

Available online at globets.org/journal

International Journal of Education, Technology and Science

3(4) (2023) 1146-1160

IJETS International Journal of Education Technology and Science

CAREER ADAPTABILITY IN TRANSITION: THE ROLE OF ONLINE ENGAGEMENT IN PROSPECTIVE ENGLISH LANGUAGE TEACHERS' CAREERS

(Research Article)

Özlem PULAT^{a,}, Ahmet BASAL^b*

^a Department of Educational Sciences, Yildiz Technical University, Türkiye ^b Department of Educational Sciences, Yildiz Technical University, Türkiye

Received: 01.06.2023

Revised version received: 29.08.2023

Accepted: 20.09.2023

Abstract

In teacher development, the contribution of university education to career adaptability during the school-to-work transition is noteworthy, but research on this connection is limited. This study examined the relationship between online engagement and career adaptability, potential gender differences, and the link between adaptability and prospective English language teachers' teaching willingness to work as teachers after graduation. Data obtained through online student engagement and career adaptability scales from 450 students across 45 universities were analyzed using independent t-tests, Pearson Correlation, and Regression analysis. Findings indicated a moderate positive relationship between online student engagement and career adaptability with increased adaptability linked to higher engagement. While career adaptability significantly influenced prospective English language teachers' willingness to become teachers, no gender-based differences were observed. This research highlights the importance of career adaptability in boosting online engagement, influencing teacher candidates' preference for teaching careers, and easing their transition from school to work, contributing to teacher development.

Keywords: Online learning; career adaptability; online student engagement; teacher candidates; teacher development

This research was based on the first author's master's thesis at the Department of Curriculum and Instruction of Yıldız Technical University, under the supervision of second author.

*Corresponding author: Ahmet Basal. ORCID ID.: <u>https://orcid.org/0000-0003-4295-4577</u> E-mail: <u>ahmetbasal@gmail.com</u> © 2021 IJETS & the Authors. Published by *International Journal of Education Technology and Science (IJETS)*. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (CC BY-NC-ND) (http://creativecommons.org/licenses/by-nc-nd/4.0/).

1. Introduction

The relationship between career adaptability and teacher development is important, as it influences various aspects of students' academic and professional journeys. The shift to online education has raised concerns about teacher candidates' career adaptability and engagement, emphasizing the need for ongoing adaptivity in both online learning and the school-to-work transition. Students' engagement in their field of study contributes to their success in future careers, highlighting the significance of career adaptability in preparing them for the professional arena. Career adaptability is closely tied to academic engagement and preparedness, as it shapes one's ability to navigate vocational responsibilities and challenges. Student engagement, encompassing behavioral, cognitive, and emotional dimensions, is crucial for academic performance, career preparation, and adaptability. By fostering career adaptability and engagement in the ever-evolving educational landscape, teachers not only enhance their professional growth and effectively respond to changes but also ensure the success of their students, communities in the face of ongoing professional challenges.

This study investigates the relationship between university students' (prospective English language teachers') career adaptability and online engagement, which is essential for university achievement and successful school-to-work transitions. Universities play a significant role in preparing students for future careers (Qenani et al., 2014), with experiences and personal growth during studies being crucial for successful transitions (Wu et al., 2016). During the Covid-19 lockdown, higher education institutions shifted to online education, affecting 1.5 billion students globally (UNESCO, 2021). This change led to difficulties in instructional quality due to inadequate technology, teacher expertise, and course materials (Bolliger & Inan, 2012). Pedagogical challenges in distance education, such as student interactions, course design, and delivery, were highlighted by Moller et al. (2008). These issues can impact students' engagement and commitment, influencing their career adaptability and competencies (Akkermans et al., 2018). Given the profound implications of online engagement on students' career adaptability in the recent shift to online education, it is vital for institutions to address pedagogical challenges and prioritize both technological and pedagogical advancements to ensure the holistic development, preparedness of future professionals, and foster student engagement and adaptability.

1.1. Challenges of Online Education and the School-to-Work Transition

The importance of adaptivity in both online learning and the school-to-work transition emphasizes the need for ongoing career adaptability among students. The increasing transition to online learning has made it difficult for learners to adapt to the new learning environments, in which context adaptivity, described by Porfeli and Savickas (2012) as "the personality trait of being flexible or willing to change" (p. 749), has become an important factor. Thus, as the educational landscape evolves, fostering adaptivity in students is paramount to ensure their seamless integration into online educational platforms and their subsequent professional endeavors.

Although school-to-work transition denotes a period between graduation and work, it may be argued that this transition starts well before graduation. Students' engagement in lectures in their field of study may contribute to their success in their future careers. Thus, ongoing career adaptability is important for students to make a smooth transition from their school life to the professional arena (O'Connell et al., 2008). In light of these findings, fostering adaptability in students not only enhances their online learning experiences but also equips them with the resilience and flexibility needed for a successful transition into the professional world.

1.2. The link between Career Adaptability, Academic Engagement, and Preparedness

Career adaptability, which affects one's career development, is closely tied to academic engagement and preparedness for professional life. According to Porfeli and Savickas (2012), career adaptability encapsulates how effectively a person can navigate through present and impending vocational responsibilities, adjustments, and challenges that, to a certain extent, shape their societal integration, which has a major impact on one's career development (Liang & Yi, 2017). Strenze (2007) emphasized that career success is intertwined with academic performance, so students' engagement in their studies before they walk from school into their professional careers is necessary, a transition that is no simple endeavor. Merino-Tejedor et al. (2016) found a positive link between academic engagement and career adaptability, so it is of considerable importance for students to be well-prepared for their possible professional lives before their first steps into them. Therefore, nurturing academic engagement is paramount, as it not only influences immediate academic outcomes but also lays the foundation for a resilient and adaptable professional journey.

1.3. Significance of Student Engagement in Academic Performance and Career Preparation

Student engagement, encompassing various dimensions, is crucial for academic performance, career preparation, and adaptability. According to Skinner and Pitzer (2012), student engagement can be described as the students' positive and eager contribution to learning activities in the classroom, marked by a constructive attitude, emotional positivity, and cognitive dedication. Kahu (2013) characterized engagement as the departure point for learning, and Salanova et al. (2010) documented its noticeable effect on students' academic performance and achievement. Perry et al. (2010) linked engagement as behavioral, cognitive, and emotional. Similarly, Klem and Connell (2004) found that engagement is positively related to academic,

social, and emotional learning. Thus, students' engagement in their education is linked with early-career gains (Hu & Wolniak, 2013) and career adaptability (Šverko & Babarović, 2019). Given these insights, it is evident that fostering multifaceted student engagement not only enriches the academic journey but also serves as a cornerstone for future professional success and adaptability.

The concept of learning engagement is also frequently employed as a metric to evaluate the progress and effectiveness of teachers' professional development and learning (Zhou et al., 2022). This notion acts as a barometer, providing valuable insights into the extent to which teachers are actively involved in their learning journey, assimilating new knowledge, skills, and teaching practices. Learning engagement essentially captures the level of teachers' dedication, interest, and active participation in their professional learning. The engagement of prospective teachers during their education is also crucial for their professional futures. The interactions and active participation in their teacher training programs directly influence their readiness for real-world teaching. By immersing deeply in their coursework, they acquire critical knowledge and teaching skills, develop problem-solving abilities, and gain insights into learner psychology. Consequently, their level of engagement can significantly shape their teaching effectiveness, ability to motivate students, and the course of their careers.

Higher career adaptability can enhance engagement in studies and increase the likelihood of working in the chosen field after graduation. Academic achievement positively affects the transition from school to work (Vuolo et al., 2013), highlighting the importance of students' engagement in their field of study. Conversely, higher career adaptability may lead to greater engagement in studies, leading to positive academic performance. Students' willingness to work as teachers after graduation affects their career adaptability in education. Mismatches between students' preferences and their majors can result in career issues (Deveci et al., 2012) and uncertainty in career plans can lead to anxiety (Saka & Gati, 2007). Making the right career decisions is important for psychological health and well-being (Uthayakumar et al., 2010), and students with higher career adaptability may be more willing to work in their field after graduation.

1.4. Psychosocial Processes and Career Adaptability

Exploring psychosocial processes, such as Life-Span and Life-Space approach, can help understand the relationship between career adaptability and engagement in studies. To better understand the relationship between career adaptability and engagement in studies, it is essential to explore the psychosocial processes involved. According to Super's (1980) Life-Span, Life-Space approach, career development is a process that unfolds across the lifespan, influenced by various life roles, self-concept, and adaptability. In this context, career adaptability can be seen as an individual's ability to respond to changing circumstances and opportunities in the work environment, enabling them to navigate through different life roles and stages (Savickas, 2005). As such, career adaptability is critical in helping individuals adjust to various challenges, including those in their educational journey.

1.5. Social Cognitive Career Theory and its Influence on Engagement in Online Learning

Social Cognitive Career Theory (SCCT) emphasizes the impact of career adaptability on students' online learning engagement and subsequent outcomes. SCCT by Lent et al. (1994) also offers valuable insights into the relationship between career adaptability and engagement in studies. SCCT posits that an individual's career choices and actions are influenced by self-efficacy beliefs, outcome expectations, and personal goals. In the context of this study, students' beliefs in their ability to adapt to changing circumstances (career adaptability) may influence their engagement in online learning, shaping their academic and career outcomes. Moreover, the SCCT framework suggests that students with higher career adaptability may have more positive outcome expectations, which in turn may lead to greater engagement in their studies.

1.6. Need for Further Research on Career Adaptability and Online Student Engagement

While career adaptability has been explored from various angles, more research is needed to understand its influence on other career-related factors. In the literature, career adaptability has been addressed from various dimensions, including social capital and career engagement (Sou et al., 2022), academic achievement (Havenga, 2011; Negru-Subtirica & Pop, 2016), and students' well-being and performance (Akkermans et al., 2018). In the context of Türkiye, career adaptability has been addressed in terms of career desire (Eryilmaz & Kara, 2018), personality traits (Eryilmaz & Kara, 2017; Hasret & Baltacı, 2021), and attachment and social support (Erzen & Kara, 2022). As these studies show, in the literature, the focus has been chiefly on factors affecting career adaptability, whereas career adaptability also affects many careerrelated factors (Savickas, 2005). Therefore, research on other dimensions of this topic is needed. Thus, career adaptability can be understood from a broader perspective for prospective and practicing teachers. In this context, it is important to understand the transition from university education to work-life and the relationship between university education, particularly student engagement, on which limited research is found in the literature. The current study, therefore, extends the literature on career adaptability by investigating the relationship between online student engagement and career adaptability. The following research questions guided the study:

What is the relationship between Online Student Engagement and Career Adaptability? Is there a difference between the mean scores of the Online Student Engagement and Career Adaptability scales in terms of gender?

What is the relationship between students' mean scores of Career Adaptability and their perceived willingness to work as a teacher after graduation?

2. Method

2.1. Research Design

This study used a quantitative approach to investigate relationships between the variables indicated in the research questions. Quantitative research typically employs statistical or numerical data to methodically explore social phenomena (Watson, 2015) and is used to objectively test hypotheses or theories by investigating the relationships among variables (Creswell, 2009). In the current study, the relationships between online student engagement and career adaptability and between career adaptability and willingness to pursue a career in teaching were investigated for English teacher candidates throughout Türkiye who were continuing their education via online learning. Specifically, whether the students' average scores on career exploration and career plans were related to their post-graduation work intentions was investigated by independent groups t-test, and the relationship between online student engagement and career adaptability was examined by multiple regression analysis. Skewness and kurtosis values were examined to determine whether the distribution was normal. It is accepted that values obtained from scales between -1.5 and +1.5 are within normal distribution (Tabachnick & Fidell, 2013). The skewness value of the Student Engagement scale was -0.194, and the Kurtosis value was 0.225. The skewness value of the career fit variable was -0.866 and the Kurtosis value was 0.923. These results indicated that the target group of related variables showed a distribution close to normal.

2.2. Participants

The researchers distributed the online form, including participants' demographic information and online versions of the Student Engagement Scale and the Career Adaptability Scale, to the English Language Teaching (ELT) departments of universities in Türkiye using the online survey portal, Google Forms. The online form was accessible for a month. The participants in the study were 450 English teacher candidates studying in different ELT departments of universities in Türkiye, comprising 346 (76.9%) females and 104 (23.1%) males. The majority (419, 93.1%) were between the ages of 18-25, 26 (5.8%) were between the ages of 26-33, and 5 (1.1%) were between the ages of 34-40. While most (374, 83.1%) attended state universities, 76 (16.9%) were students at foundation universities. All the participants were students of English language teaching departments: 86 (19.1%) for first grade, 103 (22.9% for second grade, 117 (26%) for third grade, and 144 (32%) for fourth grade.

2.3. Data Collection Tools

An online form was used to collect participants' demographic information, including participants' department, age, gender, name, and type of university. Also, online versions of the Student Engagement and Career Adaptability Scale were administered. On this form,

participants were informed about the aims of the study, the voluntary nature of participation, measures for ensuring the participants' confidentiality, and assurance of the option to withdraw from the study at any time. Ethical approval for this study was obtained from the relevant institutional review board at the university.

The Online Student Engagement Scale by Sun and Rueda (2012) was translated into Turkish by Ergün (2014). After the necessary steps were followed to ensure the language equivalence of the scale, the scale was administered to the students. To determine the construct validity and reliability of the scale, its validity and reliability were ensured. The 19-item instrument uses a 5-point Likert-type rating scale (I strongly agree, I agree, I neither agree nor disagree, I disagree and I strongly disagree) and consists of three sub-dimensions: behavioral engagement, items 1 to 5; affective engagement, items 6 to 11; and cognitive engagement, items 12 to 19.

The internal consistency coefficient of the Student Engagement Scale developed by Sun and Rueda (2012) was determined as α =0.90 (n=398). The internal consistency coefficients of the sub-dimensions were calculated as α =0.62 for behavioral engagement, α =0.90 for affective engagement, and α =0.86 for cognitive engagement, respectively. The Cronbach's Alpha value of the internal consistency reliability of the scale used in this study was α =89 (n=450). The coefficients of engagement in the sub-dimensions of the scale were α =71 for behavioral engagement, α =0.93 for affective engagement, and α =0.82 for cognitive engagement.

The Career Adaptability Scale was developed by Eryilmaz and Kara (2016). The 10-item questionnaire two provides a 5-point Likert rating scale (not at all appropriate, not appropriate, undecided, appropriate, and very appropriate). The scale consists of 10 items and is divided into two sub-dimensions: Career Planning (items 2, 4, 7, and 9) and Career Exploration (Items 1, 3, 5, 6, 8, and 10). The internal consistency reliability of the Career Adaptability Scale was found to be α =0.85 (n=219). The internal consistency coefficients of the sub-dimensions of the scale are α =0.84 for Career Exploration and α =0.71 for Career Planning (Cronbach's Alpha). The internal consistency reliability scale was found to be 0.91 (n=450, Cronbach's Alpha). The internal consistency reliability of the sub-dimensions of the Career Adaptability Scale was found to be α =83 for Career Planning and α =90 for Career Exploration (Cronbach's Alpha), respectively. As a result, it was concluded that Cronbach's Alpha values of the Student Engagement and Career Adaptability Scale were reliability Scale were reliable.

3. Results

The results of the current study are presented in line with the research questions.

1. What is the relationship between Online Student Engagement and Career Adaptability?

First, according to the results of the Pearson correlation analysis (Table 1), a moderate and positive relationship was found between online course engagement and career exploration (r =

0.417; p<0.01). A low and positive correlation was found between online course participation and career plans (r = 0.376; p<0.01).

Tał	ole 1. Results of corr	elation an	alysis		
		Variables			
		1	2	3	
1.	Online engagement	1,000	,376**	,417**	
2.	Career plan		1,000	,649**	
3.	Career exploration			1,000	

** p< 0.01

The relationship between students' online course engagement and career adaptability was examined by multiple regression analysis, according to which career planning and career discovery significantly explain students' online course participation (R=0.43, R²=0.19, F=5.334, p<0.001). When the relationships of the variables with students' online course participation were considered one by one, it was concluded that career exploration (β =0.299; p<0.001) in the regression equation was significantly related to students' online course participation. Similarly, as a result of the regression analysis, it was concluded that there is a significant relationship between career planning (β =0.182; p<0.001) and students' online course engagement. According to these results, a 19% relationship was found between students' online course engagement and career exploration and career planning.

Table 2. Results of regression analysis

	В	Std. Error	Beta	t
Constant	17,322	1,269		13,650**
Career plan	,275	,085	,182	3,256**
Career exploration	,350	,066	,299	5,346**

**p<0.01

2. Is there a difference between the mean scores of the Online Student Engagement and Career Adaptability scales according to the gender context?

When the Online Student Engagement and Career Adaptability scales were examined with reference to gender (Table 3), an independent samples t-test was used to determine the differences between the means. The findings obtained as a result of the examinations show that out of the English teacher candidates participating in the Online Student Engagement scale, 346 were female with an average of 63.3757, and 104 were male with an average of 64.0385, with degrees of freedom (df) of 151.916, a t-test of -0.456, and a significance value of 0.649 (Female, N=346, mean: 63.3757; Male, N=104 mean: 64.0385; F=6.222; t=-0.494; p=0.622, df=448; p>0.05). When the association of career adaptability in the context of gender was examined, out of the English teacher candidates participating in the Career Adaptability scale, 346 were female with an average of 39.3006, and 104 were male with an average of 37.9327, with degrees of freedom (df) of 448, a t-test of 1.639, and a significance value of 0.102 (Female, N=346, mean: 39.3006; Male, N=104 mean: 37.9327; t=1.639; p=0.102, df=448; p>0.05). As a result

of the analysis, no statistically significant difference was found between Online Student Engagement and Career Adaptability according to gender.

Table 3. The mean scores of the Online Student Engagement and Career Adaptability scales according to the gender

Scale	Gender	Ν	F	Mean	t	df	р
Online	Female	346	6,222	63,3757	-,456	151,916	,649
Student	Male	104		64,0385			
Engagement							
Career	Female	346	,158	39,3006	1,639	448	,102
Adaptability	Male	104		37,9327			

3. What is the relationship between students' mean scores of Career Adaptability and their perceived willingness to work as a teacher after graduation?

The question of whether the students' average career exploration and career planning scores would differ depending on their post-graduation work considerations was addressed using independent groups t-test (Table 4). According to the results of the analysis, the career exploration scores of those who thought a lot about teaching after graduation (= 26.72, t = -16.379) differed significantly from those who were undecided about their careers (= 20.52). Similarly, the career plan scores of those with strong intentions about teaching (= 15.10, t = -9.891) differed significantly from those undecided (= 11.78).

Dimensions of adaptability	Levels	n	$\overline{\mathbf{X}}$	Sd	t
Career plan	Undecided	134	11,78	3,41	-9.891**
	I think a lot	316	15,10	3,18	
Career exploration	Undecided	134	20,52	5,16	-16.379**
-	I think a lot	316	26,71	2,79	

Table 4. Results of t-test

* p<0.01

4. Discussion and Conclusion

In today's digital education landscape, adaptability and engagement are crucial. With more learning moving online, students need to be adaptable, especially when transitioning from school to work. Adaptability, as discussed by Porfeli and Savickas (2012), is essential for modern job paths. Studies have shown that engagement in online classes is important because it is linked to early career gains (Hu & Wolniak, 2013) and career adaptability (the ability to adjust in careers) (Šverko & Babarović, 2019). Lei et al. (2018) also found that students who are more engaged tend to do better academically. Vuolo et al., (2013) emphasized the role of academic engagement in facilitating the transition from school to work. Using theories like the Social Cognitive Career Theory and Life-Span and Life-Space approach, we can better understand how

being adaptable in careers and being engaged in school are connected. Adaptability in modern job paths is crucial, and academic engagement, as supported by multiple studies, not only boosts early career gains and adaptability but also eases the transition from school to work. Therefore, fostering student engagement also in online learning environments is not just a matter of academic success, but a critical step in ensuring seamless transitions to adaptable and fruitful careers. In essence, this focus on adaptability and engagement becomes vital for preparing students to meet the challenges of the workforce effectively.

In this study, we investigated the relationship between career adaptability and online student engagement among English teacher candidates across 45 universities in Türkiye. Our findings indicate a significant, moderately positive relationship between these variables. This aligns with Datu and Buenconsejo (2021) who found links between behavioral and emotional engagement and increased career adaptability. Furthermore, students recognize the benefits of academic engagement in their career transitions (Germeijs & Verschueren, 2006; Schnabel et al., 2002) and academic success (Negru-Subtirica & Pop, 2016). Career adaptability not only aids students in navigating future career uncertainties (Savickas et al., 2009) but also correlates with academic achievement and engagement (Havenga, 2011; Lei et al., 2018; Salanova et al., 2010). In light of these findings, it is evident that enhancing career adaptability and online student engagement among English teacher candidates can serve as a dual strategy for promoting both academic success and preparedness for future career challenges.

Our study found no gender-based differences in Online Student Engagement and Career Adaptability scores among English teacher candidates. This suggests that online learning in English teacher training might be gender-neutral. While this lack of disparity is promising, it is important to consider other factors like course content, teaching methods, and technology use. In addition, cultural and societal norms could influence these outcomes, and further research in regions with diverse gender perspectives could provide more nuanced insights. Further research should also explore how external factors, such as family support and technology access, intersect with gender in online learning. This will help ensure online education remains equitable for all language teacher candidates.

The transition from school to work is intricate. The journey from academic settings to professional environments is multifaceted and often filled with challenges. Erus and Zeren (2017) emphasized the importance of informed career decisions, noting that teacher candidates who are more deliberate in their choices tend to display greater career adaptability. Building on this, our research indicates that English language teacher candidates who are genuinely passionate and committed to teaching after graduation are more adaptable in their career trajectories. This not only underscores the significance of making conscious academic and career decisions but also suggests that such clarity can be a catalyst for both enhanced career adaptability and improved psychological well-being. Uthayakumar et al. (2010) emphasize the significance of having a clear vision of one's career path, suggesting it acts as a cornerstone for mental and emotional stability during transitional phases. This perspective is echoed by other

studies, with Deveci et al. (2012) noting that an unwilling choice of departments is associated with heightened career concerns. Similarly, Saka and Gati (2007) found that uncertainty regarding career plans is linked to increased anxiety. Collectively, these studies highlight the importance of clarity and certainty in the career decisions of English teacher candidates for emotional well-being.

Our analysis brings to the fore two crucial elements: the importance of deliberate career choices and the role of career adaptability in online engagement. Aspiring English language teachers must grasp the long-term impact of their decisions on adaptability and engagement. In our increasingly digital world, online engagement is not just beneficial—it is essential for both academic success and career readiness. Thus, teacher development programs should prioritize enhancing career adaptability and online engagement, ensuring that future teachers are well-prepared for the evolving demands of the teaching profession.

Our study offers valuable insights into the connection between career adaptability and online student engagement, specifically among English teacher candidates in Türkiye. However, it is essential to acknowledge its constraints. By concentrating solely on English teacher candidates within the Turkish context, the generalizability of our findings to broader educational landscapes and varied cultural settings might be restricted. To paint a more comprehensive picture, subsequent research endeavors should cast a wider net, examining these constructs across different academic fields and within diverse cultural backgrounds. It might also be helpful to consider other variables that could have an impact. For instance, how does a student's prior academic performance influence their adaptability and engagement in online settings? How might socioeconomic backgrounds shape these dynamics? and to what extent do individual personality traits play a role in this interplay? Addressing these questions in future studies will provide a richer, more nuanced understanding of the factors at play and their implications for educators and policymakers alike.

In conclusion, this study emphasizes the pivotal role that career adaptability and online engagement play in determining the academic and professional paths of aspiring teachers. The findings suggest that the dynamic between university education and career adaptability is not merely a linear relationship but rather a complex interplay that warrants further investigation. By understanding this relationship more deeply, there is potential to enhance the design and implementation of teacher development programs. Such programs, when informed by these insights, can better equip future teachers with the necessary skills and mindset to navigate the ever-evolving landscape of the teaching profession. As the educational sector continues to evolve, especially in the digital age, it becomes imperative for teacher training institutions to remain updated and responsive to these shifts. By integrating the lessons learned from this study, we can ensure a smoother and more effective transition for English language teacher candidates as they step into the multifaceted world of teaching.

Declaration of Conflicting Interests and Ethics

The author/s declare no conflict of interest.

Pulat & Basal / International Journal of Education, Technology and Science 3(4) (2023) 1146-1160 1157

References

- Akkermans, J., Paradniké, K., Van der Heijden, B. I. J. M., & De Vos, A. (2018). The best of both worlds: The role of career adaptability and career competencies in students' well-being and performance. *Frontiers in Psychology*, *9*, 1-13. https://doi.org/gd9p4h
- Bolliger, D., & Inan, F. (2012). Development and validation of the Online Student Connectedness Survey (OSCS). *International Review of Research in Open and Distance Learning*, 13, 41-65. https://doi.org/10.19173/irrodl.v13i3.1171
- Creswell, J. W. (2009). *Research design qualitative, quantitative, and mixed methods approaches*. SAGE Publications.
- Datu, J. A. D., & Buenconsejo, J. U. (2021). Academic engagement and achievement predict career adaptability. *The Career Development Quarterly*, 69(1), 34-48. https://doi.org/gnp4ng
- Deveci, S. E., Çalmaz, A., & Açık, Y. (2012). Doğu Anadolu'da yeni açılan bir üniversitenin öğrencilerinde kaygı düzeylerinin sağlık, sosyal ve demografik faktörlerle ilişkisi. *Dicle Tup Dergisi*, *39*(2), 189-196. https://doi.org/10.5798/diclemedj.0921.2012.02.0125
- Ergün, E. (2014). Ağsal öğrenme ortamlarında sosyal ağ yapısı ve sosyal olabilmenin öğrenci bağlılığı üzerindeki etkisi [Yayımlanmamış yüksek lisans tezi]. Hacettepe Üniversitesi.
- Erus, S. M., & Zeren, Ş. G. (2017). Öğretmen adaylarının öğretmenlik mesleğine yönelik kariyer uyumları. *Yükseköğretim ve Bilim Dergisi*, 7(3), 657-668.
- Eryilmaz, A., & Kara, A. (2016). Investigation of psychometric properties of career adaptability scale. *The Online Journal of Counseling and Education*, 5(1), 29-39.
- Eryilmaz, A., & Kara, A. (2017). Comparison of teachers and pre-service teachers with respect to personality traits and career adaptability. *International Journal of Instruction*, *10*(1), 85-100.
- Eryilmaz, A., & Kara, A. (2018). A career adaptability model for pre-service teachers. *Erzincan University Journal of Education Faculty*, 20(2), 352-365. https://doi.org/gqn2vv
- Erzen, E., & Kara, A. (2022). Bağlanma stilleri, sosyal destek ve kariyer uyumluluğu: Alternatif modeller. *Öneri Dergisi*, *17*(57), 340-364. https://doi.org/10.14783/maruoneri.896289
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74, 59-109. https://doi.org/10.3102/00346543074001059
- Germeijs, V., & Verschueren, K. (2006). High school students' career decision-making process: A longitudinal study of one choice. *Journal of Vocational Behavior*, 68(2), 189-204. https://doi.org/10.1016/j.jvb.2005.08.004
- Hasret, Y., & Baltacı, H. Ş. (2021). Teacher education students' career adaptability and vocational personality types. *İstanbul Aydın Üniversitesi Eğitim Fakültesi Dergisi*, 7(1), 71-88. https://doi.org/10.17932/IAU.EFD.2015.013/efd_v07i004

- Havenga, M. (2011). The relationship between career adaptability and academic achievement in the course of life design counselling, [Master's thesis, University of Pretoria]. https://repository.up.ac.za/handle/2263/27244
- Hu, S., & Wolniak, G. C. (2013). College student engagement and early career earnings: Differences by gender, race/ethnicity, and academic preparation. *The Review of Higher Education*, 36, 211-233. https://doi.org/10.1353/rhe.2013.0002
- Kahu, E. R. (2013). Framing student engagement in higher education. *Studies in Higher Education*, 38(5), 758-773. https://doi.org/10.1080/03075079.2011.598505
- Klem, A. M., & Connell, J. P. (2004). Relationships matter: Linking teacher support to student engagement and achievement. *Journal of School Health*, 74(7), 262-273. https://doi.org/dc7vsr
- Lei, H., Cui, Y., & Zhou, W. (2018). Relationships between student engagement and academic achievement: A meta-analysis. *Social Behavior and Personality: An International Journal*, 46(3), 517-528. https://doi.org/10.2224/sbp.7054
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45(1), 79-122. https://doi.org/10.1006/jvbe.1994.1027
- Liang, M. H., & Yi, L. F. (2017). The relations of career adaptability with entrepreneurial selfefficiency and entrepreneurial intention among university students. *Studies of Psychology & Behavior*, *15*(3), 366-371.
- Merino-Tejedor, E., Hontangas, P. M., & Boada-Grau, J. (2016). Career adaptability and its relation to self-regulation, career construction, and academic engagement among Spanish university students. *Journal of Vocational Behavior*, 93, 92-102. https://doi.org/gc7m6g
- Moller, L., Foshay, W., & Huett, J. (2008). The evolution of distance education: Implications for instructional design on the potential of the web. *TechTrends*, 52(4), 66-70. https://doi.org/10.1007/s11528-008-0179-0
- Negru-Subtirica, O., & Pop, E. I. (2016). Longitudinal links between career adaptability and academic achievement in adolescence. *Journal of Vocational Behavior*, 93, 163 -170. https://doi.org/10.1016/j.jvb.2016.02.006
- O'Connell, D. J., McNeely, E., & Hall, D. T. (2008). Unpacking personal adaptability at work. *Journal of Leadership & Organizational Studies*, 14(3), 248-259. https://doi.org/bc3nb2
- Perry, J. C., Liu, X., & Pabian, Y. (2010). School engagement as a mediator of academic performance among urban youth: The role of career preparation, parental career support, and teacher support. *The Counseling Psychologist*, 38, 269-295. https://doi.org/cssqpw
- 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. https://doi.org/10.1016/j.jvb.2012.01.009
- Qenani, E., MacDougall, N., & Sexton, C. (2014). An empirical study of self-perceived employability: Improving the prospects for student employment success in an uncertain environment. *Active Learning in Higher Education*, 15(3), 199-213. https://doi.org/gk3xd4

Pulat & Basal / International Journal of Education, Technology and Science 3(4) (2023) 1146-1160 1159

- Saka, N., & Gati, I. (2007). Emotional and personality-related aspects of persistent career decision-making difficulties. *Journal of Vocational Behavior*, 71(3), 340-358. https://doi.org/10.1016/j.jvb.2007.08.003
- Salanova, M., Schaufeli, W., Martínez, I., & Breso, E. (2010). How obstacles and facilitators predict academic performance: the mediating role of study burnout and engagement. *Anxiety*, *Stress, and Coping*, 23(1), 53-70. https://doi.org/10.1080/10615800802609965
- Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown & R. W. Lent (Eds.), *Career development and counselling: Putting theory and research to work* (pp. 42-70). Wiley.
- 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. https://doi.org/10.1016/j.jvb.2009.04.004
- Schnabel, K. U., Alfeld, C., Eccles, J. S., Köller, O., & Baumert, J. (2002). Parental influence on students' educational choices in the United States and Germany: Different ramifications— Same effect?. *Journal of Vocational Behavior*, 60(2), 178-198. https://doi.org/bgwxjg
- Skinner, E. A., & Pitzer, J. R. (2012). Developmental dynamics of student engagement, coping, and everyday resilience. In *Handbook of research on student engagement* (pp. 21-44). Springer. https://doi.org/10.1007/978-1-4614-2018-7_2
- Sou, E. K., Yuen, M., & Chen, G. (2022). Career adaptability as a mediator between social capital and career engagement. *The Career Development Quarterly*, 70(1), 2-15. https://doi.org/10.1002/cdq.12289
- Strenze, T. (2007). Intelligence and socioeconomic success: A meta-analytic review of longitudinal research. *Intelligence*, 35, 401-426.
- Sun, J. C. Y., & Rueda, R. (2012). Situational interest, computer self-efficacy and self-regulation: Their impact on student engagement in distance education. *British Journal of Educational Technology*, 43(2), 191-204. https://doi.org/br43xd
- Super, D. E. (1980). A life-span, life-space approach to career development. Journal of Vocational Behavior, 16(3), 282-298. https://doi.org/10.1016/0001-8791(80)90056-1
- Šverko, I., & Babarović, T. (2019). Applying career construction model of adaptation to career transition in adolescence: A two-study paper. *Journal of Vocational Behavior*, 111, 59-73. https://doi.org/10.1016/j.jvb.2018.10.011
- Tabachnick, B. G., & Fidell, L. S. (2013). Using multivariate statistics (6th ed.) Pearson. UNESCO. (2021). Global Education Coalition.
- Uthayakumar, R., Schimmack, U., Hartung, P. J., & Rogers, J. R. (2010). Career decidedness as a predictor of subjective well-being. *Journal of Vocational Behavior*, 77(2), 196-204. https://doi.org/10.1016/j.jvb.2010.07.002
- Vuolo, M., Mortimer, J. T., & Staff, J. (2013). Adolescent precursors of pathways from school to work. *Journal of Research on Adolescence*, 24(1), 145-162. https://doi.org/gf8336

- Watson, R. (2015). Quantitative research. *Nursing Standard*, 29(31), 44-48. https://doi.org/d7fw
- Wu, J., Dong, Y., Xiong, J., & Cao, Y. (2016). The mediating role of achievement motivation between college students' proactive personality and career adaptability and its gender differences. *Psychological Development and Education*, 32(5), 547-556.
- Zhou, N., Tigelaar, D., & Admiraal, W. (2022). The relationship between vocational teachers' motivational beliefs and their engagement in work placement. *Journal of Vocational Education & Training*. https://doi.org/10.1080/13636820.2022.2066560

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the Journal. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (CC BY-NC-ND) (http://creativecommons.org/licenses/by-nc-nd/4.0/).