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Am I choosing the right career? The implications of COVID-19 on the occupational attitudes of hospitality management students

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ABSTRACT

The hospitality industry is under threat from COVID-19 and the possibility of future crises remains very real. To improve understanding of how such a crisis impacts the attractiveness of pursuing a career in the hospitality industry, this study examines the effects of negative emotions invoked by COVID-19 on hospitality management students' occupational attitudes. Using a sample of 425 students, we find that in addition to diminishing their occupational identification and in turn, job choice intentions, that the effects of these negative emotions are channeled through three salient motivational pathways, namely self-efficacy, intrinsic and extrinsic motivation, and passion. Thus, the study not only advances theory by providing a more nuanced conceptualization of the effects of negative emotions on occupational attitudes but it identifies important leverage points that can be harnessed to help mitigate the harmful emotional effects of a crisis, such as COVID-19, important and timely contributions that the authors hope will benefit aspiring hospitality industry talent and help restore the attractiveness of careers in the hospitality industry. Future research directions and implications to theory and practice are discussed.

1. Introduction

The COVID-19 crisis has disproportionately impacted the hospitality industry. Not only has it adversely affected the emotional and physical health of its workforce (e.g., Chong et al., 2020; Wanberg et al., 2020) but also the growth and survival of hospitality businesses as a whole (Oxford Economics, 2020). At the same time, COVID-19's impact is likely to persist for the foreseeable future and experts predict that other similar crises may be inevitable (e.g., CDC, 2021; New York Times, 2020; WHO, 2021). The COVID-19 crisis therefore raises a number of important questions for stakeholders in the hospitality industry, including what are the implications of such a crisis on the career interests and intentions of the industry's future talent pool (i.e., hospitality management students), what interventions can hospitality educators undertake in an effort to help reduce or minimize the harmful effects of such a crisis on their students, and what lessons can be learned from COVID-19 to better prepare the industry for future crises? Regrettably,

our understanding of such questions is at a nascent stage, in particular how the negative emotions invoked by COVID-19 influence hospitality management students' occupational attitudes. Such a shortcoming in the literature is unfortunate because according to recent research (e.g., Bufquin et al., 2021; Sönmez et al., 2020) the significant decline in hospitality jobs due to COVID-19 (i.e., mass lay-offs, hospitality business failures) has created stress and fear among hospitality workers which by extension is likely to cause similar anxiety and negative affective reactions for those preparing for a career in hospitality management (i.e., hospitality management students). Moreover, because prior research (e. g., Brown et al., 2014; Walsh et al., 2015) has shown that personal interests and opportunities for career growth are essential factors that individuals take into consideration when making career decisions, COVID-19's impact on the hospitality industry is also likely to diminish the value and meaning hospitality management students attach to their chosen occupation.

This study has two primary objectives. The first is to examine how

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negative emotions invoked by COVID-19 influence hospitality management students' occupational attitudes, in particular, how they identify with the hospitality occupation (occupational identification) and whether they intend to pursue a career in the hospitality industry (job choice intention). Negative emotions, including anxiety, apprehension, nervousness and fear, are salient affective reactions to negative events and crises, such as COVID-19. COVID-19 has not only threatened the lives and health of individuals but also their economic and social well-being causing them to feel high levels of anxiety and uncertainty about the future. Threatening situations, especially those outside one's control, can elicit avoidance behavior and actions aimed at self-protection (Li et al., 2020). Responses to negative and uncertain events or stressors are typically accompanied by negative emotions and affective states, which in turn, influence individual attitudes and behavior (Weiss and Cropanzano, 1996).

The second is to examine the underlying mechanisms through which the effects of these negative emotions are channeled. By integrating work on proactive motivation (Parker et al., 2010), this study argues that negative emotions invoked by COVID-19 influence occupational attitudes via three salient motivational processes, namely self-efficacy ("can do" motivation), intrinsic and extrinsic motivation ("reason to" motivation), and passion ("energized to" motivation). Because individual responses and actions often contain an affective element, traditional theories of work motivation which primarily focus on cognitive factors of behavior, such as self-determination theory (Gagné and Deci, 2005; Ryan and Deci, 2020) and conservation of resources theory (Hobfoll et al., 2018; Liu et al., 2020), do not fully explain how emotions arising from affective experiences impact individuals' attitudes and behavior.

The study makes several contributions to the hospitality management literature. First, by improving understanding of how hospitality management students' emotions (i.e., negative affective feelings) invoked by COVID-19 influence their occupational attitudes, the study provides an account of how a major threat or period of prolonged crisis can impact one's career interests and aspirations. Second, by introducing an integrated conceptualization which includes both cognitive and affective motivational processes through which negative emotions affect occupational identification and, in turn, job choice intention, the study offers a more nuanced view of how the effects of negative emotions are transmitted. Third, the study extends understanding of motivational pathways by demonstrating that activated general emotions are a strong predictor not only of cognitive motivational processes (i.e., "can do" and "reason to" motivation) but also of a context-specific affective motivational process (i.e., "energized to"). From a practical standpoint,

the study suggests that interventions undertaken in an effort to manage and bolster hospitality management students' career aspirations during times of crisis are likely to have more favorable outcomes when they are based on a fuller understanding of the underlying processes through which the effects of negative emotions unfold. The conceptual framework for the study is presented in Fig. 1.

2. Literature review and hypotheses

2.1. Negative emotions and occupational identification

Emotions are a natural and instinctive state of mind which arise from one's mood and external stimuli, including periods of crisis and great uncertainty such as COVID-19. Negative emotions or negative affective feelings, both experienced and expressed, represent intense unpleasant and distressful emotional states, including fear, nervousness, apprehension, guilt, and anger (Watson et al., 1988), are transient and may change in response to changes in the stimuli and situation (Cohen et al., 1995; Watson and Clark, 1984; Cheng et al., 2020), and form part of the human natural defense mechanism for adaptation and survival (Elfenbein, 2007). When experiencing negative events (e.g., COVID-19), individuals' emotions are prone to be negatively affected, which in turn, influences their attitudes and behavior (Kiefer and Barclay, 2012).

Occupational identification is defined as the extent to which one integrates one's occupation into the self or one's self-concept (Ashforth et al., 2008; Kroon and Noorderhaven, 2018). It reflects a relatively stable constellation of attributes, beliefs, goals, values, motives and experiences by which individuals identify themselves with their occupational roles (Kroon and Noorderhaven, 2018). The development of an occupational identity is a long-term process and may begin as early as adolescence or prior to joining an occupation (Skorikov and Vondracek, 2011). Research has shown that college experiences influence students' occupational identification prior to their entry into the workforce (Berríos-Allison, 2005). The development of an occupational identification can also be influenced by external stimuli, making identity perceptions particularly salient (Ashforth et al., 2008). Following the above logic, this study argues that when confronted by a perceived threat or uncertain event, such as COVID-19's impact on the hospitality industry, the negative emotions invoked are likely to stimulate hospitality management students to attend to, reflect on, and re-appraise their occupational identification. Simply put, the attractiveness of working in the hospitality industry is likely to be diminished as a result of COVID-19's impact on the industry.

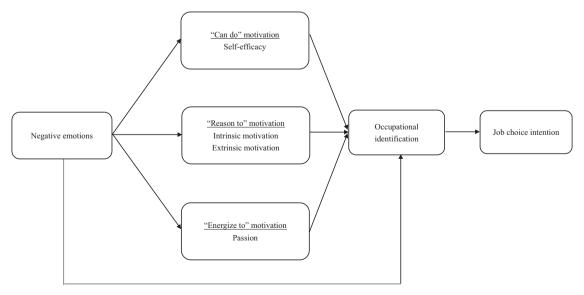


Fig. 1. The conceptual model.

According to expectancy theory (Vroom, 1964), individuals devote more time and energy to tasks they believe offer greater rewards or outcomes. Moreover, feelings, both pleasant and unpleasant, affect how individuals anticipate outcomes, with unpleasant affective experiences leading individuals to expect less positive outcomes, that is, lower valence and expectancy perceptions and judgments of outcomes (Reizer et al., 2019; Seo et al., 2004). Hence, hospitality management students with negative affective reactions due to COVID-19's impact on the hospitality industry are likely to feel uncertain and worried about their chosen profession (negative expectancy judgment for the outcome), thus affecting the value and meaning they attach to a career in the industry (valence of outcome). In other words, negative emotions invoked by COVID-19 may trigger them to reconstruct and reassess their occupational identification (Zikic and Richardson, 2016). In support of this reasoning, scholars have argued that feelings influence individuals' actions in relation to goals such that pleasant feelings lead them to undertake actions directed toward their goals while unpleasant feelings lead them to undertake actions directed away from their goals (Frijda, 1987; Luo and Mattila, 2020). Prior research also finds that both work hope and career optimism are significantly related to occupational identification (Ahn et al., 2015). Thus,

Hypothesis 1. : Negative emotions invoked by COVID-19 are negatively related to hospitality management students' occupational identification with the hospitality industry.

2.2. The underlying mechanisms

In an effort to improve understanding of "why" negative emotions invoked by COVID-19 negatively influence hospitality management students' occupational attitudes (i.e., occupational identification and, in turn job choice intention), this study draws on Parker et al.'s (2010) model of proactive motivation which asserts that motivational states act as proximal antecedents of the goal-driving process and influence individuals' proactive engagement (i.e., attitudes and behaviors). Following the model's tenets, this study proposes that three motivational mechanisms: self-efficacy ('can do'), intrinsic and extrinsic motivation ('reason to'), and passion ('energized to') mediate the effects of negative emotions on occupational identification, as follows.

2.2.1. The mediating role of self-efficacy

Self-efficacy or the "can do" motivation reflects an individual's assessment of the consequences of her/his behavior (i.e., behavior-outcome expectancy) (Bandura, 1977; Parker et al., 2010; Liu et al., 2017) and has been shown to significantly influence career and work-related outcomes (Judge et al., 2007). According to social cognitive theory (Bandura, 1977; Bandura, 2001), when individuals believe they have the ability to exercise adequate control over their actions, they are motivated to do well and persevere in the face of adversity. Efficacious individuals are not only confident in their abilities but are also able to deploy their attention and effort to cope effectively with the demands of the situation (Ebner et al., 2018; Vagni et al., 2020) and succeed in uncertain and adverse environments (Baum and Locke, 2004; Wei et al., 2020).

An individual's self-efficacy can be influenced by her/his emotional state in two important ways. First, negative affective feelings influence how individuals interpret past experiences. Due to a "mood congruence recall effect" or the tendency to recall information from memory consistent with affective states at the time of recall (Meyer et al., 1990), individuals with negative emotions are less likely to recall their previous experiences in a positive light (Casper et al., 2019). That is, affective feelings and emotions can bias judgment (Meyer et al., 1992) and choice making (Gray, 1999). Moreover, because of their narrow and short-term focus, negative emotions lead individuals to attend to and favor what matters most at the time, irrespective of possible positive long-term outcomes (Gray, 1999; Lent et al., 2017). Given their negative focus,

any negative occurrences are also likely to be attributed to the self (self-blaming) (Scott et al., 2003), which can be dysfunctional to one's perceived self-efficacy (Avramova et al., 2010). Second, negative emotions also influence how individuals view their future such that negative affective experiences lead them to anticipate negative outcomes (Seo et al., 2004), thus resulting in lower expectancy judgments and outcomes (Akgunduz et al., 2020) and adversely affecting confidence in task accomplishment. As Wright and Mischel (1982) find, negative affect leads to lower expectations, lower estimates of previous successes, and more negative general self-assessments. Other studies (e.g., Denollet and De Vries, 2006; Lent et al., 2017) similarly find that negative mood is negatively related to individuals' perceived competence.

Hypothesis 2a. : Negative emotions invoked by COVID-19 are negatively related to hospitality management students' self-efficacy.

Next, this study further argues that the effects of negative emotions on occupational identification are channeled through self-efficacy. Identification is an ongoing developmental process, whereby "people come to define themselves, communicate that definition to others, and use that definition to navigate their work- and daily-lives" (Ashforth et al., 2008: 334). Occupational identification involves the incorporation of one's sense of self with her/his occupation. When an individual believes s/he can successfully perform a task in a particular domain, or perceives high self-efficacy, s/he is more likely to allocate and devote her/his time and resources, set goals, and plan activities to achieve the goals of that domain. In the context of this study, hospitality management students who perceive high self-efficacy are more likely to set goals and create a "road map for action" to prepare for their profession, and hence be more likely to preserve and maintain the continuity of their self-concepts and sense of identity with the hospitality occupation. By contrast, when they perceive low self-efficacy as a result of high negative affective feelings, their goal striving process will be impaired, making them less likely to define and perceive themselves as members of the hospitality occupation.

Given that this study has hypothesized the effect of negative emotions on self-efficacy (i.e., Hypothesis 1) and argued the effect of selfefficacy on occupational identification, it is expected that students' self-efficacy carries the effect of negative emotions to their occupational identification. Parker et al.'s (2010) model of proactive motivation suggests that one's evaluation of the desired outcomes from her/his behaviors (e.g. self-efficacy), a "can do" motivation, explains the underlying mechanism for why individual factors affect one's goal setting in a particular domain. Because the hospitality industry is severely impacted by COVID-19, the negative emotions invoked impair students' expectancy judgments of future career development in the hospitality industry, leading to a lower perception of self-efficacy. This impairment of the "can do" motivation further negatively affects students' motivation and goal to study and work in the hospitality domain. Thus, the authors argue that the more pronounced the negative emotions invoked by COVID-19 are, the lower is the "can do" motivation, making hospitality management students less likely to define and identify themselves in the hospitality occupation. The authors therefore hypothesize an indirect relationship between negative emotions and hospitality management students' occupational identification via the "can do" motivation.

Hypothesis 2b. : Negative emotions invoked by COVID-19 have an indirect relationship with hospitality management students' occupational identification via their self-efficacy.

2.2.2. The mediating role of intrinsic and extrinsic motivation

While the "can do" motivation improves understanding about how individuals assess the behavior-outcome expectancy relationship, the "reason to" motivation improves understanding about why individuals engage in a particular goal or activity (i.e., valence) (Parker et al., 2010). According to the "reason to" motivation, an individual's desire to put in

effort or engage in an activity is either based on interest and enjoyment in the activity itself (intrinsic motivation) or the external benefits and rewards that can be achieved (extrinsic motivation) from the activity (Gagné and Deci, 2005; Putra et al., 2017). Intrinsic motivation implies that the individual is free from pressure and tension when engaging in a particular behavior (Deci and Ryan, 1985) and involves "an ongoing process of seeking and conquering challenges" (Deci, 1975: 131). Hospitality management students who experience negative emotions triggered by COVID-19 are likely to question why they chose their academic major and intended occupation (redefine its meaning). Given their inclination to view and interpret negative or ambiguous information and events as threatening (Aquino et al., 1999), those with negative emotions are likely to form less favorable judgments and thus consider their field of study and intended occupation as less autonomous and enjoyable (i.e., less intrinsically motivating). By contrast, extrinsic motivation refers to an individual's motivation to perform a task or an activity due to its associated external rewards or outcomes (Gagné and Deci, 2005; Putra et al., 2017). Negative emotions are likely to affect the attractiveness of the external rewards or outcomes when such rewards or outcomes are perceived as uncertain and less favorable.

Hospitality management students chose to study hospitality because either they find the occupation intrinsically interesting and enjoyable (i. e., intrinsic motivation) or because they believe that working in the industry offers greater career development and other benefits (i.e., extrinsic motivation) or both. However, because COVID-19 has caused considerable economic and job loss in the hospitality industry (Huang et al., 2020; Kaushal and Srivastava, 2021) and the future of the industry remains uncertain (Wen et al., 2020), hospitality management students who have experienced negative emotions due to such negative stimuli are likely to be demotivated intrinsically and extrinsically.

Hypothesis 3. : Negative emotions invoked by COVID-19 are negatively related to hospitality management students' (a) intrinsic and (b) extrinsic motivation.

Individuals are more likely to immerse themselves and integrate their self-concepts with an occupation in which they feel enjoyment and intrinsic interest (Shin and Kelly, 2013) and that their expected investment will be rewarded (Davies et al., 2013). High levels of motivation evoke identification with an occupation such that highly motivated individuals incorporate their sense of self with their occupation's attributes, values, and experiences and such self-relevant processes will in turn lead to the development of one's occupational identity (Quigley and Tymon, 2006). By contrast, lower levels of motivation often relate to withdrawal behavior and turnover intent (Dysvik and Kuvaas, 2010; Kuvaas et al., 2017) such that if an individual loses interest in a task, it is hard for her/him to identify with the task. Moreover, if an individual anticipates that the outcome will be uncertain, her/his valence will be reduced (Vroom, 1964). Without motivation, an individual will not pursue and advance in her/his career (Wong et al., 1999) or be attached and committed to her/his identified occupation (Mills and Fullagar, 2017). Following such logic, when hospitality management students are not motivated by their occupation because they perceive limited employment opportunities due to a crisis such as COVID-19, it is unlikely that they will develop a high sense of identity with their occupation. Prior research has shown that individuals with low motivation tend to have unstable goals, making it difficult to set career goals and maintain direction (Robbins et al., 2004). Intrinsic motivation has also been found to be a strong predictor of occupational identification (Shin and Kelly, 2013) and hospitality management students have been shown to be more likely to prepare for a career in hospitality when they have extrinsic motivation (Choi and Kim, 2013).

According to the above reasoning, because negative emotions are negatively related to students' intrinsic and extrinsic motivation, and these motivations are likely to predict occupational identification, an indirect relationship between negative emotions and occupational identification via intrinsic and extrinsic motivation is proposed.

Following Parker et al.'s (2010) model of proactive motivation, this study argues that the "reason to" motivation (i.e., intrinsic and extrinsic motivation) which can influence the goal setting process, acts as an underlying mechanism through which the effects of negative emotions are transmitted to influence occupational identification. Reduced intrinsic and extrinsic motivation due to negative emotions invoked by COVID-19 are likely to cause students to attend more to the negative aspects of their occupation, thus viewing a future career in the hospitality industry less favorably. As prior studies have shown, employees who view their jobs and workplace negatively are less likely to engage in their work (De Clercq et al., 2017). Given that intrinsic and extrinsic motivation influence the extent to which individuals' persist in carrying out activities (Gagné and Deci, 2005), being negatively affected emotionally, hospitality management students are less likely to be motivated to continue and persist in their career goals, leading to lower occupational identification.

Hypothesis 4. : Negative emotions invoked by COVID-19 have an indirect relationship with occupational identification via (a) intrinsic and (b) extrinsic motivation.

2.2.3. The mediating role of passion

The third mechanism, passion or the "energized to" motivation (Parker et al., 2010), is an affect-related motivational state. An individual's core affect refers to "momentary, elementary feelings that combine both valence and activation" (Parker et al., 2010: 838-839). This study conceptualizes activated affect as passion or the strong inclination individuals have for a task that they like and find important which makes them willing to invest their time and resources into performing it (Vallerand and Houlfort, 2003). Passion is a manifestation of a positive affect-related state, such as emotional energy, drive, and enthusiasm (Cardon et al., 2009; Chen et al., 2019). However, negative emotions can affect one's passion towards an activity because individuals who experience negative emotions tend to perceive themselves and their environment in a largely negative manner (Watson and Tellegen, 1985), a view and mood that inhibits one from devoting significant time and energy to the pursuit of the activity (Vallerand and Houlfort, 2003). As scholars argue (e.g., Crant, 2000; Vallerand, 2010), whether an individual feels passionate about an activity or job depends not only on the nature of the activity or job itself but also on the context in which it is embedded. Hence, context influences individuals' level of passion and whether they feel autonomous (versus controlled) and that the activity or job is important (Vallerand and Houlfort, 2003). Thus, hospitality management students with negative emotions invoked by a crisis such as COVID-19 are unlikely to affectively invest and fully immerse themselves in their pursuits or feel passionate and positive about their studies and chosen profession.

Hypothesis 5a. : Negative emotions invoked by COVID-19 are negatively related to hospitality management students' passion.

Passion is tied to activities that are deemed important to the person (Vallerand and Houlfort, 2003; Chen et al., 2019). When an activity is considered important, an individual is likely to invest attention and time into performing the activity which contributes to the development of their identity (Cardon et al., 2009; Vallerand and Houlfort, 2003). Without passion, it is unlikely that additional effort or extra time and energy will be devoted to the activity. When an individual feels that the activity is personally important and enjoyable, s/he is likely to be enthusiastic and will consider it to be a central part of her/his identity (Vallerand et al., 2014). In other words, the greater the passion, the greater the sense of identity one feels and experiences in the activity (Vallerand and Houlfort, 2003). As scholars have asserted, passion is related to identities (Vallerand et al., 2007; Butt et al., 2019) and passionate activities form part of who a person is and are internalized and incorporated into one's identity (Vallerand, 2010). Applied to the context of this study, hospitality management students who are

passionate about their intended occupation are likely to consider it important and central to their career goals and work role (Lajom et al., 2018) and thus, be more likely to identify themselves with the occupation. Such passion about their occupation does not merely mean that they like their occupation's characteristics and attributes but rather that they also consider themselves as "hoteliers" (i.e., being a member of the hospitality industry). According to Burke et al. (2015), work passion positively relates to occupational commitment and career satisfaction.

Following the above arguments that negative emotions affect passion (i.e., Hypothesis 5a), and passion influences occupational identification, this study further predicts that passion will mediate the relationship between negative emotions and occupational identification. According to Parker et al. (2010), passion or the "energized to" motivation represents a key mechanism that transmits the effects of individual factors to the goal generation and striving process. Hence, negative emotions may undermine one's passion and devotion to her/his profession. Appraising the situation as threatening to their industry's well-being, the negative emotions invoked by COVID-19 are likely to threaten and pull hospitality management students away from their career goals associated with the hospitality industry (Lazarus, 1982). Being affected negatively by COVID-19 is likely to undermine hospitality management students' passion for their self-identified occupation and affect their internalized identity with an occupation in the hospitality industry (Stryker and Burke, 2000).

Hypothesis 5b. : Negative emotions invoked by COVID-19 have an indirect relationship with occupational identification via passion.

2.3. Occupational identification and job choice intention

This study further proposes that occupational identification positively relates to job choice intention. Occupational identification provides an individual with a sense of membership in a particular profession (Ashforth et al., 2008) and serves as an important vehicle through which individuals actualize their self-concepts (Witt, 1993). In other words, an individual with a high sense of occupational identification has a high realization of her/his occupational interests and goals (Holland et al., 1980). Hence, when hospitality management students identify themselves as members of the hospitality profession, or perceive high occupational identification, they are more likely to choose a career in the hospitality industry in order to align with and maintain their self-concept. They are also more likely to set goals and take actions to prepare for their career development in the industry, leading to a strong job choice intention for the hospitality industry.

Hypothesis 6. : Occupational identification is positively related to job choice intention, such that hospitality management students will be more likely to choose a job in the hospitality industry upon graduation when occupational identification is high.

Thus far, this study has hypothesized the indirect effects between negative emotions and occupational identification via three motivational pathways, and the direct relationship between occupational identification and job choice intention. Integrating the above reasoning, a serial mediation model between negative emotions and job choice intention is further hypothesized such that the indirect effects of negative emotions on job choice intention are transmitted first through the three motivational processes and then through occupational identification. When hospitality management students experience negative emotions invoked by COVID-19, they will feel less confident, less intrinsically and extrinsically motivated, and less passionate about studying for a major in hospitality management. These motivational states will further affect how students define and identify themselves in the hospitality occupation, thus influencing their intention to choose a hospitality career after graduation. Consistent with this logic, prior studies have shown that motivational states are important predictors of individuals' identification (Rockmann and Ballinger, 2017) and

behavioral intention (Houkes et al., 2003).

Hypothesis 7:. Negative emotions invoked by COVID-19 have an indirect relationship with job choice intention through (a) self-efficacy, (b) intrinsic and extrinsic motivation, and (c) passion via occupational identification

3. Method

3.1. Sample

Data were collected in late May 2020 from full-time hospitality management students studying in nine hotel schools located in China. A total of 600 students were randomly selected to participate in the study with the assistance of contacts at each of the schools. Respondents were invited by an instant messaging system to complete an online survey within one week, informed that the purpose of the study was to understand their perspectives during the COVID-19 pandemic, and assured anonymity. A total of 426 responses were received, representing a response rate of 71%. One response was excluded because it was completed in less than 4 min (i.e., 150 s), well below the average completion time of the sample (i.e., approximately 12 min). Thus, the final sample included in the analysis consisted of 425 responses. In terms of demographics of the sample, 75.8% were female, the average age was 20.7 years old, 74.6% were in the first two years of study, and participants originated from twenty different provinces across China.

3.2. Measures

All items were measured using 5-point Likert-type scales (1 = strongly disagree and 5 = strongly agree), with the exception of negative emotions and the control variables. Where appropriate, the wording of certain items was slightly adjusted to reflect the context of the study. Because the survey was administered in Chinese items originally written in English were translated using a common backtranslation procedure to ensure equivalence in meaning (Brislin, 1970). Specifically, this involved one experienced research assistant translating the questionnaire items from their original English into Chinese, and a second experienced research assistant translating the Chinese version back into English. Next, one of the co-authors of the study who is bilingual discussed the translations with the two research assistants to reach a consensus. Following minor revisions to ensure that there were no significant differences in meaning between the two versions, the Chinese language questionnaire was pre-tested with two students who were invited to complete the questionnaire and indicate whether they fully understood its content in the Chinese context. Finally, a final refined Chinese language version of the questionnaire was prepared and administered for data collection.

Negative emotions were measured using a six-item scale adapted by Joshanloo (2017), a shorter scale with equivalent validity to the 10-item PANAS scale (Joshanloo, 2017; Watson et al., 1988). Respondents were asked to evaluate how often they experienced each emotional state within the past three months of the COVID-19 pandemic on a 5-point Likert-type scale (1 = not at all and 5 = a lot). Sample items include "hopeless", "nervous", and "worthless". Cronbach's alpha was 0.89.

Self-efficacy was measured using an eight-item scale developed by Chen et al. (2001). Sample items include "When facing difficult tasks, I am certain that I will accomplish them" and "In general, I think that I can obtain outcomes that are important to me". Cronbach's alpha was 0.91. Intrinsic motivation was measured using a six-item scale and

² Following guidance from prior research, analysis based on 0.95 power and a correlation (effect size) of 0.22 (Bosco et al., 2015) using G*Power indicates a minimum required sample size of 258 (Faul et al., 2007). Given the potential for a lower response rate with online surveys we recruited a larger initial sample.

extrinsic motivation was measured using a five-item scale, both adopted from Feij et al. (1995). A sample item for intrinsic motivation is "interesting work (work you really like)" and for extrinsic motivation is "good opportunity for upgrading and promotion". Cronbach's alphas were 0.89 for intrinsic motivation and 0.87 for extrinsic motivation, respectively.

Passion was measured using a four-item scale by McAllister et al. (2017). A sample item includes "I approach most tasks at study with a great deal of enthusiasm". Cronbach's alpha was 0.90.

Occupational identification was measured using a seven-item scale from Van Dick et al. (2004). A sample item includes "I identify myself as a student of the hospitality industry". Cronbach's alpha was 0.93.

Job choice intention was measured using a question asking respondents whether they will choose a job in the hospitality industry upon graduation (0 = not choose a job in the hospitality industry after graduate, 1 = choose a job in the hospitality industry after graduate).

Gender and study level were included as control variables, because previous research has shown that differences in these variables may influence student's self-efficacy (Huang, 2013) and motivation (Marsh et al., 2008; Adcroft, 2010). Gender was measured by 1= female student and 2= male student. Study level was measured by 1= 1st year bachelor's student, 2= 2nd year bachelor's student, 3= 3rd year bachelor's student, 4= 4th year or final year bachelor's student, 5= master level student and 6= doctoral level student.

4. Results

4.1. Common method variance

Common method variance may exist when the predictors and the criterion variables are obtained from a single source or rater (Podsakoff et al., 2003). To help reduce and evaluate the likelihood of common method variance, we employed both procedural and statistical remedies.

First, procedural remedies suggested by Podsakoff et al. (2003) were employed, such as protecting respondents' anonymity and informing them that there are no right or wrong answers. The authors also created psychological separation between scale items for predictor and other criterion variables by including items not relevant to the variables of the study (e.g., lifestyle items, such as "Do you stay on-line with your mobile phone longer than originally intended?"). Procedural remedies are helpful in reducing respondents' evaluation apprehension and social desirability bias (Podsakoff et al., 2003). Second, statistical remedies were also used to evaluate potential common method variance, including Harman's one-factor test, which showed that the largest factor only explained 35.3% of total variance, indicating that common method variance was not significant in this study.

Next, confirmatory factor analyses (CFAs) were conducted to assess the convergent and discriminant validity of the variables studied. The CFA test included all composite variables (i.e., negative emotions, selfefficacy, intrinsic motivation, extrinsic motivation, passion and occupational identification). Overall model fit was assessed by root-meansquare error of approximation (RMSEA), comparative fit index (CFI) and Tucker-Lewis index (TLI). According to Hair et al. (2010), a model has a good fit if the p-value of Chi-square is significant, CFI and TLI are greater than 0.90, and RMSEA is lower than 0.07. As presented in Table 1, the results show that the six-factor model has a good fit $(\chi 2)$ [579] = 1336.61, p < 0.01; RMSEA = 0.055; CFI = 0.93; TLI = 0.92)and all factor loadings are significant. Moreover, as presented in Table 2, the composite reliability of each construct was greater than its average variance extracted, and all average variance extracted was greater than 0.05, indicating good convergent validity. In order to test discriminant validity, this study followed the suggestions of earlier work (e.g. Deng et al., 2018; Lin et al., 2019) and conducted a series of CFA models for comparison between the original six-factor model and several alternative five-factor models randomly combining any two variables. Results show that the six-factor model was better than any alternative

Table 1Results of confirmatory factor analysis for the measures of the study variables.

Model	χ^2	Df	CFI	TLI	RMSEA
Six-factor model	1336.61	579	0.93	0.92	0.055
Five-factor model: combining intrinsic and extrinsic motivation	1492.30	584	0.91	0.90	0.060
Five-factor model: combining negative emotions and extrinsic motivation	2571.75	584	0.81	0.79	0.089
Five-factor model: combining negative emotions and self- efficacy	2501.52	584	0.81	0.80	0.088
Five-factor model: combining negative emotions and intrinsic motivation	2580.73	584	0.80	0.79	0.090
Five-factor model: combining negative emotions and passion	2583.16	584	0.80	0.79	0.090
Five-factor model: combining negative emotions and occupational identification	2590.92	584	0.80	0.79	0.090
Five-factor model: combining self- efficacy and occupational identification	2634.48	584	0.80	0.78	0.090
Five-factor model: combining intrinsic motivation and occupational identification	1954.88	584	0.87	0.86	0.074
Five-factor model: combining passion and occupational identification	2208.65	584	0.84	0.83	0.081
Five-factor model: combining extrinsic motivation and occupational identification	1935.33	584	0.87	0.86	0.074

Note: TLI is the Tucker-Lewis index, CFI the comparative fit index, and RMSEA the root-mean-square error of approximation.

five-factor model, indicating good discriminant validity (Hair et al., 2010). Finally, as presented in Table 2, the average variance extracted for each construct was greater than the squared correlation estimate of any two constructs, further demonstrating good discriminant validity (Hair et al., 2010). Therefore, all composite variables were included in further analysis.

Table 2 summarizes the means, standard deviations and zero-order Pearson correlations for all variables. Negative emotions were negatively related to self-efficacy (r = $-0.25,\,p<0.01$), intrinsic motivation (r = $-0.16,\,p<0.01$), extrinsic motivation (r = $-0.17,\,p<0.1$) and passion (r = $-0.20,\,p<0.1$). Self-efficacy (r = $0.47,\,p<0.1$), intrinsic motivation (r = $0.66,\,p<0.01$), extrinsic motivation (r = $0.57,\,p<0.01$) and passion (r = $0.51,\,p<0.01$) were positively related to occupational identification. Occupational identification was positively related to job choice intention (r = $0.48,\,p<0.01$). In terms of control variables, study level was positively related to negative emotions and negatively related to job choice intention (r = $-0.23,\,p<0.01$).

To test the direct effect of negative emotions on occupational identification, self-efficacy, intrinsic and extrinsic motivation, and passion, hierarchical linear regression was performed. As presented in Table 3, the results show that negative emotions are significantly and negatively related to occupational identification ($\beta=-0.16,\ b=-0.15,\ SE=0.05,\ t=-3.33,\ p<0.01,\ M5),\ self-efficacy\ (<math display="inline">\beta=-0.27,\ b=-0.19,\ SE=0.03,\ t=-5.82,\ p<0.001,\ M1),\ intrinsic motivation (<math display="inline">\beta=-0.16,\ b=-0.15,\ SE=0.04,\ t=-3.32,\ p<0.01,\ M2),\ extrinsic motivation (<math display="inline">\beta=-0.16,\ b=-0.14,\ SE=0.04,\ t=-3.20,\ p<0.01,\ M3)$ and passion ($\beta=-0.20,\ b=-0.17,\ SE=0.04,\ t=-4.14,\ p<0.001,\ M4),\ supporting\ Hypotheses\ 1,\ 2a,\ 3\ and\ 5a.$

Hypotheses 2b, 4 and 5b predict the indirect effects between negative emotions and occupational identification via self-efficacy, intrinsic and extrinsic motivation and passion, respectively. To test these indirect effects, bootstrapping analysis was performed using 5000 re-samples by Model 4 of PROCESS 3.5 (Hayes, 2017). The PROCESS macro enables a specific indirect effect to be tested when controlling for the effects of all other mediators (Preacher and Hayes, 2008). The indirect effect of the

Table 2 Means, Standard Deviations, and Correlations.

	Mean	SD	CR	AVE	1	2	3	4	5	6	7	8
1. Study level	2.04	1.07										
2. Gender	1.24	0.43			-0.00							
3. Negative emotions	2.33	0.78	0.89	0.58	0.12*	0.06						
4. Self-efficacy	3.50	0.53	0.91	0.55	0.13**	0.03	-0.25**					
5. Intrinsic motivation	3.54	0.70	0.90	0.59	-0.04	-0.02	-0.16**	0.40**				
6. Extrinsic motivation	3.38	0.70	0.87	0.56	-0.11*	-0.00	-0.17**	0.35**	0.73**			
7. Passion	3.31	0.64	0.90	0.70	0.02	-0.02	-0.20**	0.62**	0.44**	0.38**		
8. Occupational identification	3.34	0.73	0.93	0.66	-0.09	0.01	-0.17**	0.47**	0.66**	0.57**	0.51**	
9. Job choice intention	0.74	0.44			-0.23**	0.02	-0.09	0.10*	0.38**	0.34**	0.14**	0.48**

Notes: N = 425.

Gender was measured by 1 = female student and 2 = male student. Study level was measured by 1 = 1st year bachelor's student, 2 = 2nd year bachelor's student, 3 = 3rd year bachelor's student, 4 = 4th year or final year bachelor's student, 5 = master level student and 6 = doctoral level student. Job choice intention was measured by 0 = not choose a job in the hospitality industry after graduate, and 1 = choose a job in the hospitality industry after graduate. CR represents composite reliability, and AVE represents average variance extracted.

Table 3 Results of Regression Analysis.

	Self-efficacy	Intrinsic motivation	Extrinsic motivation	Passion	Occupational identification		
	M1	M2	M3	M4	M5	M6	
Control variables							
Study level	0.08(0.02)**	-0.02(0.03)	-0.06(0.03)	0.03(0.03)	-0.05(0.03)	-0.05(0.02)*	
Gender	0.06(0.06)	-0.02(0.08)	0.01(0.08)	-0.01(0.07)	0.04(0.08)	0.03(0.06)	
Independent variable							
Negative emotions	-0.19(0.03)***	-0.15(0.04)**	-0.14(0.04)**	-0.17(0.04)***	-0.15(0.05)**	0.01(0.03)	
Mediators							
Self-efficacy						0.21(0.06)**	
Intrinsic motivation						0.43(0.05)***	
Extrinsic motivation						0.15(0.05)**	
Passion						0.21(0.05)***	
R^2	0.09	0.03	0.03	0.04	0.03	0.52	
ΔR^2	0.09***	0.03**	0.03**	0.04**	0.03**	0.49***	

Notes: N = 425.

Unstandardized regression coefficients and standard errors (in parentheses) were presented. Gender was measured by 1 = female student and 2 = male student. Study level was measured by 1 = 1st year bachelor's student, 2 = 2nd year bachelor's student, 3 = 3rd year bachelor's student, 4 = 4th year or final year bachelor's student, 5 = master level student and 6 = doctoral level student.

simple mediating effect is supported if the bias-corrected confidence interval does not contain zero at 95% level of confidence, after controlling for the effects of the other mediators (Hayes, 2017). As presented in Table 4, results show that the indirect effect between negative emotions and occupational identification via self-efficacy was significant (effect = -0.04,SE = 0.02,bias-corrected

Table 4 Bootstrapping Analysis for the Indirect Effects of Simple Mediating Effects.

DV: occupational identification	Effects	SE	LLCI	ULCI
Mediators:				
Self-efficacy	-0.04	0.02	-0.07	-0.01
Intrinsic motivation	-0.06	0.02	-0.11	-0.02
Extrinsic motivation	-0.02	0.01	-0.05	-0.01
Passion	-0.03	0.01	-0.07	-0.01
DV: job choice intention	Effects	SE	LLCI	ULCI
Chain mediating effects through				
Self-efficacy and occupational identification	-0.08	0.04	-0.16	-0.03
Intrinsic motivation and occupational identification	-0.13	0.06	-0.26	-0.04
Extrinsic motivation and occupational identification	-0.04	0.02	-0.11	-0.01
Passion and occupational identification	-0.07	0.03	-0.15	-0.02

Notes: The bias-corrected confidence intervals were based on 5000 re-samples at the 95% level of confidence.

interval = -0.07, -0.01), supporting Hypothesis 2b. Moreover, the indirect effect between negative emotions and occupational identification via intrinsic motivation (effect = -0.06, SE = 0.02, bias-corrected confidence interval = -0.11. -0.02), motivation extrinsic (effect = -0.02. SE = 0.01, bias-corrected confidence interval = -0.05. -0.01) and passion (effect = -0.03, SE = 0.01, bias-corrected confidence interval = -0.07, -0.01) were also significant. Hence, Hypotheses 4 and 5b received support. After controlling for all mediating effects, the relationship between negative emotions and occupational identification was not significant (see M6 of Table 3). Thus, self-efficacy, intrinsic and extrinsic motivation, and passion fully mediated the relationship between negative emotions and occupational identification (Baron and Kenny, 1986).

Hypothesis 6 proposes that hospitality management students' occupational identification has a positive relationship with job choice intention in the hospitality industry. Because job choice intention is a dichotomous variable, logistic regression was conducted to test this hypothesis. Results show that occupational identification was positively related to job choice intention ($\beta = 2.01$, SE = 0.25, p < 0.001, Wald = 65.37, Exp(B) = 7.50), supporting Hypothesis 6.

To test Hypothesis 7, bootstrapping analysis using PROCESS 3.5 (Model 80) was performed using 5000 re-samples (Hayes, 2017). This version of PROCESS enables testing by logistic regression for a

p < 0.05.

p < 0.01.

p < 0.05.

^{***} p < 0.01.

p < 0.001.

dichotomous outcome variable (Hayes, 2020). As the results in Table 4 show, the indirect effect between negative emotions and job choice intention through self-efficacy and occupational identification was significant (effect = -0.08, SE = 0.04, bias-corrected confidence interval = -0.16, -0.03). Additionally, the indirect effect between negative emotions and job choice intention via intrinsic motivation and occupational identification (effect = -0.13, SE = 0.06, bias-corrected confidence interval = -0.26, -0.04), via extrinsic motivation and occupational identification (effect = -0.04, SE = 0.02, bias-corrected confidence interval = -0.11, -0.01), and via intrinsic motivation and occupational identification (effect =-0.07, SE =0.03, bias-corrected confidence interval = -0.15, -0.02) were also significant. Finally, the overall model has an acceptable fit (Model LL(8) = 142.87, p < 0.001, CoxSnell $R^2 = 0.29$, McFadden $R^2 = 0.29$), supporting Hypothesis 7. After controlling for all mediating effects, the relationship between negative emotions and job choice intention was not significant (b = -0.16, SE = 0.19, p > 0.05), indicating a full mediation through the proposed serial mediating effects (Baron and Kenny, 1986).

5. Discussion

By drawing on the affective experience perspective (Seo et al., 2004) and integrating work on proactive motivation (Parker et al., 2010), this study examines how negative emotions invoked by a crisis such as COVID-19 influence hospitality management students' identification with their occupation and intention to pursue a career in the hospitality industry via three salient motivational processes, namely self-efficacy ("can do" motivation), intrinsic and extrinsic motivation ("reason to" motivation), and passion ("energized to" motivation). Supporting the study's predictions, the results revealed that negative emotions significantly reduce hospitality management students' occupational identification and in turn, their job choice intention and further that three underlying motivational pathways significantly explain how the effects of such emotions are channeled. Specifically, the three underlying motivational pathways (i.e., self-efficacy, intrinsic and extrinsic motivation, and passion) and occupational identification fully mediated the negative relationship between negative emotions and the job choice intention of the hospitality management students. Results indicate that each motivational pathway explained a strong and significant variance in the mediating effects.

5.1. Theoretical contributions

This study contributes to theory in several ways. First, by demonstrating the effects of negative emotions invoked by COVID-19, this study captures how emotional responses to adversity and crisis in an industry can influence occupational attitudes toward an industry. Data were collected from hospitality management students at a time when the hospitality industry had already been severely impacted by COVID-19. Although career development and job choice have received some attention in the hospitality literature (Song and Chon, 2012; Tolkach and Tung, 2019), it remained unclear how emotions invoked by a major crisis would affect occupational attitudes. Thus, by providing a more nuanced view of the effects of negative emotions invoked by a crisis on occupational attitudes, this study not only advances understanding of the consequences of heightened levels of anxiety and negative emotions from pressures from work, study, social interactions, and safety (Li et al., 2020) but it responds to calls to examine the effects of COVID-19 on the attractiveness of hospitality jobs and occupations (LJHM, 2020).

Second, the study also contributes to the broader career literature. Job choice is highly dependent on the anticipated outcomes of a job (e. g., earnings potential, opportunities for career growth and advancement) (Sheu et al., 2010) and is often viewed as a cognitive and evaluative decision-making process (e.g., the weighting of both advantages and disadvantages) influenced by job seekers' perceptions of the attributes of the job (Schwab et al., 1987). The results of this study, however,

provide evidence supporting the idea that emotions may also play a role in occupational identification and in turn, job choice intentions. As the findings reveal, negative emotions can influence decision-making when it involves complex (versus simple) cognitive processes that arise due to crises and uncertainty (Isen and Reeve, 2005). Thus, the study extends the literature by suggesting that job/career choice is not merely based on rational decision-making but rather can also be shaped by individuals' feelings and emotions in a particular context, a view that alters the common perception that emotions should be discounted or excluded from the decision-making process. In this manner, the study also addresses scholars' calls (e.g., Walsh et al., 2015; Song and Chon, 2012) to improve understanding about why students are interested (or not interested) in certain types of jobs following their graduation.

Third, prior research (e.g., Kiefer, 2005; Patzelt and Shepherd, 2011) has demonstrated that individuals' emotions are a key antecedent of their attitudes and behavior. For example, affective events theory (Weiss and Cropanzano, 1996) posits that one's affective response to workplace events is a proximal predictor of one's work or occupational attitudes and behaviors. However, while most prior work focuses on workplace stressors (e.g., organizational change, Kroon and Noorderhaven, 2018; Steigenberger and Mirc, 2020), this study extends this stream of research to events from the external environment by explicating the effects of a natural disaster (i.e., COVID-19). Such an addition to the literature is timely and important because according to experts COVID-19's influence is expected to continue for the foreseeable future and there remains a very real possibility of future crises (CDC, 2021; New York Times, 2020; Tesar, 2020; WHO, 2021).

Lastly, by identifying three prominent motivational pathways through which negative emotions influence occupational attitudes, this study provides a more nuanced approach for conceptualizing and predicting salient negative emotional outcomes in response to a crisis. As the study reveals, hospitality management students' negative affective reactions to COVID-19 are channeled through three motivational processes indicated by self-efficacy, intrinsic and extrinsic motivation, and passion to influence their occupational attitudes. These findings are consistent with the affective infusion (Forgas, 1995) and affect-as-information (Clore et al., 2001) perspectives which posit that individuals' affective experiences serve as a signal that can activate the cognitive process, leading to more distal outcomes. The integration of Parker et al. (2010)'s motivational framework therefore extends previous studies in three important ways. First, whereas most prior research focuses only on one cognitive or motivational process in isolation (e.g., Foo et al., 2009; Liu et al., 2017), by testing the two main cognitive motivational processes (i.e., "can do" and "reason to" motivation) and a salient affective motivational process (i.e., "energized to" motivation) simultaneously, this study provides a more precise account of their underlying variance. Second, it found that an event-based emotional state (i.e., negative emotions) invoked by an external threat (i.e., COVID-19) reduced the task-specific affective state (i.e., passion), and in turn, influenced occupational identification and job choice intention. The focus on negative emotions as adaptive emotional responses to external threats is therefore different from previous studies which have mainly focused on dispositional, context-free measures of negative affectivity (Watson et al., 1988). Third, this study also responds to calls for more research to apply the proactive motivation model in different research fields (Parker et al., 2010), and finds that "can do", "reason to", and "energized to" motivations are significant to explaining why the negative emotions of students invoked by a crisis affect their occupational identification, and further affect their job choice intention. Hence, the findings expand the model of proactive motivation to the context of career-related outcomes and indicate that these motivational states are important underlying mechanisms that transmit the effects of emotions to occupational identification and job choice intention.

5.2. Practical implications

The study also offers new insights of relevance to hospitality management educators, practitioners, and students. First, by demonstrating that negative emotions invoked by COVID-19 can diminish students' occupational attitudes, we alert educators to the importance of not only monitoring the emotional states of their students and helping them to restore their emotional health (e.g., emotional counseling, pastoral care, encouraging students to form support groups) during periods of crisis but, interestingly, that when the occupation students aspire toward is also being threatened that steps need to be taken to reduce students' anxiety about their chosen occupation/profession. The COVID-19 crisis has created unparalleled uncertainty about the future of the hospitality industry in general and careers in hospitality management in particular. As a consequence, stakeholders need to help students understand how the industry intends to recover and identify potential future career opportunities (e.g., forums with industry experts, career counseling). Such efforts could even include helping students to identify career opportunities in alternative industries in which the skill-set they are currently acquiring through their studies will be viewed favorably by potential employers. It is important to note that such interventions could be undertaken proactively (e.g., during the early stages of a crisis) to help minimize the onset of negative emotions and to strengthen student's confidence, persistence, and commitment to their studies as a crisis

Second, the finding that self-efficacy, intrinsic and extrinsic motivation, and passion represent three salient motivational pathways through which negative emotions are channeled enables the design and implementation of more targeted responses during times of crisis. For example, given the important role that self-efficacy can play in helping to mitigate the adverse effects of negative emotions on occupational attitudes, steps should be taken to bolster students' self-efficacy. Efforts could include developing skills relevant to overcoming the challenges imposed by COVID-19, including offering training, workshops, and coaching to develop both new learning abilities and new occupation related skills that may be necessary in the hospitality industry post-crisis (e.g., using remote learning and working technologies). Such interventions are not only likely to make students more confident, improve their view of the future, and help them set goals but may also have the added benefit of making them feel more competitive in their intended labor market. Moreover, given the similar importance of intrinsic and extrinsic motivation, efforts should be made to help cultivate these forms of motivation. This might be accomplished by enhancing students' interest in their intended occupation and helping them overcome challenges (e.g., providing mentoring from current hospitality industry employees) as well as by improving students' understanding about the potential rewards and benefits that can be achieved from joining the industry (e.g., organizing industry related job fairs), thereby helping to decrease their uncertainty about the future of the industry. Further, given the importance of passion, efforts should be made to kindle and bolster students drive, energy, and enthusiasm for a career in the hospitality industry. Interventions could include providing students with internships and other opportunities for engagement with the industry which can help them to feel connected with the industry or like "hoteliers", perceptions that are likely to help thwart the effects of negative emotions imposed by COVID-19 and promote commitment and satisfaction with their intended occupation (Stryker and Burke, 2000).

Third, although not directly tested, the study also offers important additional insights of relevance to hospitality educators and businesses. For example, for hospitality educators, because occupational identification can form as early as adolescence, this suggests that negative emotions invoked by a crisis such as COVID-19 may also impact the occupational attitudes of secondary school students and hence, their interest and choice in pursing tertiary education in hospitality management. Accordingly, to help overcome this potential student recruitment issue, hospitality educators should take steps to communicate to

prospective students (e.g., through school websites, program brochures, materials at education fairs and open days, talks at secondary schools) the various forms of support available at the school to not only promote their emotional well-being but also help them find jobs in the industry following their graduation (e.g., placement services). For practitioners, given the potential deleterious consequences of negative emotions on occupational attitudes, hospitality businesses should not only similarly monitor their employees' emotional states and take remedial action as needed but also take steps to enhance employee commitment and motivation to their careers and industry (e.g., recognition programs, job rotation opportunities, crisis management skills training) during periods of heightened crisis.

5.3. Limitations and future research

Despite the study's theoretical and practical contributions, several limitations warrant consideration. First, because data were collected from only one source (i.e., full-time hospitality management students) and at a single point in time, the possibility of common method bias cannot be ruled out nor can causality be established. Although results from Harman's one-factor test (Podsakoff et al., 2003) and confirmatory factor analysis suggest that common method variance was not a significant issue, future research could consider including objective forms of measurement (e.g., actual job searches, job application decisions). Moreover, because it is possible that job choice intention could be an antecedent of occupational identification, given that hospitality management students can adjust their perceptions of occupational identification to self-verify their intended career (Swann et al., 1992), future studies could also consider utilizing longitudinal methods (e.g., measuring variables over a longer period of time and at a greater number of intervals) to improve the understanding of causality. Second, because the majority of respondents were first and second year students, future research could consider a more narrow focus on final year hospitality management students because they may have different reactions to external stimuli (e.g., COVID-19), given their closer proximity to graduation and stage in job search related activities. Similarly, to enhance the generalizability of the findings, future work could replicate the study in different academic disciplines (e.g., medicine, nursing) and industries (e.g., healthcare, financial services) which may be impacted differently by COVID-19. Third, because this study's interest was in understanding the implications of a crisis such as COVID-19 on hospitality management students' emotions and occupational attitudes, individual personality traits were not measured directly. However, as prior research suggests, personality traits may influence perceptions and reactions to environmental stimuli (see Huang et al. (2014) for a meta-analysis). For example, students with a high level of neuroticism (e.g., Schneider, 2004) may perceive stressors more negatively and, as a consequence, experience greater negative emotions and their related consequences than those who exhibit a lower level of neuroticism. Thus, further insights may be gained by including such variables in future investigations. Fourth, because data were collected during the COVID-19 pandemic, comparisons cannot be made before the crisis or with different types of crises. Future research could therefore replicate this study, for example, post-crisis or during different types of crisis (e.g., general economic recession) to provide further insights into the relationships investigated. Finally, this study examined the underlying mechanisms through which negative emotions influence occupational attitudes from a motivational perspective (Parker et al., 2010) and specifically, three motivational pathways, including "energized to" passion. However, given that prior work suggests that both harmonious and obsessive passion may influence employee emotions and behavior (e.g., emotional exhaustion, innovative behavior, and customer service behavior), future work could include dualistic forms of passion to elucidate the implications of different types of passion. Other psychological mechanisms (e.g., emotional regulation, stress coping) and variables (e.g., perceived stress, emotional exhaustion) could similarly be

included in future research.

6. Conclusion

COVID-19 has harmed hospitality management students' emotional health and created uncertainty about their future careers in the hospitality industry. Negative emotions are a natural and adaptive response to external threats and uncertain events, such as COVID-19. By examining how negative emotions triggered by COVID-19 influence the occupational attitudes of hospitality management students, this study revealed that not only do such emotions adversely impact occupational identification and in turn, job choice intentions but that their effects are channeled through three underlying motivational pathways (i.e., "can do", "reason to" and "energized to" motivations). Thus, by identifying both affective feelings and proactive motivational mechanisms as important antecedents of career aspirations this study improves the theoretical precision of predicting how the effects of negative emotions brought about by a crisis are likely to affect career interests and aspirations. Importantly, the study suggests that in the context of a severe crisis such as COVID-19 students are likely to benefit most from efforts that not only help to restore their emotional well-being but also cultivate their self-efficacy, intrinsic and extrinsic motivation, and passion for pursuing a career in their chosen occupation. The authors are encouraged that the leverage points identified by this study can be used to help make students more confident, interested in, and passionate about their studies and intended careers in hospitality management, thus helping to preserve a valuable source of future talent for the hospitality industry.

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