the majority of head chefs who were earning the highest wages were totally satisfied with their jobs, while those earning less were only somewhat satisfied in their jobs. Standardized residuals for this analysis also showed a higher than expected count of satisfaction ratings that were correlated on both scales. For example those totally dissatisfied, somewhat dissatisfied, neutral, somewhat satisfied, and totally satisfied on both scales was higher than expected in each of these points.

Ratings for variables

In order to answer RQ2, participants were asked to rate 59 variables on a scale of 1–7 for how important they thought that each one listed was in contributing to the

Figure 5. Job satisfaction and wages.

success of a head chef in Ireland. This first scale was a rating of the variables “needed for success” (NS scale). They were also asked then to rate on a scale of 1-7 how much they thought they had personal ownership (PO scale) of each of these listed characteristics. An alpha co-efficient of 0.97 showed the scale to be highly reliable (De Vaus, 1993; Oppenheim, 1992). Figure 6 shows the mean ratings given to each of the 59 variables. Mean ratings for each of the traits on the NS scale were between 1.18 and 3.23, which corresponds to “extremely important” and “moderately important.” Thus, even the lowest rated items were still deemed moderately important. Mean ratings for each of the variables on the PO scale were between 1.3 and 2.94, which corresponds to “describes me down to a T” and “yes I have plenty of this trait.” Again, the lowest rated items still reflected variables that head chefs perceived themselves as possessing plenty of these traits.

Importance—Performance analysis

RQ3 involves comparing and contrasting the responses of participant head chefs both on the NS and PO scales. Figure 7 depicts the results of importance—performance analysis.

It can be seen that variables in the “concentrate here” area of the graph are where head chefs have rated variables as high in importance but have rated their PO of such variables as lower. Variables highlighted in this section include: confidence, innovation, keeping up with current trends, self-discipline, communication, budgeting, cost management, motivating others, and delegating.

Another quadrant from this analysis shows the areas that head chefs in Ireland can “keep up the good work” that they are already doing. Variables that were rated high in importance but also high in personal ownership included: work hard, knowledge of HACCP, organized, previous experience, perseverance, knowledge of flavors, passion, professionalism, work pleasure, knowledge of menu development, time management, culinary skill, knowledge of profit and loss,

Traits Important for Success:		Mean:	Personal Ownership of Traits:		Mean:
1. Commitment to Quality		1.18	1. Ability to Work Hard		1.3
2. Organised		1.26	2. Commitment to Quality		1.46
3. Knowledge of HACCP		1.337	3. Knowledge of HACCP		1.5
4. Ability to work hard		1.339	4. Menu Planning		1.603
5. Knowledge of flavour		1.345	5. Knowledge of Flavour		1.607
6. Ability to Motivate Self		1.349	6. Work Pleasure		1.611
7. Conscientiousness		1.41	7. Passion		1.613
8. Professionalism		1.43	8. Professionalism		1.62
9. Menu Planning		1.44	9. Perseverance		1.64
10. Cost Management		1.451	10. Conscientiousness		1.6727
11. Ability to Motivate Others		1.452	11. Organised		1.6728
12. Budgeting		1.458	12. Respect for Others		1.679
13. Culinary Skill		1.46	13. Positive Attitude		1.68
14. Time Management		1.473	14. Culinary Skill		1.69
15. Work Pleasure		1.479	15. Knowledge of Profit and Loss		1.7
16. Knowledge of Profit and Loss		1.48	16. Previous Experience		1.71
17. Ability to Delegate		1.51	17. Flexibility		1.75
18. Positive Attitude		1.521	18. Decision Making		1.762
19. Passion		1.526	19. Ability to Adapt		1.766
20. Communication		1.53	20. Time Management		1.77
21. Decision Making		1.54	21. Problem Solving		1.78
22. Positive Atmosphere		1.55	22. Ability to Motivate Self		1.793
23. Respect for Others		1.56	23. Positive Atmosphere		1.795
24. Ability to Adapt		1.568	24. Fostering Teamwork		1.8
25. Job Training		1.6	25. Ability to Get Along with Others		1.81
26. Flexibility		1.61	26. Company Commitment		1.82
27. Perseverance		1.64	27. Person-Job Fit		1.89
28. Ability to foster teamwork		1.648	28. Dealing with Change		1.89
29. Self Discipline		1.66	29. Open Minded		1.9
30. Problem Solving		1.68	30. Job Training		1.902
31. Keeping up to date with Trends		1.72	31. Desire to Remain in the Job		1.907
32. Confidence		1.77	32. Cost Management		1.91
33. Innovation		1.78	33. Budgeting		1.92
34. Ability to Get Along with Others		1.8	34. Communication		1.93
35. Previous Experience		1.82	35. Opportunity to Progress		1.95
36. Open Minded		1.87	36. Keeping up to date with Trends		1.957
37. Person-Job Fit		1.89	37. Self Discipline		1.963
38. Dealing with Change		1.91	38. Innovation		1.963
39. Company Satisfaction		1.92	39. Confidence		1.97
40. Critical Thinking		1.95	40. Ability to Delegate		2.03
41. Company Commitment		1.97	41. Company Satisfaction		2.031
42. Emotional Control		1.98	42. Ability to Motivate Others		2.036
43. Desire to Remain in the Job		2	43. Education		2.073
44. Opportunity to Progress		2.01	44. Critical Thinking		2.074
45. Planning		2.09	45. Length of Time with Employer		2.08
46. Internalisation of Company Objs		2.12	46. Emotional Control		2.09
47. Careful		2.15	47. Family Support		2.09
48. Having a Mentor		2.3	48. Careful		2.193
49. Family Support		2.33	49. Planning		2.198
50. Sensitivity		2.34	50. Internalisation of Company Objs.		2.22
51. Career Planning		2.37	51. Sensitivity		2.25
52. Physical Fitness		2.41	52. Physical Fitness		2.3
53. Time with Employer		2.5	53. Extroverted		2.46
54. Education		2.53	54. Agreeable		2.49
55. Agreeable		2.58	55. Career Planning		2.54
56. Other Job Ops in Market		2.66	56. Having a Mentor		2.62
57. Extroverted		2.79	57. Other Job Ops in Market		2.7
58. Networking		2.92	58. Computer Skills		2.93
59. Computer Skills		3.23	59. Networking		2.94

Figure 6. Ratings for variables on each scale.

Figure 7. Importance—Performance analysis.

conscientiousness, respect, flexibility, positive work atmosphere, able to motivate self, decision making, able to adapt, problem solving, team building, training, able to get along, commitment to quality, and a positive attitude.

Variables that were considered of “low priority,” where they were rated both lower in importance and also low in PO, included: dealing with change, opportunity to progress in the company, family support, company satisfaction, critical thinking, emotional control, strategic planning, internalizing company objectives, carefulness, physical fitness, sensitivity, education, having a mentor, career planning, agreeableness, being extroverted, networking, and having computer skills.

And finally, variables that were rated higher in PO than considered in importance for success, which fall in the “possible overkill” quadrant, included: having other job opportunities, length of time with their current employer, desire to remain in the job, person-job fit, company commitment, and open mindedness. These variables do not pose issues for head chefs working in Ireland. It is important to note that even the lowest variables were rated as moderately important.

How demographics affected ratings

Each of the 19 demographic independent variables was cross-referenced with the scoring for each of the success scales that head chefs rated. There were 147 significant relationships between the demographics and how head chefs rated each of the 59 characteristics that they thought were needed for success. Similarly there were 158 significant relationships between the demographics and how head chefs rated PO of the listed characteristics on the success scale. The most significant independent variable was that of “work perspective.” Nationality was the independent variable that most affected how ratings on the PO scale

were distributed. Age, years working, number of previous jobs, wages earned, job satisfaction, education, achievement felt in current job, marital status, gender, and how the data was gathered all showed interaction with how variables were rated on each of the scales. However, a detailed breakdown of these findings is outside the scope of this article but may form the substance of a separate article.

Factor analysis

The final aim of this research (RQ4) was to see if a model could be constructed that would summarize all the factors for success as a head chef, combining competencies, personality, and environmental variables. In this regard, factor analysis was carried out on both the NS and PO scales to see if variables could be grouped together under common themes. Therefore the 59 variables listed for both the NS scale and the PO scale were subjected to principal components analysis (PCA) using SPSS, version 22. The Kaiser–Meyer–Olkin (KMO) value for the NS scale was 0.84 and for the PO scale 0.874, exceeding the recommended value of 0.7 (De Vaus, 1993) for scales suitable for factor analysis. Bartlett's test of sphericity reached statistical significance for both the NS scale ($\chi^2 = 5093.932$, $df = 1653$, $p = 0.000$) and the PO scale ($\chi^2 = 5436.88$, $df = 1770$, $p = 0.000$) also, supporting the factorability of the correlation matrix.

NS scale

PCA revealed the presence of 15 components with eigenvalues exceeding 1, explaining 68.7% of the variance. An inspection of the scree plot (see Figure 8) revealed a leveling out effect after the third component. Varimax rotation was performed and the rotated solution revealed a number of medium strength loadings that explained 14.95%, 12.36%, and 10.57% of the variance, respectively. Each of the characteristic groupings could be summarized as comprising of the three factors of professionalism, leadership skills, and interaction with job context (see Table 5).

Factor 1—Professionalism: (average mean = 1.533, average rank = 18.2)

Factor 2—Leadership Skills: (average mean = 1.658, average rank = 24.2)

Factor 3—Interaction with Job Context: (average mean = 2.187, average rank = 43.96)

PO scale

PCA revealed the presence of 15 components with eigenvalues exceeding 1, explaining 70% of the variance. An inspection of the scree plot revealed a leveling out effect after the fifth component (see Figure 9). In the interpretation of these five components, Varimax rotation was performed. The rotated solution revealed a number of medium strength loadings that explained 12.99%, 10.98%, 10.47%, 7.81%, and 7.62% of the variance, respectively. On examination of the five components, it was noted that each of the

Figure 8. Scree plot for NS scale.

characteristic groupings could be summarized as comprising of the factors as outlined in the following. Details of component characteristics for each factor are indicated on Table 6.

- Factor 1—Professionalism: (average mean = 1.8, average rank = 22.39)
- Factor 2—Individual Characteristics: (average mean = 1.846, average rank = 26.17)
- Factor 3—Management Skills: (average mean = 1.836, average rank = 30.07)
- Factor 4—Leadership Skills: (average mean = 1.944, average rank = 29.21)
- Factor 5—Interaction with Job Environment: (average mean = 2.13, average rank = 38.91)

Discussion

Main findings on career success

The first objective of the current study was to investigate the measures of success for head chefs working in Ireland. One objective measure of success found that on average, head chefs working in Ireland were earning between €30,000–€40,000 per annum. These figures correspond to the average industrial wage in Ireland (MRCI, 2008). Therefore, the highest achievers in the culinary world are only earning the equivalent of mid-level workers in the industrial sector. A frequent complaint about the culinary industry is the low pay (Collins, 2001; Hertzman & Maas, 2012; Iverson & Deery, 1997; Mac Con Iomaire, 2008; Pratten, 2003; Wang et al., 2011). Results from the

Table 5. Factor analysis of variables needed for success.

1. Professionalism	Correlational value	2. Leadership skills	Correlational value	3. Interaction with job context	Correlational value
Organize	0.699	Commitment to Quality	0.325	Work Pleasure	0.312
Adapt	0.685	Works Hard	0.347	Sensitivity	0.716
Conscientious	0.682	Decision Making	0.384	Physical Fitness	0.655
Communication	0.654	Time Management	0.417	Computer Skills	0.645
Quality	0.649	Ability to Delegate	0.37	Time with Company	0.614
Commitment	0.64	Problem Solving	0.342	Education	0.597
Work Hard	0.634	Knows Flavors	0.336	Extroverted	0.596
Motivate Self	0.602	Time with Company	0.369	Career Planning	0.588
Team Building	0.572	Internaliaation of Company Obs.	0.422	Networking	0.581
Motivate Others	0.557	Company Commitment	0.386	Internaliaation of Company Obs.	0.572
Decision Making	0.537	Company Satisfaction	0.411	Agreeable	0.557
Confidence	0.535	Opportunity to Progress	0.702	Company Commitment	0.555
Culinary Skill	0.52	Know Menu Development	0.686	Company Satisfaction	0.516
Cost Management	0.513	Know HACCP	0.61	Emotional Control	0.475
Flexibility	0.503	Know profit & loss	0.549	Other Jobs Ops in Market	0.445
Time Management	0.47	Professionalism	0.543	Planning	0.433
Training	0.457	Respect	0.525	Person-Job Fit	0.417
Perseverance	0.446	Innovation	0.482	Family Support	0.413
Budgeting	0.433	Desire to Remain in Job	0.473	Have Mentor	0.389
Ability to Delegate	0.426	Open Minded	0.456	Gets Along with Others	0.378
Problem Solving	0.424	Self Discipline	0.448	Previous Work Experience	0.34
Dealing with Change	0.418	Positive Attitude	0.447	Careful	0.339
Critical Thinking	0.404	Positive Atmosphere	0.445	Respect	0.344
Know Flavors	0.337	Passion	0.385	Innovation	0.316
Work Pleasure	0.316	Keeps up with Current Trends	0.317	Desire to Remain in Job	0.366
Previous Experience	0.308			Open Minded	0.307
Know Menu Development	0.454			Self Discipline	0.323
Professionalism	0.426				
Self Discipline	0.346				
Positive Attitude	0.365				
Passion					

current study though show that 44.1% were satisfied with their wages, with a further 27.6% being neutral and only 24.7% were dissatisfied with their wages. However, the current study does show that those who were working for a greater number of years in the industry were earning higher wages. In

Figure 9. Scree plot for PO scale.

general, success as a chef and making it to the top of a kitchen brings rewards financially and many head chefs are satisfied with their earnings.

The fact that the star rating, the type of establishment (i.e., small family run business or a part of a large chain), and the size of the establishment where the chefs worked with seats/covers unaccounted for in the present study is a weakness that might have further explained variance in wages. Both Seibert and Kraimer (2001) and Melamed (1996) found that salaries were influenced by the size of the firm in which the individuals worked.

Subjective success was recorded in the ratings of job satisfaction, and the majority of head chefs (80%) were satisfied in their jobs. Higher job satisfaction came with an increase in years working, although there was a slight dip in overall satisfaction until head chefs were working 10 years. However, older generations do have more job satisfaction than those newly qualified (Gursoy et al., 2008; Hertzman & Maas, 2012). Job satisfaction also correlated with wages earned, thus confirming Arthur et al.'s (2005) assertion that objective and subjective career success are interdependent.

Variables needed to succeed as a head chef and personal ownership of them

The second aim of the current research was to investigate perceptions of what contributes to success of head chefs working in Ireland. Table 4 outlines the mean ratings of the 59 variables in descending order for both the NS scale and

Table 6. PO factor analysis of traits.

1. Professionalism	Correlational value	2. Individual characteristics	Correlational value	3. Management skills	Correlational value	4. Leadership skills	Correlational value
Person–Job Fit	0.647	Work Hard	0.398	Able to Adapt	0.319	Menu Planning	0.405
Problem Solving	0.641	Decision Making	0.335	Know Flavors	0.310	Critical Thinking	0.332
Previous Work Experience	0.623	Able to Adapt	0.307	Family Support	0.340	Job Training	0.302
Work Hard	0.600	Perseverance	.405	Gets Along with Others	0.338	Networking	0.368
Know HACCP	0.558	Flexible	0.385	Communication	0.319	Internalize Company Objs.	0.300
Decision Making	0.557	Respect	0.341	Budgeting	0.731	Professionalism	0.451
Ability to Adapt	0.548	Opportunity to Progress	0.386	Cost Management	0.681	Organized	0.386
Confidence	0.535	Open Minded	0.447	Knows Profit & Loss	0.549	Conscientious	0.310
Perseverance	0.515	Emotional Control	0.376	Able to Delegate	0.525	Time Management	0.690
Menu Planning	0.512	Family Support	0.330	Organize	0.489	Self Disciplined	0.617
Work Pleasure	0.501	Positive Attitude	0.633	Career Planning	0.455	Innovative	0.572
Deal with Change	0.500	Gets Along with Others	0.627	Other Job Opportunities	0.429	Strategic Planning	0.565
Critical Thinking	0.469	Professional	0.611	Conscientious	0.414	Culinary Skill	0.561
Culinary Skill	0.451	Self Motivated	0.595	Motivates Others	0.406	Keeps up with Trends	0.527
Desire to Remain	0.443	Passion	0.589				
Job Training	0.429	Positive Work Atmosphere	0.550			5. Interaction with Job Environment	Correlational Value
						Work Pleasure	0.395
Flexible	0.423	Physical Fitness	0.511			Flexible	0.421
Knowledge of Flavors	0.403	Fosters Teamwork	0.482			Sensitive	0.740
Innovative	0.396	Communication	0.455			Company Satisfaction	0.704
Conscientious	0.376	Extroverted	0.357			Networking	0.673
Motivates Others	0.372	Organized	0.321			Respect	0.600
Education	0.371	Motivates Others	0.380			Agreeable	0.570
Know Profit & Loss	0.351	Time Management	0.438			Desire to Remain	0.562
Passion	0.344	Self Disciplined	0.376			Internalize Company Objs.	0.514
Cost Management	0.336					Opportunity to Progress	0.497
Fosters Team Work	0.336						

(Continued)

Table 6. (Continued).

1. Professionalism	Correlational value	2. Individual characteristics	Correlational value	3. Management skills	Correlational value	4. Leadership skills	Correlational value
Open Minded	0.326					Time with Employer	0.458
Communication	0.325					Open Minded	0.449
Budgeting	0.323					Emotional Control	0.434
Organised	0.318					Family Support	0.401
Internalise Company Obj's.	0.316					Has Mentor	0.356
Time with Employers	0.307					Computer Skills	0.315
Positive Attitude	0.304					Positive Attitude	0.310
						Positive Work Atmosphere	0.408
						Fosters Team Work	0.353
						Career Planning	0.416
						Other Job Ops.	0.357
						Self Disciplined	0.337
						Strategic Planning	0.406

the PO scale. It is noteworthy that four of the top five traits on both scales are common: commitment to quality, ability to work hard, knowledge of HACCP, and knowledge of flavor. The top five traits are also found in the international literature on career success (Antun & Salazar, 2005; Balazs, 2001, 2002; Dreher & Bretz, 1991; Judge et al., 1995; Pratten, 2003; Zopiatis, 2010). Those variables that were rated lowest on the scales include networking, computer skills, and extraversion. However, even these variables were still rated as moderately important. How variables were rated had some commonalities and some differences to the results of the Cypriot chefs (Zopiatis, 2010) and Taiwanese food and beverage employees (Wang et al., 2011), but direct comparison with either these studies is not possible due to different methodologies, variables, and population samples. It was also found that demographics significantly impacted how the head chefs rated each of the scales.

Importance—Performance analysis

In answering the third research question of this study, importance—performance analysis highlights how results from both the NS and PO scales could be compared. Findings show four quadrants, which are labeled “concentrate here,” “keep up the good work,” “low priority,” and “possible overkill.” The most important quadrant of this analysis is the “concentrate here” section. Variables included: confidence, innovation, keeping up with current trends, self-discipline, communication, budgeting, cost management, motivating others, and delegating. This analysis provides useful data for culinary educators or industry bodies, such as the RAI, IHF, Bord Bia, and Fáilte Ireland, in developing continuous professional development courses. Innovation and keeping up with current trends is an emerging area of importance for chefs and the development of a master’s course in this area in recent years has been a foresight for the culinary industry in Ireland. Concentrating on budgeting and cost management has also been an area that has been highlighted in research literature over the past number of years (Gilbert & Guerrier, 1997; Raybould & Wilkins, 2005; Zopiatis, 2010) and is of greater importance since the economic recession in Ireland.

Factor analysis to develop culinary model for success

The current study developed a measure of the variables for culinary success that were based on competencies, personality, and the context of the individual. In addressing RQ4, these measures were then subjected to factor analysis to group the variables together for easier summation of the factors influencing success that was specific to the culinary industry. Findings showed that the factors needed for success could be grouped as professionalism, leadership skills, and interaction with the job context. For how head chefs rated themselves, the factor analysis resulted in five groupings, which

can be summarized as professionalism, individual characteristics, management skills, leadership skills, and interaction with the job environment. Interacting with the job context probably most reflects the work of Wang et al. (2011) and shows how individuals are impacted by education, personal outlooks, and having support in how they fit into and attain success with a company. While the job environment and context of employment were the lowest ranked factor in both the NS and PO scales, this factor did have a moderate correlation with success and should still be considered in Western cultures. This research shows the factors that are needed for success specifically within the culinary industry are broader in scope than Zopiatis' (2010) study, as competencies, character traits or personality, and the context of the workplace for head chefs all impact on their success.

Recommendations and conclusion

Culinary students should be aware that a broad range of skills and competencies is required from those who wish to progress to the top of the culinary world. Factors needed to succeed and those involved in becoming a successful head chef include professionalism, leadership skills, individual characteristics, management skills, and how the individual interacts within the job context or environment. Students should also be prepared to be patient for success, as the majority of head chefs who were earning the highest wages had been working for many years.

Results also highlight areas that head chefs may benefit from further training or continuous professional development courses. Perhaps these are areas that third-level institutes or supporting bodies could consider for running as short courses or evening classes.

Findings from the current study can also be used to build a model for success within the culinary workplace that develops tomorrow's industry leaders, both at the educational level but also at the industry level. Results can be used both in the development of curricula and also as key objectives in learning outcomes. In the industry, findings can be used at the recruitment, selection and training stages of employment, and also with talent management. Perhaps findings may even be useful for the development of performance appraisals, benchmarking, and reward systems in the continuous professional development of staff within the industry.

One factor that is growing in importance, both in Ireland and globally, but was not found in the literature was the area of social media, particularly rating sites such as TripAdvisor and Yelp, and the power of Twitter. Computer skills and communication were measured in this study, but it is important to note that head chef management of the online work environment or social media was not part of this study. Academic research in this area is sparse (Rousseau, 2012), but perhaps any future study might include

it, or study the phenomenon of how a chef's life and satisfaction are impacted by social media separately.

Finally, the authors recommend that future scholars might test the findings from this article in other countries to see if there is a difference in how other cultures rate the factors for culinary success.

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