The Relationship Of Information Enlightenment To Psychological Empowerment In Light Of Some Demographic Variables Among A Sample Of University Students

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Abstract:

Information literacy plays a crucial role in empowering students to effectively address the challenges they encounter and attain their goals in both their personal and academic pursuits. Therefore, university students comprehend the significance of research work and their proficiency in executing the needed research duties, which influences the correctness of the research outcomes. The reliability and moral principles of individuals reflect the effectiveness of their psychological empowerment. Hence, the objective is to uncover the correlation between information enlightenment and psychological empowerment, taking into account certain demographic characteristics among graduate students at the institution. The researcher employed a descriptive methodology and developed two measures, one for measuring information enlightenment and the other for assessing psychological empowerment. These scales were then administered A total of 85 male and female students, who are currently pursuing master's and doctoral degrees at the College of Education, King Khalid University, were included in the sample. The results revealed a robust and significant correlation between knowledge enlightenment and psychological empowerment among postgraduate students at King Khalid University. Significant disparities in information literacy scores can be seen based on age, gender, and level of education, particularly among older individuals, men, and those with PhD degrees. Doctoral students have a higher level of

competence in psychological empowerment compared to master's students. The study suggested the necessity of educating university students on the significance of information enlightenment and improving their psychological empowerment.

Keywords: information enlightenment, psychological empowerment.

Introduction:

The term "information enlightenment" is a contemporary concept in the field of information. Information enlightenment refers to an individual's understanding of their information requirements and their capacity to effectively and ethically find, gather, and utilize information to address practical concerns and challenges. Being able to effectively participate in the information society is necessary and is considered a fundamental aspect Regarding the pursuit of continual learning, it is essential to uphold the principles of human rights. information enlightenment refers to a collection of skills that allow individuals to accurately determine their information requirements and utilize them in a proficient and productive manner. The text consists of 269 pages. (Abu Ras; Al-Kalalda, 2016) stated that a knowledgeable student can assess the scope and characteristics of their information requirements, get the necessary information, analyze it critically, and utilize it effectively to accomplish a certain objective. In the study conducted by Al-Shehri and Al-Zuhri (2015), Several universities within the states shown interest. The United States of America has defined a set of criteria known as "The Power of Information" and has organized them into three dimensions: information enlightenment, learner independence, and social responsibility. Information enlightenment facilitates the comprehension of legal and ethical matters pertaining to ownership, such as intellectual property rights and plagiarism, for academic researchers. It also promotes the dissemination of education and empowers students and researchers to engage in continuous self-learning and conduct scientific research based on solid scientific principles.

According to Al-Dahamsheh (2019), psychological empowerment and motivation are closely related. Psychological empowerment, similar to motivation, aims to enhance an individual's self-efficacy. According to Al-Sharaida and Abdul Latif (2018:299), psychological empowerment is It is a procedure that assists persons in contemporary educational

systems to attain elevated levels of collaboration, camaraderie, self-assurance, ingenuity, and autonomous thinking in their tasks and obligations.

Based on the aforementioned, the researcher posits that information enlightenment refers to the capacity of an academic researcher to identify their information requirements for conducting research, efficiently access this information, critically evaluate it to select relevant material, and utilize it in a novel and accurate manner. This process should be conducted with ethical considerations, taking into account intellectual property rights and ethical concerns associated with the information, in order for the researcher to appreciate the value of the acquired information. His autonomy in acquiring it and his societal accountability render him a proficient and beneficial researcher in scientific inquiry. Based on this description, the criteria for information enlightenment have been established to encompass three primary elements that constitute the basis of current research:

1- Once the researcher has identified the information required and the methods to obtain it, they must demonstrate their ability to identify the necessary information for their research, their familiarity with different sources of information, their proficiency in Utilizing electronic databases, whether accessed via the university's website or the internet, and assessing their functionality. to access comprehensive information to address any gaps in the existing research in a clear and effective manner.

2- After assessing and scrutinizing the facts, selecting the relevant ones, and utilizing them effectively: This refers to the researcher's capacity to analyze the information he acquires in a constructive manner, with the aim of identifying the key aspects of his research. It involves assessing the credibility, quality, and accuracy of the information, as well as evaluating its sources and organization. Additionally, it entails providing constructive criticism of others' research, ultimately leading to the acquisition of new knowledge that contributes to the field. Investigation.

3- The aspect of personal accountability and ethical concerns related to the utilization of information: Information literacy refers to the researcher's capacity to effectively utilize their knowledge base in conducting information searches. It also encompasses their personal accountability in seeking out and utilizing the information they gather to address their research inquiries. Additionally, information literacy entails adhering to ethical guidelines when using the information and maintaining

scientific integrity. Furthermore, it involves employing creativity in utilizing the information for research purposes and properly documenting it. Accurately.

The term "score" refers to the numerical result achieved by the graduate student on the information enlightenment scale utilized in the present study, which was developed by the researcher.

Psychological empowerment is a recently emerged topic in the realm of human sciences. Psychological empowerment, as described by Ambad, Nabila, and Bahron (2012: 323), refers to a favorable cognitive state that individuals require to improve their perception of control and expertise in their professional responsibilities, enabling them to execute them proficiently and effectively. As stated by Al-Dahamsheh (2019: 398), psychological empowerment pertains to an individual's ability to independently make decisions and have influence over their own lives. Psychological empowerment, as defined by Zhu, Sosik, Riggio, and Yang (2012: 190), is a process that leads to the improvement of an individual's internal condition. This process promotes their independence in carrying out their job tasks and increases their motivation to accomplish essential work duties. Psychological empowerment, as defined by Al-Saadi (2018: 430), encompasses a set of psychological traits that individuals require to feel competent in handling their profession, enhancing their self-assurance, and surmounting hindrances that hinder their work. Al-Majdalawi (2020) defines psychological empowerment as a technique that strengthens the ability to make decisions in a work environment. It functions as an internal catalyst for motivation and inspiration, empowering individuals to recognize and fulfill their self-assurance and ability to execute tasks.

The aspects of psychological empowerment have exhibited variation throughout prior studies, since researchers have not reached a consensus on the precise dimensions. Some studies have provided the following dimensions:

(Khalifa; Shehab, 2015) defined psychological empowerment as comprising four dimensions: meaning, self-efficacy, independence, and influence. The study conducted by Al-Shraida and Abdel-Latif (2018) shown that psychological empowerment may be categorized into four distinct dimensions: meaning, competence, independence, and influence. According to Spreitzer (1995: 1442), psychological empowerment is the combination of motivation and psychological factors, which may be broken down into four dimensions: meaning, competence, choice, and influence.

Through an analysis of psychological literature and previous research, the researcher has developed a specific definition of psychological empowerment and its many aspects in relation to the present study.

Psychological empowerment refers to a cognitive and emotional condition in which an individual has a sense of fulfillment and satisfaction from engaging in important study and research activities, and is able to effectively confront and overcome the problems encountered. It instills in him a feeling of self-assurance and a recognition of his capabilities and potential to attain his objectives. Additionally, it aids him in properly organizing his time and assuming accountability for his activities in order to complete his academic and research assignments with autonomy and efficiency. He possesses strong leadership qualities that enable him to make judgments that are advantageous to the discipline of scientific inquiry.

The researcher discovered the dimensions utilized in developing the present study scale, which are categorized into four primary dimensions as follows:

1-The dimension of meaning pertains to the researcher's interpretation of the importance of graduate studies, their level of psychological satisfaction derived from academic achievements and research endeavors, their proficiency in scientific investigation, and their ability to tackle encountered challenges.

2- The competency dimension refers to the researcher's self-assurance and belief in their abilities to accomplish their goals. It also encompasses their possession of research capabilities and skills that facilitate efficient searching in multiple sources and effective organization of time and resources to complete their research work.

3- The dimension of autonomy and ethical conduct: This refers to the researcher's capacity to take responsibility for their actions, carry out their scientific duties, manage challenges encountered, complete academic and research tasks, and make efficient and effective decisions pertaining to their research responsibilities.

4- The influence dimension refers to the researcher's capacity to exert influence on others and have their thoughts and personal impressions manifested in their academic and research activities, while maintaining positive control over them.

Based on the information presented, the researcher believes that psychological empowerment enhances the motivation

and capability of researchers to effectively do academic and research activities, as well as overcome the problems that hinder their different motives. It boosts their self-confidence in making autonomous decisions and taking responsibility for their actions, empowering them to exercise influence over individuals and the jobs they perform.

Procedurally, the score achieved by the graduate student on the psychological empowerment scale employed in the current research (made by the researcher) defines it.

Prior research on information enlightenment, such as the study conducted by Al-Sulami in 2007, demonstrated that female master's and doctoral students possess the ability to identify information needs and evaluate and utilize information effectively.

Hepworth's 2009 research demonstrated that students in their last year of university possess a significant level of information literacy skills. The results also showed that there were no statistically significant differences related to the variables of gender and specialization. The study done by Schroeder and Cahoy (2010) revealed that American university students have a significant level of knowledge enlightenment. The study done by Barakat and Ziad (2012) discovered considerable variations in the amount of information enlightenment among participants, depending on their greater academic attainment. Exceptional pupils and those in the third and fourth years had elevated levels of information enlightenment. A further study conducted by Walton and Mark (2013) found that increasing knowledge and understanding among university students improves cognitive processes and enables them to efficiently manage information. Moreover, social media contributes to the enhancement of information awareness and the advancement of educational achievements.

The study conducted by Shady (2018) highlighted the need of teaching information literacy skills, including the protection of intellectual property, to kids from an early age. This is crucial in order to cultivate their ability to do independent research effectively in the future. A study conducted by Madadha and Ahmed Nafi (2018) revealed that the degree of information enlightenment at Jordanian public universities is significantly high. Furthermore, the study found no statistically significant disparities in information enlightenment based on gender, specialization, and academic level. The study conducted by Raddad (2019) revealed that STEM schools provide students with a multitude of abilities that enhance their ability to gather

information and conduct research. These schools also foster excellence, innovation, and creativity, particularly in the area of information retrieval skills. The findings of the study conducted by Al-Hamzah and Al-Balkhiri (2020) shown that information enlightenment empowers students to get knowledge pertaining to their actuality, surroundings, well-being, and academic endeavors, and to make suitable decisions at the right moment.

Previous studies on psychological empowerment have shown inconsistent results. A study done by Chaing and Hsieh (2012) shown that psychological empowerment has a beneficial effect on an individual's job performance, as observed across several dimensions. In a study conducted by Aghaei and Savari (2014), a correlation was found between psychological empowerment and another variable. There is a connection between the attributes of psychological empowerment (such as sense of purpose, ability, influence, and freedom to choose) and one's level of dedication to their career. Mustafa and Taha (2015) performed a study that discovered a strong and favorable correlation between psychological empowerment, including elements such as meaning, competence, self-determination, and influence, and both self-advocacy and perceptions. In a research done by Al-Nawajah (2016), it was discovered that there were no notable disparities in psychological empowerment between male and female university students, with the exception of the influence dimension, where males achieved greater scores. In contrast, Huang's (2017) research demonstrated a favorable correlation between psychological empowerment and self-efficacy with proactive conduct among MBA students in southern China. In their 2018 study, Al-Sharida and Abdul Latif discovered a direct relationship between psychological empowerment and innovative teaching abilities in educators. Similarly, the research conducted by Al-Dahamsheh and Saif Abdullah (2019) discovered that there were no statistically significant disparities in psychological empowerment between male and female students. Adolescents who are enrolled in secondary education.

This research builds upon previous studies by clearly defining the subject, choosing the research participants, creating and refining research tools, and examining the results of the current study. This current research sets itself apart from previous studies by investigating the relationship between information enlightenment and psychological empowerment, while considering different demographic variables. Previous studies have shown differences in The disparity in information

literacy among different samples may be attributed to several factors, such as gender, field of study, educational institution, professional background, and academic attainment, throughout the pre-graduate schooling stages. Al-Sulami's (2007) research investigated female students pursuing master's and doctoral degrees. Additional research has examined the concept of psychological empowerment in teachers and high school students, with a particular emphasis on investigating gender inequalities and the impact of family background. Mastery. The researcher was fascinated by the discrepancies in knowledge enlightenment and psychological empowerment between male and female students at the master's and doctorate levels. The researcher's objective was to investigate the variations in age (older and younger), gender, and program level (master's and doctorate). This inquiry was prompted by the lack of prior studies that have examined these particular characteristics.

Statement of the problem:

The importance of information enlightenment rests in its capacity to enable students to efficiently tackle the obstacles they face, acquire the essential resources for their personal and academic endeavors, and cultivate a lifelong dedication to study. Thus, university students gain a deep understanding of the importance of research, their ability to successfully complete research tasks, and their skill in organizing research information in a way that impacts the results of their work with precision, dependability, and ethical considerations. This exemplifies their successful psychological empowerment. The present study is to examine the correlation between information enlightenment and psychological empowerment among Postgraduate students at the institution, while considering different demographic variables. The study focuses on the fundamental question: What is the relationship between information enlightenment and psychological empowerment among graduate students in universities? This inquiry gives rise to several subsidiary inquiries, which are stated below: Does a link exist between information enlightenment and psychological empowerment among university graduate students?

Are there disparities in information literacy levels among participants in the present research sample based on criteria such as age, gender, and program?

Do individuals of the present research sample exhibit differences in psychological empowerment depending on characteristics such as age, gender, and program?

Objectives of the study:

The main aim of this study is to examine the correlation between knowledge enlightenment and psychological empowerment in the chosen sample. Additionally, the study aims to examine the variations in information enlightenment and psychological empowerment based on age, gender (males vs. females), and program level (Master's vs. PhD).

Significance of the study:

1- The research is significant as it centers on a current subject in the realm of ongoing education, particularly the illumination of university graduate students about knowledge. This necessitates individuals to own psychological empowerment, which serves as a driving force and enhances their self-assurance.

2- As far as the researcher knows, there have been no Arab or international studies that have investigated the relationship between the factors being explored in this study.

3- Creating two assessment tools to measure the components of information enlightenment and psychological empowerment.

4- The results of this study have the capacity to greatly influence the field of continuing education.

5- Providing recommendations to spread information, raise consciousness, and enhance psychological empowerment in order to support continuous education.

Method:

Research design:

The researcher employed the descriptive-correlative approach due to its pertinence to the current study protocols.

Population and sample of the study:

The primary study sample comprised 85 postgraduate students who were currently enrolled in master's and doctorate programs at the Faculty of Education, King Khalid University in Saudi Arabia for the academic year 2023. The sample consisted of 33 males and 52 females. The ages of the individuals varied from 23 to 49 years, with an average age of 33.74 and a standard deviation of 6.29. The subsequent tables display the

distribution of the sample based on demographic factors, namely age, gender, and program.

Table 1. Distribution of the study sample according to age

Age	No.	%
Less than 35 years old	52	62.4
35 years old or more	33	37.6
Total	85	100.0

Table 1 presents the distribution of the study sample, which includes 85 male and female students who are currently enrolled in master's and PhD programs at the Faculty of Education, King Khalid University in Saudi Arabia. According to the statistics, 62.4% of the sample is under the age of 35, while 37.6% are 35 years old or older.

Table 2. Distribution of the study sample according to gender

Gender	No.	%
Male	33	38.8
Female	52	61.2
Total	85	100.0

According to Table 2, the study sample comprised 85 male and female students who were currently enrolled in master and PhD programs at the Faculty of Education, King Khalid University in Saudi Arabia. The sample was distributed with 61.2% representing females and 38.8% representing males.

Table 3. Distribution of the study sample according to program

Program	No.	%
Master	57	67.1
Doctorate	28	32.9
Total	85	100.0

Table 3 displays the distribution of the research sample, consisting of 85 male and female students enrolled in master and doctorate programs at the Faculty of Education, King Khalid University in Saudi Arabia. The distribution reveals that 67.1% of the sample is in the master program, while 32.9% is in the PhD program.

Instruments of the study:

The researcher developed two research instruments. Using the Internet, she designed graphics on the Google website and applied them electronically to a sample group of male and female students enrolled in the master's and doctoral programs at the Faculty of Education in Abha, King Khalid University in Saudi Arabia. Afterwards, the researcher evaluated the effectiveness of the two measures in measuring psychological traits in the Saudi context. This was done by studying a group of 48 master's and doctoral students from the Faculty of Education at King Khalid University. The sample comprised 22 males and 26 females. The age range of the participants ranged from 23 to 49 years, with a mean age of 34.23 years and a standard deviation of 6.34.

Psychometric efficiency of instruments:

To evaluate the apparent reliability of the Information Enlightenment Scale and the Psychological Empowerment Scale, the researcher administered them in their initial version to a group of nine arbitrators who were professors specialized in educational psychology, psychometrics, mental health, clinical psychology, and educational technology. The scales were modified according to their opinions and directions, making modest linguistic alterations, until both instruments achieved their final version for usage in the present research population. These two tools can be explained as follows:

1- Information enlightenment scale (constructed by the researcher):

Following an extensive examination of relevant literature and prior studies conducted both in Arab and international contexts, a comprehensive information enlightenment scale was developed for the present research. The aim was to evaluate the degree of information literacy among postgraduate students (Master and Ph.D.) who are currently studying in the Faculty of Education at King Khalid University in the Kingdom of Saudi Arabia. Items were created for each dimension. The information culture scale consists of a total of 34 items, which are categorized into three categories. The first dimension, which pertains to the assessment of information needs, sources, and methods of access, consists of ten elements numbered from one to ten. The second dimension, which involves evaluating and critiquing material, as well as selecting and utilizing relevant information effectively, consists of 12 elements numbered from 11 to 22. The third dimension, which encompasses personal responsibility and ethical

considerations related to the use of information, consists of 12 questions ranging from 23 to 34. All the statements are affirmative. The grading weights for these sentences were adjusted as follows: (always) is assigned a weight of 5 degrees, (often) is assigned a weight of 4 degrees, (occasionally) is assigned a weight of 3 degrees, (rarely) is assigned a weight of 2 degrees, and (never) is assigned a weight of 1 degree. The score of 34 suggests a poor level of proficiency in information enlightenment abilities for the learner. The score of 170 also signifies a significant proficiency in the student's information enlightenment skills.

Internal consistency:

This illustrates the level of correlation between each statement and its relevant dimension. Furthermore, it illustrates the extent to which each component of the scale is associated with the overall score of the scale items. These two methods may be combined by calculating the correlation coefficient between each item and its related dimension, as well as the correlation coefficient between the dimensions and the overall score of the information enlightenment scale.

Table 4. The value of the correlation coefficient between the item and the dimension it belongs to in the scale of information enlightenment (n = 48)

Determining the need for information and its sources and how to access it		Assessment and criticism of information, selection and use of appropriate information efficiently		Personal responsibility and ethical issues for using information	
N	Correlation coefficient	N	Correlation coefficient	N	Correlation coefficient
1	**0.500	11	**0.750	23	**0.589
2	**0.637	12	**0.721	24	**0.861
3	**0.581	13	**0.876	25	**0.670
4	**0.369	14	**0.636	26	**0.782
5	*0.298	15	**0.597	27	**0.665
6	**0.682	16	**0.820	28	**0.677
7	**0.595	17	**0.690	29	**0.588
8	**0.665	18	**0.799	30	**0.561
9	**0.433	19	**0.749	31	**0.787
10	**0.629	20	**0.756	32	**0.396

-	-	21	**0.712	33	**0.773
-	-	22	**0.406	34	**0.618

* Significant at (0.01)
** Significant (0.05)

Table 4 indicates that the correlation coefficients between each item and its corresponding dimension were statistically significant at a significance level of 0.01, except for the fifth item in the first dimension. The scale of information enlightenment yielded a statistically significant result at a significance level of 0.05. This demonstrates the reliability of the scale and the accuracy of its content in assessing the intended measure, which is the enlightening of knowledge.

Table 5. Validity of the correlation coefficients between the dimensions and the total score of the information enlightenment scale

Dimensions	Determining the need for information and its sources and how to access it	Assessment and criticism of information, selection and use of appropriate information efficiently	Personal responsibility and ethical issues for using information	Total
Determining the need for information and its sources and how to access it	-	**0.677	**0.682	**0.852
Assessment and criticism of information, selection and use of appropriate information efficiently	**0.677	-	**0.714	**0.920
Personal responsibility and ethical	**0.682	**0.714	-	**0.895

Dimensions	Determining the need for information and its sources and how to access it	Assessment and criticism of information, selection and use of appropriate information efficiently	Personal responsibility and ethical issues for using information	Total
issues for using information				
Total	**0.852	**0.920	**0.895	-

** Significant at (0.01)

Table 5 indicates a statistically significant association between the dimensions themselves and between the dimensions and the overall degree at a significance level of 0.01. This suggests that the information enlightenment scale is reliable and accurate.

Reliability:

The researcher utilized the split-half method and Cronbach's Alpha Coefficient to assess the reliability of the information culture scale. The findings are displayed in Table 6.

Table 6. Reliability coefficients using split-half and Cronbach's alpha coefficient for the dimensions of the information enlightenment scale (n = 48)

Dimensions of information culture	split-half coefficients	Reliability coefficients	Cronbach's alpha
Determining the need for information and its sources and how to access it	0.552	0.711	0.719
Assessment and criticism of information, selection and use of appropriate information efficiently	0.831	0.908	0.906

Dimensions of information culture	split-half coefficients	Reliability coefficients	Cronbach's alpha
Personal responsibility and ethical issues for using information	0.555	0.714	0.884
Total	0.800	0.889	0.936

Table 6 indicates that the dependability coefficient was satisfactory. This outcome suggests that the information enlightenment scale demonstrates strong dependability. Cronbach's alpha coefficient was used to calculate the reliability of each item in the information enlightenment scale after it was removed. Table 7 displays the findings.

Table 7. The value of alpha of each item after its deletion and the total alpha value of the information enlightenment scale

Item no.	Alpha value	Item no.	Alpha value
1	0.936	18	0.935
2	0.935	19	0.935
3	0.937	20	0.934
4	0.936	21	0.936
5	0.935	22	0.937
6	0.937	23	0.936
7	0.937	24	0.935
8	0.936	25	0.935
9	0.934	26	0.935
10	0.937	27	0.936
11	0.936	28	0.936
12	0.936	29	0.937
13	0.935	30	0.935
14	0.934	31	0.936
15	0.937	32	0.936
16	0.935	33	0.936
17	0.935	34	0.937
Total		0.938	

Table 7 displays that the alpha value of each item was less than the total alpha value. This indicates that the information enlightenment scale has good reliability.

2. Psychological empowerment scale (prepared by the researcher):

Following an extensive examination of relevant literature and prior studies conducted by Arab and international researchers, a comprehensive scale for measuring psychological empowerment was developed for the present study. The objective was to assess the degree of psychological empowerment among postgraduate students (Masters and Ph.D.) enrolled in the Faculty of Education at Abha, King Khalid University in the Kingdom of Saudi Arabia. The psychological empowerment scale consists of 25 items, which are divided into four aspects. The initial dimension encompasses seven things ranging from one to seven. The second component, efficiency, encompasses six elements ranging from 8 to 13. The third dimension, which encompasses independence and excellent behavior, consists of six elements ranging from 14 to 19. The fourth dimension, denoted as "influence," consists of six components ranging from 20 to 25. The grading weights for these items were adjusted as follows: (always) = 5 degrees, (often) = 4 degrees, (occasionally) = 3 degrees, (rarely) = 2 degrees, and (never) = 1 degree. All products exhibited a good nature. A score of 25 indicates a low level of psychological empowerment for the student, while a score of 125 shows a high level of psychological empowerment.

Validity:

The assessment of internal consistency involved two methods: firstly, the computation of the correlation coefficient between each item and its appropriate dimension, and secondly, the calculation of the correlation coefficient between the dimensions and the total score of the psychological empowerment scale.

Table 8. The value of the correlation coefficient between the item and the dimension it belongs to in the psychological empowerment scale (n = 48)

Meaning		efficiency		Independence and good behavior		Influence	
N	Correlation coefficient	N	Correlation coefficient	N	Correlation coefficient	N	Correlation coefficient
1	**0.676	8	**0.816	14	**0.688	20	**0.682
2	**0.817	9	**0.779	15	**0.810	21	**0.733

3	**0.877	10	**0.887	16	**0.828	22	**0.863
4	**0.847	11	**0.910	17	**0.752	23	**0.863
5	**0.822	12	**0.718	18	**0.874	24	**0.827
6	**0.916	13	**0.635	19	**0.882	25	**0.751
7	**0.898						

** Significant at (0.01)

Table 8 shows that the correlation coefficients between each item and its corresponding dimension were all statistically significant at a significance level of 0.01. This outcome demonstrates the reliability of the scale and the accuracy of its content (the items) in assessing the intended construct [psychological empowerment].

Table 9. The validity of the correlation coefficients on the psychological empowerment scale (n = 48)

Dimensions	Meaning	Efficiency	Independence and good behavior	Influence	Total
Meaning	-	*0.831*	**0.790	*0.750*	0.919**
Efficiency	0.831**	-	**0.816	*0.771*	0.928**
Independence and good behavior	0.790**	*0.816*	-	*0.845*	0.935**
Influence	0.750**	*0.771*	**0.845	-	0.907**
Total	0.919**	*0.928*	**0.935	*0.907*	-

** Significant at (0.01)

Table 9 demonstrates a statistically significant association between the dimensions themselves, as well as between the dimensions and the overall degree, with a significance level of 0.01. This outcome demonstrates the soundness of the psychological empowerment measure.

Reliability:

The researcher employed the split-half technique and Cronbach's Alpha Coefficient to evaluate the reliability of the psychological empowerment scale. The results are presented in Table 10. The reliability coefficients for the dimensions of the psychological empowerment scale were calculated using both the split-half method and Cronbach's alpha coefficient. The sample size for this analysis was 48.

Dimensions of psychological empowerment	split-half coefficients	Reliability coefficients	Cronbach's alpha
Meaning	0.862	0.926	0.926
Efficiency	0.788	0.882	0.871
Independence and good behavior	0.803	0.891	0.890
Influence	0.685	0.813	0.873
Total	0.851	00.920	0.965

According to Table 10, the dependability coefficient was satisfactory. The outcome suggests that the psychological empowerment measure has strong dependability. Cronbach's alpha coefficient was used to calculate the reliability of each item in the psychological empowerment scale after it was removed. The findings are displayed in Table 11.

Table 10. The alpha value of each item after its deletion and the total alpha value of the psychological empowerment scale

Item no.	Alpha value	Item no.	Alpha value
1	0.964	14	0.962
2	0.963	15	0.964
3	0.964	16	0.962
4	0.961	17	0.964
5	0.962	18	0.963
6	0.964	19	0.964
7	0.961	20	0.961
8	0.963	21	0.964
9	0.962	22	0.963
10	0.964	23	0.963
11	0.964	24	0.962
12	0.963	25	0.962
13	0.963	-	-
Total		0.965	

Table 11 shows that the alpha value of the item is less than the total alpha value. This result indicates the reliability of the psychological empowerment scale.

Statistical processing:

To evaluate the validity and reliability, we utilized statistical techniques like the Pearson correlation coefficient, Cronbach's Alpha coefficient, and Spearman-Brown coefficient. The research data was analyzed using statistical methods including a one-sample t-test, independent samples t-test, Pearson correlation coefficient, and Friedman test.

Results:

The study inquiries were formulated as hypotheses and subjected to statistical testing. The outcomes were as follows:

The findings from the initial hypothesis indicate that there is no statistically significant relationship between knowledge enlightenment and psychological empowerment among postgraduate students.

In order to assess the accuracy of this hypothesis, the correlation coefficient (specifically, the Pearson correlation coefficient) was employed to measure the relationship between the scores of the study sample on the scales of information enlightenment and psychological empowerment. The findings are displayed in Table 14.

Table 14. The relationship between information enlightenment and psychological empowerment among the research sample (n = 85)

Dimensions	Meaning	Efficiency	Independence and good behavior	Influence	Total
Determining the need for information and its sources and how to access it	0.649**	*0.625*	**00.543	*0.522*	0.636**
Assessment and criticism of	0.630**	*0.542*	**0.626	*0.608*	0.652**

Dimensions	Meaning	Efficiency	Independence and good behavior	Influence	Total
information, selection and use of appropriate information efficiently					
Personal responsibility and ethical issues for using information	0.840**	*0.667*	**0.618	*0.654*	0.756**
Total	0.785**	*0.673*	**0.670	*0.669*	0.760**

**Significant at (0.01).

Table 14 demonstrates a significant and robust positive correlation between information enlightenment and psychological empowerment among postgraduate students at the Faculty of Education, King Khalid University, with a p-value of 0.01.

The results of the second hypothesis indicate that there are no statistically significant differences in the mean scores of the sample participants on the information enlightenment scale based on the parameters being studied.

]Age (under 35 years old - 35 years or older)] The data includes information on gender (males and females) and program (Masters and PhD.(

In order to ascertain the veracity of this theory, the subsequent three hypotheses were subjected to testing:

The first hypothesis is that there are no statistically significant differences in the average scores of persons in the sample group on the information enlightenment scale, based on their age (particularly, comparing those under 35 years old to those

35 years or over). In order to assess the accuracy of this hypothesis, an Independent samples t-test was employed, as indicated in Table 15.

Table 15. Significance of differences in the scale of information enlightenment according to the age variable (n = 85)

Dimensions of information culture	Category	No.	Mean	Standard deviation	t	Sig(tailed-2)
Determining the need for information and its sources and how to access it	Less than 35 years old	53	35.42	5.26	3.647	Sig at 0.01
	35 years old or more	32	39.63	4.98		
Assessment and criticism of information, selection and use of appropriate information efficiently	Less than 35 years old	53	47.35	8.51	1.568	Insig.
	35 years old or more	32	50.41	8.79		
Personal responsibility and ethical issues for using information	Less than 35 years old	53	50.96	7.70	2.031	Sig. at 0.05
	35 years old or more	32	54.16	5.72		
Total	Less than 35	53	133.74	19.56	2.507	Sig. at 0.05

	years old					
	35 years old or more	32	144.19	16.94		

Table 15 demonstrates that there were statistically significant variations in the average scores of the individuals in the sample regarding their level of information enlightenment. These differences were observed in the overall score as well as in the specific dimension of determining the need for information, its sources, and the methods of accessing it, while considering personal responsibility and ethical considerations in using information. These variations were attributed to the age variable. The values of t were 2.507, -3.647, and -2.031, respectively, at significance levels of 0.05 and 0.01, in favor of the age group of 35 years and older. Individuals in this age range possess a greater capacity to discern the necessity of knowledge, identify its origins, and understand how to obtain it. Furthermore, they are capable of taking personal accountability and considering ethical concerns when utilizing information. Furthermore, there were no statistically significant disparities observed between them in terms of their abilities to analyze and critique material, as well as pick and utilize relevant knowledge effectively.

The second hypothesis posits that there are no statistically significant disparities in the average scores of the individuals in the sample regarding their level of information enlightenment, when considering the gender variable (males versus females). To test the validity of this hypothesis, an Independent samples t-test was used as shown in Table 16.

Table 16. Significance of differences in the scale of information enlightenment according to the gender variable (n = 85)

Dimensions of information **enlightenment**	Category	No.	Mean	Standard deviation	t	Sig(tailed-2)
Determining the need	Male	33	39.00	4.18	2.76	Sig. at 0.01

for information and its sources and how to access it	Female	52	35.73	5.92		
Assessment and criticism of information, selection and use of appropriate information efficiently	Male	33	49.55	9.32	0.878	Insig.
	Female	52	47.85	8.28		
Personal responsibility and ethical issues for using information	Male	33	53.82	5.47	1.717	Insig.
	Female	52	51.11	7.91		
Total	Male	33	142.36	16.32	1.820	Insig.
	Female	52	134.69	20.41		

Table 16 indicates that there were no statistically significant differences in the mean scores of the individuals in the sample regarding their level of understanding and awareness of data, when considering both dimensions (evaluation and critique of information, selection and effective utilization of relevant information, personal accountability and ethical considerations in information usage), based on gender. The values of t were 1.820, 0.878, and 1.717, respectively. Moreover, there were statistically significant differences between the two groups in terms of evaluating the need for information, recognizing its origins, and comprehending how to acquire it, with a significance level of 0.01, showing a preference for men.

The third hypothesis posits that there are no statistically significant changes in the mean scores of the individuals in the sample on the information enlightenment scale, when considering the program variable, specifically the differentiation between individuals with a Master's degree and those with a Ph.D.

To test the validity of this hypothesis, an Independent samples t-test was used as shown in Table 17.

Table 17. Significance of differences in the scale of information enlightenment according to the program variable (n = 85)

Dimensions of information culture	Category	No.	Mean	Standard deviation	t	Sig(tailed-2)
Determining the need for information and its sources and how to access it	Master	57	35.49	5.02	3.886	Sig. at 0.01
	PhD	28	40.07	5.27		
Assessment and criticism of information, selection and use of appropriate information efficiently	Master	57	46.67	9.71	3.690	Sig. at 0.01
	PhD	28	52.25	4.22		
Personal responsibility and ethical issues for using	Master	57	41.14	7.91	2.251	Sig. at 0.05
	PhD	28	54.25	4.77		

information						
Total	Master	57	133.30	20.13	3.151	Sig. at 0.01
	PhD	28	146.57	13.57		

Table 17 indicates that there were significant statistical variations in the average scores of the participants in the study regarding their level of information enlightenment. These differences were observed in relation to the overall score as well as the specific dimensions of determining the need for information and its sources, understanding how to access it, assessing and critiquing information, selecting and utilizing appropriate information effectively, and considering personal responsibility and ethical considerations in using information. The value of t was calculated as the difference between 3.886, 3.690, 3.251, and 3.151, respectively, at a significance level of 0.01 in favor of those enrolled in the doctorate program.

The findings of the third hypothesis suggest that there are no statistically significant differences in the mean scores of the participants in the sample, as assessed by the psychological empowerment scale, based on the variables of age (below 35 years or 35 years and above), gender (males or females), and program (Master or Ph.D.).

In order to confirm the accuracy of this theory, the subsequent three hypotheses were examined:

The first hypothesis suggests that there are no statistically significant differences in the average scores of individuals in the sample on the psychological empowerment scale, based on their age. This especially distinguishes between those under 35 years old and those who are 35 years or older.

To test the validity of this hypothesis, an Independent samples t-test was used as depicted in Table 18.

Table 18. Significance of differences in the scale of information enlightenment according to the age variable (n = 85)

Dimensions of psychological empowerment	Category	No.	Mean	Standard deviation	t	Sig(tailed-2)

Meaning	Less than 35 years old	53	30.13	6.22	0.919	Insig.
	35 years old or more	32	31.28	4.32		
Efficiency	Less than 35 years old	53	23.08	5.61	1.586	Insig.
	35 years old or more	32	24.91	4.30		
Interdependence & good behavior	Less than 35 years old	53	24.19	5.41	0.649	Insig.
	35 years old or more	32	24.94	4.70		
Influence	Less than 35 years old	53	22.92	4.66	1.134	Insig.
	35 years old or more	32	24.13	4.82		
Total	Less than 35 years old	53	100.32	20.09	1.156	Insig.
	35 years old or more	32	105.25	17.14		

Table 18 indicates that there were no statistically significant variations in the average scores of the participants on the psychological empowerment scale across different age groups, including both the overall level and specific characteristics (efficiency, independence, good conduct, and influence). The values of t were 0.919, -1.586, -0.649, -1.134, and -1.156, respectively. These numbers do not have statistical significance. This outcome signifies that the initial hypothesis has been completely acknowledged.

The second hypothesis posits that there are no statistically significant disparities in the average scores of the individuals in the sample on the psychological empowerment scale based on their gender (male-female).

To test the validity of this hypothesis, an Independent samples t-test was used as displayed in Table 19.

Table 19. Significance of differences in the scale of information enlightenment according to the gender variable (n = 85)

Dimensions of psychological empowerment	Category	No.	Mean	Standard deviation	t	Sig(tailed-2)
Meaning	Male	33	31.64	3.97	1.419	Insig.
	Female	52	29.88	6.33		
Efficiency	Male	33	25.27	3.44	2.433	Sig. at 0.05
	Female	52	22.81	5.89		
Interdependence & good behavior	Male	33	24.18	4.70	0.411	Insig.
	Female	52	24.65	5.44		
Influence	Male	33	23.55	3.86	0.261	Insig.
	Female	52	23.27	5.25		
Total	Male	33	104.64	14.73	0.946	Insig.

	Female	52	100.62	21.38		

Table 19 indicates that there were no statistically significant variations in the average scores of the individuals in the sample on the psychological empowerment scale, both in the overall score and in the dimensions of meaning, independence, and positive conduct, as a result of the gender variable.

The value of t was calculated as the difference between 1.419, 0.411, and 0.946. Nevertheless, there were statistically significant disparities in efficiency across genders, with males exhibiting a higher degree of efficiency at a significance level of 0.05.

The third hypothesis posits that there are no statistically significant disparities in the average scores of the sample participants on the psychological empowerment scale based on the program variable of gender (male-female).

To test the validity of this hypothesis, an Independent samples t-test was used as displayed in Table 20.

Table 20. Significance of differences in the scale of information culture according to the gender variable (n = 85)

Dimensions of psychological empowerment	Category	No.	Mean	Standard deviation	t	Sig(tailed-2)
Meaning	Master	57	30.05	6.30	1.210	Insig.
	Doctoral	28	31.60	3.58		
Efficiency	Master	57	22.98	5.86	2.473	Sig. at 0.05
	Doctoral	28	25.36	2.98		
Interdependence and good behavior	Master	57	24.19	5.65	0.708	Insig.
	Doctoral	28	25.04	3.93		
Influence	Master	57	23.23	5.44	0.500	Insig.
	Doctoral	28	23.68	2.86		

Total	Master	57	100.45	21.59	1.189	Insig.
	Doctoral	28	105.68	12.13		

Table 20 indicates that there were no statistically significant variations in the average scores of the participants on the psychological empowerment scale, both in the overall score and in the dimensions of independence and vulnerability, as a result of the program variable. The values of t were 1.210, -0.708, and -1.189, respectively. Nevertheless, there were statistically significant disparities in terms of efficiency between those who were enrolled in the PhD program and others, with the former group having an advantage. These differences were statistically significant at a significance level of 0.05.

Discussion:

The outcome of the initial hypothesis: This outcome is rational. King Khalid University students depend on the identification and collection of information from many sources to study their courses and dissertations. Thus, individuals may rapidly get the relevant material for their research endeavors and utilize it in a creative manner, while ensuring adherence to intellectual property rights by accurately recording all Arab and international references. This instills in them a sense of the significance of the knowledge they hear and fosters a sense of societal obligation towards it. Psychological empowerment arises from adopting successful habits that enable students to complete their academic and research activities with efficiency and effectiveness. This leads to a sense of satisfaction and significance in their work, allowing them to confront and overcome problems. They cultivate self-assurance and get a heightened perception of their capabilities and capacity to accomplish their objectives. This facilitates efficient time management in research endeavors, thereby impacting self-esteem and bolstering psychological perspectives, so empowering individuals to regulate their academic performance and get master's and doctorate degrees in scientific research. The evidence presented supports the presence of a robust positive association between information enlightenment and psychological empowerment in graduate students.

The outcome aligns with the conclusions drawn from the research conducted by Al-Hamza and Al-Balkhiri (2020), which

shown that information literacy enhances students' ability to get information relevant to their academic tasks. These findings align with the research conducted by Walton and Mark (2013), which shown that providing university students with information enlightenment can stimulate the cognitive processes necessary for effectively processing knowledge.

The outcome of the second hypothesis: The reason for this outcome may be attributed to the fact that postgraduate students at King Khalid University, who are aged 35 years and beyond, possess a higher level of maturity and experience in discerning the necessary knowledge and its credible sources. Individuals in the age bracket of 35 years and older has superior aptitude in acquiring, utilizing, and effectively applying knowledge in their scientific investigations, regardless of whether they hold a master's degree or a PhD. Nevertheless, the two groups intersect when it comes to assessing information and selecting the most suitable one to tackle their study inquiries. Consequently, there were no notable variations that were statistically significant between them. This result partially aligns with the conclusions drawn by Belabbas and Raqiq (2016) in their study, which found that university students possess the ability to recognize the necessity of information and comprehend its significance. Additionally, the study suggests that males tend to have more time, skill, and a greater capacity to identify the need for information, its sources, and the means to obtain it, in comparison to females. The results align with the conclusions made by Hepworth (2009), Barakat (2012), and Madadha (2018), indicating that there are no statistically significant disparities related to the gender variable in terms of information enlightenment. Nevertheless, it deviates partially from the findings of other studies by revealing statistically significant disparities in identifying the necessity for knowledge, its origins, and the means of obtaining it, in favor of males. Students in the doctorate program possess a higher level of maturity, competence, and experience in information literacy abilities compared to those in the master's degree. Statistically significant disparities exist between PhD students and master's students in terms of information enlightenment, with doctoral students having an advantage. This finding aligns with the findings of Barakat's study (2012), which suggested that students in the later years of university possess a higher level of proficiency in information enlightenment.

Findings from the third hypothesis: The observed outcome can be attributed to the understanding and recognition of the

significance of postgraduate education by the individuals in the current sample. They possess a strong comprehension of the purpose and value of research work, and are highly motivated to excel in their endeavors. Furthermore, their research experience enables them to effectively influence others through their innovative ideas and suggestions, irrespective of their age. Consequently, there are no discernible distinctions in the level of psychological empowerment between master's and doctorate students who are below 35 years old and those who are 35 years old or above. This finding validates the assertion made by Al-Majdalawi (2020) that psychological empowerment serves as a mechanism for enhancing the capacity to make appropriate decisions, acting as an internal source of motivation and enthusiasm.

This finding also indicates that males exhibit more efficiency compared to females. The absence of statistically significant differences between male and female master's and doctoral students in the aspects of psychological empowerment can be attributed to their shared recognition of the relevance and value of graduate study. However, the majority of males exhibit higher levels of competence and self-assurance in their talents, as well as in their capacity to efficiently plan and manage their time, in order to successfully finish their master's and doctorate research duties and attain their objectives, in comparison to females. The findings align with those of the Al-Dahmshah research (2019), indicating that there are no statistically significant disparities in psychological empowerment based on gender. The findings were consistent with the results of the Al-Nawajaa research (2016), which identified gender disparities in one aspect of psychological empowerment, favoring males. Furthermore, this outcome indicates that those pursuing doctorate degrees possess greater expertise compared to those pursuing master's degrees. This outcome appears rational, considering that male and female doctorate students possess a higher level of maturity, competence, and experience compared to those who are enrolled in the master's degree. This finding validates the existence of statistically significant disparities in psychological empowerment between doctorate students and master's students, with doctoral students having a higher level of psychological empowerment.

Conclusion:

The concept of information enlightenment is a significant subject in today's society, where the strength of a community

is determined by the level of knowledge and utilization of information by its individuals. Hence, the present study focused on the notion of information enlightenment, as it plays a crucial role in equipping university students with the necessary skills to effectively navigate the ever-changing landscape of quantitative information, utilize it in an ethical manner, handle it proficiently, and foster a lifelong learning mindset. Psychological empowerment refers to a collection of psychological traits that enable individuals to have a sense of control over their job, improve their belief in their own abilities, and overcome obstacles that impede their work. The objective of this study is to uncover the relationship between knowledge enlightenment and psychological empowerment among a group of postgraduate students at King Khalid University. The findings demonstrated a clear and statistically significant association between knowledge enlightenment and psychological empowerment among the participants. Significant statistical disparities exist in the average scores of information enlightenment based on factors such as older age, gender (males), and attainment of PhD degrees. Doctoral students exhibit more efficiency in psychological empowerment compared to master's students. The study suggested that it is essential to educate university students on the significance of information enlightenment and to enhance their psychological empowerment.

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Recommendations:

-Promoting information enlightenment among university students to foster a commitment to lifelong learning.

-The imperative to improve the information literacy abilities of postgraduate students.

-The imperative to enhance the sense of psychological empowerment among university students and postgraduate students.

- Providing university students with education on the significance of psychological empowerment to augment their self-assurance and capacity to make sound judgments in both their academic and professional endeavors.

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