



The influence of Different Types of Career Exploration on Achievement Career Identity Among Z Generation

Abdullah Sinring¹, Nur Fadhilah Umar²

¹ Guidance and Counseling, Universitas Negeri Makassar, Indonesia
Email: abdullah.sinring@unm.ac.id

² Guidance and Counseling, Universitas Negeri Makassar, Indonesia
Email: nurfadhilahumar@unm.ac.id

(Received: 25-12-2022; Reviewed: 10-01-2023; Accepted: 26-03-2023;
Available online: 16-04-2023; Published: 18-04-2023)



This is an open access article distributed under the Creative Commons Attribution License CC-BY-NC-4.0 ©2023 by author (<https://creativecommons.org/licenses/by-nc/4.0/>).

Abstract. This study aims to determine the effect of career exploration on the achievement of career identity, as well as various aspects of career exploration consisting of aspects of parental influence, economic status, personal choices, personal preferences, teacher influence, peer influence, the media, and which religious orientation most influential on identity career achievement. Using a correlational research design to determine how much influence the independent and dependent variables have. The data collection technique used a career development questionnaire. It developed from theory of the career development questionnaire, which EFA and CFA had tested to determine model fit, and both Career identity development inventories (CIDI). The sample in this study was students in South Sulawesi. The data analysis technique used was Pearson correlation and multiple regression analysis. Based on the findings, it was found that: 1. Career exploration on the career identity of generation Z students has a positive influence, 2. Several aspects of career exploration consist of personal choices, preferences, peer influence, and the media positively influencing career identity, 3. Aspects of career exploration that do not affect achievement career identity are parental influence, economic status, teacher influence, and religious orientation.

Keywords: Career exploration, Career Identity, Achievement Career Identity, Z Generation.

INTRODUCTION

Career exploration is one of the stages of human career development where they learn to know themselves, know the work environment and recognize the individual's potential, especially generation Z ((H. Chen et al., 2022; Umar, 2021; Zhou & Xu, 2022). Self-exploration is characterized by how individuals want to know more about themselves and think about making choices related to ideas, values, and experiences (Reed et al., 2004). This

explanation is in line with the results of research by Kim & Kim (2018) that various experiences influence career exploration in one's school environment. According to Erik J. Porfeli & Vladimir B. Skorikov (Keishing & Renukadevi, 2016), career exploration is divided into two things: diverse career exploration with a broad scope of learning related to the world of work and the individual himself and more extensive career exploration. Specifically related to in-depth exploration with the main focus on

aligning one's perception of oneself and career prospects, both are part of the Z generation's career development stage.

Self-exploration is a crucial stage in individual career development (Nauta, 2007). This stage is because career exploration is the initial stage for individuals to recognize themselves and their potential and get to know various types of work (Nagib & Wilton, 2020; Nordin & Seng, 2021). Nonetheless, career self-exploration often shows optimal development, influenced by the individual's immediate environment, such as parents and the social and environmental sphere (Blustein, 1988; Zikic, J., & Hall, 2009). Another research shows, Unoptimal individual career exploration is influenced by parents who do not understand child development (Caldera et al., 2003; Guan et al., 2016). Also, the career guidance process at every career level could be more optimal (Siahaan et al., 2016). Hence, individuals such as generation Z have less hope of achieving ideal career development conditions according to their stage (Chen, 2004).

The individual's career exploration process could be more optimal, resulting in various career problems, such as jobs or professions that are not following their fields. Individuals cannot take advantage of their diverse experiences to advance in their work and need to improve in developing their careers, where careers develop from time to time (Savickas et al., 2009; Van Hai et al., 2022). So that individuals cannot build their lives through their chosen careers (Pham, 2022). One of them leads to forming a career identity that is moratorium or even reaches the diffusion stage (Cote, 2006; V. Skorikov & Vondracek, 1998). Individuals with a moratorium career identity will form students who have career exploration and can consider various career possibilities, but these individuals have yet to be able to commit (Jannah, 2014; Porfeli & Savickas, 2012). Whereas individuals with career diffusion self-identities will form students who do not have consideration for their careers due to not being at the exploratory career development stage and accompanied by not making essential choices in career decisions (Germeijs et al., 2012; Talib & Aun, 2009).

However, on the contrary, if an individual experiences an optimal career exploration process, they will form a career self-identity in the form of achievement (Fusco et al., 2019; Poux & Fry, 2015). A career achievement self-

identity is someone who has skills in assessing their abilities and interests can assess the opportunities they can achieve, can make choices and is committed to a career (Agungbudiprabowo, 2019; Hirschi & Herrmann, 2012). Individuals with this career identity can decide on the type of career they choose, determine careers, and direct their careers ideally (Germeijs et al., 2012; Talib & Aun, 2009).

The formation of achievement career identity, cannot be separated from the process of career development (Hirschi, 2011). The career development process involves exploration, commitment, and reconsideration (Lee et al., 2022; Negru-Subtirica et al., 2015). Each of these developmental stages positively contributes to forming self-identity and career achievement. However, from this process, career exploration becomes essential to study because the career exploration stage is the initial stage of students recognizing themselves (Ahn et al., 2015). They are also crystallizing a related understanding of their potential (Deng et al., 2022) regarding what types of work are appropriate to choose from (Liptak, 2006), and determine several aspects of work that are by their self-image (Srividya & Basu, 2022). The career exploration process also allows individuals to determine the steps to achieve the types of work following their identity (Chen et al., 2021).

The study results (Batool & Ghayas, 2020) show that career exploration consists of various aspects: influence from parents, economic status, personal choices, personal preferences, teacher influence, peer influence, media influence, and religious orientation. These various types of career exploration are seen as positively contributing to shaping individual career achievement and self-identities (Berríos-Allison, 2005; V. B. Skorikov & Vondracek, 2007). In line with the results of research by Wuerth et al., (2004), career exploration with aspects of parental influence has a direct effect on career achievement identity. Furthermore, the aspects of career exploration, namely personal choices and personal preferences that individuals have, will positively increase the identity of the career achievement generation Z (De Cieri et al., 2009; Savickas, 2002). Other aspects of career exploration can also influence individual career achievement identities, namely the economic status that a person has will affect his career achievements (Langenkamp &

Carbonaro, 2018). In addition, aspects of peer influence and even the media are predicted to positively influence one's career achievement identity (Eccles, 2009; Hanushek et al., 2003; Meeus & Dekovic, 1995; Pandang & Umar, 2021).

Therefore, this study aimed to examine the effect of various types of individual career exploration consisting of aspects of parental influence, economic status, personal choices, personal preferences, teacher influence, peer influence, media influence, and religious orientation. That aspect are factor predicted to have a positive effect on forming identity career achievement among the Z generation. The Z Generation is in the process of achieving their careers at the university level by learning and acquiring the skills needed for their future careers (Aryani & Umar, 2020; Kautish et al., 2022). Based on the various descriptions of the ideal learning environment and actively learning to obtain a broad and extensive scope of information (Lalić et al., 2020; Seemiller & Grace, 2017).

METHOD

Research Instruments

1. *Career Identity Development Inventory (CIDI)*

The career identity development inventory (CIDI) was adapted from the questionnaire (Bennion & Adams, 1986). The questionnaire based on the development of Erikson's career identity development theory consists of 4 aspects of career self-identity: moratorium, foreclosure, diffusion, and achievement. This instrument uses four answer choices from a modified Likert scale: strongly agree, agree, disagree, and strongly disagree. The previous career identity development inventory had been tested for validity and reliability through confirmatory factor analysis on JASP and was said to be valid for use. The results of the CFA test can be seen in the following table 1.

2. *Career Development Questionnaire*

The career development questionnaire developed by researchers based on research results (Batool & Ghayas, 2020) shows three identity factors for career development:

exploration, commitment, and reconsideration, which were first carried out by exploratory factor analysis. Career exploration consists of several aspects: parental influence, economic status, personal choices, preferences, teacher influence, peer influence, media, and religious orientation. This instrument uses four answer choices which are modifications of the Likert scale: strongly agree, agree, disagree, and strongly disagree. The career development questionnaire, namely career exploration factors, has also been tested with a confirmatory factor analysis which is contained in the following table 2.

RESULTS AND DISCUSSION

Result

Based on the results of multiple regression tests, it was found that several aspects jointly influenced the formation of student career achievement identities, which specifically can be seen in table 3.

Based on the Pearson's correlation analysis results in table 3, it was concluded that several aspects of career exploration consisting of parental influence had a significant positive relationship with achievement ($p < .05$; Pearson's = 148*). Economic status is significantly related to achievement ($p < .05$; pearson's = 116*), and personal choice has a significant relationship to achievement ($p < .001$; person's = 325***). Personal preferences have a significant relationship with achievement ($p < .001$; pearson's = 264***), influence also has a significant relationship with achievement ($p < .01$; pearson's = 187**), peer influence is significantly correlated with achievement ($p < .001$; pearson's = 243***). The media aspect of career exploration has a relationship with achievement ($p < .001$; Pearson's = 334***), and finally, religious orientation is related to career identity achievement ($p < .001$; Pearson's = 200***). Various aspects of career exploration have a positive relationship with career achievement identity seen from Pearson's value. However, those with a strong relationship consist of personal choice, personal preferences, peer influence, the media, and religious orientation.

Table 1. Confirmatory Factor Analysis Result of Career Identity Development Inventory

Instrumen	Reliabilitas		Validitas				
	McDonald's	Cronbach's	RMSEA	GFI	CMIN/DF	CFI	TLI
Career Identity Development Inventory	0.892	0.890	0.003	0.917	351.328/129	0.907	0.889
Moratorium	0.744	0.740	0	1.000	-	1.000	1.000
Diffusion	0.843	0.841	1.082e-4	0.937	-	0.921	0.882
Foreclosure	0.762	0.758	0.025	0.967	-	0.931	0.885
Achievement	0.758	0.756	5.484e-4	0.955	-	0.914	0.827
N= 290							

Table 2. Confirmatory Factor Analysis Career Development Questionnaire

Instrument	Reliabilitas		Validitas				
	McDonald's	Cronbach's	GFI	CMIN/DF	CFI	TLI	
Career Exploration	0.893	0.896	0.898	2735.879/253	0.928	0.913	
Parental Influence							
Socioeconomic							
Personal Choice							
Personal <i>preferences</i>							
Teacher Influence							
Peer Influence							
Media							
Spiritual Orientation							
N= 290							

Table 3. Person's Partial Correlations

Variable		CIDI_A	EkspP O	EkspS E	EkspP RB	EkspPP REF	EkspP G	Eksp PTS	EkspM	EkspO RK
CIDI_A	Pears on's r	-								
	P-value	-								
EkspPO	Pears on's r	0.148*	-							
	P-value	0.012	-							
EkspSE	Pears on's r	0.116*	0.189*	-						
	p-value	0.48	0.001	-						
EkspPRB	Pears on's r	0.325*	0.447*	0.189*	-					
	p-value	**	**	*	-					
EkspPPR EF	Pears on's r	0.264*	0.375*	0.271*	0.465*	-				
	p-value	**	**	**	**	-				
EkspPG	Pears on's r	0.187*	0.447*	0.199*	0.497*	0.462**	-			
	p-value	*	**	*	**	*	-			
	p-value	0.001	<.001	0.042	<.001	<.001	-			

EkspPTS	Pearson's r	0.243* **	0.069	0.233* **	0.292* **	0.183*	0.334* **	-	
	p-value	<.001	0.239	<.001	<.001	0.002	<.001	-	
EkspM	Pearson's r	0.334* **	0.312* **	0.265* **	0.490* **	0.382** *	0.374* **	0.128*	-
	p-value	<.001	<.001	<.001	<.001	<.001	<.001	0.030	-
EkspORK	Pearson's r	0.200* **	0.426* **	0.267* **	0.4741	0.429** *	0.401* **	0.121*	0.608* **
	p-value	<.001	<.001	<.001	<.001	<.001	<.001	0.040	<.001

*p<.05, **p<.01, ***p<.001, one-tailed
 Note: Parental Influence = EkspPO
 Economic Status = EkspSE
 Personal Choice = EkspPRB
 Personal Preferences = EkspPPREF
 Teacher Influence = EkspPG
 Peer Influence = EkspPTS
 Medium = EkspM
 Religious Orientation = EkspORK

Table 4. Model Summary

Model	R	R ²	Adjusted R ²	RMSE
H ₀	0.000	0.000	0.000	2.569
H ₁	0.432	0.187	0.164	2.350

Table 5. Linear Regression Career Exploration Test on Achievement Career Identity

Model	Sum of Squares	df	Mean Square	F	p
H ₁ Regression	356.241	8	44.530	8.065	< .001
Residual	1551.515	281	5.521		
Total	1907.755	289			

The data analysis in tables 4 and 5 explains that the influence between career exploration simultaneously with career achievement identity has a value of R² = 0.187; F = 8.281; p<.001. Therefore, the career

exploration variable significantly affects career identity with a practical contribution of 18% of the career exploration variable, and 43% is influenced by other variables, namely career commitment and reconsideration.

Table 6. Coefficients Exploration Career terhadap Achievement Career Identity

Model		Unstandardized	Standard Error	Standardized	t	p	Collinearity Statistics	
							Tolerance	VIF
H ₀	(Intercept)	20.066	0.151		132.996	< .001		
H ₁	(Intercept)	9.530	1.625		5.865	< .001		
	Total_EkspPO	0.011	0.108	0.007	0.100	0.920	0.670	1.493
	Total_EkspSE	-0.037	0.064	-0.034	-0.579	0.563	0.835	1.197
	Total_EkspPRB	0.271	0.121	0.162	2.239	0.026	0.554	1.804
	Total_EkspPPREF	0.224	0.113	0.132	1.979	0.049	0.653	1.532
	Tota_EkspPG	-0.110	0.093	-0.083	-1.171	0.242	0.583	1.715
	Total_EkspPTS	0.224	0.074	0.182	3.032	0.003	0.802	1.246
	Total_EkspM	0.406	0.110	0.266	3.707	< .001	0.561	1.781
	Total_EkspORK	-0.118	0.112	-0.077	-1.051	0.294	0.533	1.875

Based on data analysis in table 6, in terms of coefficients career exploration of achievement career identity, it can be explained that the influence of parents, economic status, teacher influence, and religious orientation does not affect career achievement identity, which shows a $p\text{-value} > .05$, and a negative standardized value which means the effect is negative. The career exploration aspect of personal choice significantly influences achievement ($\beta = 0.526$; $p < .05$), and personal preferences also affect achievement with a value ($\beta = 0.348$; $p < .05$). Furthermore, the career exploration aspect of peer influence also significantly influences achievement ($\beta = 0.442$; $p < .01$), the media aspect also significantly influences career identity achievement ($\beta = 0.888$; $p < .001$). Therefore, the career exploration aspects of personal choice, personal preferences, peer influence, and the media positively influence and are also able to predict the increase in career achievement identity.

Discussion

Based on the results of data analysis, it was found that several aspects of career exploration had an effect on career identity achievement, and several aspects also had an effect on the variable y .

The career exploration variable is proven to influence career achievement identity positively. This finding shows that if Generation Z individuals have high career exploration, it can also increase their achievement (Poux & Fry, 2015). In line with the results of research by Patton & Porfeli (2007) that someone with specific diverse career exploration will get a

career that is consistent with their interests, needs, and values, and also obtained from environmental factors, opportunities that exist, and social pressures received (Chen et al., 2021; Zikic & Klehe, 2006). Therefore, with the results of previous studies, it is predicted that achieving his career identity refers to awareness of one's interests, abilities, goals, and work values ((Hirschi & Herrmann, 2012; Woo et al., 2019). In addition, it also has a meaning in which they perceive themselves according to their career role and become an outstanding career success (Henderson, 2002; Kroger, 2007; Pandang et al., 2021).

Another study finding is that several career exploration aspects influence identity achievement. Some of the aspects that are predicted to affect achievement are essential to developing individual achievement career identities as generation Z. The aspect of career exploration, namely personal choice, positively influences achievement significantly if a good individual's personal choice will also increase one's achievement (Mancini et al., 2015). The research results of Saleem et al., (2014) show that personal choices and preferences have a strong and direct impact on a person's career choices, so individuals with dominant personal choices such as skills or ability to do something. Steps in changing behaviour and thinking processes in choosing career individuals who focus logically on careers so that they continue to enjoy exploration (Abdo, 2016; Latif & Umar, 2022). In addition, personal preferences and roles that individuals will assign can shape and develop their potential. These factors will

affect career (Ausburn & Brown, 2006; Mitrovic Veljkovic et al., 2019; Pandang et al., 2022).

The career exploration aspect of peer influence also influences one's career achievement identity. Several studies have shown that peer influence is also proven to influence career achievement identity (Sianipar & Sawitri, 2015), the better the peer environment that plays a role in supporting and providing information about the outside world in achieving career identity (Savira et al., 2022; Wong et al., 2019). Furthermore, the influence of the media influences one's achievement, so generation Z has more access to information related to various professions, the job market, and knowledge about the world around them through the media and is used as an ideal learning resource (Gupta, 2019; Saleem et al., 2014). Thus, this makes them more complex in career exploration and achieving a career achievement identity by utilizing the media ((Kris, 2016; Tambolia & Paulb, 2020). However, several aspects of career exploration do not influence one's career achievement identity consisting, including parental influence, economic status, teacher influence, and religious orientation, this is different from the results of previous research explaining that achieving a career cannot be separated from parental influence who provide support, but it is also stated that economic status has little effect on getting a decent and appropriate career (Barirroh, 2020; Jungen, 2008; Selfiana, 2021). In addition, it is also explained in the results of previous studies stating that a person's success in achieving a career is also influenced by the professionalism of a teacher who provides teaching and information related to career roles (Johnson et al., 2012; Umar et al., 2022; Wallace, 2009; Yoon et al., 2007)

CONCLUSIONS AND SUGGESTIONS

Based on the findings from the results and discussion, it can be concluded that: 1) Career exploration, which is part of the individual career development factor, contributes positively to influencing career achievement identity, that the higher one's career exploration, the greater the chance to arrive at the stage of career achievement identity. 2) Aspects of career exploration that positively affect career achievement identity, namely personal choice, personal preferences, peer influence, and the media. It is explained that these aspects can

increase a person's career achievement identity. 3) However, several aspects harm variable Y, so they do not contribute to the identity of career achievement, namely the influence of parents, economic status, teacher influence, and religious orientation.

REFERENCES

- Abdo, A. A. (2016). Factors affecting career choice among undergraduate students in Univeritas Indonesia. *International Journal of Economic Perspectives*, 10(1), 630–644.
- Agungbudiprabowo, A. (2019). Status Identitas Vokasional Mahasiswa. *Jurnal Konseling Gusjigang*, 5(1).
- Ahn, S., Jung, S. H., Jang, S. H., Du, X., Lee, B. H., Rhee, E., Gysbers, N., & Lee, S. M. (2015). Planned happenstance skills and occupational identity status in high school students. *The Career Development Quarterly*, 63(1), 31–43.
- Aryani, F., & Umar, N. (2020). Factors Affecting Z Generation on Selecting Majors in The University: an Indonesian Case. *Journal of Social Studies Education Research*, 11(3), 109–133.
- Ausburn, L. J., & Brown, D. (2006). Learning strategy patterns and instructional preferences of career and technical education students. *Journal of STEM Teacher Education*, 43(4), 4.
- Barirroh, R. (2020). *Pengaruh Kepribadian dan Pola Asuh Orang Tua terhadap Keberhasilan Karier Wirausahawan*. STIE YKPN.
- Batool, S. S., & Ghayas, S. (2020). Process of career identity formation among adolescents: components and factors. *Heliyon*, 6(9), e04905. <https://doi.org/10.1016/j.heliyon.2020.e04905>
- Bennion, L. D., & Adams, G. R. (1986). A revision of the extended version of the objective measure of ego identity status: An identity instrument for use with late adolescents. *Journal of Adolescent Research*, 1(2), 183–197.

- Berrios-Allison, A. C. (2005). Family influences on college students' occupational identity. *Journal of Career Assessment*, 13(2), 233–247.
- Blustein, D. L. (1988). The relationship between motivational processes and career exploration. *Journal of Vocational Behavior*, 32(3), 345–357.
- Caldera, Y. M., Robitschek, C., Frame, M., & Pannell, M. (2003). Intrapersonal, familial, and cultural factors in the commitment to a career choice of Mexican American and non-Hispanic White college women. *Journal of Counseling Psychology*, 50(3), 309.
- Chen, C. P. (2004). Positive Compromise: A New Perspective for Career Psychology. *Australian Journal of Career Development*, 13(2), 17–28.
- Chen, H., Liu, F., & Wen, Y. (2022). The influence of college students' core self-evaluation on job search outcomes: chain mediating effect of career exploration and career adaptability. *Current Psychology*, 1–12.
- Chen, S., Xue, Y., Chen, H., Ling, H., Wu, J., & Gu, X. (2021). Making a Commitment to Your Future: Investigating the Effect of Career Exploration and Career Decision-Making Self-Efficacy on the Relationship between Career Concern and Career Commitment. *Sustainability*, 13(22), 12816.
- Cote, J. E. (2006). *Emerging Adulthood as an Institutionalized Moratorium: Risks and Benefits to Identity Formation*.
- De Cieri, H., Sheehan, C., Costa, C., Fenwick, M., & Cooper, B. K. (2009). International talent flow and intention to repatriate: An identity explanation. *Human Resource Development International*, 12(3), 243–261.
- Deng, X., Zeng, H., Liang, M., & Qiu, J. (2022). Relations between different career-development profiles, academic self-efficacy and academic motivation in adolescents. *Educational Psychology*, 42(2), 259–274.
- Eccles, J. (2009). Who am I and what am I going to do with my life? Personal and collective identities as motivators of action. *Educational Psychologist*, 44(2), 78–89.
- Fusco, L., Sica, L. S., Boiano, A., Esposito, S., & Aleni Sestito, L. (2019). Future orientation, resilience and vocational identity in southern Italian adolescents. *International Journal for Educational and Vocational Guidance*, 19(1), 63–83.
- Germeijs, V., Luyckx, K., Notelaers, G., Goossens, L., & Verschueren, K. (2012). Choosing a major in higher education: Profiles of students' decision-making process. *Contemporary Educational Psychology*, 37(3), 229–239.
- Guan, P., Capezio, A., Restubog, S. L. D., Read, S., Lajom, J. A. L., & Li, M. (2016). The role of traditionality in the relationships among parental support, career decision-making self-efficacy and career adaptability. *Journal of Vocational Behavior*, 94, 114–123.
- Gupta, S. (2019). Career selection in Indian college youth: Role of mass-media. *IAHRW International Journal of Social Sciences Review*, 7(5), 912–916.
- Hanushek, E. A., Kain, J. F., Markman, J. M., & Rivkin, S. G. (2003). Does peer ability affect student achievement? *Journal of Applied Econometrics*, 18(5), 527–544.
- Henderson, S. J. (2002). *The correlates of inventor motivation, creativity and achievement*. Stanford University.
- Hirschi, A. (2011). Effects of orientations to happiness on vocational identity achievement. *The Career Development Quarterly*, 59(4), 367–378.
- Hirschi, A., & Herrmann, A. (2012). Vocational identity achievement as a mediator of presence of calling and life satisfaction. *Journal of Career Assessment*, 20(3), 309–321.
- Jannah, M. (2014). Gambaran Identitas Diri Remaja Akhir Wanita yang Memiliki Fanatisme K-Pop di Samarinda. *Psikoborneo: Jurnal Ilmiah Psikologi*,

- 2(1).
- Johnson, S. M., Kraft, M. A., & Papay, J. P. (2012). How context matters in high-need schools: The effects of teachers' working conditions on their professional satisfaction and their students' achievement. *Teachers College Record*, 114(10), 1–39.
- Jungen, K. A. (2008). *Parental influence and career choice: How parents affect the career aspirations of their children*.
- Kautish, P., Hameed, S., Kour, P., & Walia, S. (2022). Career beliefs, self-efficacy and VUCA skills: A study among generation Z female students of tourism and hospitality. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 30, 100340.
- Keishing, V., & Renukadevi, S. (2016). A review of knowledge management based career exploration system in engineering education. *International Journal of Modern Education and Computer Science*, 8(1), 8.
- Kim, N., & Kim, J. (2018). The relationship between career guidance, counseling experience, and adolescents' career maturity development. *한국청소년연구*, 29(4), 5–32.
- Kris, B. (2016). *IMPACT OF MASS MEDIA IN CAREER SE STUDENTS OF*.
- Kroger, J. (2007). Why is identity achievement so elusive? *Identity: An International Journal Of Theory And Research*, 7(4), 331–348.
- Lalić, D., Stanković, J., Bošković, D., & Milić, B. (2020). Career Expectations of Generation Z. *Proceedings on 25th International Joint Conference on Industrial Engineering and Operations Management–IJCIEOM: The Next Generation of Production and Service Systems 25*, 52–59.
- Langenkamp, A. G., & Carbonaro, W. (2018). How school socioeconomic status affects achievement growth across school transitions in early educational careers. *Sociology of Education*, 91(4), 358–378.
- Latif, S., & Umar, N. F. (2022). *Different 21 st Century Skills Among Z Generation in The Higher Education Based on The Level of Students , and Gender Difference*. 8(3), 210–219.
- Lee, Y., Kim, Y., Im, S., Lee, E., & Yang, E. (2022). Longitudinal associations between vocational identity process and career goals. *Journal of Career Development*, 49(3), 569–584.
- Liptak, J. J. (2006). *Career exploration inventory*. Indianapolis, IN: JIST Publishing.
- Mancini, T., Caricati, L., Panari, C., & Tonarelli, A. (2015). Personal and social aspects of professional identity.: An extension of Marcia's identity status model applied to a sample of university students. *Journal of Vocational Behavior*, 89, 140–150.
- Meeus, W., & Dekovic, M. (1995). Identity development, parental and peer support in adolescence: Results of a national Dutch survey. *Adolescence*, 30(120), 931–945.
- Mitrovic Veljkovic, S., Maric, M., Subotic, M., Dudic, B., & Greguš, M. (2019). Family entrepreneurship and personal career preferences as the factors of differences in the development of entrepreneurial potential of students. *Sustainability*, 11(20), 5693.
- Nagib, W., & Wilton, R. (2020). Gender matters in career exploration and job-seeking among adults with autism spectrum disorder: Evidence from an online community. *Disability and Rehabilitation*, 42(18), 2530–2541.
- Nauta, M. M. (2007). Career interests, self-efficacy, and personality as antecedents of career exploration. *Journal of Career Assessment*, 15(2), 162–180.
- Negru-Subtirica, O., Pop, E. I., & Crocetti, E. (2015). Developmental trajectories and reciprocal associations between career adaptability and vocational identity: A three-wave longitudinal study with adolescents. *Journal of Vocational Behavior*, 88, 131–142.

- Nordin, M. H. A., & Seng, H. C. (2021). Exploring Children's Career Planning Through Career Guidance Activities: A Case Study. *Development*, 10(2), 754–765.
- Pandang, A., Hadi, P., & Umar, N. (2021). *Evaluasi Program Konselor Sebaya Sebagai Media Bantuan Antar Mahasiswa di Universitas Negeri Makassar*.
- Pandang, A., & Umar, N. F. (2021). The Need Analysis of Peer Counseling Program to Enhance Self-Efficacy to be a Counsellor. *International Conference on Science and Advanced Technology (ICSAT)*.
- Pandang, A., Umar, N. F., & Harum, A. (2022). Gender Analysis of Student Career Self-Efficacy and Implications in Career Guidance Services at State Vocational Schools. *Journal of Educational Science and Technology*, 8(2), 105–112.
- Patton, W., & Porfeli, E. J. (2007). Career exploration for children and adolescents. In *Career development in childhood and adolescence* (pp. 47–69). Brill.
- Pham, T. (2022). Communication competencies and international graduates' employability outcomes: Strategies to navigate the host labour market. *Journal of International Migration and Integration*, 23(2), 733–749.
- Porfeli, E. J., & Savickas, M. L. (2012). Career Adapt-Abilities Scale-USA Form: Psychometric properties and relation to vocational identity. *Journal of Vocational Behavior*, 80(3), 748–753.
- Poux, K. N., & Fry, M. D. (2015). Athletes' Perceptions of Their Team Motivational Climate, Career Exploration and Engagement, and Athletic Identity. *Journal of Clinical Sport Psychology*, 9(4).
- Reed, M. B., Bruch, M. A., & Haase, R. F. (2004). Five-factor model of personality and career exploration. *Journal of Career Assessment*, 12(3), 223–238.
- Saleem, N., Hanan, M. A., Saleem, I., & Shamshad, R. M. (2014). Career Selection: Role of Parent's Profession, Mass Media and Personal Choice. *Bulletin of Education and Research*, 36(2), 25–37.
- Savickas, M. L. (2002). Career construction. *Career Choice and Development*, 149, 205.
- Savickas, M. L., Nota, L., Rossier, J., Dauwalder, J.-P., Duarte, M. E., Guichard, J., Soresi, S., Van Esbroeck, R., & Van Vianen, A. E. M. (2009). Life designing: A paradigm for career construction in the 21st century. *Journal of Vocational Behavior*, 75(3), 239–250.
- Savira, F., Sugiharto, D. Y. P., & Mulawarman, M. (2022). The Effect of Family and Peer Environments on Students' Career Planning. *Jurnal Bimbingan Konseling*, 11(3), 215–220.
- Seemiller, C., & Grace, M. (2017). Generation Z: Educating and engaging the next generation of students. *About Campus*, 22(3), 21–26.
- Selfiana, C. (2021). Motivasi Pengaruh Orang Tua, Karir, Sosial, Dan Ekonomi Terhadap Minat Mahasiswa Mengikuti PPAK. *Journal of Public and Business Accounting*, 2(1), 17–26.
- Siahaan, E., Gultom, P., & Lumbanraja, P. (2016). Improvement of employee banking performance based on competency improvement and placement working through career development (case study in Indonesia). *International Business Management*, 10(3), 255–261.
- Sianipar, C. S., & Sawitri, D. R. (2015). Pola asuh otoritatif orang tua dan efikasi diri dalam mengambil keputusan karir pada mahasiswa tahun pertama. *Jurnal Empati*, 4(4), 1–7.
- Skorikov, V. B., & Vondracek, F. W. (2007). Vocational identity. In *Career development in childhood and adolescence* (pp. 143–168). Brill.
- Skorikov, V., & Vondracek, F. W. (1998). Vocational identity development: Its relationship to other identity domains and to overall identity development. *Journal of Career Assessment*, 6(1), 13–35.
- Srividya, N., & Basu, R. (2022). Effect of Age on Employees' Attitudes at Workplace—A Study. In *Achieving \$5 Trillion Economy*

- of India (pp. 281–292). Springer.
- Talib, M. A., & Aun, T. K. (2009). Predictors of career indecision among Malaysian undergraduate students. *European Journal of Social Sciences*, 8(2), 215–224.
- Tambolia, J., & Paulb, M. (2020). *To Study The Impact Of New Media On Mass Media Students Career Choices*.
- Umar, N. F. (2021). Digital Career Planning Models for Z Generation. *Indonesian Journal of Educational Studies*, 23(2), 91–100.
- Umar, N. F., Sinring, A., & Pandang, A. (2022). Career Self-Management Scale (CEDLE scale) In The Indonesian Version of The Social Cognitive Model. *Indonesian Journal of Educational Studies*, 25(1), 10–20.
- Van Hai, D., Huong, N. T., Van Son, P., & Le, H. T. T. (2022). Factors Affecting Career Guidance and Counselling Activities for Middle School Students in the North Central Region of Vietnam. *American Journal of Educational Research*, 10(9), 553–559.
- Wallace, M. R. (2009). Making sense of the links: Professional development, teacher practices, and student achievement. *Teachers College Record*, 111(2), 573–596.
- Wong, S. C., Lim, J. Y., Lim, C. S., & Hong, K. T. (2019). An Empirical Study on Career Choices Among Undergraduates: A PLS-SEM Hierarchical Component Model (HCM) Approach. *International Journal of Human Resource Studies*, 9(2), 276–298.
- Woo, Y.-K., Kim, S.-K., & Choi, Y. (2019). The effects of career identity on learning persistence and academic achievement: Mediating effect of utility value. *The Mathematical Education*, 58(1), 41–54.
- Wuerth, S., Lee, M. J., & Alfermann, D. (2004). Parental involvement and athletes' career in youth sport. *Psychology of Sport and Exercise*, 5(1), 21–33.
- Yoon, K. S., Duncan, T., Lee, S. W.-Y., Scarloss, B., & Shapley, K. L. (2007). *Reviewing the evidence on how teacher professional development affects student achievement*. Issues & Answers Report, REL.
- Zhou, Y., & Xu, G. (2022). Career Exploration and Decision-Making Learning Experiences (CEDLE) Scales: Validation Among Chinese Vocational College Students. *Journal of Career Development*, 49(4), 846–861.
- Zikic, J., & Hall, D. T. (2009). Toward a more complex view of career exploration. *The Career Development Quarterly*, 58(2), 181–191.
- Zikic, J., & Klehe, U.-C. (2006). Job loss as a blessing in disguise: The role of career exploration and career planning in predicting reemployment quality. *Journal of Vocational Behavior*, 69(3), 391–409.