Unemployment Anxiety and Its Relationship to Academic Identity among Graduate Students

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ABSTRACT:

When students suffer from employment anxiety, it affects their behavior, daily life, and even physical and psychological well-being. Experiencing high anxiety may make individuals feel frustrated, undermine their self-confidence, cause them to withdraw from social interactions, and lessen their motivation and aspiration to achieve. Due to fast technological advancement these concerns have aggravated now jobs in all disciplines and all sectors are facing continuous risk because the shrinking of job opportunities especially in academic fields and increasing competition with smart systems and automated equipment. Consequently, unemployment anxiety may become a form of advanced psychological outcome that arises from confusion and deterioration in academic identity.

The research problem was formulated in terms of the question: Is there a relationship between unemployment anxiety and academic identity of graduates? The purpose of the study is to find the relationship between unemployment anxiety and academic identity. To accomplish the aims of the research, two scales i.e. unemployment anxiety and academic identity scales were constructed.

According to James Marcia (1966, 1980) and Charles Carver and Charles' (1985) Future Expectations Theory, the two researchers adopted an Academic Identity Integration Theory. Once the two instruments' validity and reliability were established, they were administered to a sample of graduate students (PhD, Master's and Diploma students) from scientific and humanities subjects. Researchers took a convenient sample of female and male students from University of Kufa in Iraq.

The result showed that the unemployment anxiety of the research sample was less than average. Unemployment anxiety wasn't found to be statistically significantly different as per gender. Nevertheless, differences that were statistically significant were found according to academic specialization in favor of scientific students. There were no significant differences according to the degree level. The findings also show that the research sample's academic identity was at the above-average level. Moreover, it has been identified that there are no statistically significant differences in academic identity based on gender or academic specialization, while there are statistically significant differences according to degree levels in favor of PhD

students. In conclusion, the results exhibited a statistically significant negative relationship between academic identity and unemployment anxiety.
Keywords: Anxiety, Unemployment, Identity, Academic Identity, Students, Graduate Studies.

Research Problem

Flores (2007) defines identity as a non-cognitive factor that is central to education as it influences performance and decision making. Graduate students face many challenges and obstacles that interact with their prior knowledge, experiences, and various parts of their personalities. The ensuing patterns of academic identity are likely to differ depending on social and cultural circumstances and the pressures of contemporary life (Flores, 2007).

According to Marcia (1980), there are four identity statuses: a diffuse, foreclosed, moratorium and achieve identity. Diffuse identity pertains to both the lack of commitment to one's academic identity and the lack of exploration of it. There is often indecision, procrastination, and delays in making academic decisions. Students in a moratorium status are unclear and indecisive, actively exploring and evaluating their academic values and interests. A person with a foreclosed identity is strongly committed but is not willing to explore other alternatives. When students enter graduate studies, they may challenge their diffuse or foreclosed identity and gather clarity on their ideological and professional commitments. According to Marcia (1980, p. 56), identity has been achieved into academic values and goals, which refers to after a period of exploration and reflection.

In this case, students with moratorium identity may be unsure whether they have chosen the best academic specialization and may lack motivation and preparedness to face the academic learning experiences and knowledge. As a result, the identity status experienced by students in higher education can significantly impact their academic identity, where higher education settings are generally fraught with various challenges and situations, through which students subsequently acquire various academic and life skills and personality development (Al-Dhafri, 2015) .

The demographic variables such as gender and field of study have influence upon academic identity patterns. A study by Al-Mahasneh and Al-Athamat (2018) showed that achieved identity differed in favor of female students. The other classification that was positively correlated with academic achievement of males was diffuse academic identity. According to Carlisle (2015, p. 45), achieved academic identity had a negative association with behavioral self-handicapping while two self-handicapping types had positive associations with moratorium and foreclosed academic identities. In the same vein, Puspoky (2018, p. 34) made remarks concerning identity statuses, self-efficacy and achievement goal orientations as the diffuse academic identity was negatively related to mastery goal orientation and academic engagement. Research conducted by Zayed (2025) and Al-Sukari (2022) has also revealed a negative correlation between academic self-handicapping and academic identity.

In today's world, students face a major problem in shaping their academic identities. A lack of closeness to their study area and a declining belief in their research abilities can weaken students ' academic identity and increase their susceptibility to newer issues especially with the takeover of advanced technology in the modern world. Inan and Koç (2023) stated that unemployment anxiety is negatively related to life satisfaction. According to Lemay et al. (2020), it follows that the connection between artificial intelligence anxiety and technological readiness may create technological readiness inhibitors, which are positively linked with anxiety about job replacement and technological and social illiteracy. Frey and Osborne (2017)

added that artificial intelligence is not simply a productive technology anymore but is what alters beliefs about professional and occupational expectations. The quick progression of AI algorithms has brought about psychological insecurity for students. The anxiety about unemployment is shifting from mere unavailability of work to a greater concern regarding being replaced and changing demands in the labour market.

Unemployment is one of the major problems that societies face. Unemployment can have drastic effects on mental health. It can cause anxiety, sadness, and depression.

According to Wei (2024), unemployment has a positive correlation with the increase in psychological disorders, such as depression and drug addiction. Even though those economies have witnessed an economic growth, unemployment is on the rise. In developing countries, uemployment has become an important social problem as the current economic systems have not adapted to globalisation.

The psychological consequences of unemployment anxiety have become one of today's most serious issues affecting society and even the health of people and communities (Khitabi, 2007, p. 40). Mr. Shaheen report indicates that unemployed persons often suffer certain amount of tension, frustration and anxiety, which can affect their self-esteem and perception of failure capability to move on with the future more negatively. According to Al-Jumaili (2020), the unemployed male and female graduate students showed very high levels of unemployment anxiety variance and surveyed perceptions of the future value significantly correlated. University students have a negative self-management strategies relationship which gave lesser unemployment anxiety dimensions as reported by Al-Laymoon and Al-Shawashreh (2020).

In Iraq, experiencing unemployment represents a serious challenge in connection to the graduates of universities and institutes who are not able to practice their professional specializations due to not finding any job opportunity in both the public or private sector. In Iraq, the unemployment rates have been said to be several times the unemployment rates reported as normal (Mohammed and Baden, 2015).

With the growth of unemployment and their harmful effects on society, many experts from various fields are giving considerable attention towards social, psychological and economic effects of unemployment. According to Shaheen (2015), the fear of redundancy forms an essential cause that contributes to the risk of committing suicide as well as social crises, unlike the individuals who are gainfully employed and have high confidence over their future.

The exploration of unemployment anxiety by students is thus a social necessity rather than an academic one. Today's life has become complicated, especially for a graduate student, due to the change in social and economic conditions (Mohammed & Devecioglu, 2018). According to a new survey (Charles, 2012), 64 per cent of higher education graduates worry about being unemployed. According to Davras (2020), unemployment anxiety has an adverse effect on students' behavior, quality of life, and physical and psychological well-being. High anxiety may result in feelings of frustration, decreased self-esteem, social withdrawal, and low achievement motivation. The anxiety due to technlogy and of losing out on a job is growing.

Graduate students are an important form of human capital investment. Their fears about being unemployed go beyond the financial implications to issues of existence, personal and academic identity. This discrepancy between what the workplace needs and what credentials our schools provide may grow. Despite graduate students usually having strong academic aspirations and a high sense of academic belongingness, uncertain future career opportunities may hinder academic identity and raise unemployment anxiety.

The current study, therefore, aims to explore the relationship between academic identity and unemployment anxiety of graduate students.

The following question allows us to express the research problem:

What is the nature of the relationship between academic identity and unemployment anxiety among graduate students?

Significance of the Research

A student's academic identity relates much more strongly to important educational variables than demographic characteristics like the socioeconomic background and can thus contribute significantly to academic success and adjustment. It is therefore essential to develop students' academic identity and help them to achieve identity status. Cognitive resilience and improvement of creativity through achievement identity. The engagement and ability of students to deal with academic and technical problems (Kroger, 2007, p. 30) is stronger in those with strong academic identities.

Your academic identity also relates to your academic performance. Academic identity statuses can predict academic achievement, as demonstrated by Abdi and Zandipayam (2019). In a similar tone, Mancini (2015, p. 33) stated the relationship between academic identity and career success. He indicates that students who attain achieved identity perform better academically, cope better with challenges and are more satisfied professionally. Students with moratorium identity on the other hand, not being able to commit are likely to find it harder to study. Previous studies consistently demonstrated that students with an achieved identity have higher academic achievement, greater satisfaction with educational choices, and more psychological stability. On the contrary, students at the moratorium stage may experience anxiety in academic settings and find it hard to commit to a research project, meanwhile students with foreclosed identity may satisfy the academic requirements. However, these students do not actively or creatively think about anything (Hejazi et al., 2012).

The educational institutions supporting the well-being of students can produce the necessary change and foster the development of awareness. Educational institutions should develop effective measures and initiatives geared towards reinforcing their academic identities. The character of a person is ultimately developed through learning and training that creates continuity and a self-image. This process of development is a fundamental aspect of academic personality. As a student's academic identity becomes more stable and accomplished, their perception of technological changes as an opportunity increases and anxiety towards artificial intelligence and related technologies decreases (Amodeo et al., 2017).

Simultaneously unemployment continues to be among the most serious issues facing the world. Although the economy is growing over the years the unemployment rate still keeps on rising every year. When governments are not able to implement good policies that lower unemployment, the problem gets worse as well as its consequences.

Unemployment anxiety matters because it can severely affect mental health and emotional wellbeing. In this regard, the association of anxiety is with the employment prospects that a person has to face on an everyday basis. As a result of the transformation of the economy and increased competition for jobs in the labor market, unemployment anxiety has a psychological, social, and professional impact on students.

This study is important because it focuses on the graduate students, which is one of the most critical groups in higher education. The public good will increasingly be served by graduate education as societies evolve in future development. This stage, however, is generally burdened with psychological struggles, frustration, uncertainty, anxiety and worries about an unpredictable future (Al-Souri, 2014, p. 14).

Accordingly, this research will have theoretical and practical knowledge which will form an integrated whole that will help in better understanding all the three variables. The importance of the present study can be viewed from two aspects.:

First: Theoretical Importance

The theoretical importance is determined by the following points:

1. The importance of research comes from the importance of research variable as academic identity represents the hub of the student's academic self while unemployment anxiety represents an anticipated economic outcome.
2. The research findings explained above contribute to the consequence of theory of academic identity and unemployment anxiety. It can close research gaps and help understand the indirect psychological mechanisms in the relationship between these variables. As a result, it may create new avenues for excellent studies connecting them to current academic, psychological, educational and professional variables..

Second: Practical Importance

The practical importance is determined by the following points:

1. The study provides scientific indicators which help those in charge of the academic process understand the kind of relationship that exists between academic identity and occupational anxiety so as to enhance the provision of psychological and academic support methods for graduate students.
2. The findings of this research can provide the bodies concerned such as the Ministry of Higher Education and the like with relevant information regarding the professional fears of graduate students. This assists in creating education policies that link academic specialties with smart labor market requirements.
3. The research enhances the understanding of the professional-psychological needs of graduate students to improve their employability skills.

Aims of the Research

The current research aims to:

Aim One-A: To identify the level of academic identity among graduate students.

Aim One-B: To identify academic identity among graduate students according to the domains of the scale.

Aim Two-A: To identify the level of unemployment anxiety among graduate students.

Aim Two-B: To identify unemployment anxiety among graduate students according to the domains of the scale.

Aim Three: To identify statistically significant differences in academic identity and unemployment anxiety according to the variables of gender, male and female, specialization, scientific and humanities, and type of degree, diploma, master's, and doctorate.

Aim Four: To identify the statistically significant relationship between academic identity and unemployment anxiety among graduate students.

Aim Five: To identify statistically significant differences in the relationship between academic identity and unemployment anxiety among graduate students according to the variables of gender, specialization, and degree.

Limitation of the Research

The present research is limited to academic identity and unemployment anxiety variables only. The research sample consists of graduate students at the University of Kufa – Al-Najaf Al-Ashraf Governorate, which is limited according to the gender variable male and female, academic specialization scientific and humanities, and type of degree diploma, master's, and doctorate for the preparatory and research stage for the academic year 2023-2026 AD, 1446-1447 A.H.

Research limits: In the spatial aspect: The current research is limited to the University of Kufa which is one of the universities in Iraq. In the temporal aspect: The current research extends from 9/1/2022 to 9/22/2022.

Definitions of Terms

First: Academic Identity

1. Definition of Marcia, 1980: The concept where an individual uses a definition; a student or a researcher. In addition, you can also use someone's assertions that involve values, beliefs, and educational and professional goals. Components of academic identity are cognitive, conative and behavioral. We explore this theory in this academic identity essay. (Marcia, 1980) We recognized four identity patterns: a diffused identity; a moratorium identity; a foreclosed identity and an achieved identity.
2. According to Murtithi, a students sense of belonging in a school refers to what students feel and how a student interpret and perceive the possibility of accomplishing a task academic or being able to achieve.
3. According to Burbidge et al., 2018, a student has developed a set of forma values, ideas, and goals and is committed to applying them in order to receive them. The achievement-identify refers to the identification with success and learning and the degree of the student's awareness of the principles and values of academia.
4. Mohammed Sayed, 2022 says that this deals with the self-view and perception the individual has of himself/herself in academic contexts through exploring one's goals and values and their commitment to achieving academic tasks.

The researcher adopted Marcia's 1980 definition as the theoretical definition of academic identity, since the researcher adopted Marcia's 1980 theory in preparing the scale in the current research.

The student's feelings, image and reputation of himself or herself in the academic setting. Further, this refers to his or her acceptance of a series of values, objectives and ideas, as well as the level of engagement in their application. The total score is assessed by the researcher who prepared the Academic Identity Scale. The student responds to the items in the scale to get his score.

Second-A: Unemployment

It was defined by:

1. According to Al-Shammari (2005:5), the concept of unemployment has come to mean a situation in which the individual is able and willing to work, but suitable wages and suitable work are not available.
2. According to Al-Akhdar, 2006:98 "which means a presence of a group of workers who have the desire to work but do not work". In other words they remain outside the active labour force, they are unemployment.

Second-B: Unemployment Anxiety

It was defined by:

1. According to Carver & Scheier (1985:34–35), job anxiety is defined as a psychological tension which occurs when a worker judges that there is a gap between what he/she expects to occur (positive to experiences in the job market and professional future) and what he/she experienced negatively (unemployment or no adaptation to the requirements of the labour market). The feeling of anxiety is the impact of the mismatch between the individual's perception of the future and expected reality on the psychological, cognitive and behavioral state, professional self-efficacy and technological and environmental changes (Carver & Scheier, 1985: 34-35).
2. According to Al-Mashhadani (2014:20) defines stress as a mental and intellectual strain, which happens to the person due to feeling insecure about their job. This manifests as negative expectations and a continuous fear of being unable to secure or retain a job (for example, a person with agoraphobia may feel inferior to their peers).
3. According to Al-Harahsheh, 2019, the term refers to a set of painful feelings experienced by either the graduate - or the student in the stages approaching graduation - and has been defined as the fear of failure to integrate into the labor market, as well as the social and family pressures resulting from inability to invest the academic qualification in professional stability.
4. According to Abdullah (2021), a feeling that arises after one's graduation period (believing that one will not get a suitable job)

that causes anxiety, tension, fear and discomfort because one believes that he will not get suitable job opportunities and that there are too many negative expectations for the future00.

Unemployment anxiety has been given a theoretical definition by adopting the definition of Carver & Scheier, 1985:34–35. The researcher adopted that theory of Carver & Scheier, 1985:34–35 for building the scale in the present research.

Unemployment anxiety is defined as the anxiety and frustration that students go through due to the anxiety of not getting a suitable job. This is assessed through the cumulative score the student attains after responding to the questions in the Unemployment Anxiety Scale created by the researcher in the present investigation.

First Axis: Theoretical Framework

Academic Identity Integration Theory, James Marcia, 1966, 1980

James Marcia's Identity Development Theory, which emerged in 1966 and which was developed further in 1980, is based on Erik Erikson's concept of identity, Erikson 1968. James Marcia's Identity Development Theory, which emerged in 1966 and which was developed further in 1980, is one of the most influential psychological theories in the study of identity. It is the process that one undergoes to become complete and integrated in various fields of life especially in the academic field. The theory posits that two basic dimensions are inherent in the process of forming an academic identity: exploration and commitment.

Crisis or Exploration: Identity formation begins with the emergence of an identity crisis, a pressing issue within the individual regarding beliefs, roles and goals in life. In other words, it is a phase of looking around and finding what is his. The individual here collects the available roles and then picks the most appropriate ones.

Commitment can be defined as the degree of commitment that the individual accepts the selected values, ideological principles, goals, and social roles and the degree of adherence to them, among the alternative available. This does not mean total stability or no development, as a person who has found identity can develop his or her self throughout life with some measure of stability and consistency (Marcia, 1980:14).

Marcia (1980) identified four identity statuses based on the two dimensions, with each status reflecting levels of exploration and commitment.

First: Diffused Identity: There is low exploration and low commitment. People with this pattern display disinterest and lack of concern with identity issues. Based on this pattern, they do not bind themselves in a particular direction and lack the decision-making ability in identity domains. Usually, situations and circumstances affect those with diffused identity; They have an external locus of control and are less adapted.

Secondly, a moratorium identity denotes a situation with thorough exploration or search but limited commitment to any identity-related aspects. When considering important life decisions, these individuals do an evaluative critique of alternatives. During this phase, they actively re-examine life choices, which motivates them to face several pressures and move along which axis.

Third: Foreclosed Identity: Low exploration and high commitment characteristics. The psychological rigidity and close-mindedness characterize individuals with this pattern. There is an implicit commitment on behalf of these actors to quite a few goals and values, which they do not explore. A person of this character adopts rules, law, choice, and belief. The children of bureaucrats have ideal relations with their parents. They tend to be authoritarian and dependent on the customs.

After exploration successfully making the identity without turning back. Through this pattern, identity development is achieved. People who have this pattern think objectively, make decisions judiciously, and have strong social ties with others. The writer indicates that this stage is a period of self-realization (Marcia, 1980:26–36).

In this academic setting, integration of academic identity is viewed as a process of exploring

academic and professional options and committing to options that are consistent with one's values and personal standards, resulting in enhancement of one's sense of competence and academic belonging..

Second: Unemployment Anxiety.

Future Expectations Theory (Carver & Charles, 1985)

The Future Expectations Theory in the context of professional and academic anxiety is attributed to Carver and Charles (Carver & Charles), who worked with Michael F. Scheier on the theory of self-regulation and future expectations in 1985. It is a psychological and social framework that focuses on how individuals form expectations about their future and how these expectations influence their current behavior and psychological well-being. The theory explains anxiety by directly linking it to the concept of future expectations as a theoretical framework that integrates positive perceptions (hopes and aspirations) with negative perceptions (fears and doubts). It reflects the psychosocial nature of unemployment-related anxiety among university youth and explains that anxiety is not merely an immediate response but rather the product of a cognitive and emotional gap between expectations and reality.

Dimensions of the Future Expectations Theory that Can Be Measured

Domains of the Theory:

1. Cognitive Dimension

A set of thoughts and mental perceptions held by the individual regarding their professional future, including the likelihood of obtaining employment, evaluating opportunities for success and failure, and understanding labor market requirements. Relationship to the theory: It is directly associated with positive and negative future expectations about the labor market and professional certainty or uncertainty.

2. Psychological Dimension

A set of feelings and emotions experienced by the individual when thinking about their professional future, such as anxiety, fear, reassurance, or optimism.

Relationship to the theory: It represents the emotional component associated with perceptions of the future and realistic or pessimistic expectations.

3. Behavioral Dimension

A set of actions and responses carried out by the individual as a result of their expectations and feelings toward the professional future, including efforts invested in training, searching for opportunities, hesitation in making professional decisions, and avoidance behaviors.

Relationship to the theory: It reflects how future expectations influence the individual's current behaviors.

4. Professional Self-Efficacy Dimension

The individual's perception of their academic and professional abilities and skills and the extent of their confidence in their capacity to face labor market challenges and adapt to its requirements.

Relationship to the theory: It reflects how future expectations influence professional self-efficacy.

5. Contextual Dimension / Digital Transformations

External factors that affect the individual's future expectations, including economic changes, labor market conditions, and technological developments.

Previous Studies

Academic Identity

A. Arabic Studies

1. Zayed (2025)

(The Predictive Role of Academic Self-Handicapping, Academic Identity, and Social Support in University Students' Academic Adjustment)

The current investigation aimed to analyse the predictive model of academic self-handicapping, academic identity, and social support on academic adjustment. The participants in the

study included 320 male and female students. There were four variables which were measured using a reliable scale. they used this method as the targeted approach. The results show that self-handicapping in academics, academic identity, and social support significantly contribute to predicting academic adjustment. An association existed between academic adjustment and academic identity and social support. Academic self-handicapping lowered the levels of academic identity, social support, and academic adjustment. According to Zayed (2025), gender and academic specialization differences were not statistically significant.

Zayed, Amal Mohammed (2025) The study seeks to analyze academic adjustment through the academic self-handicapping, academic identity, and social support. The Port Said Journal of Educational Research 4(2) 40-71.

2. Al-Saadi (2024)

(Determining the Degree of Alienation and the Pattern of Academic Identity among Palestinian Students at the University of Haifa)

The study aimed to identify the levels of alienation and academic identity patterns and to inspect the predictive ability of alienation dimensions on academic identity among the students. The informative technique was used by the researcher. 242 gifted and talented students were selected randomly. The study used two scales. One is the alienation scale which was developed by the researcher. Another is an academic identity scale. According to the findings, the level of alienation of Palestinian students at the University of Haifa was moderate. The identity pattern that was dominant was foreclosed identity. The research further found helplessness and normlessness alienation dimensions as predictors of academic identity (Al-Saadi, 2024).

Rahab Al-Saadi 2024 The study identifies the extent of alienation and academic identity pattern among Palestinian students at the Haifa University. The Journal for Humanities Research - An-Najah University.

B. Foreign Studies

1. Albarram & Lim (2024)

(Promoting Scholars' Research Orientation through Understanding the Interplay between Academic Identity and Psychological Needs)

The goal of this study is to find out how the interaction of autonomy, relatedness and competence enhances academics' research orientation from the perspective of self-determination theory. A correlational descriptive methodology was applied by the researcher. The study involved 310 academic participants. As per the results, the satisfaction of competence needs motivated by autonomy and connectedness to the academic community by academic identity significantly improved research orientation. Results of the study also informed self-determination theory by showing how competence in research orientation was pursued through autonomy and relatedness by participants motivated by their academic identity (Albarram & Lim, 2024).

Albarram, B. M., & Lim, Y. M. (2024). Scholars' Research Orientation Promotion: The Exegesis of the Interplay Between Academic Identity and Psychological Needs. Journal of Contemporary Eastern Asia, 23(2), 1–17.

Second: Unemployment Anxiety

A. Arabic Studies

1. Study of Abdul Hamid (2024)

(Cognitive Emotion Regulation Strategies and Their Relationship with Technological Unemployment Anxiety among Al-Azhar University Students)

The study sought to know how cognitive emotion regulation strategies may relate to Al-Azhar University students' anxiety towards technology unemployment. The approach used was descriptive correlational. A total of 522 students included in the sample. There is a significant correlation between the strategies of self-blame, catastrophizing, and blaming others with the total score of the Technological Unemployment Anxiety Scale. The results also indicated that it is possible to predict the dimensions and total score of technological

unemployment anxiety by using the scores of the Cognitive Emotion Regulation Strategies Scale. There were no statistically significant differences between males and females on the Cognitive Emotion Regulation Strategies Scale (CERS-36) regarding acceptance, refocus on planning, positive refocusing, positive reappraisal, putting into perspective, and focus on thought. Nonetheless, male participants showed significantly higher levels of self-blame, catastrophizing, and blaming others, research says. Neither dimensions nor overall total score of technological unemployment anxiety show statistically significant differences between male and female Al-Azhar University students (Abdul Hamid, 2024).

Ahmed Mohammed Abdul Hamid 2024. Al-Azhar University Students' Technology Unemployment Anxiety in Relation to Cognition Emotion Regulation Strategies. Journal of the Institute of Educational Sciences in Psychological Sciences, 48(2), 17-80..

B. Foreign Studies

1. Study of Kıran et al. (2025)

(Determining Levels of Unemployment Anxiety among Pharmacy Students at Ege University)

The research modified pharmacy students' perceptions of unemployment through different levels of anxiety and hopelessness. Pharamcy students studying at Ege University, in Turkey, have also been asked for the research on restaurant reuse. The method of descriptive was used. The participants were 691 male and female students. The scale for unemployed anxiety was used. The results indicate that students are very worried about the rising numbers of pharmacy graduates which reduced their chances of getting a job. Lower family income was associated with higher unemployment anxiety. The more students progressed in their studies, the more anxious they felt about unemployment. The research also indicated that unemployment anxiety was low in students who were very good academic performers, students who had lived abroad for a long time, and those looking to set up their own business. "We experience unemployment anxiety," pharmacy students in general. This is due to the increase in the number of pharmacy colleges and training programmes (Kıran et al. 2025)

Kıran, B., Karaca, E. G., & Baliç, B. (2025). Determining Levels of Unemployment Anxiety among Pharmacy Students at Ege University. Journal of Research in Pharmacy, 26(4), 1016–1024.

Chapter Three

First: Research Methodology

The researcher utilized the descriptive correlational method to analyse the connection between academic identity and unemployment anxiety among graduate students through data collection and analysis process. Correlational analysis is a type of descriptive analysis that identifies the relationship between two or more variables and the strength of the relationship between them. It is viewed as a systematic scientific analysis and interpretation of facts, phenomena, or problem situations quantitatively through the collection of standardized information of the phenomenon. (Allam, 2011, p. 261).

Second: Research Population

The research population includes all people, phenomena, or events that researchers study and that share common observable characteristics. The researcher generalizes the results of the study to the ultimate target. (Al-Najjar, 2010, p. 149) The study targeted graduate students from 2023 to 2026 at University of Kufa. This was the sample population. They classified based on colleges, academic specialization, gender and degree type.

There were 1,163 students from 20 colleges consisting of 14 scientific colleges and 6 humanities colleges. The total student population in the humanities was 549, or 47%, while the scientific disciplines comprised of 614 students or 53%.

There were 446 (38%) male students and 717 (62%) female students. There were 22 (2%)

diploma students, 721 (62%) master's students, and 420 (36%) Ph.D students.

Psychometric Properties of the Academic Identity Scale

After confirming the item's ability to differentiate between individuals who possess high levels of the characteristic and those who possess low levels of it, psychometric researchers look for the psychometric properties of test and scale, which are properties that reflect the accuracy of the tool in measuring what is intended to measure and performing that measurement process with the lowest margin of human error (Al-Masri, 1999: 36).

The researcher established both validity and reliability as follows:

First: Scale Validity

The validity of a scale is the extent to which a scale achieves that for which it has been designed. (Odeh, 1998, pp. 333-335) This refers to the extent to which the instrument measures what is intended to measure (Harrison, 1983, p. 11). Several considerations affect the estimation of validity. The extent to which the scale can be considered valid, can depend on the purpose and sample type. It is also specific, i.e. the scale that is valid for measuring one characteristic need not be valid for measuring other characteristics. (Al-Ansari, 2000, p. 94).

The validity of the current scale was verified through three types of validity:

A. Face Validity

Face validity is what the test appears to measure in its superficial form. It is not about what it actually measures (Anastasi & Urbina, 1997, pp. 110–117). According to Freeman (1962, p. 73) the extent to which a test item is related to the variable being measured.

Ebel says experts examine the items of a test and claim that it seems to measure the characteristic for which it has been designed, when it is face valid.

To check the face validity, the researcher presented the Academic Identity Scale to a panel of specialists and experts for review. Expert approval for measuring the intended construct was obtained for all items at the rate of 90%. The significance of expert opinion was tested using Chi-square goodness-of-fit test. As shown in Table ( ) eight items were deleted.

B. Construct Validity

Construct validity relates to the extent to which empirical scores match the theoretical assumptions. When a scale exhibits construct validity, it means that the scale measures what the authors of the scale assume it measures (Allen &Yen, 1976, p. 108).

Construct validity, also known as conceptual validity or hypothetical construct validity, refers to the amount to which a psychological scale measures a hypothetical construct or psychological concept (Rabee, 1994, p. 98).

In confirming the construct validity, researchers applied the indicator items obtained from the item discrimination as well as the correlation between item score, domain score, and total test score. The statistical analysis sample of 400 was used to check for construct validity.

C. Factorial Validity

The key concept of Confirmatory Factor Analysis is to test the degree of correspondence for the covariance matrix of the analyzed variables. The matrix of the proposed model exhibits particular relationships among the variables, which is one of the most commonly used techniques for validating construct validity. Maccallum and Austin (2000, p. 201) refer to this technique as Covariance Structure Analysis.

The fit measures refers to the one that indicates the quality of model fit. When these indices indicate acceptable levels of fit, the scale is considered highly accurate. If not, it may be seen as weak or even rejected (Byrne, 2010: 4).

The researcher utilized Confirmatory Factor Analysis (CFA) for the Academic Identity Scale to verify the validity of their hypothesized structure. This analysis was performed by means of Amos statistical program. The assessment investigated the relationship of the covariance

matrix of the items included in the investigation, with the covariance matrix suggested by the model.

Second: Indicators of Scale Reliability

Reliability:

Validity is a relative characteristic and cannot be absolute. The reliability coefficient refers to stability over time, internal consistency, or equivalence coefficient (Abu Labdeh, 1985: 224). Reliability is considered a necessary procedure, although a valid scale is generally a reliable one (Faraj, 1980: 232).

The researcher calculated reliability using two methods:

A. Test–Retest Reliability Method

The test-retest approach is one of the important approaches for estimating reliability as it reveals the stability coefficient of individuals' responses across two administrations of the same scale separated by a time interval (Allam, 2000: 148).

The reliability sample used for the scale comprised 100 male and female students, which was the same sample used for the Artificial Intelligence Usage Anxiety Scale. This is illustrated by table. The scale was administered again after 15 days. The reliability was calculated using Pearson's correlation coefficient between the scores on the first and second administration of the participants. Table ( ) indicates that the reliability coefficient of Academic Identity Scale was high (Anastasi, 1976: 115).B. Cronbach's Alpha Coefficient

The estimation of reliability using this method depends on the consistency of an individual's responses to all items of the scale (Thorndike & Hagen, 1977: 82).

To estimate reliability using this method, Cronbach's Alpha formula was applied to the scores of the 100 male and female students who constituted the same sample used to estimate the reliability of the Artificial Intelligence Usage Anxiety Scale. The reliability coefficient of the Academic Identity Scale was found to be high (Stanley & Hopkins, 1972: 262), as shown in Table (1).

Table (1): Reliability Coefficients of the Academic Identity Scale and Its Domains Using Test–Retest and Cronbach's Alpha Methods

Domains	Test–Retest	Cronbach's Alpha
Diffused Identity	0.891	0.884
Moratorium Identity	0.911	0.775
Foreclosed Identity	0.933	0.872
Achieved Identity	0.915	0.887
Total Score	0.926	0.914

Second: Unemployment Anxiety

Psychometric Properties of the Scale

Psychometricians highlight two basic psychometric features: validity and reliability. The data or scores obtained from any psychological scale are dependent on these two properties. The aim of psychometric characteristics of scales and its items is to provide an indication of their accuracy to measure the required constructs and also to minimize the measurement error. (Abdul Rahman, 1998: 159–227).

Validity of the Unemployment Anxiety Scale

Validity is the degree to which the scale measures what it claims to measure (Odeh, 1998: 333-335). This reflects the ability to measure the scale construct that the scale intends to measure and is one of the most important characteristics nature of a psychological scale (Ebel, 1972: 435) (Harrison, 1983: 11) .

According to psychometric experts, there are many methods for estimating validity. According to Faraj (1980: 360), sometimes a quantitative validity coefficient is gained and sometimes a qualitative estimate is gained.

For the present scale, two types of validity established are face and construct validity. The following outlines the procedures followed.

A. Face Validity

Face validity is logical analysis to determine whether the scale is capable of measuring the construction anymore makes the sense ball seventy scale. The most effective way of assessing the face validity of a measure is getting a group of experts (specialists) to judge the appropriateness of the items for measuring the construct (Ebel, 1972: 55).

To achieve face validity of the Unemployment Anxiety Scale, the researcher presented the domains and items to a panel of educational and psychological experts. The items were confirmed to be suitable for measuring the intended construct, as evidenced by a 93.33% agreement. At a significance level of 0.05, the Chi-square goodness-of-fit test was used. The findings are illustrated in table ( )..

B. Construct Validity

Construct validity is considered the most representative form of validity and is Also known as hypothetical construct validity or concept validity. Psychologists will devise an instrument to measure a personality variable. Through an analysis of the items or variables one can judge the validity of the instrument. It is based on theoretical postulates which are tested empirically (Cronbach, 1970: 105).

According to Faraj (1980: 315), it is assumed that individuals vary in the extent to which they possess the trait of interest and that this variation should be reflected in their performance on the measure.

Internal consistency refers to the degree of homogeneity. As a result, the homogeneity degree of a scale closely relates to construct validity because it helps determine what behavior or trait the scale measures and shows the consistency of the scale items in measuring the instrument.

Anastasi (1976) states that when the correlation coefficient between the score of each item and the score of the total scale is statistically significant, it is an indicator of construct validity (Anastasi, 1976: 154).

The researcher assumed that differences in individual respondents would reflect differences in their performance and responses on the scale. Item discrimination was used to assess construct validity of the test. We also looked at internal consistency by correlating the score of each item with its respective domain's total score. These relationships were expected to be positively correlated and statistically significant, serving as indicators of construct validity. This gave evidence of internal consistency and confirmed that the scale measures only one construct.

C. Factorial Validity

Factor analysis assumes the principle of parsimony, that is, the search for the basic factors common to phenomena. According to analysts, researchers can learn about the elements that constitute the character of man with this approach.

When testing factorial validity, the fit indices should include an acceptable model fit. When the indices show reasonable fit, the scale will be highly accurate. If not, the model could be weak or rejected (Byrne, 2010: 4).

Second: Reliability Indicators of the Scale

Reliability helps discover and reduces errors of measurement. The scale items that have been designed to measure a construct are assumed to be reliable in their measurement (Murphy, 1988: 63).

There are many ways to measure the reliability of psychological scales and tests. There are some methods that assess the external consistency such as the test–retest method, which yields a coefficient of stability over time and the parallel forms method, which requires that two equivalent versions of the scale in item characteristics and nature are developed (Ebel, 1972: 412). Methods which assesses internal consistency like split-half reliability and techniques of analysis of variance (Al-Zahir et al., 1999: 140).

The scale reliability was estimated by administering it to a sample of 100 male and female graduate students from the University of Kufa using stratified random sampling. The Artificial Intelligence Usage Anxiety Scale employed a similar sample for its construction. The table below has the information.

1. Test–Retest Method

According to Allam (2000: 148), the test-retest technique is an essential process in estimating reliability as it indicates the stability coefficient in the responses of individuals on two occasions.

The scale is administered first and then it is read ministered after approximately two weeks time. Then, the score from two administration is correlated. This method affords confidence that the results will be similar and consistent where the scale is administered repeatedly with the same individuals under similar conditions (Al-Gharib, 1985: 653).

The Unemployment Anxiety Scale was administered by researcher to reliability sample of 100 students which was re-administered after two weeks. The obtained scores from both administrations and the relationship between the two was calculated using Pearson's r. Table ( ) shows that the resulting reliability coefficients were satisfactory (Anastasi, 1976: 115).

2. Cronbach's Alpha Coefficient

Cronbach's Alpha is characterized by its consistency and the confidence that can be placed in its results because it is based on the variance among all scale items. Each item is treated as an independent measure, and the reliability coefficient reflects the consistency of individual performance and the homogeneity among the scale items (Odeh, 2000: 354).

The researcher administered the Unemployment Anxiety Scale to a sample of 400 male and female students. The reliability coefficients obtained were satisfactory (Stanley & Hopkins, 1972: 262), as shown in Table ( ).

Reliability Coefficients of the Unemployment Anxiety Scale Using Test–Retest and Cronbach's Alpha Methods

Domains	**Test–Retest**	**Cronbach's Alpha**
Cognitive Domain	0.822	0.625
Psychological Domain	0.836	0.539
Behavioral Domain	0.822	0.791
Professional Self-Efficacy Domain	0.830	0.813
Contextual / Digital Transformations Domain	0.842	0.851

Aim Two-A: Identifying the Level of Academic Identity among Graduate Students

To achieve this aim, the researcher calculated the arithmetic mean and standard deviation of the sample scores on the Academic Identity Scale. A one-sample t-test was used to compare the sample mean on the Academic Identity Scale with the theoretical mean of the scale.

The results of the one-sample t-test comparing the sample mean on the Academic Identity Scale with the theoretical mean indicated that the calculated t-value for the Academic Identity Scale was statistically significant. The calculated t-value of 16.073 was greater than the tabulated value of 1.960 at a significance level of 0.05 and a degree of freedom of 599. This indicates the presence of a statistically significant difference between the sample mean on the Academic Identity Scale and the theoretical mean in favor of the sample mean. This finding suggests that the level of academic identity among the research sample was above average.

Aim Two-B: Identifying Academic Identity among Graduate Students According to the Scale Domains

The researcher calculated the arithmetic means and standard deviations of the Academic Identity domains (Diffused Identity, Moratorium Identity, Foreclosed Identity, and

Achieved Identity) and employed a one-sample t-test. The results are presented in Table (6).

A. Diffused Identity Domain

The Diffused Identity domain of the Academic Identity Scale among graduate students was statistically significant. The calculated t-value of 8.655 exceeded the tabulated value of 1.960 at a significance level of 0.05 and a degree of freedom of 599. This indicates a statistically significant difference between the sample mean on the Diffused Identity domain and its theoretical mean of 24, in favor of the sample mean. This finding indicates that the level of Diffused Identity among the research sample was above average.

B. Moratorium Identity Domain

The Moratorium Identity domain of the Academic Identity Scale among graduate students was statistically significant. The calculated t-value of 12.205 exceeded the tabulated value of 1.960 at a significance level of 0.05 and a degree of freedom of 599. This indicates a statistically significant difference between the sample mean on the Moratorium Identity domain and its theoretical mean of 24, in favor of the sample mean. This result suggests that the level of Moratorium Identity among the research sample was above average.

C. Foreclosed Identity Domain

The Foreclosed Identity domain of the Academic Identity Scale among graduate students was statistically significant. The calculated t-value of 9.701 exceeded the tabulated value of 1.960 at a significance level of 0.05 and a degree of freedom of 599. This indicates a statistically significant difference between the sample mean on the Foreclosed Identity domain and its theoretical mean of 24, in favor of the sample mean. This finding indicates that the level of Foreclosed Identity among the research sample was above average.

D. Achieved Identity Domain

The Achieved Identity domain of the Academic Identity Scale among graduate students was statistically significant. The calculated t-value of 18.060 exceeded the tabulated value of 1.960 at a significance level of 0.05 and a degree of freedom of 599. This indicates a statistically significant difference between the sample mean on the Achieved Identity domain and its theoretical mean of 24, in favor of the sample mean. This finding suggests that the level of Achieved Identity among the research sample was above average.

The researcher interprets the high level of academic identity by suggesting that graduate students demonstrate the presence of multiple identity statuses rather than being restricted to a single pattern. They are experiencing a stage characterized by complexity and overlap, which may result in the coexistence of more than one identity status. The elevated levels across all identity patterns reflect a dynamic identity condition characterized by change and instability according to experiences, challenges, and academic difficulties encountered by students.

The findings are consistent with those reported by Al-Mahasneh and Al-Athamat (2017). The researcher further explains that the elevated level of academic identity does not indicate that all identity statuses are fixed among students or that students belong simultaneously to all identity patterns. Rather, it reflects varying degrees of these identity statuses among individuals and the movement between them according to situations and academic experiences. This interpretation is consistent with the dynamic perspective of identity proposed by Marcia (1980).

According to Marcia's theory (1980), a high level of Diffused Identity reflects the absence of identity integration. Both exploration and commitment are low, resulting in the inability of students to establish a clear academic identity. This condition may reflect difficulties in coping with research pressures and uncertainty regarding academic pathways. The graduate study stage is considered a decisive period related to students' academic future and specialization, which may create confusion and uncertainty. The abundance of choices,

alternatives, and academic pressures further enhances confusion and feelings of helplessness.

The elevated level of Moratorium Identity can be explained by its characteristic high level of exploration, which broadens students' perspectives. Graduate study requires continuous exploration of academic and research alternatives, familiarity with current developments, and constant reconsideration of academic identity. This reflects students' efforts to make informed decisions. Some students may prefer remaining in the exploration stage to ensure that their academic and research decisions are based on careful consideration. Moratorium Identity may also be associated with academic anxiety because commitment remains low. Students seek to establish and finalize their identities, yet the abundance of alternatives and professional and academic pressures may increase stress and fear of making decisions that could later prove ineffective in the face of rapid changes. This status represents a transitional stage toward identity achievement. Without exploration, students cannot attain Achieved Identity. Graduate students therefore remain engaged in continuous exploration without full commitment due to their involvement in research and analysis, which requires extensive investigation before making decisive commitments.

The elevated level of Foreclosed Identity may be explained by the tendency of students to make academic decisions regarding specialization and research goals based on external influences such as family, employment, or institutional constraints rather than personal exploration. According to Marcia's theory (1980), this may lead to difficulties adapting to academic developments and a tendency toward conformity and imitation. It may also be associated with limited use of innovative technologies, reluctance to take risks, a preference for stability, and avoidance of the uncertainty and anxiety imposed by technological transformations. Furthermore, it may reflect limited academic individuality and a lack of full autonomy in scientific and academic development.

The elevated level of Achieved Identity suggests that students have succeeded in developing a clear and stable identity through extensive knowledge and experience in their fields of specialization. This reflects academic maturity, deep self-awareness, and emotional stability, enabling them to adapt to educational changes and demonstrate flexibility in selecting academic and professional pathways. It also indicates institutional belonging and a balance between commitment and exploration despite contemporary challenges. Students with achieved identity experience greater harmony with themselves, possess clear academic goals, demonstrate confidence in their abilities, and show resilience in facing difficulties and pressures. Identity is not acquired instantly but is constructed through extensive exploration, discovery, and strong commitment.

The findings are consistent with Al-Shalawi (2023), who reported elevated levels of both Foreclosed Identity and Achieved Identity.

The results also agree with the findings of Al-Obaidani et al. (2023), who reported elevated levels of Achieved, Moratorium, and Foreclosed Identity, and with Khalifa (2022), who found elevated levels of Diffused Identity. However, the findings differ from those of Al-Shalawi (2023), who reported no statistically significant differences in Achieved, Diffused, and Moratorium Identity patterns

Aim One-A: Identifying Unemployment Anxiety among Graduate Students

To achieve this aim, the researcher calculated the arithmetic mean and standard deviation of the sample scores on the Unemployment Anxiety Scale and used the One-Sample T-Test to compare the sample mean with the theoretical mean of the scale. The results are presented in Table (8).

The table shows that the calculated t-value for the Unemployment Anxiety Scale was statistically significant. The calculated t-value of (-5.074) exceeded the tabulated value of (1.960) at a significance level of (0.05) and a degree of freedom of (599). This indicates a statistically significant difference between the sample mean

on the Unemployment Anxiety Scale and the theoretical mean, in favor of the theoretical mean. This finding indicates that unemployment anxiety among the research sample was below the average level.

Aim Two-B: Identifying Unemployment Anxiety among Graduate Students According to the Scale Domains

The researcher calculated the arithmetic means and standard deviations of the Unemployment Anxiety domains (Cognitive, Psychological, Behavioral, Professional Self-Efficacy, and Contextual/Digital Transformations) and used the One-Sample T-Test. The results are presented in Table (9).

The results indicate that the mean scores of the Unemployment Anxiety domains compared with their theoretical means were as follows:

A. Cognitive Domain

The Cognitive Domain of the Unemployment Anxiety Scale among graduate students was statistically significant. The calculated t-value of (19.559) was greater than the tabulated value of (1.960) at a significance level of (0.05) and a degree of freedom of (599).

This indicates a statistically significant difference between the sample mean on the Cognitive Domain and its theoretical mean of (18), in favor of the sample mean. This finding indicates that the Cognitive Domain among the research sample was above average.

B. Psychological Domain

The Psychological Domain of the Unemployment Anxiety Scale among graduate students was statistically significant. The calculated t-value of (4.041) was greater than the tabulated value of (1.960) at a significance level of (0.05) and a degree of freedom of (599). This indicates a statistically significant difference between the sample mean on the Psychological Domain and its theoretical mean of (18), in favor of the sample mean. This finding indicates that the Psychological Domain among the research sample was above average.

C. Behavioral Domain

The Behavioral Domain of the Unemployment Anxiety Scale among graduate students was statistically significant. The calculated t-value of (-5.035) exceeded the tabulated value of (1.960) at a significance level of (0.05) and a degree of freedom of (599). This indicates a statistically significant difference between the sample mean on the Behavioral Domain and its theoretical mean of (18), in favor of the theoretical mean. This finding indicates that the Behavioral Domain among the research sample was below average.

D. Professional Self-Efficacy Domain

The Professional Self-Efficacy Domain of the Unemployment Anxiety Scale among graduate students was statistically significant. The calculated t-value of (-15.356) exceeded the tabulated value of (1.960) at a significance level of (0.05) and a degree of freedom of (599). This indicates a statistically significant difference between the sample mean on the Professional Self-Efficacy Domain and its theoretical mean of (18), in favor of the theoretical mean. This finding indicates that the Professional Self-Efficacy Domain among the research sample was below average.

E. Contextual / Digital Transformations Domain

The Contextual / Digital Transformations Domain of the Unemployment Anxiety Scale among graduate students was statistically significant. The calculated t-value of (-5.420) exceeded the tabulated value of (1.960) at a significance level of (0.05) and a degree of freedom of (599). This indicates a statistically significant difference between the sample mean on the Contextual / Digital Transformations Domain and its theoretical mean of (18), in favor of the theoretical mean. This finding indicates that the Contextual / Digital Transformations Domain among the research sample was below average.

The researcher explains the low level of unemployment anxiety among graduate students by their possession of a high level of skills and academic competence. Their involvement in scientific research and study requirements may

reduce anxiety regarding their professional future. Their engagement with academic and research goals and efforts to develop and enhance them strengthens their sense of capability in confronting future labor market challenges.

According to Carver and Charles (1985), awareness of the future influences individuals' behavior. Graduate students possess positive perceptions, hopes, and aspirations, which contribute to lower anxiety levels. Individuals' confidence, psychological perceptions of the future, and expectations of professional stability affect their perception of unemployment-related risks. Social and professional support, as well as students' sense of self-efficacy, play an important role in reducing the impact of negative expectations and enhancing positive expectations regarding employment opportunities and occupational stability.

Graduate students are generally concerned with their professional future, and anxiety may be linked to achievement. When expectations are positive, they foster optimism and confidence in one's academic and professional abilities and capacity to face future occupational challenges. All these factors contribute to reducing unemployment anxiety among students.

No previous studies were found that agreed with the findings of the current objective. However, the results differed from those reported by Al-Jumaili (2020), Ishtayyeh (2014), and Mohammed (2023).

The researcher explains the elevated levels of both the Cognitive and Psychological Domains by the expectations and perceptions students hold regarding their future, including employment opportunities, labor market requirements, and possibilities of success and failure. These perceptions are associated with negative expectations concerning the labor market. Graduate students often possess a high degree of awareness regarding labor market complexities and challenges, which leads them to think continuously about employment requirements and manifests as cognitive anxiety.

The elevated Psychological Domain reflects negative emotions such as fear and pessimism experienced when students think about their professional future. Psychological pressures, whether social or self-imposed, to prove themselves during this stage of education may generate tension and anxiety associated with establishing professional and personal identity.

The researcher interprets the lower levels of the Behavioral Domain, Professional Self-Efficacy Domain, and Technological Transformations Domain as positive indicators reflecting emotional stability among graduate students. Despite the presence of cognitive anxiety, students do not surrender to withdrawal behaviors. Their immersion in academic study and pursuit of research goals represents a positive form of engagement that absorbs anxiety and redirects it toward achievement and academic excellence.

Regarding Professional Self-Efficacy, the findings suggest that students possess a strong professional self-concept. Their advanced educational qualifications reduce fears of failure in performing future job tasks. Their confidence in their academic and professional skills enhances their ability to confront labor market challenges.

Students also demonstrate acceptance of and flexibility toward technological developments, which is reflected in the lower level of anxiety associated with technological transformations. Graduate students are among the groups most engaged with modern technologies and systems in research activities, contributing to technological adaptability rather than perceiving technological developments as threats to employment. External factors therefore exert less influence on their future professional expectations.

No previous studies were found that either agreed or disagreed with the findings of this objective.

Aim Three: Identifying Statistically Significant Differences in Academic Identity and Unemployment Anxiety According to Gender (Male, Female), Academic Specialization

(Scientific, Humanities), and Degree Type (Diploma, Master's, Doctorate)

To achieve this objective, the researcher used Multivariate Analysis of Variance (MANOVA) by calculating sums of squares, mean squares, and F-ratios. Table (12) presents the summary of the analysis results.

1. Gender Variable

Academic Identity

The calculated F-value for gender was (1.259), which was smaller than the tabulated F-value of (3.860) at a significance level of (0.05) and degrees of freedom (1, 595). This indicates that there was no statistically significant difference in academic identity according to gender.

Unemployment Anxiety

The calculated F-value for gender was (0.132), which was smaller than the tabulated F-value of (3.860) at a significance level of (0.05) and degrees of freedom (1, 595). This indicates that there was no statistically significant difference in unemployment anxiety according to gender.

The absence of gender differences in academic identity suggests that the academic environment provides similar opportunities and conditions for both males and females. Feelings of belonging, specialization, and aspirations for success appear to be shared characteristics that depend more on individual motivation than gender. Furthermore, academic experiences are similar regardless of gender, as students function within the same academic environment, contributing to the development of a common academic identity.

No previous studies were found that either agreed or disagreed with this finding.

Similarly, no gender differences emerged in unemployment anxiety. This may be because unemployment anxiety is associated with future employment concerns that are shared by both genders under technological and economic challenges. Employment opportunities in the labor market are increasingly influenced by qualifications and market conditions rather than gender.

No previous studies were found that either agreed or disagreed with this finding.

2. Academic Specialization (Scientific vs. Humanities)

Academic Identity

The calculated F-value for specialization was (0.968), which was smaller than the tabulated F-value of (3.860) at a significance level of (0.05) and degrees of freedom (1, 595). This indicates that there was no statistically significant difference in academic identity according to academic specialization.

Unemployment Anxiety

The calculated F-value for specialization was (16.223), which exceeded the tabulated F-value of (3.860) at a significance level of (0.05) and degrees of freedom (1, 595). This indicates the presence of a statistically significant difference in unemployment anxiety according to academic specialization, in favor of students in scientific disciplines.

The absence of differences in academic identity may be explained by the fact that graduate students possess similar levels of academic and research commitment and maturity. The academic environment fosters a sense of belonging regardless of specialization. Commitment to academic and scientific standards is a general behavior associated with quality rather than the nature of the discipline itself.

This result is consistent with the findings of Zayed (2025) and differs from those of Bani Khaled (2012).

The presence of significant differences in unemployment anxiety in favor of scientific specializations may be explained by the higher expectations held by students in these fields. Their disciplines are closely linked to rapidly changing labor markets, and they often aspire to highly skilled positions. Challenges within the labor market may therefore generate stronger feelings of threat and concern regarding future opportunities. In contrast, humanities disciplines may offer greater flexibility. Students in

scientific disciplines may also be more affected by technological developments, placing them in a state of continuous challenge and adaptation.

No previous studies were found that either agreed or disagreed with this result.

3. Degree Variable, Diploma, Master's, Doctorate

Academic Identity: The F-ratio according to the degree variable reached 13.431, which is greater than the tabulated F-value of 3.010 at a significance level of 0.05 and degrees of freedom 2 and 595. This indicates that there is a statistically significant difference in academic identity according to the degree variable, in favor of doctorate students.

Unemployment Anxiety: The F-ratio according to the degree variable reached 2.879, which is smaller than the tabulated F-value of 3.010 at a significance level of 0.05 and degrees of freedom 2 and 595. This indicates that there is no statistically significant difference in unemployment anxiety according to the degree variable.

The researcher explains this by stating that doctorate students possess broader and more precise scientific and research experience, in addition to clearer academic goals. Doctorate students also perceive themselves as an important part of the academic environment. Scientific maturity and clarity of academic and scientific goals contribute to reducing anxiety related to modern systems and make them more capable of facing technological challenges and less affected by anxiety about them.

The absence of differences in unemployment anxiety may be explained by the fact that this anxiety is a general trait shared by all academic levels. Job opportunities are no longer guaranteed in light of automation. Unemployment anxiety is not limited to competence or academic level, but is also affected by external factors such as economic changes, competition, scarcity of job opportunities, and students' awareness of unemployment risks and technological challenges. This has led to convergence in their professional awareness of the future, resulting in no significant differences.

Identifying the Statistically Significant Relationship between Academic Identity and Unemployment Anxiety among Graduate Students

To achieve this aim, Pearson's correlation coefficient was used between the scores of the sample, consisting of 600 male and female students, on the Academic Identity Scale and their scores on the Unemployment Anxiety Scale. The t-test was then used to determine the significance of the correlation coefficients. The results are presented in Table (11).

The researcher explains the existence of an inverse relationship between academic identity and unemployment anxiety. This means that the student's confidence in their abilities and professional competence and their sense of belonging to their specialization make them believe that their competence and scientific productivity will make them desirable for future employment. A higher level of academic identity indicates clarity in the student's academic path and goals, a clear vision of their future, and awareness of their value within the academic and scientific community. This reduces anxiety about finding a job.

In addition, immersion in the academic environment, building relationships with professors, and participating in seminars and conferences may open employment opportunities and reduce anxiety toward unemployment. The student does not see themselves merely as a degree holder, but as someone who possesses knowledge and skills, which makes them more flexible in obtaining job opportunities or establishing a private project in their specialization. All of this reduces unemployment concerns among students.

The current result agreed with the studies of Zayed (2025) and Al-Laymoon and Al-Shawashreh (2020). No studies were found that differed from the results of this objective.

Fifth: Statistically Significant Differences in the Relationship between Academic Identity and

Unemployment Anxiety among Graduate Students According to Gender, Specialization, and Degree

1. According to Gender

To achieve this aim, Pearson's correlation coefficient was used between the respondents' scores on the Academic Identity Scale and their scores on the Unemployment Anxiety Scale. The correlation coefficient was converted to its corresponding standard value, and then the z-test was used to determine the significance of the difference between the two correlation coefficients. The results are presented in Table (18).

Table (18) shows that the difference in the correlation coefficients between academic identity and unemployment anxiety according to gender was statistically significant. The calculated z-value of 4.905 was greater than the tabulated z-value of 1.960. This indicates a statistically significant difference in the relationship between academic identity and unemployment anxiety according to gender, in favor of males.

The researcher explains the statistically significant relationship between academic identity and unemployment anxiety in favor of males as indicating that males' confidence in their academic status and their ability to overcome the threat of unemployment depend on the extent of their academic and scientific confidence and their belief in finding employment more than females, which reduces their anxiety. Males are also more capable of facing labor market challenges compared with females.

No previous studies were found that either agreed or differed with the result of this objective.

2. According to Specialization, Scientific and Humanities

To achieve this aim, Pearson's correlation coefficient was used between the respondents' scores on the Academic Identity Scale and their scores on the Unemployment Anxiety Scale. The correlation coefficient was converted to its corresponding standard value, and then the z-test was used to determine the significance of the difference between the two correlation coefficients. The results are presented in Table (19).

Table (19) shows that the difference in the correlation coefficients between academic identity and unemployment anxiety according to specialization was statistically significant. The calculated z-value of 2.829 was greater than the tabulated z-value of 1.960. This indicates a statistically significant difference in the relationship between academic identity and unemployment anxiety according to specialization, in favor of humanities specialization.

The researcher explains the statistically significant differences in the relationship between academic identity and unemployment anxiety in favor of humanities specialization by the ambiguity of the professional future and the scarcity of job opportunities, which increase students' feelings that employment opportunities may not be available. The use of artificial intelligence systems, such as translation and content writing tools in humanities specializations, has increased anxiety and reduced feelings of security. This may weaken students' confidence in their professional abilities and strengthen the link between identity and psychological state among students, compared with scientific specializations, whose students rely more on the external labor market than on their identities.

No previous studies were found that either agreed or differed with the result of this objective.

3. According to Degree, Diploma, Master's, Doctorate

To achieve this aim, Pearson's correlation coefficient was used between the respondents' scores on the Academic Identity Scale and their scores on the Unemployment Anxiety Scale. The correlation coefficient was converted to its corresponding standard value, and then the z-test was used to determine the significance of

the difference between the two correlation coefficients.

Table (20) shows that the differences in correlation coefficients between academic identity and artificial intelligence usage anxiety according to degree were not statistically significant. The calculated z-values of 0.929, 1.078, and 0.651, respectively, were smaller than the tabulated z-value of 1.960. This indicates that there are no statistically significant differences in the relationships between academic identity and unemployment anxiety according to degree.

The researcher explains the absence of statistically significant differences in the relationship between academic identity and unemployment anxiety as reflecting the stability of academic identity in reassuring students across their different study stages. Unemployment anxiety may also be considered a general trait among all students. The challenges and difficulties of obtaining job opportunities make all academic groups similarly affected.

Recommendations

Based on the findings of the research, the researcher recommends the following:

Holding seminars and career guidance programs that connect academic specializations with future skills and requirements that suit the future labor market.

Organizing seminars for faculty members on how to deal with students who have different academic identity patterns, in order to help them achieve and reach achieved identity.

Providing an academic and educational environment that helps students achieve their identities through the design of counseling programs to develop and enhance academic identity.

Encouraging graduate students to continuously develop their academic identity through self-learning, exploration, attendance at seminars and programs, and keeping up with new developments in the labor market and the technological skills it requires.

Fourth: Suggestions

As a continuation of the current research, the researcher suggests conducting the following studies:

Conducting a longitudinal study to explore the future effect of unemployment anxiety and how it changes with the development of artificial intelligence systems.

Conducting a study on unemployment anxiety and its relationship with other variables such as morale, quality of life, and some personality traits among graduate students and undergraduate students.

Conducting an experimental study on the effect of academic identity training on improving academic and professional performance.

Conducting a study on the effect of a counseling program based on cognitive strategies for preventing technological unemployment anxiety among graduate students.

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