

Students' Career Anxiety: A Systematic Literature Review

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Abstract: Students' career anxiety: A systematic literature review. Career-related concerns are an issue even within student population. Previous researches have aimed to explore students' career anxiety but there has not been any literature review that concludes these findings. **Objectives:** This study aims to systematically review existing researches to find out how career-related anxieties have been identified and what might predict them. **Methods:** From 780 articles found, 17 articles were considered eligible in which information such as definition, measurement methods, and correlates were then extracted. **Findings:** Students' career anxiety is generally defined in terms of feelings, physiological reactions, and cognitive components related to students' career situations. Factors related to individuals, their environment, and helpful environmental and psychological resources were identified. **Conclusion:** Students' career anxiety might manifest itself in negative feelings, physiological reactions, and maladaptive cognitive state. School and students' direct environment might play an essential role in ensuring smooth career exploration by identifying and helping manage students' career anxiety.

Keywords: students' career anxiety, students' employment anxiety, career-related anxiety.

Abstrak: Kecemasan karir pelajar: Reviu literatur sistematis. Kekhawatiran terhadap karir muncul bahkan pada populasi pelajar. Telah banyak penelitian yang membahas kecemasan karir pada populasi pelajar, namun belum ada reviu literatur yang merangkum temuan-temuan tersebut. **Tujuan:** Reviu literatur ini dilakukan untuk mengidentifikasi bagaimana kecemasan karir pelajar selama ini didefinisikan, diukur, dan mengidentifikasi variabel-variabel lain yang berkaitan. **Metode:** 780 artikel diseleksi secara sistematis, dan 17 artikel dianggap layak untuk ditelaah lebih lanjut terkait definisi, pengukuran, dan variabel korelasi yang ditemukan. **Hasil:** Kecemasan karir pelajar umumnya didefinisikan terkait dengan perasaan, reaksi fisiologis, dan komponen kognitif yang muncul dalam situasi karir. Faktor yang berkaitan dengan individu, lingkungan, dan sumber daya psikologis ditemukan relevan dengan keberadaan kecemasan karir. **Kesimpulan:** Kecemasan karir pelajar dapat muncul dalam bentuk perasaan negatif, reaksi fisiologis, serta kondisi kognitif yang negatif dan maladaptif. Sekolah dan lingkungan dapat mengambil peran yang penting dalam memastikan kelancaran eksplorasi karir pelajar dengan mengidentifikasi dan membantu pelajar menghadapi kecemasan karirnya.

Kata kunci: kecemasan karir pelajar, kecemasan kerja pelajar, kecemasan karir.

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■ INTRODUCTION

Students and graduates often exhibit anxious thoughts and attitudes when thinking about their future employability or when searching for a job. It is not uncommon for graduates to feel anxious about job searching and applying for jobs (Isnaini & Lestari, 2016), or to have anxious thoughts and behave apprehensively when discussing job-seeking and their future employability (Sejati & Prihastuty, 2012). In other words, anxiety and fear about one's future are normal processes in young people's lives, but this idea seems to remain rather unexplored. This viewpoint overlooks the current situation faced by young people: inflation is on the rise, and there is a significant disparity between the number of job openings and the number of individuals seeking employment, which is expected to worsen in the coming future (Suhendra & Wicaksono, 2020; Soeharjoto & Oktavia, 2021). It is also not unusual for these young individuals to express their concerns about this topic, demonstrating how delving further into this concept might ensure seamless career development during their schooling years.

Career anxiety plays a crucial role in one's career development. Its importance may even be more prominent when someone has to make a significant career decision. Students' career anxiety is the consequence of one's hesitation when making career decisions and can hinder one's career exploration and decision-making (Tsai et al., 2017). It is important to note that feelings of anxiety within someone's career decision-making process are sometimes necessary (Peng & Johanson, 2006). However, if career anxiety becomes too overwhelming and is not addressed, it can be a hindrance in one's career decision-making process. Students' career anxiety might prevent them from exploring career opportunities and ultimately lower the quality of their career decisions. Identifying students' career anxiety is essential to ensure a smooth and

effective career decision-making process, allowing students to feel more comfortable engaging with their career-related thoughts, programs, or activities.

Previously, literature reviews that include career-related anxiety as a researched variable mainly focused on the non-student population. A literature review was done on research focusing on working adults about their anxiety towards future careers (Rajabimajd et al., 2021). Another literature review was done to evaluate working adults and job seekers' career anxiety and anxiousness regarding their employability (Mahmud et al., 2021b). A literature review on researches about collegiate and professional athletes (Rice et al., 2019) also further explored athletes' anxiety related to possible career dissatisfaction. On the other hand, literature reviews on career-related issues in the student population rarely include students' career anxiety as a relevant subject to be further analyzed. Previous literature reviews often focus on the broader concept of career-related processes and issues in the student population, such as career adaptability (Chen et al., 2020) or career indecision (Priyashantha et al., 2023). In these previous researches, career anxiety often remains unexplored and very narrowly defined and measured despite its constant presence, for example as career choice anxiety or career concerns. Findings related to students' career anxiety are still sporadic and not conclusive about the nature of these career-related anxieties in the student population.

Currently, there is no existing literature review on career anxiety within the education context or with regard to student populations. Previously, students' career anxiety was typically discussed as part of their career exploration. In this context, career anxiety refers to one's ability to make career decisions (e.g. Osipow, 1999; Saka et al., 2008). Career anxiety is also defined as students' views and concerns about their future

employability (e.g. Unguyren & Huseyinli, 2020). Students' career anxiety has been described in various ways, with a noticeable difference between defining it as the inability to make career decisions based on one's ability and interest and emphasizing concerns about the labor market and the future.

This systematic literature review aims to unearth and summarize how students' career anxiety has been defined across research on career anxiety and the student population. Related to that matter, this study also aims to evaluate how students' career anxiety has been measured in previous research. This research also hopes to uncover the many variables that correlate to how each study defines students' career anxiety—finding similar predictors will enrich our understanding of students' career anxiety.

■ METHODS

Search Strategy and Selection Criteria

Articles were taken from three databases available from University of Indonesia library service: Sage Journals, Taylor & Francis, and ScienceDirect. The review was conducted based on the PRISMA guidelines (Page et al., 2021) as seen in Figure 1. Keywords “career AND anxiety” were used to search for titles, abstracts, and literature keywords. Through this method, 780 works of literature were obtained. Literature was selected using a few criteria, which required that the literature: (1) be a journal article, (2) be written in English, (3) research career-related anxiety within the educational context, and (4) use students as its research sample. Literature was excluded if: (1) it only had a career-related variable that was not related to anxiety or an anxiety-related variable that was not associated with a career, (2) there was no measurement of any form of students' career anxiety, or (3) if it focused on instrument development.

Data Extraction

The search results were imported into EndNote. To remove non-article references, the references were manually sorted based on their publication type. Duplicates were then automatically eliminated. Once duplicates were removed, titles and abstracts were screened to determine their suitability based on the inclusion criteria. Any irrelevant literature was excluded. A second screening process was then conducted on the full text of each literature, focusing on determining if the literature discusses anxiety related to career situations or students' career concerns and processes that are related to anxiety. The screening also assessed if the literature measures career-related anxiety—for instance, if students' career anxiety is not simply discussed as an additional analysis in the literature.

Data such as research samples, students' definitions of career anxiety, measurements of career anxiety, and correlates of students' career anxiety were extracted from each study. The various definitions of students' career anxiety, measures, and correlates were identified and summarized in a narrative text and a comprehensive table. The quality of each piece of literature was assessed using the Critical Appraisal Skills Programme (CASP, 2018). The indicators of this assessment were whether an article 1) had a focused issue, 2) had an adequate sample, 3) minimized bias in the research, 4) had an appropriate design, and 5) had an appropriate analysis. Each study was labeled with a Yes, No, or Inconclusive in each indicator (Wuthrich et al., 2020). For this study, an article will be regarded as *Acceptable* if it fulfills at least three indicators. An article will be considered *Not Acceptable* if it is inconclusive or does not meet three or more indicators. These articles underwent further inspection to decide whether to include said article in the literature review.

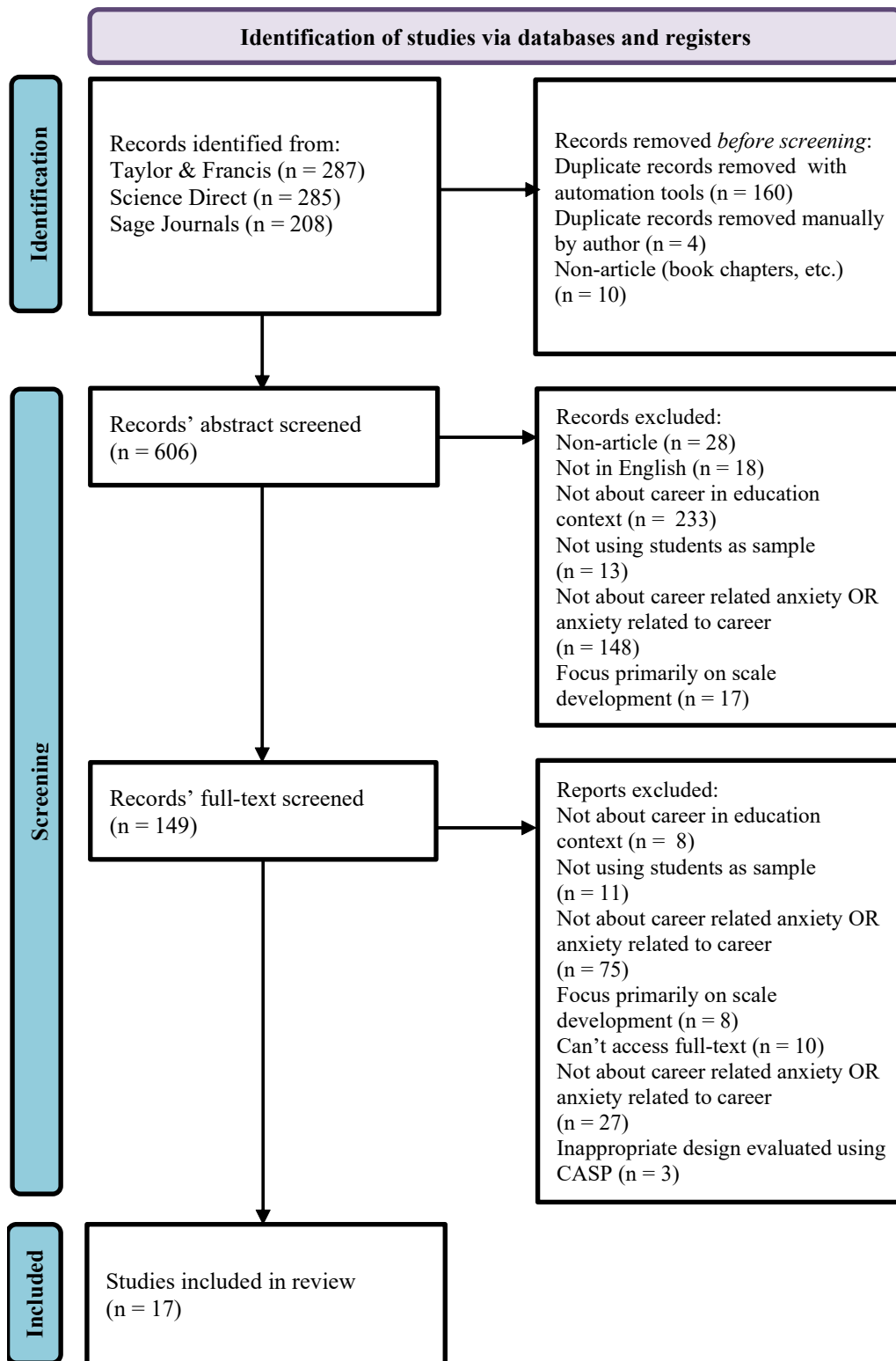


Figure 1. Research flow, based on prisma guidelines (page et al., 2021)

■ RESULTS AND DISCUSSION

Twenty articles were initially selected based on inclusion and exclusion criteria. The twenty articles were then assessed using CASP to determine their eligibility. Seventeen papers were found to be of *Acceptable* quality; three articles fitted all the indicators, ten fulfilled four indicators, and four met at least three indicators. The remaining three articles with '*Not Acceptable*' quality were assessed further. In the end, all *Not Acceptable* literature was excluded from the review. One piece of literature was excluded because of inappropriate design, another one was excluded for improper method and inadequate sample, and the last one was eliminated because of its qualitative nature and how students' career anxiety was not discussed further in relation to other variables.

How Students' Career Anxiety Was Defined

Students' career-related anxiety is mentioned using various terms in the 17 articles, such as *career anxiety*, *employability anxiety*, and *career/choice anxiety*. In 11 articles, the definitions of students' career anxiety are further elaborated (Peng & Johanson, 2006; Starling & Miller, 2011; Braunstein-Bercovitz et al., 2012; Gati et al., 2012; Walker & Tracey, 2012; Lustig et al., 2017; Boo, Kim, & Kim, 2021; Boo, Wang, & Kim, 2021; Mahmud et al., 2021a; Belle et al., 2022; Unguren & Kacmaz, 2022). Six other studies do not elaborate further on the definition of anxiety or students' career anxiety that is being measured in the research and simply define students' career anxiety as feelings of anxiety in career-related situations (career decision-making situations, beliefs about one's employability).

The anxieties recorded in these articles are all associated with a career situation, in which each study might define its own career situation. Fifteen articles describe students' career anxiety

as anxiety in the context of career decision-making; it refers to anxious thoughts or concerns and feelings of anxiety regarding the whole process of career decision-making (Salimi et al., 2001; Peng & Johanson, 2006; Grier-reed et al., 2009; Braunstein-Bercovitz et al., 2012; Gati et al., 2021; Germeijs et al., 2012; Boo, Kim, & Kim, 2021; Boo, Wang, & Kim, 2021; Mahmud et al., 2021a; Kautish et al., 2021), or anxiety in which it emphasizes on individual's inability to make a career decision (Starling & Miller, 2011; Walker & Tracey, 2021; Jung et al., 2015; Lustig et al., 2017; Unguren & Kacmaz, 2022).

Students' career anxiety is generally considered as state anxiety toward a career decision-making situation. A few studies (Braunstein-Bercovitz et al., 2021; Gati et al., 2021; Boo, Kim, & Kim, 2021; Boo, Kim, & Wang, 2022) define students' career anxiety as a feeling of stress and concerns that are present in the process of career decision making (Saka et al., 2008). Saka et al. further explain how anxiety in this context refers to feelings of anxiety and concerns before an individual makes a career decision and anxiety towards the uncertainty in making a choice—this anxiety exists because of the uncertain nature of the future, or the anxiousness that emerges because of the inability to make a career decision. It also refers to the anxiety that stems from fear of making the wrong choice thus losing a better opportunity, and the anxiety about how one's decision might fail. Saka et al.'s definition of students' career anxiety is the most used definition in this review.

Another study conceptualizes career anxiety as anxiety towards the career decision-making process (Peng & Johanson, 2006) in reference to *state anxiety* by Spielberger (1972). State anxiety describes a condition in which the feeling of tension and worry that an anxious individual feels is impermanent or temporary; anxiety varies in intensity and its presence depends on the

situation perceived by the individual. In this study, the situation was a career-related activity in which an individual was instructed to formulate a career decision. Unguren and Kacmaz's (2022) study defines career anxiety as a negative emotional state that arises due to uncertainty and difficulty in achieving career decisions as part of the career decision-making process (Vignoli, 2015). Mahmud et al. (2021), who examined career anxiety in students who will face the labor market in near future added that career anxiety in this context is a form of negative feelings and physiological reactions that presents itself when fear is provoked—in which fear is triggered by the perception of a future threat (Dobson, 1985). Thus throughout these various studies, it is common to conceptualize students' career anxiety as anxiety towards a comprehensive conception of career situations; the career situation that is implied in each study ranges from the process of making a career decision as a student to thoughts of employability and future employment.

When students' career anxiety is associated with the inability to achieve a career decision, such as in Starling and Miller (2011) and Lustig et al.'s (2017) research, students' career anxiety refers to the definition introduced by Sampson, Peterson, and colleagues (Peterson, Sampson, Reardon and Lenz, 1996; Sampson, Peterson, Lenz, Reardon, & Saunders, 1996). Sampson, Peterson, and their colleagues define student's career anxiety as an individual's inability to make a career decision, along with negative feelings and thoughts that arise during the career decision-making process. Another research defines career anxiety as one's inability to make decisions because of the many options and information that leads to confusion and lack of confidence in making decisions (Brown, 2012, in Walker & Tracey, 2012). In this context, students' career anxiety is defined as a state they might go through in which they would struggle to make career decisions and experience discomfort.

Other studies by Unguren and Huseyinli (2021) and Belle et al. (2022) define students' career anxiety as anxious thoughts and negative feelings that cause distress and are present when one is thinking about their future employability or their ability to get jobs in the future. Unguren & Huseyinli's research further explains that the context of 'getting a job' referred to seeking employment that can provide individuals with the livelihood they feel like they deserve—in other words, when defining the students' career anxiety that was felt by participants, concerns about future economic well-being were present. Lastly, research by Belle et al. (2022) defines students' career anxiety as a highly distressing emotion related to an individual's expectations of their ability to get a job and get prestigious, if not proper, employment after graduation (Malim & Birch, 1998). These latest studies put a lot of emphasis on how students' career anxiety is very much related to students' future employability and the quality of their future employment.

To sum it all up, students' career anxiety can be defined as feelings, physiological responses, and thinking patterns that often refer to the career decision-making process and are also related to the inability to make career decisions. This anxiety then traps an individual in a situation where they will continue to feel anxious and unable to reach a career decision. Some studies view students' career anxiety as something that is also directly related to the ability to get a decent job after graduating from school.

Students' career anxiety measurement

Nine instruments were used to measure career-related anxiety and they were identified. The career anxiety measurement tool by Tsai et al. (2017) was widely used in various studies in this review to measure students' career anxiety (Boo, Kim, & Kim, 2021; Boo, Wang, & Kim, 2021; Mahmud et al., 2021; Unguren & Kacmaz, 2022). The

Table 1. Articles included in the review

Author	Sample size	Sample age	Measurement or treatment	Definition of student's career anxiety	Career anxiety related findings
Salimi et al. (2005)	High school senior; 223 (124 girls, 99 boys)	16-21 (M=17,1; SD=0,8)	Educational and Career Anxiety Questionnaire; Parent's Self-esteem and Expectancy Questionnaire	"...anxiety about different education and careers."	Parent's self-esteem predicted educational and career anxiety, in which this effect is stronger in samples whose fathers experienced higher education.
Peng & Johanson (2006)	College athlete; 65	Not mentioned	Career Maturity Inventory; Cognitive Career Oriented Intervention; State subscale of State-Trait Anxiety Inventory	"...state anxiety in a decision-making process of career..." in this study, after having received career-decision-making instruction.	Significant mean difference in anxiety related to career decision-making was found between the groups; those exposed to the intervention exhibited less anxiety.
Grier-reed et al. (2009)	University students; 75	Not mentioned	Gender; Ras; Career Decision Self-Efficacy Short Form; Six-sessions career planning course; Career Thoughts Inventory (CTI); Commitment Anxiety Subscale)	"...the anxiety an individual experiences when faced with career decisions."	Significant mean difference was found between before and after intervention through course planning.
Starling & Miller (2011)	Community college freshmen; 125	18-44 (M=20; SD=4,1)	Career Thinking Inventory; Status of college major selection	"...a combination of the inability to make a commitment to a specific career selection and a generalized anxiety about the process of making a decision..."	Career anxiety in community college population was higher than that of normative (college) population. Those with undecided majors exhibit significantly higher anxiety.
Braunstein-Bercovitz et al. (2012)	Behavioral sciences freshmen; 200	20-30 (M=23,7)	Experience in Close Relationships Inventory; Trait Anxiety Scale from State-Trait Anxiety Inventory; Life Orientation Test-Revised; Emotional and Personality Career Difficulties (EPCD); The Career Indecision Scale	"... career-choice anxiety is considered a state-like condition, referring to the specific anxiety which accompanies the career decision-making process; adopted the definition proposed by Saka et al. (2008)..."	Career choice anxiety was significantly and positively related to career indecision. Anxious attachment was also found to be significantly and positively related to career-choice anxiety.

Author	Sample size	Sample age	Measurement or treatment	Definition of student's career anxiety	Career anxiety related findings
Gati et al. (2012)	Undergraduate students; 543	(M=23, SD=3,25; M=22,51, SD= 2,18; M=21,99, SD=3,52) on T1 and (M=25,84, SD=3,30) on follow-up.	EPCD ; Decided/Undecided using forced choice option developed by the author; Career choice satisfaction using 2 questions developed by the author	"...the anxiety associated with career decision-making and includes four categories: (1) anxiety about the process—feelings of stress and anxiety arising prior to decision making; (2) anxiety about the uncertainty involved in choosing—including uncertainty about the future, anxiety about being in an undecided state, and anxiety due to low tolerance for ambiguity; (3) anxiety about commitment to one's choice—including perfectionism about choosing, fear of losing other potentially suitable options, fear of choosing an unsuitable occupation, and anxiety about one's responsibility for the act of choosing; and (4) anxiety about the outcome—in cases where the individual is worried about being unable to actualize the chosen alternative."	Career anxiety was found to be stable between T1 and T2. Career anxiety predicted career decision status in male samples, in which higher anxiety predicted one's tendency to not yet make a career decision.
Germeijs et al. (2012)	Highschool students; 665	M=18, SD=6,3	Study Choice Task Inventory; CDSE; CFI (Career Choice Anxiety Subscale) ; Rational Decision-Making Style Scale; Commitment Scale of the GIDS; Student Adaptation to College Questionnaire (Subskala Academic Adjustment & Social Adjustment)	"...feelings of anxiety..."	Students in the achievement and foreclosure stage were found to exhibit lower career anxiety.

Author	Sample size	Sample age	Measurement or treatment	Definition of student's career anxiety	Career anxiety related findings
Walker & Tracey (2012)	University students; 207	Not mentioned	CDSE; Subscale choice/commitment anxiety and lack of readiness of the Career Indecision Profile	"...choice/commitment anxiety has been described as one's inability to commit to a decision to due to having a multiplicity of available options or to not having a sufficient amount of information that would permit one to make a confident decision." (Brown et al., 2012)	Career anxiety is predicted by the ability to understand the importance of the correlation between what is done at the present and what is one's future goal, thus decreasing anxiety.
Jung et al. (2015)	Undergraduate students; 98	M=21,22; SD=3,22	Affect grid; FTP Scale by Carstensen & Lang (1996), CDSE; Modified version of State Anxiety Scale from State-Trait Anxiety Inventory ; General Self-Efficacy Scale	"People feel anxious when they cannot choose and commit to a particular career."	Students who perceive their future as limited in terms of time (FTP) have lower anxiety when choosing a career. This predictive quality is weakened when students have high affect spin.
Lustig et al. (2017)	University students; 141	18-60 (M=22,5; SD=6,80)	CFI (Subskala Career Choice Anxiety) ; Family Environment Scale-Form R	"...the impact anxiety has on a person's ability to commit to a career decision."	Students with more family conflict as well as family's degree of expressiveness predicts higher anxiety.
Unguren & Huseyinli (2020)	Tourism education university students; 512	Not mentioned	Measurement of intention to pursue career in tourism sector; status of student membership; scale developed to measure employability anxiety	<i>Anxiety of employability</i> ; anxiety towards one's ability to get a job in the future (in the context of high unemployment rate). "...anxiety about finding a job after the graduation."	Low intention to have a career in the tourism field is related to higher anxiety in relation to one's employability, and the relationship is stronger in students who are not part of any extracurricular club.
Boo, Kim, & Kim (2021)	University students in hospitality course; 293	Not mentioned	Measurement of career anxiety developed by Tsai et al. (2017) ; measurement of choice goals developed by the author; GPA	<i>Career anxiety represents negative emotions experienced throughout the career decision-making process and during job performance (Saka et al., 2008); students uncertain about their career choice are anxious about their indecision (Tsai et al., 2017).</i>	Higher anxiety about one's ability and the perception of the workforce predicts higher intention in engaging in activities that might help improve their performance in aiming for their career.

Author	Sample size	Sample age	Measurement or treatment	Definition of student's career anxiety	Career anxiety related findings
Boo, Wang, & Kim (2021)	Students who take hospitality course; 560	M=21,61; SD=3,89	Career Adapt-Abilities Scale; FTP Scale by Carstensen & Lang (1996); measurement of career anxiety by Tsai et al. (2017)	<i>Career-related anxiety comprises four categories: anxiety about the process, anxiety about uncertainty, anxiety about the choice, and anxiety about the results (Betz & Serling, 1993; Saka & Gati, 2007).</i>	Higher career adaptability in students predicts lower career anxiety. Adaptability affects students' perception of having enough time to manage their future, and predicts lower anxiety
Kautish et al. (2021)	Hospitality & tourism students in public universities; 472	>17	Scale developed to measure career anxiety in terms of personal ability, irrational belief about employment, employment environment, professional education training, social support in terms of friends, social support in terms of family, and career commitment	<i>"... the anxiety concerns related to career have taken up steam in the global pandemic milieu and more particularly been observed in university graduates who are on verge of completing their studies and will look for employment opportunities in the future (Mahmud et al., 2020)."</i>	Career anxiety in terms of personal ability, irrational beliefs, perception of work environment, and professional training has a significant role in defining career commitment. Career commitment can be strengthened through social support.
Mahmud et al. (2021a)	University students who will face the workforce in 6-12 months; 232	18-40	Fear of Covid Scale (FCV19S); measurement of career anxiety by Tsai et al. (2017); DASS	<i>"Anxiety is the unpleasant feeling state and physiological reaction that occurs when fear is provoked; fear is one's awareness and appraisal of danger (Beck & Emery, 1979). Anxiety is a state of human emotion which can be formed due to the perception of future threat (Dobson, 1985)."</i>	Fear of COVID-19 predicts career anxiety in students. Fear of COVID affects depression in students and then affects the career anxiety felt by students.
Belle et al. (2022)	Final year undergraduate students; 546	Not mentioned	Coping styles' scale; anxiety subscale of the DASS , using "When I thought about getting unemployment after graduation in the last week..." as permeable; PsyCap questionnaire	<i>"An emotion that is distressing" (Malim & Birch, 1998) in relation to post-graduation employment expectancies.</i>	PsyCap or psychological resources and positive coping style predicts lower anxiety towards one's employability, while negative coping style predicts higher employability anxiety. PsyCap predicts one's coping style which in turn, predicts one's level of career anxiety.

Author	Sample size	Sample age	Measurement or treatment	Definition of student's career anxiety	Career anxiety related findings
Unguren & Kaemaz (2022)	Students from tourism management, tourism guiding, gastronomy and culinary arts, and recreation department; 1097	Not mentioned	FCV19S; three-item scale developed to measure perceived risk of infection; Psychological Resilience Scale; measurement of career anxiety by Tsai et al. (2017)	<i>Career anxiety is defined as the emotional state that arises due to the uncertainties or indecisions experienced by the individual in career choice (Vignoli, 2015)</i>	Fear of COVID-19 and perception towards the risk of getting infected affects the career anxiety in tourism and hospitality students, in which career anxiety is predicted by students' fear of COVID-19 due to their perception of risk of infection. This relationship is found to be stronger in students with lower psychological resilience

Measured students' career anxiety refers to anxiety related to the individual's perception of their ability in the future workforce, irrational or excessive fear, anxiety about the work environment, and the individual's perception of his lack of professionalism when entering the job market. These four studies also define students' career anxiety as a form of anxiety that corresponds throughout the career decision-making process.

Several studies define students' career anxiety as state anxiety. They used anxiety measuring tools such as the State-Trait Anxiety Inventory and DASS to measure state anxiety that is associated with a career situation. Research by Peng and Johanson (2006) and research by Jung et al. (2015) measured students' career anxiety using the state subscale of the State-Trait Anxiety Inventory instrument (Spielberger et al., 1970, 1983) after participants were instructed to think about career decision making, and with additional information to fill out a questionnaire "...now, when you think about your career decisions that you may not have made yet" respectively. The research conducted by Belle et al. (2022), which measured career anxiety related to the ability to get a job, used the anxiety subscale in DASS-21 (Norton, 2007) by adding, "*When I think about employment/job status after graduation in the past week...*" as a condition that preceded each statement.

Meanwhile, the measurement of anxiety that is closely related to the process and status of career decision-making used subscales related to career commitment from various career-related instruments. The Career/Choice Anxiety subscale in the EPCD (Saka et al., 2008) was used to measure career anxiety in the context of the career decision-making process, concern about uncertainty, worries about making mistakes, and thoughts of failure in one's chosen career (Braunstein-Bercovitz et al. , 2012; Gati et al., 2012). Commitment Anxiety subscale from the

CFI or Career Factors Inventory (Chartrand et al., 1990) was used in two studies (Germeijs et al., 2021; Lustig et al., 2017). The Commitment/Choice Anxiety subscale of the CTI or Career Thinking Inventory by Sampson, Peterson, and colleagues (Peterson, Sampson, Reardon and Lenz, 1996; Sampson, Peterson, Lenz, Reardon, & Saunders, 1996) was used in two other studies (Grier-reed et al., 2009; Starling & Miller, 2011). Another study (Walker & Tracey, 2012) used the career anxiety subscale in the Career Indecision Profile (Brown et al., 2012). These subscales share some similarities, in which career anxiety is measured as a part of an anxiety profile or career-related thoughts and behavior patterns, where anxiety is closely associated with indecisiveness.

The last two studies measured career anxiety by developing their measuring instrument based on the career definition determined by the researcher. Kautish et al. (2021) established a measurement scale based on career anxiety that was defined as self-efficacy anxiety, irrational fear, job-related anxiety, and lack of proper training. Meanwhile, Unguren & Huseyinli (2020) established a specific measurement scale to measure anxiety related to finding a post-educational job.

Correlates of Students' Career anxiety

Several things can be predicted by students' career anxiety, ranging from factors from within the individual to external influences from the individual's environment. Personality factors such as the form of attachment (Braunstein-Bercovitz et al., 2012), identity achievement, and foreclosure (Germeijs et al., 2012), as well as factors such as career adaptability (Boo, Wang, & Kim, 2021), were found to predict career anxiety in students. External factors such as parental self-esteem on children's academic and career abilities (Salimi et al., 2001) also predicted career anxiety in children as students. Other situational factors, such as fear of the COVID-

19 pandemic, were also found to predict students' career anxiety (Mahmud et al., 2021a).

Students' career anxiety was also correlated with several factors akin to their career exploration as students. Concern about the career decision-making process was found to be associated with the status of the career decision itself (e.g., has the student made a career decision or not; Gati et al., 2021) and involve oneself in activities that support academic abilities that are considered helpful in building career opportunities (Boo, Kim, & Kim, 2021). Students' career anxiety can also predict a person's commitment to his career decisions (Kautish et al., 2021).

While career anxiety is closely related to one's career decision status itself, factors such as future time perspective (Jung et al., 2015), the lack of understanding about the correlation between the present and their future (Walker & Tracey, 2012), and the ups and downs of individual effect (Jung et al., 2015) were found to predict career anxiety that occurs when individuals are unable to make a career decision. External factors such as conflict within the family and the degree of emotional expressiveness of the family (Lustig et al., 2017) were also found to predict the state of anxiety related to one's career choice. Situational factors such as fear of the COVID-19 pandemic and perceptions of how likely an individual is to be infected with the virus (Unguren & Kacmaz, 2022) can also predict career anxiety in students, especially those whose future career opportunities are significantly related to human-related service such as tourism. Finally, career anxiety was related to individual perceptions of the workforce and their employability; factors such as the intention to have a career in the field being studied in higher education (Unguyren & Huseyinli, 2021) as well as internal factors such as resilience and individual's psychological resources (Belle et al., 2022) were found to be predictive of students' career anxiety.

In other words, factors affecting the presence of students' career anxiety vary from intrapersonal factors such as personality, students' developmental stage, and their psychological resources, to external factors such as parental self-esteem regarding their children's career and other environmental factors like fear of the pandemic and how it increases anxiousness in students regarding their career. Other external factors that predict students' career anxiety are related to students' career exploration process, such as whether a career decision has been made and how involved students are with academic activities that are considered helpful to their future employability. Some of these external factors specifically affect the anxiety that arises when it comes to making career choices, such as students' future time perspective and how much students realize the connection between what they do now with their future career, students' family environment such as existing conflicts and family's emotional expressiveness, and also students' view of the environment of their future career opportunities such as whether they are situational dangers (e.g. COVID-19 pandemic) or whether they find congruence between their field of study and career opportunities.

■ CONCLUSIONS

Students' career anxiety is generally defined as negative feelings, physiological reactions, and cognitive components such as negative thoughts and worries that arise in students' career situations. Anxiety, in this case, is temporary and occurs because of certain career situations faced by individuals, such as demands to make a career decision or situations in which individuals will transition in their careers (such as when individuals have just entered a new educational stage and need to determine majors, or when individuals achieve graduation and must enter the world of work), and also when individuals are concerned about the quality of their future employment and their employability.

The measurement of students' career anxiety also varies based on how career anxiety is defined in each study. Career anxiety, when considered part of a thought or behavior pattern, is often measured as an individual's inability to determine a career decision. Meanwhile, when students' career anxiety is defined more broadly as fear and maladaptive thoughts that arise in the context of the career decision-making process, the measurement also considers other factors, such as individual perceptions of the two, specifically defined as anxiety about the labor market and the ability to work/get a job is also measured based on these conditions.

Career anxiety is related to various individual aspects, ranging from personality and trait anxiety tendencies to external factors such as the immediate environment (friends and family) and situational factors such as the world situation. Internal factors such as personality. Attachment and affective patterns are intrinsic factors that predict anxiety tendencies in individuals. However, what is quite interesting from aspects related to students' career anxiety is how resources that can provide individuals with more career information, career understanding, and increase individual competencies related to their careers are often found to predict lower anxiety in the career decision-making process and anxiety towards the post-education world. Thus, efforts to increase the quality and quantity of resources that can facilitate this in the educational environment must be considered by schools and educators to reduce the collective career anxiety students might feel and improve the quality of the graduates' career decisions. Future studies could focus on developing effective programs and activities to improve students' career decision-making and reduce career anxiety.

This study has a few limitations. First, most of this research was conducted on the tourism/hospitality student population. Since anxiety in a career context is defined as a cognitive and emotional state that is a response to a specific

career situation that students perceive, it is essential to consider how students in different fields might have different views of careers and the workforce available to them—individuals may have other sources of anxiety, or elicit different anxious behaviors.

Another limitation is found in how the career-related anxieties that are discussed in this review come from studies on various stages of education. This review found that students' career anxiety might be heightened at the end of students' education period (example: senior year of high school, final year of university). Thus, the context of employment or anxiety about the labor market feels relevant to discussions related to students' career anxiety. A review that emphasizes the employment aspect of students' career anxiety might be relevant to discussions related to students' career anxiety, especially in places where employability is an issue, such as in developing countries where the working-class population is skyrocketing with the disparity between job seekers and available job vacancies.

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