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The Relationship between Academic Crafting, Work-School Facilitation and Academic Engagement: A Mediated Model

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Cover Page Footnote

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The Relationship between Academic Crafting, Work-School Facilitation and Academic Engagement: A Mediated Model

Hubungan antara *Academic Crafting*, Fasilitasi Kerja-Sekolah dan Keterlibatan Akademik: Sebuah Model Mediasi

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ABSTRACT

This research examines the relationship between academic crafting, work-school facilitation and academic engagement in higher education. Based on the Job Demands-Resources (JD-R) Model, the research sought to determine how students' alignment of academic activities with personal preferences and interests (*academic crafting*) affects academic engagement and whether work-school facilitation mediates this effect. The research therefore emphasized the delicate balance that students strike between their work obligations and their scholarly activities. Our research hypotheses focused on understanding how academic crafting directly and indirectly affects student engagement. The research data were obtained from a sample of students enrolled in postgraduate programs and actively working in the labor market. The sample included a higher proportion of male (108), married people (88), those aged 26 to 35 (89), students pursuing a master's degree with a thesis (112), and those who had been employed for 6–10 years (47). The analyses revealed that academic crafting has a direct positive effect on academic engagement. Moreover, in the research, academic crafting not only directly affected academic engagement, but also indirectly through work-school facilitation. In this case, it was determined that work-school facilitation had a mediating role in the study. Therefore, students who proactively aligned their course-related activities with their interests effectively balanced their work demands and academic responsibilities and exhibited more dedication and enthusiasm in their academic studies.

ABSTRAK

Penelitian ini menguji hubungan antara *academic crafting*, fasilitasi kerja-sekolah dan keterlibatan akademik di pendidikan tinggi. Berdasarkan Model *Job Demands-Resources* (JD-R), penelitian ini berupaya untuk mengetahui bagaimana keselarasan aktivitas akademik siswa dengan preferensi dan minat pribadi (*academic crafting*) memengaruhi keterlibatan akademik dan apakah fasilitasi kerja-sekolah memediasi efek ini. Penelitian ini menekankan keseimbangan yang harus dicapai siswa antara kewajiban kerja dan aktivitas ilmiah mereka. Hipotesis penelitian kami berfokus pada pemahaman bagaimana *academic crafting* secara langsung dan tidak langsung memengaruhi keterlibatan siswa. Data penelitian diperoleh dari sampel mahasiswa yang terdaftar pada program pascasarjana dan aktif bekerja di pasar tenaga kerja. Mayoritas sampel adalah laki-laki (108), orang menikah (88), berusia 26-35 tahun (89), mahasiswa yang sedang mengejar gelar master dengan tesis (112), dan mereka yang telah bekerja selama 6–10 tahun (47). Analisis menghasilkan bahwa *academic crafting* mempunyai pengaruh positif langsung terhadap keterlibatan akademik. Selain itu, dalam penelitian tersebut, *academic crafting* tidak hanya berdampak langsung pada keterlibatan akademik, namun juga secara tidak langsung melalui fasilitasi sekolah-kerja. Dalam kasus ini, ditentukan bahwa fasilitasi sekolah-kerja mempunyai peran mediasi dalam penelitian ini. Oleh karena itu, mahasiswa yang secara proaktif menyelaraskan aktivitas terkait perkuliahan dengan minat mereka secara efektif menyeimbangkan tuntutan pekerjaan dan tanggung jawab akademik mereka serta menunjukkan lebih banyak dedikasi dan antusiasme dalam studi akademis mereka.

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1. Introduction

In recent years, there has been a noticeable rise in the inclination of university students to engage in employment as a means of augmenting their financial resources during their educational journey (Vossensteyn et al., 2015). Conversely, individuals who are employed on a full-time basis in their professional careers are more inclined to pursue advanced degrees such as master's or doctoral studies (Lee et al., 2020). These observed instances highlight the necessity of attaining a harmonious balance between academic pursuits and professional commitments, specifically emphasizing the importance of achieving a work-school balance. Empirical evidence, on one hand, suggests that students who have demanding work schedules may experience adverse effects on their academic achievement and classroom performance (Polidano & Zakirova, 2011) while on the other hand, aligning work experience with educational goals has positive effects on students' interest and motivation for school (Creed et al., 2015). Additionally, there is existing research suggesting that the pursuit of a master's or doctorate degree by full-time employees can have both beneficial and negative impacts on their work life when considering the same scenario in reverse (e.g., Lee et al., 2020; Waite, 2017; Wakeling & Laurison, 2017). Within these particular circumstances, the endeavor to attain a balance between work and study embodies a multifaceted experience that has the potential to significantly enhance the achievements of both individuals pursuing education and those engaged in full-time employment.

Therefore, considering the intricate nature and challenges associated with managing work and educational demands, it is evident that a range of strategies and abilities are required to successfully attain balance between work and school responsibilities. The use of these strategies and skills brings up the concept of work-school facilitation. This refers to the strategies and skills that individuals use to effectively balance work demands and academic responsibilities (Creed et al., 2020). These strategies and skills involve individuals using their academic and work-related assets, time management skills and personal freedom to create a harmonious and mutually beneficial balance between their academic and professional endeavours, which leads us to the phenomenon of academic crafting.

The primary objective of this study is to understand the strategies and abilities to help university students effectively integrate their work experience and academic achievement. In pursuit of this objective, we developed a concept of 'academic crafting' based on the job crafting phenomenon and its associated constructs by Tims et al. (2012). Furthermore, it is also suggested that the practice of developing academic crafting, which can be defined as organizing and modifying academic activities

in accordance with academic skills and preferences, can help working students balance work demands and academic responsibilities (work-school facilitation). Finally, this balance was thought to make students more energetic, diligent and dedicated in their academic activities (academic engagement). Thus, this study aims to investigate this pattern, namely the relationship between the concepts of academic crafting, work-school facilitation and academic engagement, which has not been previously studied.

In line with the above-mentioned purpose, quantitative research method was used in this study conducted on individuals working in a job and receiving postgraduate education in Turkey. The study suggests that academic crafting is expected to affect academic engagement through work-school facilitation. There are various grounds for doing the study in Turkey, particularly among those who work in the labor market and pursue postgraduate studies. One crucial aspect is that higher education institutions, including graduate education, play a significant role in the labor market in Turkey (Alpaydin, 2015), as is the case in other countries (e.g., Bartlett & Uvalic, 2019). This is due to the fact that postgraduate study is typically favored by persons who are currently employed in the workforce and seek to enhance their job performance and advance in their careers. For this reason, conducting the study on both individuals working in the labor market and individuals receiving postgraduate education helped to obtain important findings in the relevant field. Furthermore, given the significance of academic engagement within the realm of education in Turkey (Çapri et al. 2017), our study specifically examined the factors that influence academic engagement. Thus, it is thought that the acquired data would enhance the understanding of how to enhance academic engagement, a crucial aspect in the realm of education.

The Concept of Academic Crafting

The concept of employees actively modifying their work environment to better correspond with their own preferences and motivations was initially formulated by Kulik, Oldham & Hackman (1987) and afterwards labelled as "job crafting" by Wrzesniewski and Dutton (2001) (Almeida et al., 2022). According to Wrzesniewski and Dutton (2001, p.181), the concept of job crafting refers to the deliberate actions taken by employees to modify their job in order to better match it with their own preferences, motivations, and interests. Job crafting therefore refers to the proactive process by which individuals shape and redefine their job roles and tasks to make them more meaningful, engaging and aligned with their skills, interests and values.

In their seminal work, Wrzesniewski and Dutton (2001) delineate three fundamental components of job crafting: a) The phenomenon of employees modifying

the task-related aspects of their jobs, such as the quantity or nature of their tasks, is commonly referred to as "**task crafting**." b) Another form of employee adaptation involves adjusting the extent of their interactions with colleagues in the workplace, known as "**relational crafting**." c) Additionally, employees engage in **cognitive crafting** by altering their perceptions of their jobs in order to enhance their overall job satisfaction. On the other hand, Tims et al. (2012) propose that job crafting has four distinct components, namely: increasing structural job resources, increasing social job resources, increasing challenging job demands, and decreasing hindering job demands. The component of increasing structural job resources encompasses activities that are designed to facilitate the accomplishment of work-related goals and foster personal growth and learning while the establishment and cultivation of connections with colleagues and supervisors fall within the purview of increasing social job resources. The increasing challenging job demands pertains to tasks that need heightened levels of physical or psychological exertion, yet contribute to the acquisition of novel abilities and enhance the overall appeal of work. Ultimately, the decreasing hindering job demands entails minimizing activities that contribute to an increased burden for employees and result in fatigue (Tims et al., 2012; Kerse, 2019).

The concept of job crafting involves employees taking the initiative to organize their work and modify their activities, rather than directly altering the nature of the job. This proactive approach has been found to enhance job satisfaction, employee flexibility, and commitment (Berg et al., 2010). Job crafting, which has both individual and organizational advantages, is not possible in every organizational structure. For instance, based on Burns and Stalker (1961), job crafting is more likely to be achieved in an organic organizational structure rather than a mechanical one since mechanic organizational structures are characterized by a significant degree of formalization and centralization. These structures entail clear delineation of rules and task assignments within the organization, with decisions made by top-level managers being disseminated to employees through formal and vertical communication channels (Daft et al., 2010). This particular organizational structure is suitable for environments with unchanging conditions and monotonous behaviors (McShane & Glinow, 2017), where decisions are made only by top management and employees are expected to implement these decisions. Due to the absence of flexibility and cooperation within the workplace and only behaviors in compliance with rules and regulations are exhibited, employees cannot take the necessary initiative to solve the problems encountered (Hoy & Sweetland, 2001), and therefore they cannot exhibit job crafting behaviors. In contrast, organic organizational structures, as described by Burns and Stalker (1961), involve decentralized decision-

making authority. In such structures, subordinates are granted authority and responsibility, and control, authority, and communication are organized in a network structure (Daft et al., 2010). This allows for reduced hierarchy and increased autonomy. Consequently, employees in these structures may deviate from stereotypical behaviors and display autonomous behaviors, potentially leading to job crafting behaviors.

Therefore, it could be contended that an organic organizational structure and job crafting behaviors may be more appropriate for specific job roles and professions. For example, as Almeida et al. (2022) point out, the potential for job crafting is higher in academia (i.e., academics) because they can possess the autonomy to establish their own research objectives, select their collaborators, and exercise a certain degree of discretion in determining the subjects they instruct, and therefore have more control and flexibility in their work. These circumstances are equally applicable to the role of being a student because, as a student, one has the ability to make informed decisions on course selection aligned with personal objectives, engage in project-based learning within the curriculum, participate in various extracurricular initiatives, establish effective study routines, and cultivate social connections both inside and outside the classroom setting. Therefore, this study focuses on this academic crafting behavior that is likely to occur in academic life. Academic crafting can be defined as the change behaviors that students or academics initiate in order to align their assignments/courses/projects with their own preferences and interests, taking into account the concept of job crafting. This study primarily concentrates on students, so the subsequent sections will solely provide explanations tailored to student perspectives, while acknowledging that the aforementioned phenomena are equally applicable to academics, who may be seen as individuals engaged in continuous learning and professional development.

It is possible to extrapolate from the four components of work crafting identified by Tims et al. (2012) to the four components of academic crafting. Academic crafting, akin to job crafting, pertains to the practice wherein individuals customize their educational experiences to align more effectively with their own requirements, objectives, and areas of interest. Based on the components proposed by Tims et al. (2012), the academic crafting component, which is particularly relevant for students, is outlined in our study as follows:

Increasing Structural Academic Resources

Within the realm of academic crafting, students (or academics), whether they be students or scholars, have the capacity to enhance their repertoire of academic resources by undertaking proactive initiatives that are specifically designed to enhance the quality of learning

settings. For instance, students have the opportunity to actively seek out other educational materials, such as textbooks, online courses, or scientific papers, in addition to the designated curriculum. They can also adapt their study schedule to align with their most productive hours. Moreover, students may also explore investigating academic aid alternatives, such as participating in study groups or utilizing tutoring services, in order to enhance their academic performance.

Increasing Social Academic Resources

This facet pertains to the proactive endeavors undertaken by students or academics to establish contacts and networks that can facilitate the achievement of their academic objectives. For instance, students have the opportunity to partake in scholarly pursuits through their active involvement in classroom discourse, establishment of study groups with peers who have similar intellectual inclinations, and solicitation of advice from instructors or academic advisers. These actions have the potential to increase individuals' access to social and intellectual resources, thus fostering more inclusive and rewarding educational experiences.

Increasing Challenging Academic Demands

Academic crafting may encompass the proactive pursuit of more demanding academic standards by students or academics, with the aim of cultivating additional skills and enhancing their educational journey. For example, a student may choose to participate in additional academic modules, enroll in higher-level courses, take courses from higher grades or from different fields, take on additional responsibilities related to academic studies, or engage in research endeavours that require the expansion of their intellectual capacities. By actively pursuing challenging academic demands, students have the opportunity to increase the stimulus and rewards of their academic journey.

Decreasing Hindering Academic Demands

This component encompasses initiatives to minimize or eliminate academic demands that hinder students' (or academics') ability to study effectively. As an illustration, a student may prioritize the cultivation of efficient time management abilities to mitigate the adverse consequences of academic stress. Students may also seek out alternate approaches to meet certain course requirements that they regard as too challenging. This may involve entering into negotiations with instructors to set flexible deadlines or discussions on possible changes to the structure of the course.

By using the four components of academic crafting described above, students have the opportunity to personalize their educational experience to align more effectively with their preferences, motivations and interests. Adopting a proactive approach has the potential to result in increased levels of happiness,

engagement and personal development throughout students' academic endeavors.

The Relationship Between Academic Crafting and Academic Engagement

Academic engagement refers to the readiness and willingness of students to actively participate in prescribed schoolwork and academic studies. This term draws upon Schaufeli et al.'s (2006) conceptualization of work engagement. Academic engagement encompasses the positive and satisfying mood related to studying and academic activities (Carmona-Halty et al., 2021), and similar to work engagement (Schaufeli et al., 2006; Pacquing, 2023), it is characterized by a fusion of vigor, commitment, and absorption. The dimension of academic engagement known as "*vigor*" pertains to the manner in which students approach their assignments and academic tasks with enthusiasm and cognitive adaptability. On the other hand, the dimension of "*dedication*" concerns students' psychological connection and sense of accomplishment derived from their assignments and academic work. Lastly, the dimension of "*absorption*" relates to students' complete immersion and loss of temporal awareness when engrossed in their assignments and academic work. When these three elements come together, academic engagement emerges. Just as work engagement has numerous benefits for individuals and organizations, academic engagement is just as beneficial in the field of education. Engaged students experience higher levels of satisfaction, psychological well-being and success in their academic endeavours. Individuals demonstrate elevated levels of performance, creativity, and proactive learning, resulting in reduced levels of stress and burnout (Bakker & Demerouti, 2008).

The practice of academic crafting has the potential to enhance academic engagement and overall educational achievement by allowing students and scholars to tailor their educational journey to correspond with their own preferences, strengths, and objectives (Almeida et al., 2022). Several empirical research have consistently demonstrated a significant and favorable association between job crafting and work engagement within organizational settings (e.g., Salanova & Schaufeli, 2008; Tims, Bakker & Derks, 2013; Tims et al., 2013; Tims et al., 2015). The validity of this positive relationship is anticipated to extend to the domain of academic crafting-academic engagement within the educational setting.

The practice of academic crafting provides students and scholars with the opportunity to create their educational journey according to their own preferences, resulting in heightened perceptions of autonomy, competence, and meaningfulness. The aforementioned elements play a significant role in fostering increased levels of academic engagement, which is characterized by heightened

energy, unwavering determination, and focused concentration on one's academic pursuits (Bakker & Demerouti, 2008). This relationship also aligns with the theoretical framework of the Job Demands-Resources (JD-R) Model. According to the proposed model, employees are faced with job demands (requirements), encompassing physical, mental, and emotional exertion and competencies required for their work, as well as job resources, including favorable physical and social attributes of the workplace that alleviate stress and job demands (Tims et al., 2012). In other words, according to the model, employees try to balance these demands in the organizational environment by reducing these demands and increasing resources, and for this purpose, they may make some changes in their jobs (job crafting) (Tims & Bakker, 2010). This assertion holds true in the context of academic crafting as well. Both students and academics engage in the process of making adaptations and modifications to strike a balance between the demands and available resources associated with assignments and academic endeavors. As an illustration, students partake in academic endeavors by optimizing their study schedule to align with their most productive periods, thereby maximizing the utilization of available academic resources (*Augmenting Structural Academic Resources*). Additionally, they actively seek input and feedback from their peers regarding their assignments and academic undertakings, thereby capitalizing on the social academic resources at their disposal (*Enhancing Social Academic Resources*). Furthermore, students may adopt unconventional approaches to completing assignments and academic tasks, thereby embracing and maximizing the challenging academic demands they encounter (*Increasing Challenging Academic Demands*). Lastly, they make a conscious effort to distance themselves from individuals whose problems and difficulties may have a detrimental impact on their academic progress, thereby minimizing the inhibiting academic demands they face (*Mitigating Obstructive Academic Demands*). This allows individuals to effectively manage the relationship between demand and available resources, leading to a subsequent enhancement in their academic engagement, which is defined as being energetic and enthusiastic in doing their homework and academic work. Although there is no research supporting this relationship in the literature, research findings examining the job crafting-work engagement relationship support this positive relationship (i.e., Bakker et al., 2012; Petrou et al., 2012; Tims et al., 2013). In this direction, the subsequent research hypothesis was formulated in the present study:

H₁: Academic crafting positively and significantly affects students' academic engagement levels.

The Mediating Role of Work-School Facilitation

In recent times, there has been a growing inclination among university students to seek employment

opportunities in order to enhance their financial resources (Vossensteyn et al., 2015). According to Devlin, James, and Grigg (2008), the financial burden of higher education has shifted onto students due to a decline in state financing and a rise in tuition prices. While there are certain benefits associated with employment throughout one's academic pursuits, such as the acquisition of useful skills and the attainment of financial stability (Curtis & Shani, 2002), it is worth noting that there exists a body of research suggesting potential drawbacks, including less interest in educational pursuits and reduced levels of satisfaction (Creed et al., 2015). According to Polidano and Zakirova (2011), students who work more than eight hours a week are more likely to drop out of school, which has a negative impact on both grade retention and academic progress.

Similar to their full-time colleagues, student employees have the intricate challenge of effectively navigating work-related stressors while also balancing their academic commitments and non-work duties, such as familial responsibilities (Tims et al., 2012). The successful execution of this multifaceted responsibility necessitates the implementation of efficient tactics to manage conflicting obligations and enhance both professional and academic achievements. On the other hand, it is clear that the tendency of employees to obtain a master's or doctoral degree has also increased (Lee et al., 2020). A growing number of professionals are acknowledging the significance of pursuing postgraduate degrees in order to augment their career opportunities and maintain a competitive edge in an ever-changing labor market. The inclination to concurrently engage in higher education and employment underscores the need of skillfully managing the responsibilities associated with job and academic pursuits. In the light of these multifaceted challenges and opportunities, the concept of "Work-School Facilitation" gains importance.

Work-School Facilitation refers to the strategies and skills that individuals use to effectively balance work demands and academic responsibilities (Creed et al., 2020). Work-School Facilitation is the establishment of a harmonious and mutually advantageous relationship between an individual's academic pursuits and professional endeavors, leveraging their academic and work-related resources, proficient time management abilities, and personal autonomy. The notion incorporates several strategies such as time management, resource optimization, and stress reduction approaches. These strategies have been found to have a beneficial association with several outcomes, including improved effort and attendance (Butler, 2007), higher GPA/Grade Point Average (McNall & Michel, 2011), enhanced well-being, and increased engagement (Creed et al., 2015).

The preceding sections have explored the concept of academic crafting, which empowers students and scholars to purposefully shape their educational endeavors in accordance with their individual preferences, motivations, and areas of interest. The proactive nature of this behavior is expected to have a positive impact on individuals' ability to effectively handle and harmonize their work and academic responsibilities, a phenomenon referred to as "work-school facilitation". In other words, within the scope of the JD-R Model, students' organizing academic activities in their school life according to their personal preferences, needs and expectations helps students to achieve a resource-demand balance. Achieving this balance is not only limited to work life, but also reflects positively on school and private life (such as increased work-home facilitation and work-study facilitation) (Akkermans & Tims, 2017; Creed et al., 2020). Therefore, academic crafting increases resources as students' activities at school and the material they learn are aligned with the demands of work (Butler, 2007), thus strengthening work-school facilitation. This scenario facilitates students to be more willing and show more effort in school-related studies, that is, to increase the level of engagement (Koperski, 2017). Based on this, the following hypothesis can be developed that the positive effect of academic crafting on students' academic engagement will be realized through work-school facilitation:

H₂: Work-school facilitation plays a mediating role in the effect of academic crafting on students' academic engagement levels.

2. Methods

The study employed a quantitative research design. Data were collected in this manner through the use of a questionnaire form. The data were analyzed using the SPSS, Process MACRO, and AMOS software. Below, the procedure of study and the corresponding analyses are elucidated.

Participants and Procedures

The research population consisted of graduate students actively working in the labor market. The sample consisted of graduate students who were enrolled in the institute of a state university in Turkey. A comprehensive roster of 1237 graduate students currently enrolled in the institute was acquired for the purpose of sample selection. In light of the potential inclusion of individuals who may not have been employed, and in accordance with the scope of our study focusing exclusively on currently employed graduate students, the questionnaire was distributed to all students through email utilizing the convenience sampling technique.

Subsequently, the inquiry "Are you currently employed?" was posed, and those who affirmed in the affirmative were instructed to proceed with addressing the other queries outlined in the provided questionnaire. A total of 331 individuals were involved in the study, with 157 of them opting not to complete the questionnaire due to their self-reported unemployment status. The remaining 174 participants completed the questionnaire form, but 6 participants were excluded from the analysis due to missing data. Consequently, the data from 168 participants were subjected to final analysis.

Based on the analysis conducted on the demographic features of the participants, it was noted that there was a higher representation of male participants ($n=108$) and a greater prevalence of married individuals ($n=88$) compared to other categories. Upon analyzing the age distribution, it becomes evident that there is a greater number of participants falling between the age range of 26-35, amounting to 89 individuals. Conversely, the number of participants aged 46 and above is comparatively smaller, with a total of 10 individuals. The examination of postgraduate education types revealed that 14 individuals were enrolled in doctoral programs, 112 were pursuing master's degrees with a thesis requirement, and 42 were pursuing master's degrees without a thesis requirement. Ultimately, it was ascertained that the cohort of workers with a tenure ranging from 6 to 10 years exhibited the largest count, totaling 47 individuals, while the group of employees with a tenure ranging from 16 to 20 years had the lowest count, including just 15 individuals.

The Scales

The study employed scales related to academic crafting, work-school facilitation, and academic engagement. The original language of all scales is English. These scales were first translated into Turkish and then back into English using the translation-retranslation method. All these translations were done by the researchers and two language experts. After ensuring the unity of meaning between Turkish and English, the survey data were obtained with the Turkish language format of the scales.

Academic Crafting

For academic crafting, Tims et al. (2012) and Hyrkkänen et al. (2018) scales were taken into consideration. Tims et al. (2012) suggested that the job crafting scale is reliable (Cronbach Alpha coefficient of the scale dimensions: 0.76, 0.73, 0.77, and 0.75) and valid. In the study, the statements in these scales were revised and adapted according to the purpose and sample of the study, and a study-specific "academic crafting" scale was created. For example, "my job/studies" was replaced by "my lessons" and "duties/study tasks" by "assignments". The finalization

of the 17-item scale was achieved by considering both the cultural context of the community and the level of comprehensibility. This scale consists of 4 dimensions: increasing structural resources (4 items), increasing social resources (4 items), increasing challenging demands (4 items), decreasing hindering demands (5 items). The scale items were developed using a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Work-School Facilitation

For work-school facilitation, the 5-item scale in Butler's (2007) study was used. The scale exhibits a unidimensional nature. Butler (2007) found that this scale is reliable (Cronbach alpha: 0.85) and valid. A 5-point Likert-type (1: Strongly Disagree - 5: Strongly Agree) response was requested for the items in the scale.

Academic Engagement

Finally, for academic engagement, the 9-item Utrecht Work Engagement Scale-9 [UWES-9]) developed by Schaufeli et al. (2006) was considered in terms of student engagement. These researchers found that the scale was valid and that the Cronbach Alpha coefficient for reliability was between 0.85 and 0.92 in different country samples. The components within this scale were arranged in accordance with the research's intended purpose and scope. As an illustration, the phrase "my homework" was employed in lieu of "my work/job". The scale is composed of three elements each for the dimensions of Vigor, Dedication, and Absorption. The measure utilized in this study is a 5-point Likert scale, ranging from 1 (Almost Never) to 5 (Very Often). The scale items are provided in Appendix 1.

3. Results

Reliability and Validity Results

Validity and reliability analyses were conducted for each of the scales used in the study. In order to assess the validity of the study, both exploratory and confirmatory factor analyses were performed due to the revisions made to the academic crafting and academic engagement items. Confirmatory factor analysis was conducted for the work-school facilitation scale. A 4-factor structure was identified in the exploratory factor analysis of the 17-item academic crafting scale. One item, namely AC17, was identified as overlapping in the analysis results, and hence, it was eliminated from further research. Consequently, the results obtained from the exploratory factor analysis revealed the presence of four items exhibiting factor loadings over 0.40 within each dimension, thus indicating a four-dimensional structure. Confirmatory factor analysis was performed with Amos 18.0 program to verify this factor structure. In the analysis,

item factor loadings took values between 0.490 and 0.839. Moreover, the fit index values obtained during the validation of the model were found to meet the established requirements, as presented in Table 1.

The validation process for academic engagement involved following identical stages. Initially, an exploratory factor analysis was conducted on the 9-item scale. The resultant factor structure exhibited a unidimensional nature, with factor loadings surpassing the threshold of 0.40. Subsequently, confirmatory factor analysis was performed and a result was obtained with values between 0.504 and 0.929, where the fit index values related to model accuracy provided the reference. Finally, confirmatory factor analysis was conducted for work-school facilitation. The findings showed that the item factor loadings were between 0.587 and 0.857 and the fit index values met the reference values.

AVE (Average Variation Extracted) values were also calculated for scale validity. AVE values higher than 0.40 are taken as reference (Tavares et al., 2019). The findings revealed that this value was 0.455 for academic crafting, 0.522 for work-school facilitation and 0.534 for academic engagement, thus discriminant validity was also achieved.

After validation, Cronbach Alpha and CR (Composite Reliability) values were analyzed for scale reliability. When the results exceed 0.70 (Jaya, 2017; Natalya & Purwanto, 2018), it indicates the presence of dependability. The findings of the studies indicated that the scales measuring academic crafting (Cronbach's alpha = 0.811, CR = 0.929), work-school facilitation (Cronbach's alpha = 0.830, CR= 0.842), and academic engagement (Cronbach's alpha = 0.911, CR = 0.908) demonstrated satisfactory levels of reliability.

Hypothesis Test Results

Prior to analyzing the correlations among the variables under investigation, an assessment was conducted to ascertain the normality of the scale by examining the skewness and kurtosis values. The values observed in academic crafting (Skewness= -0.843; Kurtosis = 1.335), work-school facilitation (Skewness = -0.859; Kurtosis = 0.672), and academic engagement (Skewness = -1.432; Kurtosis = 6.736) measures (George & Mallery, 2016) typically fall within the range of -2 to +2. Consequently, the assumption of normality was satisfied. In addition, Harman's single-factor test was conducted to detect common method bias (Podsakoff et al. 2003). In the present study, a factor analysis was conducted on all items, revealing the emergence of six factors with eigenvalues exceeding 1. Therefore, this finding shows that there is no common method bias.

The present study employed Pearson Correlation analysis to ascertain the direction and magnitude of the correlations between the variables, while considering the implications of the findings in regard to normal distribution. The findings obtained by controlling the demographic characteristics of the participants are given in Table 2. Within the scope of this study, it was seen that there were significant positive relationships between academic crafting and work-school facilitation ($r = 0.315$), academic crafting and academic engagement ($r = 0.592$), as well as work-school facilitation and academic engagement ($r = 0.398$).

Process MACRO program and models developed by Hayes (2013) were used to test the hypotheses. In this

program, where the bootstrap technique and 5000 re-samples are taken as reference, Model 4 (simple mediation) is selected and hypotheses are tested. The findings are presented in Figure 1.

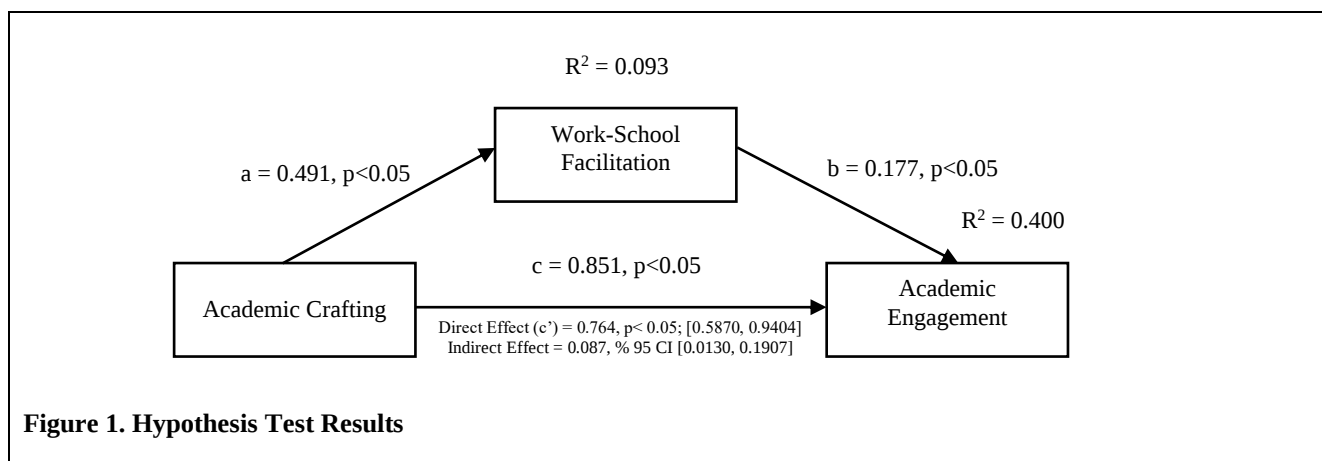
The results presented in Figure 1 indicate a positive and significant relationship between academic crafting and academic engagement. This relationship holds true when considering the overall effect ($B = 0.851$, $p < 0.05$) as well as the direct effect ($B = 0.764$, $p < 0.05$). Consequently, the first hypothesis (H1) is validated. The findings regarding mediation indicate that academic crafting indirectly affects academic engagement through work-school facilitation ($B = 0.087$, $p < 0.05$). Therefore, H2 in the study was also supported.

Table 1. Scale Fit Index Values

Models	CMIN/DF	RMR	CFI	IFI	TLI	RMSEA
	$0 < X^2/sd \leq 5$	≤ 0.10	≥ 0.90	≥ 0.90	≥ 0.90	$< 0.05 - \leq 0.08$
Academic Crafting	1.581	0.074	0.932	0.933	0.916	0.059
Work-School Facilitation	1.117	0.017	0.999	0.999	0.996	0.027
Academic Engagement	2.048	0.052	0.980	0.980	0.963	0.079

Table 2. Correlation Analysis Results

Control Variables: Gender, Marital Status, Age, Type of Education, Duration of Employment		1	2	3	Mean	Std. D.
1. Academic Crafting	r	1			3.870	0.521
	Sig.					
2. Work-School Facilitation	r	0.315	1		3.820	0.840
	Sig.	0.000				
3. Academic Engagement	r	0.592	0.398	1	3.874	0.735
	Sig.	0.000	0.000			



4. Discussion

The primary objective of this study is to investigate the concept of "academic crafting" as a strategy for promoting congruence between student behavior and academic activities within the field of education. Additionally, this research aims to explore the direct and indirect impacts of academic crafting, specifically through the lens of "work-school facilitation," on enhancing "academic engagement," a crucial factor in the education sector. The sample of the study consisted of the students who were taking postgraduate education and were actively working at the same time. The study findings have made significant contributions in both theoretical and practical domains.

The primary contribution of this research is in the identification of a parallel notion of academic crafting within the education sector, as well as the validation of the applicability of the academic crafting scale within this particular domain. Therefore, it was observed that it was possible for students to change their courses and other academic activities according to their personal interests and needs, and this situation was reflected in other academic activities of the students.

Furthermore, the present study conducted an analysis on the notion of "engagement," a term of utmost importance within the realm of education (Gamage et al., 2022). The significance of engagement within this field has been underscored in relation to its role in influencing students' inclination towards learning and their consistent involvement in their educational pursuits (Öz Aktepe & İslamoğlu, 2020). Moreover, this concept holds significant importance in the field of education because to its impact on critical thinking, problem-solving capabilities, and effective communication skills (Carini et al., 2006). Furthermore, it is of utmost importance to emphasize the significance of engagement at the university level, since research suggests that engagement tends to decline as individuals progress through higher levels of schooling (Klem and Connell, 2004). It is imperative to ascertain the components that impact engagement in order to comprehensively comprehend these factors and variables.

Within the framework of this significance, the findings of this study showed that academic crafting has a direct positive effect on engagement level. This finding is consistent with other research studies (Tims, Bakker & Derks, 2013; Petrou et al., 2012; Bakker et al., 2012) that indicate a positive relationship between job crafting and work engagement. Furthermore, it was found that academic crafting not only has a direct effect but also has an indirect effect on academic engagement through work-school facilitation. This situation demonstrates that students' dedication and commitment to their academic pursuits are enhanced when they integrate

their own interests, talents, and preferences into their academic endeavors.

Thirdly, the study's findings offered a significant scholarly addition by providing empirical support for the Job Demands-Resources (JD-R) Model perspective. In essence, students have successfully created a balance between the demands and resources of academic work and assignments through modifications in their needs and available resources. This has therefore facilitated the harmonization of their work and school activities. Furthermore, this equilibrium has had a significant role in enhancing students' academic engagement, as it has resulted in increased levels of energy and enthusiasm when it comes to completing assignments and engaging in academic activities. This phenomenon signifies a significant procedure of equilibrium and adaptation that facilitates the enhancement of students' productivity and involvement in both the realms of professional employment and scholarly pursuits.

5. Conclusion

In the research, it was observed that the notion of academic crafting finds resonance in the realm of education. Additionally, it has been established that academic engagement, recognized as a pivotal aspect within the educational landscape of Turkey (Çaprı et al., 2017), stands to benefit from academic crafting, with work-school facilitation playing a mediating role in this augmentation. It is evident that academic crafting undertaken by graduate students who are concurrently employed in Turkey fosters an improvement in work-school facilitation. Consequently, within the sample population, graduate students employed in Turkey effectively balanced their academic and professional commitments through engagement in academic crafting. This practice not only bolstered their enthusiasm and vitality in academic pursuits but also honed their competence and proficiency in their professional endeavors. Such a scenario is anticipated to elevate the caliber of the Turkish labor market. Thus, the study unequivocally illustrates that embracing academic crafting can serve as an effective strategy for graduate students to seamlessly amalgamate their professional experiences with their academic achievements. To maximize outcomes, it is beneficial to encourage students' involvement in academic activities, expand the array of courses aligned with industry demands, offer flexibility in course selection and academic pursuits, and enhance career counseling services for graduates.

In conjunction with the study's contributions, it is essential to take into account the study's limitations. One primary constraint is the small quantity of data acquired, which has been collected in a cross-sectional manner. Hence, it is advisable for future research endeavors to use a longitudinal data collection approach

and enhance the generalizability of findings by the inclusion of bigger sample sizes. Additionally, this research investigated the correlation between academic crafting and a single mediator, namely work-school facilitation, as well as a sole outcome variable, which is academic engagement. In future research, the development of more intricate models incorporating diverse mediators, moderators, and outcome variables can be achieved through the use of academic crafting. In this context, it is possible to utilize the work-school conflict mediator variable, the personality moderator variable, and the outcome variables of student wellbeing and academic success. The inclusion of these additional variables may help us to gain a more comprehensive understanding of the process by which academic crafting influences students' academic engagement. These enhanced models will contribute additional substance and complexity to forthcoming research endeavors.

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Ethics Committee Statement

It received ethical review approval from Kafkas University Social and Human Sciences Scientific Research and Publication Ethics Board (E-3367/24.01.2024 date/Issue 53). The principles set out in the Declaration of Helsinki were followed in the ethical conduct of the research.

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