

# HOSPITALITY UNDERGRADUATE PERCEPTIONS OF THEIR FUTURE JOB SECURITY AS AFFECTED BY INCREASED AUTOMATION AND THE RELATION TO EMOTIONAL INTELLIGENCE

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## ABSTRACT

Greater automation in foodservice is forecasted to result in significant job displacement by 2030. To maintain their jobs, managers and employees alike will need to display proficiency in social skills associated with emotional intelligence. This study investigated hospitality management undergraduate students' perceptions of job insecurity linked with increasing automation as related to emotional intelligence. Students with both front and back of the house experience had greater emotional intelligence across three subscales compared to those with only front of the house or only back of the house experience. These results provide new evidence for preparing students for a foodservice career through jobs with variations in emotional labor.

**Keywords:** automation; job insecurity; emotional intelligence; hospitality; foodservice

## INTRODUCTION

The world is rapidly changing due to advances in technology centered around computer-based systems. The foodservice industry has responded to these changes through implementing automation in a variety of tasks, driven by higher labor costs coupled simultaneously with decreased technology costs (Tanyeri, 2018). It is projected that compared to 2015, by 2030 the foodservice industry could use automation technology to decrease operating costs by as much as 15% (Harris, Kimson, & Swedel, 2018). Advances in artificial intelligence have enabled robots to flip burgers, make pizzas, and brew coffee, among other tasks (Tanyeri, 2018). Self-service kiosks and mobile app ordering have been implemented in major restaurant chains, automating a portion of jobs once held by traditional cashiers (Dunn, 2017).

There is very little research on the impact of automation on foodservice jobs, with much of what is known coming from industry sources. Based on a report out of the McKinsey Global Institute, 73% of tasks performed by foodservice and accommodation workers could be automated (Chui, Manyika, & Miremadi, 2016b). Research out of the University of Oxford suggests waiters, cashiers, and food preparation employees rank among the professions with the highest probability of being replaced by automation (Whitehouse & Gambrell, 2017). Job replacement would not take place overnight, but rather steadily, and by the year 2030, 35% of all of food preparation jobs and 5-14% of foodservice host jobs could be replaced by automation (Manyika et al., 2017). Greg Creed, CEO of Yum! Brands, predicts fast-food workers will be replaced by automation within the next ten years (Dunn, 2017). Another study suggest fast-food workers have a 92% chance of their jobs being replaced by automation (Frey &

Osborne, 2017). This raises questions as to what kind of psychological impact these changes will have on foodservice workers.

Anecdotal reports indicate greater use of robotics can raise employee concerns over their own job security (Chao & Kozlowski, 1986). While employees who conduct low-skilled tasks characterized by predictable, physical labor (i.e. loading and unloading a dock) tend to exhibit greater concerns over job loss (Chao & Kozlowski, 1986; Vieitez, Carcia, & Rodriguez, 2001), this anxiety could likely spread to more high-skilled employees with technical training and managerial responsibilities given recent advances in technology (Huang & Rust, 2018). Job insecurity plays an important role in occupational health across a broad range of professions. A meta-analytic review suggests job insecurity is related to depression, anxiety, and low satisfaction in life; the review encompassed over 54,000 employees of varying skill levels from varying industries (Llosa, Menéndez-Espina, Agulló-Tomás, & Rodríguez-Suárez, 2018). One study of 148 automobile workers found a significant relationship between employees' perceptions of how secure their jobs were as affected by technological change and their psychological well-being, including anxiety and depression (Vieitez et al., 2001).

While some scenarios reflect a future with massive foodservice worker unemployment, both history and empirical evidence point to the contrary. According to David H. Autor, Professor of Economics at MIT, the employment to population ratio increased in the 20<sup>th</sup> century despite more ubiquitous automation (2015). This mirrors a report put out over 50 years ago by the Lyndon B. Johnson Administration which reached the conclusion that, rather than threatening employment, "technology eliminates jobs, not work" (Bowen, 1966). For example, with regards to foodservice, this might entail a burger-flipping robot replacing a line cook. However, the increased speed and efficiency of the robot might enable the restaurant to produce more food quicker and at a higher volume, thus necessitating hiring more human workers to fill orders and deliver them than before the robot was installed, a net increase in jobs.

Advanced technology can affect labor dynamics to where humans complement the technology or complete tasks less conducive to automation. For example, "cobots" are a type of helper robot that works alongside humans in manufacturing to increase labor productivity (Harris et al., 2018). One restaurant chain that utilized mobile phone apps and kiosks for digital ordering witnessed increased sales growth by multiple percentage points and a more efficient process, leading to higher volume orders and, ultimately, net job creation (Dunn, 2017). More human labor was reallocated to table service and deliveries. The bigger problem facing foodservice workers may not be job replacement, but rather displacing of lower skilled occupations to those requiring abilities more difficult to automate.

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Conservative estimates indicate 15% of all work activities across all industries worldwide could be displaced by 2030 as a result of automation (Manyika et al., 2017). Food preparation tasks in particular are routine and predictable, making them highly susceptible to automation (Brynjolfsson & McAfee, 2014); foodservice workers spend close to 50% of their time doing food preparation tasks that can be automated (Chui, Manyika, & Miremadi, 2016a). While foodservice hosts and prep cooks are likely to experience a net decrease in employment opportunities, combination food preparation and service worker jobs are expected to increase by nearly 550,000 by 2030 (Manyika et al., 2017). The work environment at a popular fast casual restaurant chain lends support to this forecast, as workers were diverted to less computer friendly tasks such as personal interactions with customers, assembling orders, and checking orders before delivery (Dunn, 2017). In-person interactions are some of the most difficult processes to computerize (Huang & Rust, 2018). For example, the job of foodservice general managers, which entails motivating and interacting with a myriad of personality types, has a low probability of being automated (Whitehouse & Gambrell, 2017).

Generally speaking, computers are very proficient in performing predictable, rule-based tasks such as brewing coffee or producing the same food product over and over (Brynjolfsson & McAfee, 2014). By contrast, human interactions involve unpredictability and randomness given the wide spectrum of emotions and scenarios involved. Research on artificial intelligence by Huang and Rust (2018) suggests jobs that involve empathetic intelligence associated with emotion recognition and regulation are least susceptible to automation. As the workplace becomes more digitized, "intuitive and empathetic skills will be the most lasting comparative advantages of human service" (Huang and Rust, 2018). Alongside large frame pattern recognition and the ability to ideate, humans have greater complex communication skills than computers (Brynjolfsson & McAfee, 2014).

Despite rapid increases in technological innovation, humans are likely to still have the upper hand in this area of social skills for some time in the future (Brynjolfsson & McAfee, 2014). By 2030, workers will spend an estimated 34-38% additional hours devoted to activities that entail social and emotional aptitudes compared to their current position descriptions (Manyika et al., 2017). Social skills are a key factor in employability and increased automation means employers can afford to be more selective in the hiring process (Hogan, Chamorro-Premuzic, & Kaiser, 2013). Both high and low skilled workers must improve their emotional intelligence (EI) to maintain their job security in foodservice while avoiding job displacement.

EI has been identified as "a set of interrelated abilities possessed by individuals to deal with emotions" (Wong & Law, 2002). This skillset encompasses "the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth" (Mayer & Salovey, 1997). A study of 187 foodservice workers found a positive relation between EI, job satisfaction, and job performance (Sy, Tram, & O'Hara, 2006). Executives in the automated foodservice industry who had higher EI had significantly higher stress management skills and coping abilities compared to those with lower EI (Cha, Cichy, & Kim, 2009). Work incivility can lead to emotional exhaustion, but a study of restaurant frontline service found the extent of this exhaustion was moderated by an employee's ability to regulate emotions (Cho, Bonn, Han, & Lee, 2016). EI carries ramifications for both the mental health of employees and the fiscal health of restaurants; in another study,

higher profit performance, customer satisfaction, and employee satisfaction were associated with greater EI of general managers (Langhorn, 2004).

The components of EI, including self-emotion appraisal, others' emotional appraisal, use of emotion, and regulation of emotion, benefit workers by serving as a personal resource for coping with stressful situations (Cheng, Huang, Lee, & Ren, 2012). Low EI is associated with negative reactions to job insecurity (Jordan, Ashkanasy, & Hartel, 2002). Two studies involving nurses and real estate agents found negative correlations between job insecurity and EI (Cheng et al., 2012; Cheung, Gong, & Huang, 2016).

Within foodservice there is variation in the amount of customer interaction that would demand higher EI and skillsets less prone to automation. For example, a server may need to effectively regulate their emotions when conversing with unhappy customers. By contrast, a prep cook who spends their time relatively isolated in the kitchen, divorced from customer interaction, may not have these same demands for strong EI skills. This discrepancy in job requirements can be conceptualized as emotional labor, or "the extent to which the job requires the management of emotions to achieve positive job outcomes" (Wong & Law, 2002). Front of the house positions such as servers, hosts, and cashiers are considered high emotional labor jobs, while back of the house positions, such as cooks and dishwashers, are classified as low emotional labor jobs (Adelman, 1989). Emotional labor can moderate the effect EI has on employee attitudes, as high emotional labor jobs are associated with greater turnover intention and organizational commitment when EI is high (Wong & Law, 2002). Workers exposed to more emotionally demanding jobs may thus be able to cope more effectively with negative emotions.

The information from this study may shed light on the role of EI as a competitive advantage for students entering the foodservice industry, especially as society becomes more technology driven. EI skills are often lacking in school curriculum (Manyika et al., 2017), despite the fact that EI can be improved through training (Mattingly & Kraiger, 2018). One study found hospitality students were able to improve their EI over time when lessons with EI were incorporated as part of the instructional materials (Wolfe, 2017). Many education systems are, in some regards, outdated and based around teaching students skills required to excel in the economy of 19<sup>th</sup> century England (Brynjolfsson & McAfee, 2014). These skills, which include arithmetic, reading, writing, and memorizing facts, are fundamentally important and should be kept in the curriculum. However, forward planning school curriculums must emphasize social skills and EI to equip students for the workforce as projected automation usage increases. Several studies suggest EI training should be integrated into the curriculum for hospitality students in higher education (Scott-Halsell, Shumate, & Blum, 2007; Wolfe, Phillips, & Asperin, 2014).

The purpose of this study was to investigate hospitality management undergraduate perceptions of job stability as affected by the increasing prevalence of robotics and automation, along with indicators of emotional intelligence. Four study objectives were identified: 1.) Determine if future foodservice workers experience job insecurity due to robotics and automation in the hospitality industry 2.) Determine the relation between EI and job insecurity due to robotics and automation 3.) Determine the relationship between EI and type of foodservice experience 4.) Explore the need for more support for greater skill development in EI in hospitality management curriculum.

## MATERIALS AND METHODS

### Sample and Procedures

A convenience sample of hospitality management students were surveyed from two universities, one in the Northeast and one in the Midwest. Before data collection began, the Institutional Review Board from each university approved the study. An online survey platform was used to collect data.

### Materials

A seven-point Likert scale ranging from “1 = Strongly disagree” to “7 = Strongly agree” was used to measure all survey items. Perceptions of job insecurity rendered by increased robotics and automation in the hospitality industry consisted of ten questions adapted from Chao and Kozlowski (1986). This scale has been used previously to assesses the type of employees in a large-batch manufacturing plant (Chao & Kozlowski, 1986) and a factory that manufactured car components (Vieitez et al., 2001). To the best of the researchers’ knowledge, hospitality student perceptions of job insecurity rendered by increased robotics and automation in the hospitality industry have yet to be evaluated. For the sake of brevity, this variable will be referred to as simply “perceptions of job insecurity.”

EI was assessed with the scale developed by Wong and Law (2002), previously validated as a psychologically sound tool for measuring EI. This scale included self-emotion appraisal, others’ emotion appraisal, use of emotion, and regulation of emotion, each of which consisted of four items each. Cronbach’s alpha for this scale was 0.90 for the study sample of undergraduates. Additionally, demographic variables collected included age, gender, years of experience in hotels and foodservice, whether students anticipated working in the hospitality industry after graduation, and type of foodservice experience. Type of foodservice experience was categorized using common terminology used in foodservice operations and familiar to participants, including “Back of the house”, “Front of the house”, “Both”, and “I don’t have foodservice experience”. Specific examples of front and back of the house jobs were given to participants: (a) Back of the house (i.e. chef, line cook, prep cook, preparing food); (b) Front of the house (i.e. waiting tables, serving food, cashier, host/hostess, busser).

### DATA ANALYSIS

Of the 131 student surveys completed, 31 were largely incomplete and excluded from further analysis, rendering 100 usable surveys. Data was analyzed with IBM SPSS Version 24. Descriptive statistics of the survey were calculated that included variable averages and standard deviations. Cronbach’s alpha was used to determine the reliability of all survey variables. Mean job insecurity perceptions were compared to determine differences between students who did and did not anticipate working in hospitality after graduation. The normality assumption was confirmed by the Shapiro Wilk’s test, but the Levene’s test showed a lack of homogeneity of variance. Therefore, a Welch’s F test was used (Jan & Shieh, 2014).

Correlation coefficients were calculated to determine the relationship between average perceptions of job insecurity and averages of the EI indicators. This analysis included all students whether they had hospitality experience or not. Because Shapiro-Wilk tests showed all EI variables violated the required assumption of normality, the correlation between survey variables was calculated using Spearman’s rho.

To determine the effect of type of foodservice experience (excluding students without experience) on EI variables, a Welch’s F test was used for self-emotion appraisal, because this variable showed a lack of normality. Others’ emotional appraisal showed normality and

homogeneity of variances, and a traditional one-way ANOVA was conducted. For use of emotion and regulation of emotion, a Welch’s F test was used because preliminary analysis showed a lack of normality and homogeneity of variances. Post-hoc tests used included Tukey’s HSD for others’ emotional appraisal and the Games Howell test for the remaining EI variables.

## RESULTS

Demographic information can be found in Table 1. The proportion of male to female students reflects trends in higher education where the majority of students, as of the fall of 2018, are female (National Center for Education Statistics, n.d.). Close to three-fourths of the students surveyed had some level of foodservice experience. Slightly more than one third of respondents did not anticipate working in hospitality after graduation.

Table 2 contains descriptive information for the ten job insecurity survey items, including mean and standard deviation. On the seven-point Likert scale, students had slightly less than neutral perceptions (M = 3.94, SD = 1.31) of how robotics and automation would impact their job security in the hospitality industry (Table 3). Average perceptions of job insecurity based on where students anticipated working after graduation were as follows: (a) foodservice: M = 4.26, SD = 1.54; (b) hotels: M = 3.77, SD = 0.88; (c) both hotels and foodservice: M = 4.63, SD = 1.52; (d) neither hotels or foodservice: M = 3.63, SD = 1.27. There were no significant differences among the four groups, (*Welch’s F*[3,40.36] = 2.15, *p* = 0.109). On average, students “Somewhat agree[d]” or “Agree[d]” they possessed EI as shown by the four indicators.

There was no correlation between student’s perceptions of job insecurity and any of the EI indicators (Table 4). However, all EI indicators were significantly correlated with one another at *p* < 0.001. The greatest correlation observed was between self-emotion appraisal and regulation of emotion, (*r*<sub>s</sub>[98] = 0.71, *p* < 0.001). The weakest correlation observed was between perceptions of job insecurity and regulation of emotion, (*r*<sub>s</sub>[100] = 0.003, *p* = 0.98).

Main effects for type of foodservice experience were found with self-emotion appraisal (*Welch’s F*[2, 15.9] = 3.66, *p* = 0.049), use of emotion (*Welch’s F*[2, 15.18] = 7.06, *p* = 0.007), and regulation of

**Table 1: Demographics of Hospitality Students Surveyed (n =100)**

Demographics (Mean ± SD)		Frequency
Age (20 ± 2.09)		
Gender	Male	30
	Female	70
Years of experience working in hotels (0.5 ± 0.99)		
Years of experience working in foodservice (2.2 ± 2.1)		
Type of foodservice experience	Back of the house	7
	Front of the house	36
	Both back and front of the house	29
	I don't have foodservice experience	28
Anticipated sector working in after graduation	Foodservice	20
	Hotels	29
	Hotels and foodservice	15
	I don't anticipate working in either foodservice or hotels	36

**Table 2: Descriptive Statistics of Perceptions of Job Insecurity\* as Affected by Robotics and Automation in Hospitality**

	Mean ± SD
With more and more robots and automation everywhere, my chances of finding another job in the hospitality industry are small.	3.75 ± 1.67
Robots and other new forms of automation reduce my job security in the hospitality industry.	3.97 ± 1.65
My job skills in the hospitality industry are rapidly becoming obsolete.	3.91 ± 1.44
Robots & automation seriously threaten my future in the hospitality industry.	3.87 ± 1.66
The introduction of robots & automation will slowly displace jobs in the hospitality industry.	4.35 ± 1.57
I have only a small chance of keeping my job in the hospitality industry as technological advances increase.	3.63 ± 1.60
I fear that someday I will lose my job in the hospitality industry to robots & automation.	3.75 ± 1.59
Robots & automation will make me less useful as a worker in the hospitality industry.	3.93 ± 1.71
Increased automation and robots will mean less and less work for people in the hospitality industry.	4.34 ± 1.55
As a result of robots & automation in the workforce, I will have a smaller and smaller part in the hospitality industry.	3.94 ± 1.55

\*Perceptions of job insecurity were measured on a 7-point Likert scale ranging from “1 = Strongly disagree” to “7 = Strongly agree”.

emotion (*Welch’s F*[2, 16.06] = 4.41, *p* = 0.03). There was no main effect of type of foodservice experience on others’ emotion appraisal (*F*[2, 69] = 0.701, *p* = 0.50).

Self-emotion appraisal was higher for students who had both front and back of the house experience in foodservice (*M* = 5.97, *SD* = 0.67) than students that had only front of the house experience (*M* = 5.47, *SD* = 0.79) (Table 5). Use of emotion was higher for students with both front and back of the house experience in foodservice (*M* = 6.24, *SD* = 0.47) than only front of the house experience (*M* = 5.69, *SD* = 0.87) (Table 5). Regulation of emotion was higher for students with both front and back of the house experience in foodservice (*M* = 5.89, *SD* = 0.57) than only front of the house experience (*M* = 5.39, *SD* = 1.05) (Table 5).

A post-hoc analysis was conducted to determine if EI was related to years of foodservice experience. No significant correlations were found between years of foodservice experience and self-emotion appraisal, use of emotion, and regulation of emotion. This suggests that type of foodservice experience may explain EI better than time spent working in the industry.

**DISCUSSION**

The present study was designed to gauge current perceptions of job insecurity rendered by greater automation and robotics in hospitality along with emotional intelligence indicators. Based on respondents’ perceptions of job insecurity, students had mixed reactions as to whether their jobs in hospitality would be affected by more robotics and automation. Students, on average, had slightly less than neutral perceptions. Perceptions had no relation to what type of jobs they planned to pursue upon completion of their undergraduate degree. Prior research in a manufacturing plant has shown perceptions of job insecurity differ between high and low skill workers, with higher skill workers perceiving robots as having a positive impact on their jobs (Chao & Kozlowski, 1986). Another study of employees in a car component factory found similar results, employees with a higher level of job qualification and greater levels of education had main effects on perceptions of job security (Vieitez et al., 2001). The present study did not assess students using any metric involving skill level and including this may have shed additional insight on perceptions.

**Table 3: Descriptive Statistics and Reliability of Survey Variables**

	Mean ± SD	Cronbach’s α
Perception of job insecurity	3.94 ± 1.31	.944
Self-emotion appraisal	5.66 ± 0.821	.771
Others’ emotion appraisal	5.62 ± 0.753	.667
Use of emotion	5.85 ± 0.841	.783
Regulation of emotion	5.56 ± 0.893	.752

The overall neutral perceptions of job insecurity, even among students who intended to work in foodservice after completing their degree, shows ambivalence to estimates of how likely hospitality jobs will be automated in the coming years (Chui et al., 2016b; Frey & Osborne, 2017; Manyika et al., 2017; Whitehouse & Gambrell, 2017). Chefs and general managers, professions that generally involve high levels of creativity and EI, have a low probability of being replaced by automation (Whitehouse & Gambrell, 2017). Among jobs unique to foodservice not yet mentioned, bartenders, dishwashers, and housekeeping workers have a very high chance of being automated (Whitehouse & Gambrell, 2017). This was a base-line study where the students expressed their current understanding without the benefit of reading current literature detailing the types of automation that will impact the industry. Future studies should determine whether perceptions of job insecurity are affected by exposure to foodservice industry trends in automation use.

In contrast to prior research, the present study found no negative correlation between perceptions of job insecurity and EI indicators. Students reported, on average, greater EI compared to perceptions of job insecurity. EI can reflect an individual’s ability to cope with stressful circumstances and is negatively correlated with psychological strain (Cheung et al., 2016). The slightly higher EI observed in the students and increased capacity to manage undesirable perceptions of job insecurity may therefore explain why no negative correlations were found.

There was a main effect of type of foodservice experience on EI indicators that included self-emotion appraisal, use of emotion, and regulation of emotion. These three variables were significantly higher for students who had both back and front of the house experience compared to just front of the house experience. This could be attributed to several factors. Students who have worked as both a line cook (back of the house) and a server (front of the house), for example, may have been exposed to more unique job scenarios that led to greater increases in their abilities to identify emotions within themselves, use emotions to their advantage, and cope with negative emotions. Higher EI is associated with greater adaptability to situational demands (Salovey, Mayer, Goldman, Turvey, & Palfai, 1995). Alternatively, as opposed to more diverse work experiences leading to higher EI, students with already high EI may be more likely

**Table 4: Correlation Matrix of Survey Variables**

	1	2	3	4	5
Perception of job insecurity	-				
Self-emotion appraisal	.059	-			
Others’ emotion appraisal	.189	.634*	-		
Use of emotion	.066	.59*	.551*	-	
Regulation of emotion	.003	.71*	.506*	.632*	-

\*Correlation is significant at the 0.001 level (2-tailed).



**Table 5: Post Hoc Results for Self-emotion Appraisal by Type of Foodservice Experience, for Use of Emotion by Type of Foodservice Experience, and for Regulation of Emotion by Type of Foodservice Experience**

*Mean Differences (Xi – Xj)*  
(Effect Sizes are indicated in parentheses)

	Self-emotion appraisal				Use of emotion				Regulation of emotion			
	Mean	1	2	3	Mean	1	2	3	Mean	1	2	3
Back of the house	5.54	--			5.18	--			5.11	--		
Front of the house	5.47	0.063 (0.069)	--		5.69	-0.516 (-0.506)	--		5.39	-0.281 (-0.788)	--	
Both back and front of the house	5.97	-0.43 (-0.493)	-0.493* (-0.566)	--	6.24	-1.06 (-1.21)	0.547** (-0.783)	--	5.89	-0.781 (-1.02)	-0.499* (-0.59)	--

\* $p < 0.05$

\*\* $p < 0.01$

to seek out and engage in a broader range of foodservice jobs. Additionally, it should be noted that the back of the house sample was smaller than the front of house and possibly why there was no main effect for the back of the house respondents.

### CONCLUSIONS AND APPLICATIONS

The findings support the need to encourage hospitality students to work in different foodservice jobs that necessitate varying degrees of emotional labor and that this may be independent of time spent working in foodservice. Diverse working environments also give students the opportunity to practice complex communication skills, an important asset for maintaining job security and potentially minimizing job displacement as automation becomes more prevalent in the years to come (Brynjolfsson & McAfee, 2014).

Prior research has shown hospitality professionals score higher than hospitality undergraduates on EI indicators pertaining to problem solving (Wolfe et al., 2014). This evidence, in combination with the present study, highlights how real-world experiences in foodservice could provide opportunities to develop EI outside of the classroom. EI training incorporated in higher education curriculum could be complemented by giving students the opportunity to apply that information through internships or work-study programs in foodservice.

This study had several limitations. Whether the undergraduates had experience with EI training as part of their schooling was not measured, and this variable may have shed more insight on the EI values observed. Others' emotion appraisal had a Cronbach's alpha value of .667 that is only slightly below what is considered satisfactory for a subscale (Nunnally, 1978). Deleting items from this subscale would result in no improvements in reliability. Results that relate to this variable should be interpreted with caution, as this sample may not have a complete understanding of this concept. However, the EI scale with its four variables was reliable overall with a Cronbach's alpha value of .90.

Concerning the sample of students, seven undergraduates had only back of the house experience, and surveying more students that fit this category would aid in substantiating the study findings that relate to the effect of type of foodservice experience on EI indicators. Nevertheless, the validity of the results was supported in that homogeneity of variance was tested, and either a classic one-way ANOVA or a Welch's F test was used based on whether this assumption was violated.

The study was cross-sectional in design. Future work could utilize a longitudinal study to address how student perceptions of job insecurity change over the duration of their schooling. A portion of the students surveyed are likely to enter management positions in

foodservice, which have a low forecasted probability of being automated. Future research should study perceptions of job insecurity of workers who have a higher probability of having their jobs displaced by automation and robotics, such as prep cooks and cashiers. This would be useful from an occupational health standpoint to gauge the psychological well-being of employees and provide EI training to help cope with potential changes in labor dynamics.

Lastly, this study relied on self-reports of EI, as opposed to assessments from other people and ability-based measures. Self-reported measures of EI can be prone to response bias, which can inflate scores compared to peer reports of EI (Keefer, 2015; Lievens, Klehe, & Libbrecht, 2011). This does not, however, undermine the role that personal beliefs play in influencing behavior. Self-reports of EI provide insight into how individuals adapt and cope with adverse circumstances or perceptions, which can then shape observable behavior (Keefer, 2015). It should be noted how self-report measures of EI may measure a distinct set of abilities and are thus not a direct replacement for other forms of EI assessment (Keefer, 2015). Future research should explore other-reports and ability-based measures of EI to expand our understanding of how EI relates to perceptions of job insecurity and type of foodservice experience.

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