



# The Influence of Self-Efficacy on Career Decision of Teenage Mothers in Butuan City Amidst Covid-19 Pandemic

Charina May L. Lagunde<sup>1\*</sup>, and Shiela S. Badiang<sup>2</sup>

<sup>1</sup>Agusan National High School, Butuan City, Philippines

<sup>2</sup>Department of Psychology, College of Humanities and Social Sciences, Caraga State University, Ampayon, Butuan City, Philippines

## ABSTRACT

This study aims to investigate the influence of self-efficacy, including demographic information, such as the educational attainment of parents and family income, on the career decision-making of 124 teenage mothers who were identified through stratified proportionate sampling in the center region of Caraga. The data was collected through an online survey and was analyzed through descriptive and multiple linear regression analysis. The study findings show that teenage mothers' self-efficacy is at an average level and high level in career decision-making. Self-efficacy also affirms that it significantly influences the level of career decision-making of teenage mothers, giving us a nuanced understanding of its vital role in career decision-making. Further results also show that the educational background of mothers mostly influences career decision-making compared to the educational background of fathers of teenage mothers, while family income appears to have no significant influence on teenage mothers in their career decision-making. The insights from the results of this study have inferences for the design of targeted interventions and support programs intended to nurture and empower the self-efficacy of teenage mothers, thereby helping them to be more informed and confident as they take their challenges in their career decision-making for a clearer career path.

Keywords: : *Influence, Self-efficacy, Career decision-making, Teenage Mothers*

\*Corresponding Author


\*Email: charinamaylagunde@gmail.com

Received: October 7, 2022

Revised: November 21, 2023

Accepted: June 25, 2024

Released Online: June 30, 2024

Copyright © June 2024, Caraga State University. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. 

Cite this article: Lagunde, C. M., & Badiang, S. S. (2024). The Influence of Self-Efficacy on Career Decision of Teenage Mothers in Butuan City Amidst Covid-19 Pandemic, *Annals of Studies in Science and Humanities*, 5(1):18-28.

## 1 Introduction

Adolescent pregnancy is a global public health problem. It is a pregnancy in girls between the ages of 10 and 19. Some 21 million girls aged 15–19 experience pregnancy in developing regions, and an estimated 12 million of them give birth. The adolescent birth rate (ABR) has experienced a drop, decreasing from 64.5 births per 1000 women (15–19 years) in 2000 to 41.3 births per 1000 women in 2023 on a global scale. Nevertheless, the pace of this decline varies across different regions, with the most significant reduction observed in Southern Asia (SA) and slower declines in sub-Saharan Africa (SSA) and the Latin American and Caribbean (LAC). Despite improvements in

all regions, LAC and SSA persist with the highest global rates, standing at 99.4 and 52.1 births per 1000 women, respectively, in 2022 (WHO, 2023). In the Philippines, 5.4 percent of women 15 to 19 years old have ever been pregnant, 0.4% have had a pregnancy loss, and about 1.6 percent of them are currently pregnant. In terms of area residence, the percentage of women 15 to 19 years old who have experienced pregnancy was slightly lower in urban areas (4.8%) compared to rural areas (6.1%). When considering different regions, Northern Mindanao had the highest prevalence of pregnancies among women aged 15 to 19 years (10.9%), with Davao Region (8.2%), Central

Luzon (8.0%), and Caraga (7.7%) following the list. Conversely, the lowest percentages of teenage pregnancies were observed in the Ilocos Region (2.4%) and Bicol Region (Philippine Statistics Authority 2023).

The period of young adolescence, from 12 to 18 years, is crucial in the journey to construct their identity development (Erikson 1958, 1963). Adolescence is usually identified as the period when the process and development of career identity formation begin (Morsunbul & Meeus 2015). Navigating career decision-making is a complicated process that requires students to gain a deep understanding of themselves (Azhenov et al. 2023). Sampson et al. (2004), career decision-making involves a sequential and interconnected process that encompasses activities like gathering relevant information, choosing a career, pursuing education, and looking for employment after finishing an educational program (cited in Duro 2022). Choosing a career can pose one of life's most daunting challenges. Individuals frequently find themselves overwhelmed with information as they consider the myriad career paths available to them (Gati et al. 2019).

Cultivating a sense of ability in career decision-making is important to successfully engage in occupational and educational planning and decision-making (Chiesa et al. 2016). Self-efficacy plays a substantial positive role in career decision-making (Sandra & Mularsih 2021). Self-efficacy is people's belief in their capability to exercise some measure of control over their functioning and environmental events (Bandura 2001, as cited in Feist et al. 2018). Self-efficacy has a vital role in career decision-making since it denotes belief in oneself in engaging in activities related to career decisions (Duru 2022; Crişan & Turda 2015). Other than self-efficacy, the educational background of parents significantly impacts teenagers' career decisions. Parents who have higher educational backgrounds tend to demonstrate greater consistency and encounter fewer difficulties when making career choices (Mbagwu & Ajaegbu 2016). The study by Adikwu and Ereka (2022) also revealed that parental educational background and socioeconomic status influenced the students' career choices.

Previous research indicates that self-efficacy

has garnered significant attention in the literature on career-related concerns, particularly among college and university populations. Still, there is not so much emphasis on teenage mothers. Hence, this paper focused on determining the level of self-efficacy and career decision-making of teenage mothers and examined the extent of influence of self-efficacy and demographic profile (parents' educational attainment and family income) on career decision-making.

The study findings could have a potentially significant impact, providing valuable insights into the factors that influence the career decision-making processes of teenage mothers. Understanding the roles of self-efficacy may empower teenage mothers by providing them with a clearer understanding of their capabilities in navigating career choices despite their unique challenges. This knowledge could contribute to developing targeted interventions and support systems, nurturing greater self-reliance and self-belief among teenage mothers. Additionally, by exploring these dynamics within the specific context of teenage motherhood, the study enhances the broader body of knowledge in career psychology and career guidance. It improves understanding of how personal factors like self-efficacy can influence career decisions. This can guide future research in developing more effective interventions to support career development in diverse populations, especially those with additional challenges in life. Limitations of this study are also recognized, where various psychological factors like personality traits, intrinsic and extrinsic motivations, and other psychological resources of teenage mothers are yet to be explored associated with career decision-making.

## **2 Materials and Methods**

### ***Research Design***

The study employed a quantitative research design, particularly a descriptive-causal design, which further aided the researchers in collecting the data through a survey questionnaire of the identified sample size.

### ***Sample and Sampling Design***

Out of 178 teenage mothers, the sample size was determined through stratified proportionate sampling from the identified barangays. This

process yielded a sample of n=124 teenage mothers in the central region of Caraga.

***Instruments Used***

The first research instrument was the General Efficacy Scale (GSES), which comprises 10 questions, ranging from “not true at all” to “exactly true,” using the 4-point Likert scale (1= Not all true, 2 = Hardly true, 3 = Moderately true, 4 = Exactly true). It assesses individuals’ general beliefs about coping with life’s challenges. It has no subscales and reverse-coded items, so the automatic score is a simple sum of ten answers. Its Cronbach’s alpha is between .76 and .90 (Schwarzer & Jerusalem 1995).

The second research instrument was the Career Decision-Making Self-Efficacy Scale - Short Form (CDMSSES-SF). It aims to assess the confidence of an individual in making career-related decisions. The items measure accurate self-appraisal or assessment, gather professional information, select objectives, prepare decision-making plans, and solve problems (Betz et al. 1996). The results are measured by calculating the average number of its 25 items with a 5-point Likert scale, 1 = no confidence and 5 = complete confidence. Its Cronbach's alpha is .94 (Betz et al. 1996).

The range and descriptive equivalent or remark assigned on the level of self-efficacy and the level of career decision-making are shown below:

Range	Descriptive Equivalent or Remark
1.00-1.49	Very Low
1.50-2.249	Low
2.50-3.49	Average
3.50-4.49	High
4.50-5.00	Very High

***Data Gathering Procedure***

The researchers first secured the approved letter from the City Population Office (CPO) of the center region of Caraga for the study to be conducted and the list of teenage mothers per barangay. A formal letter was also sent to the identified barangays to request the assistance of their respective barangay health workers in tracing the target teenage mothers. The data was collected online due to the stringent local health restrictions imposed by the Inter-Agency Task Force (IATF) during the height of the COVID-19 pandemic. Embedded in the link for the online survey were

the formal letter and informed consent and/or assent for their voluntary participation. The scales of self-efficacy and career decision-making followed this.

***Data Analysis***

The data were tallied, tabulated, processed, and analyzed using frequency counts, percentages, and weighted mean to determine the level of self-efficacy and career decision-making. The study used multiple linear regression in examining the extent of influence of self-efficacy and demographic profile on the career decisions of teenage mothers.

***3 Results and Discussion***

Most of the participants were aged between 17–19-year-olds, and 14-year-old were the youngest (Figure 1). Most participants were still in high school with 59.68%, while others were high school graduates and college level with 20.16% and 20.16%, respectively. Most of their parents were not college graduates, and most were classified as poor and low-income (not poor) as their social status according to their income cluster, with P5,000-P10,000 having 30.64% as the highest percentage. P10,000-15,000 follows this with 21.77% and P1,000-5,000 with 20.16%.

***The Level of Self-Efficacy of Teenage Mothers***

The overall weighted mean of self-efficacy among teenage mothers was average (M = 3.15, SD = 0.633) (Table 1). Similar results among Filipino adolescent mothers also demonstrated a moderate level of self-efficacy (Mira et al. 2017). This means that teenage mothers have a fair set of beliefs that they could averagely and passably perform their tasks and plans of action related to career decision-making in prospective situations. Hence, it is crucial to nurture the self-efficacy of teenage mothers to increase their self-efficacy from an average level to a high level so that they can thrive better and succeed when pursuing any career-related decision-making.

The study by Valizadeh (2021) showed that students with good-to-high levels of self-efficacy beliefs demonstrate confidence and assertiveness in their academic achievements and performance. Career indecision and career uncertainty are linked to individuals’ low self-efficacy, accentuating the crucial role of self-efficacy in shaping career decision-making (Sandra & Mularsih 2021). The

self-efficacy of students correlates significantly with their academic motivation, thereby enhancing the academic achievement of graduating Filipino college students (Yapo et al. 2021).

**The Level of Career Decision-Making of Teenage Mothers**

The overall career decision-making among teenage mothers yielded a high-level result (M=3.60, SD = 1.015). A high level of career decision-making suggests that individuals possess a substantial level of confidence in managing tasks related to career decision-making, particularly in self-appraisal for identifying influential resources and planning for their careers (Xing & Rojewski 2018). Individuals with higher scores in career decision-making are more adept at handling challenges and are less prone to encountering psychological barriers when making career decisions. It is associated with positive career

attitudes, high self-esteem, and distinct vocational identity (Jiang & Jiang 2015). Meanwhile, low levels of career decision-making are usually associated with difficulties in career decision-making, often leading to career indecision (Gati et al. 2011). In this study, the high level of career decision-making of teenage mothers indicates that they exhibit enhanced abilities to navigate challenges and reduce the likelihood of encountering difficulties when making career decisions.

For each subscale of career decision-making, occupational informational gathering showed a high-level remark (M= 3.92, SD = 0.607) (Table 2). Occupational information gathering involves collecting important details about occupational and educational opportunities. Comprehensive occupational or career information encompasses details, including information in practice resources, career news, career policy, and career evaluation.

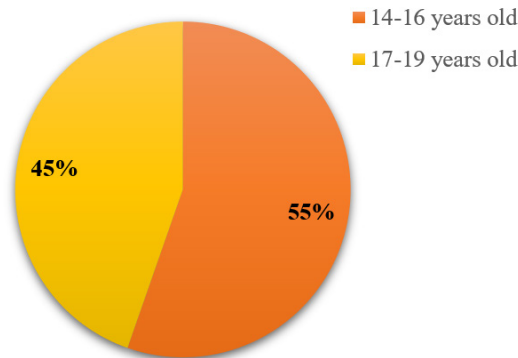


Figure 1. Age Distribution of Teenage Mothers

Table 1. Level of Self-Efficacy of Teenage Mothers

Indicators	Mean Score	Standard Dev	Remark
I can always manage to solve difficult problems if I try hard enough.	3.25	0.833	Average
If someone opposes me, I can find the means and ways to get what I want.	2.79	1.142	Average
It is easy for me to stick to my aims and accomplish my goals.	3.02	0.937	Average
I am confident that I can deal efficiently with unexpected events.	3.25	0.772	Average
Thanks to my resourcefulness, I know how to handle unforeseen situations.	3.50	0.577	High
I can solve most problems if I invest the necessary effort.	3.34	0.731	Average
I can remain calm when facing difficulties because I can rely on my coping abilities.	2.62	0.976	Average
When I am confronted with a problem, I can usually find several solutions.	3.20	0.732	Average
If I am in trouble, I can usually think of a solution.	3.12	0.728	Average
I can usually handle whatever comes my way.	3.40	0.583	Average
<b>Over-all Self-Efficacy</b>	<b>3.15</b>	<b>0.633</b>	<b>Average</b>

1.00-1.49= Very Low; 1.50-2.249= Low; 2.50-3.49= Average; 3.50-4.49= High

**Table 2. Level of Career-Decision of Teenage Mothers**

Indicators	Mean Score	Standard Dev	Remark
<b>Occupational Information Gathering</b>	<b>3.92</b>	0.607	<b>High</b>
• Find Information about occupations you are interested in.	4.69	0.691	Very High
• Find out the employment trends for an occupation over the next ten years.	2.61	1.287	Average
• Find out about the average yearly earnings of people in an occupation.	4.61	0.708	Very High
• Talk with a person already employed in a field you are interested in joining or switching.	4.05	0.863	High
• Find information about graduate or professional schools in line with your career goals.	3.63	1.032	High
<b>Goal Selection</b>	<b>3.51</b>	0.795	<b>High</b>
• Select one major from a list of potential majors you are considering.	3.56	1.092	High
• Select one occupation from a list of potential occupations you are considering joining or switching.	3.50	1.016	High
• Choose a career that will fit your preferred lifestyle.	2.57	1.191	Average
• Make a career decision, and then do not worry about whether it was wrong or right.	4.73	0.543	Very High
• Choose a major or career that will fit your interests.	3.19	1.194	Average
<b>Planning</b>	<b>3.82</b>	0.753	<b>High</b>
• Make a plan of your goals for the next five years.	4.02	1.000	High
• Determine the steps you need to take to complete your chosen major successfully.	4.33	0.762	High
• Prepare a good resume.	3.85	0.837	High
• Identify employers, firms, and institutions relevant to your career possibilities/progression.	3.01	1.158	Average
• Successfully manage the job interview process.	3.90	0.932	High
<b>Problem-Solving</b>	<b>3.33</b>	0.901	<b>Average</b>
• Determine the steps you take if you are having academic trouble with an aspect of your chosen major.	3.77	1.081	High
• Persistently work at your major or career goal even when you get frustrated.	3.80	0.937	High
• Change majors if you do not like your first choice.	2.49	1.165	Low
• Identify employers, firms, and institutions relevant to your career possibilities/progression.	3.92	0.889	High
• Identify some reasonable major or career alternatives if you are unable to get your first choice.	2.67	1.261	Average
<b>Self-Appraisal</b>	<b>3.40</b>	0.868	<b>Average</b>
• Accurately assess your abilities.	3.23	1.188	Average
• Determine what your ideal job would be.	3.82	0.914	High
• Decide what you value most in an occupation.	3.11	1.042	Average
• Figure out what you are and are not ready to sacrifice to achieve your career goals.	3.23	1.045	Average
• Define the type of lifestyle you would like to live.	3.64		High
<b>Over-all Self-Efficacy</b>	<b>3.60</b>	1.015	<b>High</b>

1.00-1.49= Very Low; 1.50-2.249= Low; 2.50-3.49= Average; 3.50-4.49= High; 4.50-5.00= Very High

In the development of the internet and global communication in a modern technology-driven world, occupational or career information is crucial as it helps individuals navigate the rapidly changing job market, understand emerging career opportunities, and acquire the necessary skills and education. It empowers informed decision-making, increases employability, and supports continuous professional development in an evolving digital landscape. Hence, it is important in the career guidance process (Cai 2020). The goal selection subscale yielded a high-level remark ( $M = 3.51$ ,  $SD = 0.795$ ). The selection of career

goals is rudimentary, directly controls and guides individuals' behavior goals, and serves as a foundational motivational mechanism for explaining individual behavior. Through the specific mechanism of setting career goals, the focus on personal competence and the direction of action becomes clear and defined (Jung 2022). The planning subscale also showed a high-level remark ( $M = 3.51$ ,  $SD = 0.753$ ). Career planning is preparing career development direction, reflecting the potential to predict the future, real-world conditions, and the capacity to influence factors. It encompasses activities and strategies individuals

undertake to achieve practical goals related to their career aspirations (Song 2015). Meanwhile, problem-solving yielded an average level remark ( $M = 3.33$ ,  $SD = 0.901$ ). Problem-solving involves the cognitive process of identifying ways to achieve specific targets and intentions (Mefoh et al. 2017); it is an advanced cognitive skill that involves identifying the nature of a problem, breaking it down, and devising an effective set of actions to tackle its associated challenges (Abazov 2016; Oliveri et al. 2017). Self-appraisal also showed an average remark ( $M = 3.40$ ,  $SD = 0.868$ ). Self-appraisal or self-evaluation is critical to career decision-making (Jiang & Jiang 2015) and highlighted its significance in the process of career decision-making (Udayar et al. 2020).

#### ***The Influence of Self-Efficacy and Demographic Characteristics on Career Decision-Making of Teenage Mothers***

The findings revealed that in terms of demographic characteristics such as age and educational attainment of teenage mothers generated VIFs greater than 5 and tolerance less than .02, which suggests that these variables add multicollinearity. They are highly correlated to the other independent variables used in the model. In modeling, the condition of independent variables should be highly correlated. Thus, these variables should be removed from the model.

Further, it also revealed that self-efficacy consistently had a significant influence on career decision-making across all five subscales, along with the mothers' level of educational attainment. Self-efficacy ( $\beta = 0.635$ ,  $p < 0.001$ ) and mothers' educational attainment - college level ( $\beta = 0.517$ ,  $p = 0.046$ ) demonstrating significant influences on occupational information gathering. These independent variables (self-efficacy and mothers' educational attainment - college level) contributed to 60.7% of the variations of the dependent variable (occupational information gathering) based on the generated  $R^2 = 0.607$  of the model.

Self-efficacy ( $\beta = 0.736$ ,  $p < 0.001$ ) and all levels of mothers' educational attainment ( $\beta = 0.613$ ,  $p = 0.006$ ;  $\beta = 0.682$ ,  $p = 0.003$ ;  $\beta = 0.939$ ,  $p < .001$ ;  $\beta = 1.223$ ,  $p < .001$ ) demonstrating significant influences on goal selection. These independent variables (self-efficacy and various levels of mothers' educational attainment) collectively

accounted for a significant portion of the variance in the dependent variable (goal selection), explaining 70.5% of the variability based on the generated  $R^2 = 0.795$  of the model.

Self-efficacy ( $\beta = 0.799$ ,  $p < 0.001$ ) and all levels of mothers' educational attainment ( $\beta = 0.666$ ,  $p < .001$ ;  $\beta = 0.907$ ,  $p < .001$ ;  $\beta = 1.114$ ,  $p < .001$ ;  $\beta = 1.211$ ,  $p < .001$ ), which also includes the fathers' educational attainment in terms of HS graduate and college level ( $\beta = -.765$ ,  $p = 0.040$ ;  $\beta = -0.903$ ,  $p = 0.021$ ) respectively demonstrating significant influences on planning. These independent variables (self-efficacy and various mothers' educational attainment and some levels of the father's educational attainment) contributed to 75.3% of the variations of the dependent variable (planning) based on the generated  $R^2 = 0.753$  of the model.

Self-efficacy ( $\beta = 1.042$ ,  $p < 0.001$ ) and all levels of mothers' educational attainment ( $\beta = 0.915$ ,  $p < .001$ ,  $\beta = 0.656$ ,  $p = 0.005$ ;  $\beta = 0.871$ ,  $p = .002$ ;  $\beta = 1.065$ ,  $p = .002$ ) demonstrating significant influences on goal selection. These independent variables (self-efficacy and various levels of mothers' educational attainment) collectively accounted for a significant portion of the variance in the dependent variable (problem-solving), explaining 79.5% of the variability based on the generated  $R^2 = 0.795$  of the model.

Self-efficacy ( $\beta = .955$ ,  $p < 0.001$ ) and all levels of mothers' educational attainment ( $\beta = 0.740$ ,  $p < .001$ ;  $\beta = 0.595$ ,  $p = .006$ ;  $\beta = 0.932$ ,  $p < .001$ ;  $\beta = 1.097$ ,  $p < .001$ ) are also demonstrating significant influences on self-appraisal. These independent variables (self-efficacy and various levels of mothers' educational attainment) collectively accounted for a significant portion of the variance in the dependent variable (self-appraisal), explaining 86.8% of the variability based on the generated  $R^2 = 0.868$  of the model.

These results imply that self-efficacy played a predictive factor in shaping the career decision-making process among teenage mothers. In support, Ogotu et al. (2017) examined the impact of self-efficacy on career decision-making among secondary school students. Their findings indicated that factors within the self-efficacy variable played a significant role in shaping the connection between self-efficacy and career decision-making. Hence, self-efficacy influences career decision-making. As highlighted by Rodinda and Eva



(2023), there is a significant favorable influence between self-efficacy and career decision-making. Higher levels of self-efficacy correspond to greater certainty in the career decision-making process among students. Additionally, self-efficacy influences career choices among undergraduate students (Njiku et al. 2022).

The study by Fouad et al. (2015) and Humayon et al. (2018) presented that family influence is a key factor in career-related decisions. These influences could be in different forms like family structural variables that reflected family members' socioeconomic status and family process-oriented variables, especially parental career-related behaviors (Xing & Rojewski 2018), including parents' educational and occupational attainment, family income, and finances-related concerns (Adikwu & Ereka 2022). However, in this study, family income consistently demonstrated no significant influence on career decision-making among teenage mothers, which reverses some research literature that indicates that family income or socioeconomic status significantly influences career decision-making and choice among students (Adikwu & Ereka 2022).

#### 4 Conclusions and Recommendations

Based on the study findings, teenage mothers possess an average level of self-efficacy. This indicates that they only have adequate confidence in their ability to exert a degree of influence over their environmental occurrences and functioning, but it still significantly affects their career decision-making. Thus, the study concluded that it is vital to strengthen and cultivate their self-efficacy beyond the typical level so that teenage mothers would not execute their tasks and plans in a mediocre manner but teach a great sense of certainty, confidence, and assurance, particularly regarding life challenges and career decision-making.

To enhance the self-efficacy of teenage mothers, it is recommended that this be achieved through targeted interventions aimed at bolstering self-efficacy among teenage mothers, like mentorship programs and self-management, to be integrated into career guidance programs in schools and the community. These programs should provide information about the importance of self-efficacy, various career paths, educational opportunities,

and skill development, empowering teenage mothers to be informed about their future career decisions.

#### Acknowledgement

The authors deeply appreciate the City Population Office (CPO) approving this study. To the barangay officials and health care workers for their assistance, which made data gathering more feasible. Further, the researchers are immensely thankful to the teenage mothers who participated in this study. This would not have been possible and successful without the people who showed their support and shared their expertise to refine this study.

#### 5 Statement of Conflict of Interest

The authors declare that there is no conflict of interests regarding the publication of this paper.

#### 6 Literature Cited

- Abazov, R. (2016). How to improve your problem-solving skills. Available at: [https://www.researchgate.net/publication/305062877\\_How\\_to\\_Improve\\_Your\\_Problem-Solving\\_Skills](https://www.researchgate.net/publication/305062877_How_to_Improve_Your_Problem-Solving_Skills). (Accessed January 19, 2023)
- Adikwu, V. O., & Ereka, L. I. (2022). Influence of parental factors on career choice among senior secondary school students in Abuja, federal capital territory, Nigeria. *Integrity Journal of Education and Training*, 6(4), 85-90. <https://doi.org/10.31248/ijet2022.148>
- Adolescent pregnancy. (2023, June 2). World Health Organization (WHO). <https://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy>
- Almeida, M. D., & Aquino, E. M. (2011). Adolescent pregnancy and completion of basic education: A study of young people in three state capital cities in Brazil. *Cadernos de Saúde Pública*, 27(12), 2386-2400. <https://doi.org/10.1590/s0102-311x2011001200010>
- Anantheswamy, A. (2010). Career Guidance. In Bureau of Labor Statistics (2010), *Occupational Outlook Handbook, 2010-11*, 172: 75-90. U.S. Department of Labor.
- Azhenov, A., Kudysheva, A., Fominykh, N., & Tulekova, G. (2023). Career decision-making readiness among students' in the system of higher education: Career course intervention. *Frontiers in Education*, 8: 1097993. <https://doi.org/10.3389/feduc.2023.1097993>
- Azizah, S. N., Saleh, S., & Sulistyanningrum, E. (2022). The effect of working mother status on children's education attainment: Evidence from longitudinal

- data. *Economies*, **10**(2), 54. <https://doi.org/10.3390/economies10020054>
- Baker, V. L. (2022). Planning, goal-setting, and problem solving. *Managing Your Academic Career*, 32-48. <https://doi.org/10.4324/9781003201311-4>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, **84**(2), 191–215. <https://doi.org/10.1037/0033-295x.84.2.191> D for Career Assessment. *Journal of Career Assessment*, **8**(3), 205–222. <https://doi.org/10.1177/10690727000800301>
- Barto, H., Lambert, S., & Brott, P. (2015). Career adaptability, resiliency and perceived obstacles to career development of adolescent mothers. *The Professional Counselor*, **5**(1), 53-66. <https://doi.org/10.15241/hb.5.1.53>
- Cai, B. (2020). A study on the effectiveness of career information collection as a way to promote graduate students' employment. *Proceedings of the International Conference on Modern Educational Technology and Innovation and Entrepreneurship (ICMETIE 2020)*. <https://doi.org/10.2991/assehr.k.200306.127>
- Chen, G., Gully, S. M., & Eden, D. (2004). General self-efficacy and self-esteem: Toward theoretical and empirical distinction between correlated self-evaluations. *Journal of Organizational Behavior*, **25**(3), 375-395. <https://doi.org/10.1002/job.251>
- Chiesa, R., Massi, F., & Guglielmi, D. (2016). Career Decision-Making Self-Efficacy Change in Italian High School Students. *Journal of Counseling & Development*, **94**(2), 210–224. doi:10.1002/jcad.1207710.1002/jcad.12077
- Chong, W. H. (2007). The role of personal agency beliefs in academic self-regulation: An Asian perspective. *School Psychology International*, **28**(1), 63-76. <https://doi.org/10.1177/0143034307075681>
- Crişan, C., & Turda, S. (2015). The connection between the level of career indecision and the perceived self-efficacy on the career decision-making among teenagers. *Procedia - Social and Behavioral Sciences*, **209**, 154-160. <https://doi.org/10.1016/j.sbspro.2015.11.271>
- Di Fabio, A., & Maree, J. G. (2013). Effectiveness of the career interest profile. *Journal of Employment Counseling*, **50**(3), 110-123. <https://doi.org/10.1002/j.2161-1920.2013.00030.x>
- Duru, H. (2022). Analysis of relationships between high school students' career maturity, career decision-making self-efficacy, and career decision-making difficulties. *International Journal of Psychology and Educational Studies*, **9**(1), 63-78. <https://doi.org/10.52380/ijpes.2022.9.1.479>
- Early childbearing. (2023, March 24). UNICEF DATA. <https://data.unicef.org/topic/child-health/adolescent-health/>
- Ehsan, S. Md. A., & Jahan, F. (2021). Analysing the impact of COVID-19 on the mothers of Bangladesh: hearing the unheard. *Journal of Public Health*. **30**(2869-2882), <https://doi.org/10.1007/s10389-021-01501-5>
- Erika Hapsari, S. Ps et al. " The Effectiveness of Career Planning Training on Career Decision Making Self Efficacy," *International Journal of Humanities Social Sciences and Education (IJHSSE)*, **9**(1): 73-87, 2022, doi: <https://doi.org/10.20431/2349-0381.0901006>.
- Febriantomo, E. H., & Suharnan, -. (2015). Training effect of self-efficacy of career decision making self-efficacy (CDMSE) and N-ACH on student SMAN 01 Pasuruan East Java. *Persona: Jurnal Psikologi Indonesia*, **4**(1)<https://doi.org/10.30996/persona.v4i1.491>
- Feist, G. (2010). The Function of Personality in Creativity: The nature and nurture of the creative personality. In J. Kaufman, & R. Sternberg, *The Cambridge Handbook of Creativity* (pp. 113-130). New York, NY: Cambridge University Press.
- Feist, J., Gregory J Feist, D., & Roberts, T. (2018). *Theories of personality*. McGraw-Hill Education.
- Fidan, V., & Nas, S. (2021). Career decision-making difficulties on high school students. *The Journal of International Educational Sciences*, **29**(29): 1-18. <https://doi.org/10.29228/inesjournal.53964>
- Firdaus, W., & Arjanggi, R. (2020). Self-efficacy and career decision making difficulties in senior high school students. *Indigenous: Jurnal Ilmiah Psikologi*, **5**(2), 141-150. <https://doi.org/10.23917/indigenous.v5i2.8941>
- Fouad, N. A., Kim, S., Ghosh, A., Chang, W., & Figueiredo, C. (2015). Family influence on career decision making. *Journal of Career Assessment*, **24**(1), 197-212. <https://doi.org/10.1177/1069072714565782>
- Gabster, B. P., van Daalen, K., Dhatt, R., & Barry, M. (2020). Challenges for the female academic during the COVID-19 pandemic. *Lancet* (London, England), **395**(10242), 1968–1970. [https://doi.org/10.1016/S0140-6736\(20\)31412-4](https://doi.org/10.1016/S0140-6736(20)31412-4)
- Ganchimeg, T., Ota, E., Morisaki, N., Laopaiboon, M., Lumbiganon, P., Zhang, J., Yamdamsuren, B., Temmerman, M., Say, L., Tunçalp, Ö., Vogel, J., Souza, J., & Mori, R. (2014). Pregnancy and childbirth outcomes among adolescent mothers: A World Health Organization multicountry study. *BJOG: An International Journal of Obstetrics & Gynaecology*, **121**(s1), 40-48. <https://doi.org/10.1111/1471-0528.12630>
- Gati, I., Levin, N., & Landman-Tal, S. (2019). Decision-making models and career guidance. *International Handbook of Career Guidance*, 115-145. [https://doi.org/10.1007/978-3-030-25153-6\\_6](https://doi.org/10.1007/978-3-030-25153-6_6)



- Gati, I., & Saka, N. (2001). High school students' career-related decision-making difficulties. *Journal of Counseling & Development*, **79**(3), 331-340. <https://doi.org/10.1002/j.15566676.2001.tb01978.x>
- Gati, I., Gadassi, R., Saka, N., Hadadi, Y., Ansenberg, N., Friedmann, R., & Asulin-Peretz, L. (2011). Emotional and personality-related aspects of career decision-making difficulties: Facets of career indecisiveness. *Journal of Career Assessment*, **19**(1), 3-20.
- Gushue, G. V. (2006). The relationship of ethnic identity, career decision-making self-efficacy and outcome expectations among Latino/a high school students. *Journal of Vocational Behavior*, **68**(1), 85–95. doi: 10.1016/j.jvb.2005.03.002
- Hackett, G., & Betz, N. E. (1992). Self-efficacy perceptions and the career-related choices of college students. Student perceptions in the classroom, 229-246.
- Hapsari S.Ps, E., HeryYoenanto S.Psi, N., & Psikolog, M. (2022). The effectiveness of career planning training on career decision making self-efficacy. *International Journal of Humanities, Social Sciences and Education*, **9**(1), 73-87. <https://doi.org/10.20431/2349-0381.0901006>
- Hodges, C. B., & Murphy, P. F. (2009). Sources of self-efficacy beliefs of students in a technology-intensive asynchronous college algebra course. *The Internet and Higher Education*, **12**(2), 93–97. <https://doi.org/10.1016/j.iheduc.2009.06.005>
- Hou, C., Wu, L., & Liu, Z. (2014). Effect of proactive personality and decision-making self-efficacy on career adaptability among Chinese graduates. *Social Behavior and Personality: an international journal*, **42**(6), 903-912. <https://doi.org/10.2224/sbp.2014.42.6.903>
- Humayon A., A., Raza, S., Aamir Khan, R., & Ul ain Ansari, N. (2018). Effect of family influence, personal interest and economic considerations on career choice amongst undergraduate students in higher educational institutions of Vehari, Pakistan. *International Journal of Organizational Leadership*, **7**(2), 129-142. <https://doi.org/10.33844/ijol.2018.60333>
- Ibrahim, A., & Marcus, L. B. (2017). Influence of parents and peer-group on choice of business education program among secondary school students in Zaria metropolis, Kaduna state. *Sokoto Educational Review*, **17**(2), 9. <https://doi.org/10.35386/ser.v17i2.32>
- Iswanti, C. D., & Fahmawati, Z. N. (2022). The relationship between self-efficacy and career decision making in students at senior high school. *Academia Open*, **7**. <https://doi.org/10.21070/acopen.7.2022.5505>
- Jiang, Z., & Jiang, X. (2015). Core self-evaluation and life satisfaction: The person-environment fit perspective. *Personality and Individual Differences*, **75**, 68-73. <https://doi.org/10.1016/j.paid.2014.11.013>
- Jung, J. (2022). Analysis of the relationship among career education program participation and satisfaction, work value, career goal setting in higher education. *Journal of Curriculum and Teaching*, **11**(8), 281. <https://doi.org/10.5430/jct.v11n8p281>
- Kim, J. Y., Choi, D. S., Sung, C., & Park, J. Y. (2018). The role of problem-solving ability on innovative behavior and opportunity recognition in university students. *Journal of Open Innovation: Technology, Market, and Complexity*, **4**(1), 1-13. <https://doi.org/10.1186/s40852-018-0085-4>
- Kürdök, O., & Harman, E. (2018). High school students' career decision-making difficulties according to locus of control. *Universal Journal of Educational Research*, **6**(2), 242-248. <https://doi.org/10.13189/ujer.2018.060205>
- Koshar, J. (2001). Teen pregnancy 2001- Still no easy answers. *Pediatric Nursing*, **27**, 505-509.
- Kumar, V. J. (2013). Adolescence Behaviour Problems: How to Tackle or Prevent? *I-Manager's Journal on Educational Psychology*, **6**(4), 13–17. <https://doi.org/10.26634/jpsy.6.4.2182>
- Kumar, S. (2016). Parental influence on career choice traditionalism among college students in selected cities in Ethiopia. *International Journal of Psychology and Educational Studies*, **3**(3), 23-30. <https://doi.org/10.17220/ijpes.2016.03.003>
- Mbagwu MI, & Ajaegbu OO. Influence of parent's educational background on career choice of teenagers among senior secondary school students in Owerri. *Edorium J Psychol*, 2016;**2**:1420. <https://doi.org/10.5348/p13-2016-9-0a-3>
- Mefoh, P. C., Nwoke, M. B., Chukwuorji, J. C., and Chijioko, A. O. (2017). Effect of cognitive style and gender on adolescents' problem solving ability. *Think. Skills Creat*, **25**, 47–52. doi: 10.1016/j.tsc.2017.03.002
- Morsunbul, U., Crocetti, E., Cok, F., & Meeus, W. (2016). Identity statuses and psychosocial functioning in Turkish youth: A person-centered approach. *Journal of Adolescence*, **47**, 145–155. doi:10.1016/j.adolescence.2015.09.001 10.1016/j.adolescence.2015.09.001
- Miles, J. (2015). The Impact of a Career Development Programme on the Career Self-Efficacy and Academic Motivation of Grade 11 Learners from Diverse Socio-Economic Backgrounds. PhD thesis, Stellenbosch University 272pp.
- Mira, B. V., Gubalane, J. C. & Panimdim, C. Y. (2017). Level of Self – Efficacy and Resilience among Adolescent Mothers. *Interdisciplinary Research Journal*, **7**(1), 0.
- Nasta, K. A. (2007). Influence of Career Self-efficacy Belief on Career Exploration Behaviors. Master's thesis, State University of New York at New Paltz 57pp.
- Nazareno, A., Lopez-Relente, M. J., Gestiada, G., Martinez, M., De Lara, M. L., & Roxas-Villanueva, R. M. (2021). Factors associated with career track choice of

- senior high school students. *Philippine Journal of Science*, **150**(5). <https://doi.org/10.56899/150.05.15>
- Niles, S. G., Jacob, C. J., & Nichols, L. M. (2010). Career development and self-esteem. In M. H. Guindon (Ed.), *Self-esteem across the lifespan: Issues and interventions* (pp. 3–24). Routledge/Taylor & Francis Group.
- Njiku, D. B., Ndung'u, D. E., & Shanyisa, D. W. (2022). Self-efficacy and career choice among Undergraduate students of Ruaha Catholic University in Iringa, Tanzania. *International Journal of Research and Innovation in Social Science*, **06**(08), 506-514. <https://doi.org/10.47772/ijriss.2022.6823>
- Odacı, H., Çıkrıkçı, N., & İrem Değerli, F. (2022). The role of problem-solving skills in career decision-making self-efficacy and vocational outcome expectations. *International Journal of Educational Reform*, **32**(4), 448-463. <https://doi.org/10.1177/10567879221076084>
- Ogutu, J.P., Odera, P., & Maragia, S.N. (2017). Self-Efficacy as a Predictor of Career Decision Making Among Secondary School Students in Busia County, Kenya. *Journal of Education and Practice*, **8**(11), 20-29.
- Oliveri, M. E., Lawless, R., and Molloy, H. (2017). A literature review on collaborative problem solving for college and workforce readiness. *ETS Research Report Series*, **2017**(1), 1–27. doi: 10.1002/ets2.12133
- Onoshakpokaiye, O. E. (2022). The influence of parents on students' choice of career in these present occupational challenges. *IJIET (International Journal of Indonesian Education and Teaching)*, **7**(1), 1-7. <https://doi.org/10.24071/ijiet.v7i1.4968>
- Otwine, A., Herbert, A. E., Irene, A., & Leonsio, M. (2023). Occupational information knowledge levels among secondary school students in Uganda. *Open Journal of Social Sciences*, **11**(07), 67-97. <https://doi.org/10.4236/jss.2023.117006>
- Patton, W., & Porfeli, E. J. (2007). Career exploration for children and adolescents. *Career Development in Childhood and Adolescence*, 47-69. [https://doi.org/10.1163/9789460911392\\_005](https://doi.org/10.1163/9789460911392_005)
- Proctor, T. (2018). Decision making and problem solving. *Creative Problem Solving for Managers*, 281-298. <https://doi.org/10.4324/9780429458255-14>
- Rodinda, M. R., & Eva, N. (2023). The effect of self-efficacy on career decision making in final year students. *Indonesian Psychological Research*, **5**(1). <https://doi.org/10.29080/ipr.v5i1.806>
- Rogers, M. E., & Creed, P. A. (2011). A longitudinal examination of adolescent career planning and exploration using a social cognitive career theory framework. *Journal of Adolescence*, **34**(1), 163172. <https://doi.org/10.1016/j.adolescence.2009.12.010>
- Saleem, N., Hanan, M.A., Saleem, I., & Shamshad, R.M. (2014). Career Selection: Role of Parent's Profession, Mass Media and Personal Choice.
- Sandra, E., & Mularsih, H. (2021). The role of self-efficacy in career decision making among graduated students from vocational high schools in Jakarta. *Advances in Social Science, Education and Humanities Research*. <https://doi.org/10.2991/assehr.k.210805.167>
- Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK: NFER-NELSON.
- Scott, A.B., & Ciani, K.D. (2008). Effects of an undergraduate career class on men's and women's career decision-making self-efficacy and vocational identity. *Journal of Career Development*, **34**(3), 263 – 285
- Scott, A. B., & Ciani, K. D. (2008). Effects of an undergraduate career class on men's and women's career decision-making self-efficacy and vocational identity. *Journal of Career Development*, **34**(3), 263-285. <https://doi.org/10.1177/0894845307311248>
- Stangor, C., & Walinga J., *Introduction to Psychology, 1st Canadian Edition*, Creative Common attributions, USA, 2018.
- Song, Y. (2015). Research of college students' career planning and employment. *Proceedings of the 2015 3rd International Conference on Management Science, Education Technology, Arts, Social Science and Economics*. <https://doi.org/10.2991/msetasse-15.2015.63>
- Spear HJ. A follow-up case study on teenage pregnancy: "havin' a baby isn't a nightmare, but it's really hard". *Pediatr Nurs*. 2004 Mar-Apr;30(2):120-5. PMID: 15185733.
- Taylor, R. B. (2008, May 26). Teen pregnancy: Medical risks and realities. WebMD. <https://www.webmd.com/baby/teen-pregnancy-medical-risks-and-realities>
- Teenage pregnancy declined from 8.6 percent in 2017 to 5.4 percent in 2022 | Philippine Statistics Authority Republic of the Philippines. (June). URL Shortener. <https://shorturl.at/jkvMP>
- Udayar, S., Levin, N., Lipshits-Brazilier, Y., Rochat, S., Di Fabio, A., Gati, I., Sovet, L., & Rossier, J. (2020). Difficulties in career decision making and self-evaluations: A meta-analysis. *Journal of Career Assessment*, **28**(4), 608-635. <https://doi.org/10.1177/1069072720910089>
- Valizadeh, M. (2021). An investigation into the effects of demographic factors on EFL learners' self-efficacy beliefs. *Shanlax International Journal of Education*, **9**(4), 300-308. <https://doi.org/10.34293/education.v9i4.4178>
- Whiston, S. C., & Keller, B. K. (2004). The Influences of the Family of Origin on Career Development. *The Counseling Psychologist*, **32**(4), 493–568.

doi:10.1177/0011000004265660

- Wodon, Q., Montenegro, C. E., Nguyen, H., & Onagoruwa, A. (2018). Missed Opportunities: The High Cost of Not Educating Girls.
- Xing, X., & Rojewski, J. W. (2018). Family Influences on Career Decision-Making Self-Efficacy of Chinese Secondary Vocational Students. *New Waves - Educational Research & Development*, **21**(1), 48-67
- Yang, Y. (2023). Research on the reform and innovation of college students' career planning and employment guidance courses in the new era. *International Journal of Science and Engineering Applications*, **12**(3), 138-139. <https://doi.org/10.7753/ijsea1203.1050>
- Yapo, F.C., A., Tabiliran, J.P., Dagami, A.T., Navales, K.J., Tus, J., (2021). The Self-Efficacy and Academic Motivation of the Graduating College Students during the COVID-19 Pandemic in the Philippines. *International Journal of Advance Research And Innovative Ideas In Education*. **7**(3), 2128-2139. <http://dx.doi.org/10.6084/m9.figshare.14784885.v1>
- Zachry, E. M. (2005). Getting my education: Teen mothers' experiences in school before and after motherhood. *Teachers College Record*, **107**, 2566–2598. doi:10.1111/j.1467-9620.2005.00629.x
- Ziebell, J. (2010). Promoting Viable Career Choice Goals Through Career Decision-Making Self-Efficacy and Career Maturity in Inner-City High School Students: A Test of Social Cognitive Career Theory. PhD thesis, University of Minnesota 125pp