

## Career Maturity and Creativity among Nurse Interns at Ain Shams University Hospitals

\* Heba Nasser Rayan. \*\* Hanaa Mohamed Abd Rabou.

\* Lecturer of Nursing Administration, Faculty of Nursing, Ain Shams University.

\*\* Assiss Prof of Nursing Administration, Faculty of Nursing, Ain Shams University.

### Abstract

**Background:** The career maturity of the nurse interns influences their career choices and their personal career development. To enhance a person's creativity for future decisions, it is crucial to acknowledge their creative potential. **The aim of this research:** assessing the relation between career maturity and creativity as perceived by nurse interns **Design:** a descriptive, correlational study approach. **Setting:** Four Ain Shams University-affiliated hospitals included in the research. **Subject:** 115 nursing interns who enrolled for the academic year 2022-2023 served as the study's subjects. **Data gathering instruments:** Two instruments—the Career Maturity Inventory questionnaire and the Kaufman Domains of Creativity Scale—were used to gather the data. **Results:** Majority of nurse' intern had moderate level in different dimensions and total career maturity. Also, the majority of nurse' interns had moderate creativity level in different domains and total creativity level. In terms of inventiveness and professional maturity. **Conclusion:** According to nursing interns, there was a strong statistically significant association between overall career maturity and overall creativity. **Recommendations:** provision of information to nurse' intern about occupation and their requirements, decision-making process through seminars, workshops, educational programs, and other training activities. Maintaining that the educational environment encourages creative thinking, as nursing instructor, performs a crucial role in the improvement of nurse' intern creativity.

**Keywords:** Career maturity, Creativity, Nurse interns.

### Introduction

Career is defined as continuous professional growth that results from picking jobs that promote one's professional goals. It is the path a person takes throughout their lifetime. Nursing profession should be meaningful, autonomous and have admittance to the requirement for development and creativity (Mohammed et al., 2020).

"The preparedness to make suitable decisions while engaged in planned exploration and holding relevant occupational knowledge, self-knowledge, and decision-making knowledge," according to the definition of career maturity (Ismail et al., 2018).

Career Maturity is a persistent manner of improvement that reveals remarkably known traits essential for career development.

Though, inner and conservational variables decide career maturity (Nurani, 2022) Career maturity shows the degree to which a one's intellectual has matured concerning their technique of living their occupational and leisureliness life.

Career maturity has played a major role in persons' career improvement and take decisions, job satisfaction, and retaining of work (Schreuder and Coetzee 2011). Nurse interns will need career maturity since as their degree of maturity rises, so will the quality of their job (Abdul Ghofur et al., 2020).

Career maturity displays numerous features such as competence, knowledge, effectiveness, ability, compliance, extremely inspired and having an effective career. It was intended to be connected to the capacity to

make wise decisions as well as the blending of one's self-concept with a profession (Ismail et al., 2018).

The aspect of career maturity (agility and assertiveness) and career management, self-efficacy, (self-evaluation, expert knowledge, goal setting, planning, and problem-solving), in anticipating career adaptability resources (concern, curiosity, and confidence, consultation) (Abdul Rahim et al., 2021)

The nursing interns' professional maturity affects both their own career growth and the careers they choose (Ali and Pael, 2022). The quality and competency of healthcare are directly impacted by the structure and performance of the industry. So, Numerous healthcare managements must assess and improve their operational maturity, including hospital administration and state-wide health authorities. (Tarhan et al 2020).

As stated by Coertse and Schepers (2004), a career-mature person is predictable to be more emotionally stable and be well adjusted to his or her career than others career-immature persons. Career maturity is the concept "career adjustment", which is considered as the consequence of by what means an individual deals with faced career adjustment difficulties compared to others.

The definition of creativity is "the development of original and valuable ideas." (Yu et al., 2019). It is important that successful companies continue to exist after becoming global and that new organizations grow (Yang et al., 2019). The capacity of employees and management to develop a culture of creativity and creative ideas is a key component of many firms' competitive edge, flexibility, and long-term viability (Holtzhausen and de Klerk, 2018).

Consequently, understanding how creativity affects organizational performance and behavior is crucial for researchers in these fields (Wu and Zhu, 2021). The team is often where innovative activity in the company is shown the employee's inventiveness may help

the group's innovation and the achievement of shared objectives (Allen et al., 2018).

One of the significant abilities of organizations for their continued existence, success is creativity. (Rangaraju & Kennedy, 2012) Creativity in Nursing can be implemented in a diversity of regions, such as clinical practice learning, inquiries, administration. Apparently, these regions interrelate to each other. Though, The skill of nursing care is not generally obvious and is still out of sight in the profession because creativity in nursing is a new notion that is less apparent than other (Cheraghi, et al, 2021).

Kaufman (2012) established the Kaufman Domains of Creative Scale (K-DOCS) and proposed a five-model framework for creativity dimensions based on the findings of confirmation analysis. These are the self/everyday, mechanical/scientific, academic, performing, and artistic aspects. Every dimension of creativity relates to activities that individuals can meet and resolve in creative methods. The Self/Everyday domain contains totally everyday jobs that persons can meet in everyday life, as discovery the greatest resolution to a problem or assisting other individuals in a creative manner. The Scholarly domain involves tasks that include exploring and conversing issues or showing other tasks allied to university, as provided positive feedback on a logical basis. Using an instrument, composing a poem, or engaging in other forms of public performance are examples of actions that may be carried out in front of research subjects or shared with them in this dimension. The mechanical/scientific domain covers tasks requiring the attention and knowledge of STEM subjects, such as designing computer programs and building mechanical devices. Lastly, activities as outlining individuals or things and creating a

figure be appropriate to the Artistic domain (Benić1, 2021)

Career maturity and creativity have historically been impacted differently by various ideologies. The reasons for the variations depend on the people-values system. Creativity is not only a natural talent; it is now influenced by several factors, including morals, society, and the family environment. Likewise, the maturity of a individual is affected by the nearby surroundings. Recognizing a person's creative potential is crucial for helping him develop his skills for future desires. (Lalnunsiami,2017).

Nursing students who have just completed their internships must possess certain skills and choose to be guided by expert nurses through a variety of units to function independently and competently. In education hospitals, nurse interns are required to complete a year-long internship, but after that, staffing shortages and budget cuts affect these facilities. Therefore, even though they lack the necessary skills and expertise to function as professional nurses, nursing interns are required to do so. As the future nursing workforce, nurse interns' skills and safety must be prioritized (Dorgahm & Obied, 2016). The internship program aims to increase new graduates' self-confidence in their awareness and evaluation abilities, as well as their practical knowledge and decision-making skills (El SharKawy et al., 2019).

### **Significance of the study:**

Career maturity is required for nursing interns because as their career maturity level rises, so will their job performance (Abdul Ghofur et al., 2020). Creativity involves novel methods of thoughtfulness. The nurse interns essential feel self-confident that a creative method to solve problems and obstacles is valued and reinforced. The nurse interns should practice creative methods to decision making, solve problems and encourage a spirit of innovation among today's workforces.

The researcher felt the requirement to conduct study on the career maturity and it is

related to creativity to finding whether creative nurse interns are matured in choice of career and to assess the relation between Career Maturity and Creativity as perceived by nurse interns.

### **Aim of the study:**

This study aimed at assessing the relation between career maturity and creativity as perceived by nurse interns, through:

- 1- Assessing career maturity as perceived by nurse interns.
- 2- Assessing creativity levels as perceived by nurse interns.
- 3- Finding out the relationship between career maturity and creativity as perceived by Nurse Interns.

### **Research question:**

Is there a relationship between career maturity and creativity among nurse interns?

### **Subjects and Methods**

#### **Research design:**

A descriptive correlational design was used.

#### **Setting:**

The research was carried out in the Ain Shams University Hospital, Pediatrics Hospital, Infection Control Center, and Academic Heart Institute, which are the four locations where nurse interns get their training.

#### **Study Subjects:**

Every eligible nursing intern is receiving training in the settings discussed before (academic year 2022-2023). The study subject were one hundred fifteen nurse interns, eighty females and thirty-five males.

**Tools of data collection:** career maturity inventory questionnaire, Kaufman Domains of Creativity Scale.

## 1-career maturity inventory questionnaire

**Part 1: Nurse Interns Characteristics:** This part was to collect personal and job Characteristics as age, marital status, gender, unit/department, hospital.

❖ **Part II:** The tool was established by (John& Mark,2011) and adopted by the researcher. It aimed to assess the nurse intern's career maturity level. It involved eleven statements categorized into four dimensions as the following: Concern (6 items), curiosity (6 items) and confidence (6 items) and consultation (6 items).

### Scoring system

Responses from the study's sample were scored on a three-point Likert scale that alternated between "disagree" and "agree". Items received a score of (1) for the agree response and (zero) for the strongly disagree response.

## 2-Kaufman domains of creativity scale:

This tool was developed by (Kaufman,2012) and adapted by the researcher. The tool assesses the creativity levels as perceived by nurse interns. It contained fifty items categorized into five dimensions: Everyday/self (11 items), Scholarly (11 items) and performance (10 items) and mechanical /scientific (9 items), artistic (9 items).

### Scoring system

Study subject responses were rated themselves on a 5-point Likert scale, with ranging (1 being much less creative and 5 being much more creative).

## II. Operational design:

**a- Preparatory phase:** Review of current and prior literature, national and international linked literature, journals on the many areas of the study, by course book, studies, magazines, and thesis based on this review are all included in this phase.

**Pilot study:** Ten percent of the sample, 12 nursing interns, participated in the pilot research in the context stated earlier to examine the clarity of tools and time needed to complete the study tools (25-30 minutes).

**Field work:** The researcher met the participants and explained the purpose of the study, The tool sheet was distributed to the respondents individually. Then, the completed tools collected and checked for completeness.

**III. Administrative Design:** Directors of the aforementioned setting gave their approval after being informed of the study's goal and its methods of data collecting.

**Tools validity:** A panel of five nursing administration specialists determined the tools' content validity: (2) assistant professors from Ain Shams University, (1) assistant professors from Cairo University, and (2) assistant professor from Menoufia University. The jury group reviewed the content of the tools for their comprehensiveness, accuracy, clarity, and relevance.

**Reliability:** Cronbach's Alpha was used to determine the internal reliability of the tools, it was  $r=0.89$  for career maturity and  $0.91$  for creativity).

### Ethical consideration:

The Faculty of Nursing at Ain Shams University's scientific research and ethics committee granted its permission for the project. An informed consent was obtained from the nurse interns to participate in the study after explaining the purpose of the study. Confidentiality for the participant will be guaranteed through coding questionnaire, as well as the right of the participant data to voluntarily participate and or withdrawal from the study at any time during data collection period without any harmful during the study period and their collected response was use for a study purpose only .

**IV. Statistical Design:** It was amended, coded, and fed into SPSS version 25 after data collection. To make the results clearer,

frequency tables and cross-tabulation were employed. Quantitative statistics were concise by the mean, SD, and mean score percentage. All statistical investigation was completed using two-tailed investigations and an alpha error of 0.05. A P-value less than or equal to 0.05 was statistically significant.

**A. Descriptive statistical analysis:** involved the mean with SD, Median, lowest, and highest for the numerical data while percentage to refer to the occurrence of every type for definite statistics.

**Pearson correlation test** is used to measure the statistical relationship, or link, between two constant variables. It is identified as the finest way of assessing the relationship between variables of concern because it is constructed on the technique of covariance. It provides data about the magnitude of the relationship, or connection, in addition to the direction of the association.

**Spearman correlation test:** used to measure the statistical correlation, or relationship, between two constant variables. It is identified as the finest way of evaluating the relationship between variables of concern for it is centered on the way of covariance. It provides statistics about the magnitude of the relationship, or correspondence, besides the direction of the correlation.

**Independent Samples Test:** This measure significant variance between averages of 2 independent samples.

#### Comparison between each variable and the socio demographic data

**Table (1):** Personal characteristics of Nurse Interns (n= 115).

Demographic data	Frequency (N=115)	Percent
<b>Gender</b>		
▪ Male	35	30.4 %
▪ Female	80	69.6 %
<b>Marital status</b>		
▪ Single	99	86.1%
▪ Married	16	13.9 %

**Table (2):** Mean score of career maturity as perceived by nurse interns.

Total	N of items	Minimum Statistic	Maximum Statistic	Mean Statistic	SD Statistic	Skewness Statistic	Kurtosis Statistic	Mean score (%)
-------	------------	-------------------	-------------------	----------------	--------------	--------------------	--------------------	----------------

**Mann Whitney test:** This used to make comparison in the variances between 2 independent study samples when the sample allocations are not usually distributed, and the sample sizes are minor.

#### Results:

**Table (1):** reveals the personal characteristics of nurse interns. And regarding to gender (69.6%) of them were female, (86.1%) of them were single.

**Table (2):** illustrates that 46.01% of nurse interns had career maturity, more than half of study subject had career maturity at consultation level. **40.72%** of them had a curiosity level of career maturity.

**Table (3):** clarifies that **63.18% of nurse interns had creativity. (71.11%)** of nurse interns were **creative in Everyday** domain as perceived by them,

**Table (4):** clarifies that, majority of nurse' interns had moderate career maturity level in different domains and total career maturity level.

**Table (5):** clarifies that, highest percentage of nurse' interns had moderate level of creativity in different domains and total creativity level.

**Table (6):** revealed that there was a highly statistically significance positive relationship between total career maturity and total creativity as perceived by nurses' interns.

Concern	6	0.00	5.00	2.63	1.09	0.02	-0.24	43.91%
Curiosity	6	1.00	4.00	2.44	0.98	-0.21	-1.06	40.72%
Confidence	6	0.00	6.00	2.51	1.40	0.80	0.41	41.88%
Consultation	6	1.00	6.00	3.45	1.03	0.38	-0.07	57.54%
<b>Total career maturity</b>	<b>24</b>	<b>6.00</b>	<b>16.00</b>	<b>11.04</b>	<b>2.30</b>	<b>0.13</b>	<b>0.29</b>	<b>46.01%</b>

**Table (3):** Mean score of creativity level as perceived by nurse interns.

Total	N of items	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic	Skewness Statistic	Kurtosis Statistic	Mean score percent
Everyday	11	29.00	50.00	39.11	5.53	-0.02	-0.07	71.11%
Scholarly	11	20.00	45.00	33.40	6.89	-0.39	-0.71	60.73%
Performance	10	10.00	46.00	30.52	10.94	-0.59	-0.53	61.04%
Scientific	9	13.00	41.00	27.53	7.65	-0.53	-0.60	61.18%
Artistic	9	9.00	37.00	27.38	8.36	-0.94	-0.23	60.84%
<b>Total of Creativity mean score</b>	<b>50</b>	<b>90.00</b>	<b>193.00</b>	<b>157.95</b>	<b>31.24</b>	<b>-0.88</b>	<b>-0.40</b>	<b>63.18%</b>

**Table (4):** Frequency and percentage distribution of career maturity as perceived by nurse interns (N=115).

Variables	levels	Frequency	Percent
Concern	low	45	39.13%
	Moderate	64	55.65%
	High	6	5.22%
curiosity	low	51	44.35%
	Moderate	64	55.65%
	High	0	0.00%
Confidence	low	67	58.26%
	Moderate	35	30.43%
	High	13	11.30%
Consultation	low	19	16.52%
	Moderate	79	68.70%
	High	17	14.78%
Total career maturity levels	low	18	15.65%
	Moderate	97	84.35%
	High	0	0.00%

**Table (5):** Frequency and percentage distribution of creativity levels as perceived by nurse interns (N=115).

Variables	levels	Frequency	Percent
Everyday	low	0	0.00%
	Moderate	88	76.52%
	High	27	23.48%
Scholarly	low	21	18.26%
	Moderate	83	72.17%
	High	11	9.57%
Performance	low	27	23.48%
	Moderate	49	42.61%
	High	39	33.91%
Scientific	low	26	22.61%
	Moderate	68	59.13%
	High	21	18.26%
Artistic	low	22	19.13%

	Moderate	60	52.17%
	High	33	28.70%
Total Creativity level	low	17	14.78%
	Moderate	74	64.35%
	High	24	20.87%

Table (6): Correlation between studied variables

Creativity dimension		Career maturity dimensions				Total score of Career Maturity
		concern	Curiosity	confidence	consultation	
Everyday	R	0.307**	0.127	0.162	-0.378-**	0.221*
	P	0.001	0.176	0.083	0.000	0.018
Scholarly	R	0.068	-0.157	0.234*	-0.402-**	-0.097
	P	0.469	0.094	0.012	0.000	0.300
Performance	R	-0.219-*	-0.164	0.131	-0.316-**	-0.278-**
	P	0.019	0.079	0.162	0.001	0.003
Scientific	R	-0.213-*	-0.247-**	-0.016	-0.330-**	-0.421-**
	P	0.022	0.008	0.869	0.000	0.000
Artistic	R	-0.283-**	-0.029	0.081	-0.107	-0.239-*
	P	0.002	0.758	0.392	0.255	0.010
Total scores of Creativity	R	-0.217-*	-0.200-*	0.142	-0.360-**	-0.301-**
	P	0.020	0.033	0.130	0.000	0.001

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

\*Spearman correlation test

## Discussion

Career maturity is essential for developing attitude to understanding career performance and comprises an assessment of a person's level of career improvement in relative to their career advancement activities (Zunker, 2012).

Being creative isn't impartial for artistes, writers, and musical groups. Each of us has the ability and responsibility to think creatively about our jobs and engage with the available resources to produce something distinctive. Therefore, Humans have great creative potential and are heritable. Although a person has a lot of intrinsic creativity up to this point, it evolves with his degree of maturity to get his ideal character (Lalnunsiami, 2017).

Regarding career maturity level, the current study findings represented that, majority of study subject had moderate level in different dimensions and total career maturity. This finding may be due to that nursing instructor, prepare nurse' intern with adequate career information and expertise and assist their shift into clinical practice. This study finding is relevant and in consistency with Seo and Kim,

(2019) who concluded that, the majority expected ratio of great career maturity related to great instructor attachment.

Moreover, Cheng et al., (2018) reported that the career maturity level was moderate as perceived by undergraduates nursing students. Also, this result is supported by Lalnunsiami, (2017) who concluded that, the general average scores of nursing students was within the average career maturity level. The present study finding contradicted with Manivannan and Venkataraman, (2018) reported that, students had high level of career maturity.

In addition, the present study findings as well as indicated the first ranking of career maturity with the maximum mean score, was correlated to consultation dimension, followed by concern dimension among nurse' intern. This may be due to career maturity counseling helps them clarify their own career path and knowing where to get the information about in the job they are searching for. Besides, it helps them to decide on their own after considering the cause and effects of their decision.

In the same line with the study result **Bin Shafie et al., (2018)** stated that, the career counseling model shows an impact of the effectiveness for the career maturity among respondents. In contrast, **Dodd, (2019)** reported that the study subject categorized the maximum for the sub-scales of concern.

Meanwhile, the last ranking of career maturity with the lowermost mean score was associated with curiosity domain as perceived by study subject. This result may be due to deficiency of information of nurse' intern containing a deficiency of professional or development data, work world, and information about occupations and their requirements.

From the research point of view misperception about the career making of decision manner can be diminished when individuals discover their own capabilities and welfares along with professions that fitting the person's behavior and abilities. In contrary, **Dodd, (2019)** reported that, subjects ranked lowest for the sub-scale of confidence.

Regarding creativity domains, the current study result revealed that, highest score of study subject had moderate creativity level in different domains and total creativity level. This finding may be due to the educational environment can encourage creative thinking, as nursing instructor, play a key role in the development of nurse' intern creativity.

This finding is in congruence with the study carried out through **Niclòs et al., (2022)** found that the respondent had moderate to high perception creativity level in the different domains. In contrary **Lalnunsiami, (2017)** who concluded that college students have low level of creativity. Moreover, nurses' intern ranked everyday creativity domain for the highest mean score, followed by the scholarly, and performance. This may be because the nursing intern is doing their best to succeed at their job, and their teacher is using creative management to assist them via coaching and training exercises that inspire them and help them be more creative in their work.

In contrary with the study findings **Niclòs et al., (2022)** reported that, the self/everyday domain is valued most highly, followed by knowledge, creativity, and performance, while the scientific/mechanic domain is valued least highly. Also, **Kandemir and Kaufman, (2019)** for Turkish future had the same findings. While nurse' intern ranked artistic followed by scientific domain for the lowest mean score. This finding may be due to being creative in science and in artistic is generally associated with higher cognitive and emotional ability. This result was in contrast with **Tu et al., (2018)** reported that, the lowest mean score regarding was performance followed by artistic among respondents.

The results of this research revealed a very statistically significant positive association between nursing interns' overall professional maturity and their overall originality. These results may be the result of creativity being a crucial resource for each person's entire life project of adapting to their changing social and occupational surroundings, which has led to extended mission career maturity.

This is in line with the result of **Lalnunsiami, (2017)** revealed that among college students, creativity & career maturity had a good link. Finally, the research question was confirmed by that, there was a positive highly statistically significance correlation between total career maturity and total creativity among nurse' interns.

From the perspective of the researcher, the capacity for cross-disciplinary orientation may be seen as a vital component of creative thinking. Instead of the traditional perception of creativity as the capacity to create new objects or new goods, creativity may result in novel ideas on how to invent oneself, one's career, career maturity, and life path. In the same line **De Valverde et al., (2020)** found that, creativity influence career development.

### **Conclusion:**

The current study findings concluded that the highest percentage of nurse' intern had moderate level at different dimensions and total career maturity. Also, the first ranking of career



maturity with the maximum mean score, was linked to consultation dimension, followed by concern dimension. The last ranking of career maturity with the minimum mean score was allied to curiosity domain.

The highest percentage of the study sample had moderate creativity level in different domains and total creativity level. There was a highly statistical significance positive association between total career maturity and total creativity among study subjects.

### Recommendation:

the current study was recommended the following: The work settings must set forth extra efforts in the delivery of information to nurse' intern about occupation and their requirements, decision-making process to increase interest about occupation and help discovers their own skills and talents alongside with careers that fitting the person's behavior and abilities. This would be through on-the-job training, workshops and seminars, and other continuing education activities. Maintain that the educational environment encourages creative thinking, as nursing instructor, play a key role in the development of nurse' intern creativity.

### References:

**Abdul Rahim.S. N, Jaafar. M.W, Arsad.M.N (2021)** Career Maturity and Career Decision-Making Self-Efficacy as Predictors of Career Adaptability among Students in Foundation Program, Universities Putra Malaysia. *Asian Journal of University Education*, v. 17, n. 4, p. 464-477.

**Abdul Ghofur.M, Soejoto.A, Pamungkas.H.P(2020)** analysis of socioeconomic status, gender, and academic achievements to student career maturity. **Vol. 17, No 3** pp 219-230 <https://doi.org/10.22190/FUEO200408017G>

**Ali . N.A, Patel .R (2022)** Diversity, equity, and inclusion in nursing education: Strategies and processes to support inclusive teaching. *Journal of Professional Nursing*

Volume 42, September–October 2022, Pages 67-72

**Allen, S., Winston, B. E., Tatone, G. R., and Crowson, H. M. (2018).** Exploring a model of servant leadership, empowerment, and commitment in nonprofit organizations. *Nonprofit Manage. Leadership* 29, 123–140. doi: 10.1002/nml.21311

**Benić, M.Z.(2021)** Translation and Validation of the Kaufman Domains of Creativity Scale on a Croatian Sample of Early Childhood and Preschool Education Students. *ceps Journal* | Vol.11 | No 3.PP 163-179.

**Bin Shafie, A. Abd Karim, S. Yasin, N. Miskam, N. (2018).** The Effectiveness of Career Counseling Model towards the Level of Career Maturity among the Drug Addicts. *International Journal of Humanities and Social Science* Volume, 8. Number, 2. January 2018.

**Cheng C, Yang L, Chen Y, Zou H, Su Y&Fan X. (2016).** Attributions, future time perspective and career maturity in nursing undergraduates: Correlational study design. *BMC Med Educ.* 2016;16:1–8. <https://doi.org/10.1186/s12909-016-0552-1>.

**Cheraghi,<sup>1</sup> M. A, Shahzad Pashaeypoor,<sup>2</sup> Dehkordi.m. d,<sup>3</sup> and Khoshkesht.s(2021)** Creativity in Nursing Care: A Concept Analysis. *Florence Nightingale JNurs* v.29(3); 389–396.

**Coertse & Schepers (2004),** Some personality and cognitive correlates of career maturity *Journal of Industrial Psychology* | Vol 30, No 2 | a150 | DOI: <https://doi.org/10.4102/sajip.v30i2.150>

**De Valverde, J. Thornhill-Miller' B. Patillo, T and Lubart, T. (2020).** Creativity. A key concept in guidance and career counseling. *Journal of Adult and Continuing Education.* Volume 26, Issue 1, May 2020, Pages 61-72.

**Dodd, C. (2019).** THE DEVELOPMENT OF CAREER MATURITY AND CAREER

- DECISION SELF-EFFICACY AMONG HIGH-SCHOOL AGED YOUTH ENROLLED IN THE TEXAS 4-H HEALTHY LIFESTYLES PROGRAM. A Thesis submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of DOCTOR OF PHILOSOPHY. doi: 10.26529/cepsj.708
- Dorgahm, R. S & Obied, K.H. (2016):** Factors affecting nurse interns' compliance with standard precautions for preventing stick injury, journal of nursing education and practice. Vol.6, No.12 pages 121-129.
- El SharKawy, A. T. A. Abd El Hady. M .R. and Ramadan, A .E. (2019):** "Effect of Training Program on Nurse Intern's Knowledge and Practice Regarding Obstetric and Gynecological Skills at Benha University Hospital." American Journal of Nursing Research, vol. 7, no. 5 (2019): 889-898. doi: 10.12691/ajnr-7-5-22.
- Holtzhausen, N., and de Klerk, J. J. (2018).** Servant leadership and the scrum team's effectiveness. *Leadership Org. Dev. J.* 39, 873–882. doi: 10.1108/ LODJ-05-2018-0193  
<https://doi.org/10.1016/j.profnurs.2022.05.013>.
- Ismail, M. S., Abdullah, S. S., Mohamad, M. Z., & Khairuldin, W. M. K. F. W. (2018).** Student's Career Maturity: Implications on Career Counselling. *International Journal of Academic Research in Business and Social Sciences*, 8(4), 865–875.
- John O. Crites & Mark L. Savickas (2011)** Revision of the Career Maturity Inventory: The Adaptability Form. *Journal of Career Assessment*. v19 n4 p355-374.
- Kandemir, M. A., & Kaufman, J. C. (2019).** The Kaufman Domains of Creativity Scale. Turkish Validation and Relationship to Academic Major. *The Journal of Creative Behavior*, 54(4), 1002–1012. <https://doi.org/10.1002/jocb.428>
- Kaufman, J. C. (2012).** Counting the muses: Development of the Kaufman Domains of Creativity Scale (K-DOCS). *Psychology of Aesthetics, Creativity, and the Arts*, 6(4), 298–308.
- Lalnunsiami,K (2017).** Creativity and career maturity among college students of aizawl district. A Dissertation Submitted in Partial Fulfillment for the degree of Master of Philosophy in Education.
- Lee, A, W. (2017).** Self-Perceptions of Creativity and Creative Performance in Adolescents. A Thesis submitted to Candidate for the degree of Master of Arts.
- Manivannan, S and Venkataraman, SA. (2018).** STUDY ON CAREER MATURITY OF SECONDARY STUDENTS. *International Journal of Human Resource Management and Research (IJHRMR)* ISSN (P). 2249-6874; ISSN (E). 2249-7986 Vol. 8, Issue 4, Aug
- Mohammed. R, Abdel Wahab.E& El-Sayed.R(2020)** Factors Influencing Career Development among Nursing Staff at Port-Said Governmental Hospitals. *Port Said Scientific Journal of Nursing* Vol.7, No. 1, pp 191-211
- Niclòs, I. Antonio, M. Zayas, M. & Sanz, Y. (2022).** Creativity Domains in Special Needs Prospective Teachers. *SPECIALUSIS UGDYMAS / SPECIAL EDUCATION* 2022 2 (43).
- Nurani, G. A. (2022).** Factors Influencing Students' Career Maturity in Vocational and General High School. *IJORER: International Journal of Recent Educational Research*, 3(6), 750-761
- Rangaraju M. S., & Kennedy S. H. (Eds.) (2012).** *Innovation in management challenges and opportunities in the next - decade*. Allied Publishers.
- Seo, J and Kim, M. (2019).** A Prediction Model of Factors related to Career Maturity in Korean High School Students. *Child Health Nurs Res*, Vol.25, No.2, April 2019. 95-102

- Shin, Y. J., and Lee, J. Y. (2018).** Predictors of Career Decision Self-Efficacy. Sex, Socioeconomic Status (SES), Classism, Modern Sexism, and Locus of Control. *Journal of Career Assessment*, 26(2), 322–337.
- Shubina I. & Kulakli, A. (2019).** Critical Thinking, Creativity and Gender Differences for Knowledge Generation in Education. *Literacy Information and Computer Education Journal (LICEJ)*, Volume 10, Issue 1.
- Tarhan, A., Garousi, V., Turetken, O., Söylemez, M., & Garossi, S. (2020).** Maturity assessment and maturity models in health care: A multivocal literature review. *Digital Health*, 6. <https://doi.org/10.1177/2055207620914772>
- Tu, C. Guo, J. Hatcher, R. & Kaufman, J. (2018).** The Relationship between Emotional Intelligence and Domain-Specific and Domain-General Creativity. *The Journal of Creative Behavior*, Vol. 54, Iss. 2, pp. 337–349 © 2018 Creative Education Foundation.
- Wu, Y., and Zhu, W. (2021).** The role of CSR engagement in customer-company identification and behavioral intention during the COVID-19 pandemic. *Front. Psychol.* 12:721410. doi: 10.3389/fpsyg.2021.721410
- Yang, J., Gu, J., and Liu, H. (2019).** Servant leadership and employee creativity: The roles of psychological empowerment and work-family conflict. *Curr. Psychol.* 38, 1417–1427. doi: 10.1007/s12144-019-0161-3
- Yu, X., Li, D., Tsai, C. H., and Wang, C. (2019).** The role of psychological capital in employee creativity. *Career Dev. Int.* 24, 420–437. doi: 10.1108/CDI-04-2018-0103
- Zunker, V. G. (2012).** *Career counselling: A holistic approach* (8th ed.). Pacific Grove, California: Brooks/Cole Publishing Company.