

Proactive personality, job autonomy and career competencies as antecedents of job crafting among academicians in Zagazig University

Dr. Maha Mohamed Elbanawey*

***Dr. Maha Mohamed** (Business Administration PhD Zagazig University, 2012).Lecturer of Business Administration, Faculty of Commerce, Zagazig University. Interested In Researching In Organizational Behavior And Human Resources Management.
Email: Maha_Elbanawey@yahoo.com

المخلص:

بعد مدخل إعادة تصميم الوظيفة إحدى صور السلوك التنظيمي المبادر للعاملين، والذي يولد مدى واسع من النواتج الايجابية سواء على مستوى المنظمة أو العاملين؛ مما يبرز أهمية تعيين محددات هذا المدخل لاسيما عندما تتزايد متطلبات الوظيفة بالمقارنة بمواردها في بيئة العمل كما هو الحال في الدول النامية ومن بينها مصر، وعلى ذلك تستهدف الدراسة الحالية توضيح دور الشخصية المبادرة، واستقلالية الوظيفة، و الجدارات الوظيفية كمحددات لإعادة تصميم الوظيفة بين الأكاديميين في جامعة الزقازيق، حيث تم تطوير ثلاثة فروض رئيسية، كما تم تجميع البيانات بواسطة طريقة الاستيفاء الذاتي للاستقصاء وذلك من خلال عينة طبقية عشوائية قوامها ٣١٨ مفردة من هؤلاء الأكاديميين، وقد أوضحت النتائج الرئيسية لأسلوب تحليل الانحدار المتعدد وجود تأثير إيجابي معنوي لكل من الشخصية المبادرة، واستقلالية الوظيفة، والجدارات الوظيفية على إعادة تصميم الوظيفة بين الأكاديميين في جامعة الزقازيق ، واختتمت الدراسة بمناقشة النتائج ودلالاتها، وحدودها، والدراسات المستقبلية.

مصطلحات أساسية: إعادة تصميم الوظيفة، الشخصية المبادرة، استقلالية الوظيفة، الجدارات الوظيفية، الأكاديميين، جامعة الزقازيق

Abstract:

It has been increasingly recognized that job crafting is an important employee proactive organizational behavior which leads to numerous beneficial outcomes for both the organization and employees. Therefore, it is important to investigate job crafting antecedents particularly, in the situations where job demands hinder employees' ability to perform effectively in work environment. Examples are developing countries, including Egypt. Therefore, this study aimed at exploring proactive personality, job autonomy and career competencies as antecedents of job crafting among academicians in Zagazig University in Egypt. Three basic Hypotheses were developed, data were collected by self-report survey from a stratified sample which comprised of 318 from those academicians. Multiple Regression analysis's main findings confirmed a significant effect of each of proactive personality, job autonomy, and career competencies on job crafting among academicians in Zagazig University. Results were discussed; recommendations, limitations, and future research were presented.

Key Terms: Proactive personality, job autonomy, career competencies, job crafting, academicians, Zagazig University.

1/ Introduction:

Job crafting is one of the forms of proactive work behavior which implies that employees change characteristics of their jobs actively (Tims and Bakker, 2010; Wrzesniewski and Dutton, 2001). Job crafting has been described as an individualized, bottom-up, and proactive approach to job re-design because it is initiated by employees themselves. This is different from top-down and “one-size-fits-all” approach because it is initiated by the organization (Demerouti and Bakker, 2014; Grant and Parker, 2009; Parker, 2014). However, in business environments that are highly competitive and uncertain, organizations are depending on crafting as a promising alternative compared with traditional job re-design approaches (Petrou and Bakker, 2016).

The past decade has witnessed an increase of the research on job crafting and this is largely due to Tims and Baker (2010) work. They used the job demands resources (JD-R) model which is earlier developed by Bakker and Demerouti (2016), Bakker and Demerouti (2007) and Demerouti et al (2001) to theoretically position job crafting as an important mechanism that links work outcomes to characteristics of the work environment. Moreover, it links also work motivation to the cultivation of job and personal resources. Finally, positive outcomes can be generated from job crafting such as work identity (Mattarelli and Tagliaventi, 2015), work engagement (Tims et al., 2015; Bakker et al., 2012; Harju et al., 2016), person-job fit (Lu et al., 2014; Tims et al., 2016), job satisfaction (Tims et al., 2013a), and increased personal resources (Vogt et al., 2016).

Although previous studies have introduced beneficial explorations of the effects of job crafting's as an antecedent of both individual and organizational outcomes, there are still some critical areas about which we know relatively little especially the factors facilitating employee job crafting (Akkermans and Tims, 2017).

Although there was an interest to investigate the factors that may predict job crafting, especially in work environments where the demands of the job actually prevent employees' ability to perform effectively, however, a perspective on proactive personality, job autonomy and career competencies as antecedents of job crafting, has received far less empirical

consideration in the job crafting literature. One of the possible antecedents of job crafting is proactive personality. Although there are numerous researches on proactive personality, there are yet several important issues to be addressed. For example, Wang et al. (2017) have called for more research to study the relationship of proactive personality and work outcomes, moreover, the effect of proactive personality on employee outcomes, especially job crafting is poorly explained.

Wrzesniewski and Dutton (2001) assured that in order to craft job effectively, employees should be given a certain degree of autonomy in their assignments or job roles. However, autonomy at work is not enough in itself for job crafting to have (Berg et al., 2010). It is becoming more important for employees to have career competencies to craft their jobs (through job resources increasing and enhancing challenging job demands) especially because employees are needed to proactively self-manage. Therefore, career competencies are likely to be a crucial antecedent of job crafting. In other words, employees are able to communicate well, set goals, and search for opportunities well if they know well their passions and strengths.

Although it is necessary to be equipped to craft their jobs better, the association between career competencies and job crafting should be examined in more detail (Akkermans and Tims, 2017).

On the basis of the above arguments, this study aims to investigate what are the uncover roles of proactive personality, job autonomy, and career competencies as antecedents of job crafting among academicians in Zagazig University.

This article is structured as follows; first is the research problem, second are the research objectives, third is the research importance, fourth is the literature review and hypotheses development. Subsequently, the methodology, results and discussions are presented. Finally, conclusions with some noteworthy implications and suggestions for future research based on limitations are developed.

2/ Research problem:

Job-crafting literature is still in its infancy (Hetland et al., 2018). So far, previous studies have concentrated on only revealing the consequences of job crafting. One of the unanswered questions is what are the factors

affecting it? Therefore, revealing the antecedents of employees' job crafting should be one the aims of recent researches (Kooij et al., 2017; Niessen et al., 2016). After reviewing literature and previous research suggestions, it has been recognized that there is a need for examining number of the antecedents of job crafting as there are previous researches that investigated proactive personality, job autonomy and career competencies as antecedents of job crafting separately, or evaluated these concepts in terms of the other concepts that it can be thought that they are correlated with them.

Thus, this study aims to make academic and practical contributions to the existing literature of job crafting by examining proactive personality, job autonomy and career competencies as antecedents of job crafting collectively in the middle east– Egypt in particular, based on propositions within JD-R model (Bakker and Demerouti, 2016). It aims also to determine the relative importance of each of the antecedents in developing job crafting.

Moreover, the current study differs from previous studies in two issues. First, the current study will not focus on specific age cohorts; rather it will cover all different age cohorts because how to keep older workers motivated and healthy is a classical concern in the literature of aging workforce. Second, this research will focus on the comprehensive dimensions of job crating not the expansive job crafting only.

3/ Pilot study:

On the basis of the previously established gap, the researcher tried to investigate the uncovered roles of proactive personality, job autonomy and career competencies as antecedents of job crafting among academicians in Zagazig University through conducting a pilot study*. It had been planned to be conducted through several personal interviews with 50 convenience sample units. However, 48 academicians from 5 faculties (the faculty of commerce, arts, engineering, pharmacy, and Physical exercises for female) have been cooperative to answer the following inquiries:

- 1- To what extent do academicians in Zagazig University practice job crafting?

*It has been conducted during May 2017

2- What are the antecedents of job crafting among academicians in Zagazig University?

The pilot study has generated the following indicators:

- 1- There is a clear variation of job crafting among academicians in Zagazig University where 35% of the interviewed academicians produced somehow examples of job crafting behaviors, while 65% (the majority) avoided all types of job crafting.
- 2- There are two types of job crafting; approach and avoidance (Bakker et al., 2014; Bakker and Demerouti, 2017). Approach job crafting includes the desire to broaden existing resources and taking on new tasks through increasing one's job resources and challenging job demands. In contrast, decreasing hindering job demands, through minimizing energy consumption in a stressful situation or threat of such, would exemplify avoidance behavior. Academicians typically showed examples of both the approach and avoidance types of job crafting.
- 3- There is a clear difference among academicians in Zagazig University opinions about factors affecting their job crafting behaviors where proactive personality and job autonomy have more influence more than career competencies.

Therefore and based on the theoretical and practical gap, research problem of this study is to investigate what are the uncover roles of the proactive personality, job autonomy and career competencies as antecedents of job crafting among academicians in Zagazig University?

In line with this basic issue, answers for following questions were sought:

- 1- What is the nature of the relationship between proactive personality and job crafting among academicians in Zagazig University?
- 2- What is the nature of the relationship between job autonomy and job crafting among academicians in Zagazig University?
- 3- What is the nature of the relationship between career competencies and job crafting among academicians in Zagazig University?
- 4- What is the relative importance of each of the antecedents of job crafting?

4/ Study objectives:

This study aims to explore proactive personality, job autonomy and career competencies as antecedents of job crafting among academicians in Zagazig University, in more details this main objective may be classified into five sub objectives, as following:

1. Providing an overview of the nature of job crating conceptualizations and its antecedents.
2. Identify the nature of the relationship between proactive personality and job crafting among academicians in Zagazig university
3. Identify the nature of the relationship between job autonomy and job crafting among academicians in Zagazig University.
4. Identify the nature of the relationship between career competencies and job crafting among academicians in Zagazig University.
5. Determining the relative importance of each of the antecedents of job crafting to better understand how to promote it.

5/ Research importance:

The importance of this study has stem from several sources as following:

5/1/ Academic importance:

The academic importance can be presented through the following points:

- 1- A promising direction for research in organizational psychology has emerged due to the renewed interest in expanding job design with job crafting. it could answer the question of how organizations can create more opportunities for challenge and growth.
- 2- Expanding the existing body of knowledge of job crafting through investigating its antecedents among academicians in Zagazig University from a person-oriented perspective.
- 3- Testing of antecedents of job crafting in different cultures may yield different results; thus, an interesting topic for research is the cross-cultural examination.

5/2/ Practical importance:

The practical importance can be presented through the following points:

- 1- Useful implications are expected to be provided through the findings of the current study for practitioners to better understand how to enhance job crafting at work and how academicians on universities craft their jobs.
- 2- The findings of the current study could help practitioners in redesigning human resource management strategies to promote universities academicians' job crafting behaviors in the workplace.

6/ Literature review and hypotheses development:

6/1/ Job crafting:

Wrzesniewski and Dutton (2001) began studying job crafting and provided fundamental contribution by focusing on how employees craft their jobs using work tasks and interactions as raw materials. They defined job crafting as “changes; both physical and cognitive, that individuals make in their work; on tasks or relational boundaries”. In other words, job crafting implies changing some aspects of the job considering specific job tasks rather than redesigning the whole job (Berg and Dutton, 2008). For instance, job crafting includes motivating employees to invest more effort in the work task. Employees feel more responsible for their performance if they craft more autonomy (Parker and Ohly, 2008). Small modifications that affect the accomplishment of short-term work goals are other examples of job crafting. Final example is when employees ask for help in specific situation or delegate tasks which interfere with the attainment of a deadline.

One of the main characteristics of job crafting is that it is an initiative from employees. That is why job crafting is different from other bottom-up redesign approaches such as idiosyncratic deals (i-deals) which implies negotiation between employees and employers about work conditions (Hornung et al., 2010) or employees participate in job redesign (Nadin et al., 2001). Thus, job crafting is an adaptive process and also a proactive behavior (Berg et al., 2010b) because employees have the freedom to craft their jobs either through redesigning, adding or emphasizing tasks. To respond to unanswered occupational callings, employees craft their jobs. Moreover, through crafting, a greater level of task variety and identity can be achieved (Berg et al., 2010a) and the work meaning will be enriched (Wrzesniewski et al., 2003).

The definition of job crafting introduced by Wrzesniewski and Dutton (2001) is somehow limited because it implies only the changes made by employees in their work tasks, relationships, and cognitions. The concept of job crafting has recently improved and uses the job demands-resources (JD-R) model introduced by Bakker and Demerouti (2014) and Demerouti et al. (2001) which has been developed to describe different behaviors of job crafting. Job characteristics according to the JD-R model are classified to job demands and job resources which vary widely across occupations.

Physical, social or organizational characteristics of the job represent job demands and require continuous physical/psychological effort. Conflicts with colleagues or work overload are examples of Job demands while physical, psychological, social or organizational job elements represent job resources and allow employees to achieve objectives and enhance their personal improvement. Examples of job resources are skill variety and autonomy, opportunity for skill utilization, team climate, and job security (Bakker and Demerouti, 2007). A prime difference between social resources and structural resources has been developed by Tims et al. (2012) where structural resources reflects capabilities, knowledge of the job, autonomy, and responsibility, whereas support from colleagues, feedback, and supervisory coaching reflect social resources.

Tims et al. (2012) stated that job crafting is “attempt that are initiated by employees to impact their job resources and job demands with a final aim of better alignment of them with their own abilities and preferences”. As a result, increasing structural resources or increasing social resources are both forms of crafting job resources. According to the above argument, the present study will focus on Tims et al. (2012) definition of job crafting as many of the previous researches have focused on it (e.g., Mäkikangas, 2018; Petrou, et al ,2018)

6/1/1/ Dimensions of job crafting:

Four dimensions of job crafting have been demonstrated (Tims et al., 2012) as follow:

- 1- Increasing structural job resources: this dimension refers to opportunity for development, autonomy, and the resources variety. The job design will probably be more affected by increasing structural job resources because it is about gaining more job related knowledge (i.e.,

employees' opportunity to develop themselves) and more responsibility (i.e., autonomy and variety).

- 2- Increasing challenging job demands: a case of boredom may occur as a result of stimulating a job which in turn may lead to job dissatisfaction and absenteeism (Kass et al., 2001). Thus, it is important that employees experience adequate levels of challenging job demands to achieve work motivation. Employees will develop their knowledge and skills, therefore they can achieve more difficult goals to be more able to challenge job demands (LePine, et al., 2005).
- 3- Increasing social job resources: resources feedback, supervisory coaching, and social support represent social job resources. Job's social aspects besides achieving satisfactory levels of interaction could be more affected by the effort to increase social job resources.
- 4- Decreasing hindering job demands: proactive efforts of employees to lower their job demands require that they realize that their demands have become overwhelming. Possible consequences of prolonged exposure to low job resources associated with high demands could appear in the form of negative health consequences (i.e., burnout; Bakker et al., 2005; Schaufeli et al., 2009) and negative organizational consequences (i.e., personnel turnover; Kulik et al., 1987).

6/1/2/Antecedents of Job Crafting

a. Proactive personality:

The roots of proactive personality are back to the interactionist perspective developed by Bowers (1973) and social cognitive theory developed by Bandura (1986). It has been argued that people need to change or modify the environment (Bateman and Crant, 1993). It has been further suggested that an individual exercises personal influence over the environment through acting as agent who embodies several items (self-regulatory capabilities, belief systems, the endowments, and distributed structures and functions) (Bandura, 2001). Therefore, proactive personality is considered a unique dispositional characteristic. Bateman and Crant (1993) and Crant (2000) defined it as a behavioral tendency toward taking personal initiative to create a favorable environment. Proactive individuals are characterized by persevering to bring about meaningful change, showing initiative, and seeking out opportunities (Bateman and Crant, 1993).

These individuals perceive constructive change as a good technique (Major et al, 2006) and they addicted to learning (Porath and Bateman, 2006; Major et al., 2006). Moreover, they can perform activities outside of their usual roles (Parker et al., 2006; Parker, 1998). When comparing proactive employees with passive individuals, the latter are usually unable to show initiative and will not grab opportunities to change their environment (Bateman and Crant, 1993). They adapt to current circumstances and endure them (Bateman and Crant, 1993). In other words, passive individuals prefer the status quo and tend to avoid changing their surroundings initiatively.

According to the argument that proactive personality is probably more related to job crafting, it has been revealed that one of the important antecedents of job crafting is proactive personality (Bakker et al. 2012; Plomp et al., 2016). This is because employees that have proactive personality generally take independent initiatives from a specific context (i.e., during emergencies, personal relationships, or social events). Moreover, they engage in job crafting behaviors (seeking challenges and job resources).

Furthermore, it has been shown that an increase in job resources has been achieved over time when employees crafted these job resources (Tims et al., 2013a, b). These results show that employees can use job crafting to change their job characteristics. Thus, it is expected that employees who have proactive personality particularly are able to make changes as they are tend to respond proactively. To summarize, the following hypotheses is formulated:

H1. Proactive personality significantly affects job crafting among academicians in Zagazig University.

b. Job Autonomy:

One of the most important work characteristics is autonomy at work that is defined as “the extent of freedom given to an employee concerning scheduling work, making decisions, and selecting the methods to perform tasks” (Hackman and Oldham, 1976). Thus, employees must have enough control over their work to perceive that there is an opportunity to enact their ideas or wishes. In other words, job crafting requires that employees have

the decision-making authority about job tasks and how to perform them (Wrzesniewski and Dutton, 2001).

More specifically, we suggest that autonomy is considered a motivating job-design element (Oldham and Hackman, 2005) and beneficial for job crafting in particular (Berg et al., 2010; Leana et al., 2009; Wrzesniewski and Dutton, 2001). It has been argued that when more autonomy is given to employees, they will craft their jobs. However, it has been demonstrated that autonomy expectations constrain employees in their job crafting (Berg et al., 2010). Employees feel unwilling to change their jobs' aspects if they lack the freedom/opportunity to craft their jobs.

Therefore, role expectations (what employees believe about what a work role does or does not entail) and autonomy expectations are two sides of the same coin (Katz and Kahn, 1978). Subordinates' role behaviors (how decision-making responsibilities should be shared) should be guided by both; these autonomy expectations, in addition to the degree to which subordinates should be self-managing (Paul et al., 2000).

However, role beliefs stem from various individual needs and self-interests (Tsui and Ohlott, 1988). Therefore, role expectation discrepancies could happen as a result of the differences in how subordinates interpret their work roles and the provided autonomy from leaders' expectations (Humborstad and Kuvaas, 2013). The main focus in this research is on how job crafting is affected by autonomy role discrepancies; that is how subordinates use job crafting to take proactive ownership of their work roles. Recently, it has been argued that when employees share levels of autonomy expectations similar to their leaders, they perceive that there is a better utilization of their competences (Tims and Bakker, 2016; Wong et al., 2016; Kim et al., 2018). To summarize, the following hypotheses are formulated:

H2: Job autonomy significantly affects job crafting among academicians in Zagazig University.

c. Career competencies:

Career competencies have been defined as "accumulated career-related skills, knowledge, and abilities which are central to career development and may be affected by individuals". The human capital perspective (Kuijpers et al., 2006), the protean career perspective ("career

meta-competencies”; Briscoe and Hall, 2006), boundaryless career perspective (“three ways of knowing”; Eby et al., 2003), and the career self-management perspective (De Vos et al., 2009; King, 2004) have been all integrated. Moreover, based on this integration of career perspectives, a career competency framework has been introduced by the authors in which three dimensions are included: communicative career competencies, reflective career competencies, and behavioral career competencies. The first encompasses “networking” which reflects the awareness of employees’ presence and professional value of their networks, how to improve these networks for purposes related to their careers, and “self-profiling” (to present and communicate their personal knowledge, abilities, and skills to labor market internally and externally).

The second includes two subcomponents. One is the reflection on motivation (reflection on values, passions, and motivations related to personal career) and the other is reflection on qualities (reflection on strengths, shortcomings, and skills related to employees’ career). The third includes work exploration (actively exploring and searching internal and external labor market for opportunities for work and career) and career control (actively influencing learning and work processes related career through setting objectives and planning to achieve them).

It has been shown that several career-related outcomes such as job crafting can be enhanced through career competencies. It is proposed that career competencies may inform job crafting behaviors in the way that when individuals can craft their jobs in a more deliberate and specific way if they possess these career competencies. In other words, employees who understand their abilities and needs can therefore modify their behaviors (work related behaviors) to better match career competencies; therefore, job crafting is based on having reflective, communicative, and behavioral career competencies. Indeed, JD-R model has been used to frame career competencies as a personal resource. Moreover, job competencies enable employees to better recognize/generate available resources in their job (Akkermans et al., 2013b). Given that employee's work resources are related to career competencies, it makes sense that they are also related to changes of resources (job crafting behavior). For instance, employees should have the ability to increase the challenging demands of their jobs only if they

have the ability to profile their personal knowledge and skills because they show that they are capable of taking on this extra challenge.

In the same manner, employees who are skilled to figure out the options of their career could be skillful at determining the work characteristic that must be adapted, moreover, they could increase the structural resources and challenging demands of their jobs to accomplish the objectives of their careers. Finally, based on perceived employability and work-home balance through job crafting behaviors, it has been confirmed that employees' subjective career success could be enhanced on the basis of career competencies. Thus, career competencies are important antecedent of job crafting. To summarize, following hypotheses has been formulated:

H3: Career competencies significantly affect job crafting among academicians in Zagazig University.

Research model as in Figure (1) is showing the proposed relationships among research variables:

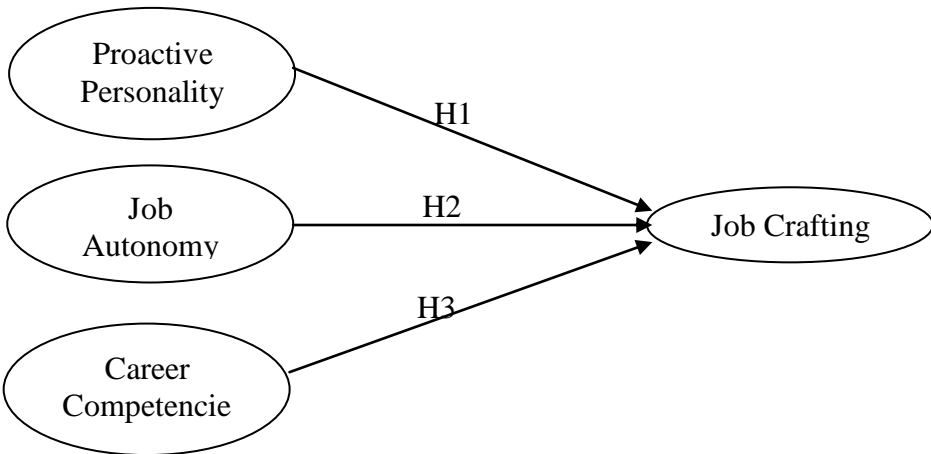


Figure (1): Research Model.

7/ Methodology:

To examine the research hypotheses, the current study adopted a quantitative method. A cross-sectional survey -as quantitative data collection technique- was employed to test the relationship between independent variables and the dependent variable as hypothesized based on the theoretical framework.

7/1/ Population and sample:

The research population is 5292 academicians in Zagazig University which contains 18 faculties and Institutes. A stratified random sample has been drawn because the population can be grouped into different strata. The sample constitutes of 359 academicians and table (1) shows how sample units are proportional distributed on each faculty and institute.

Table (1): Sample units distribution

Faculty	Population	Sample units	Valid Instruments	Response Rate (%)
Arts	177	12	10	83
Laws	53	4	4	100
Commerce	119	8	8	100
Sciences	445	30	25	83
Medicine	2369	161	137	85
Pharmacy	130	9	9	100
Nursing	91	6	6	100
Veterinary	368	25	23	92
Engineering	397	27	24	89
Computer and information	37	3	3	100
Agriculture	406	28	23	82
Education	181	12	12	100
Specific education	125	8	8	100
Physical exercises (male)	135	9	9	100
Physical exercises (female)	144	10	10	100
Technology and development	108	7	7	100
Ancient Near East studies	7	0.474	-	-
Asian studies	6	0.407	-	-
Total	5292	359	318	88.6

Source: The General Department of Human Resources in Zagazig University. It should be noted that the institute of Asian studies and Ancient Near East studies have been excluded where its sample units were less than 1unit. Table (2) shows the descriptive statistics of sample demographics.

Table (2) Descriptive statistics of sample demographics (N=318)

Variables	Category	Frequency	Percentage
Gender	Male	196	61.6
	Female	122	38.4
Age	Less than 25	116	36.5
	From 25 to less than 35	110	34.6
	From 35 to less than 45	85	26.7
	From 55 to less than 65	7	2.2
Scientific degree	Lecturer.	154	48.4
	Assistant professor	105	33
	Professor.	59	18.6
Income (LE per month)	Less than 7000.	125	39.3
	Form 7000- less than 9000.	103	32.4
	From 9000- less than 11000.	83	26,1
	From 11000- less than 13000	7	2.2
Experience	Less than 5 years.	40	12,6
	From 5- 10 years.	150	47,2
	From 11- 15 years.	90	28,3
	From 16- 20 years.	38	11,9

As is shown in the above table, the result showed that majority of the academicians in Zagazig University were male 61.6% meanwhile 38.4% were female. In terms of age, 36.5% were Less than 25 years old, followed by academicians between 25 to 35years old representing 34.6%, and so on. Academicians' Scientific degree varied from Lecturer. (48.4%) to Assistant professor (33%) and who were Professor (18.6%).

Monthly income by Egyptian Pound levels varied where 39.3% of the sample are Less than 7000, whereas % 32.4of the academicians are earning between 7000- 9000., 26,1% are earning between 9000- 11000and finally, 2.2% are earning between 11000- 13000. According to the Academicians' Experience years 12,6% were Less than 5 years, however 47,2% were between 5to10 years, 28,3%were between 11to 15 years and finally, 11,9% were between16- 20 years.

7/2/ Measures:

The measures that have used in this study have been adopted from previous studies and have been modified to better suit the context of the study.

7/2/1/ Job crafting

To measure job crafting, four dimensions scale developed by Tims et al. (2012) was used. The four scales are “increasing social job resources” (e.g., “I ask others for feedback on my job performance”), “increasing structural job resources” (e.g., “I try to develop my capabilities”), “decreasing hindering job demands” (e.g., “I try to ensure that my work is emotionally less intense”), and “increasing challenging job demands” (e.g., “If there are new developments, I am one of the first to learn about them and try them out”). Five items are included in each dimension except “decreasing hindering job demands,” which consists of six items.

7/2/2/ proactive personality:

To measure proactive personality, Seibert (2001) scale, which adapted from Bateman and Crant (1993) and originated from an interactive perspective, has been adopted. It suggests that individuals can create their environments (Crant, 1995). It includes 10- items, examples are "I can spot a good opportunity long before others can", "I am constantly on the lookout for new ways to improve my life", "I can spot a good opportunity long before others can" and "If I see something I don't like, I fix it".

7/2/3/ Job Autonomy:

To explore the extent of job autonomy that employees expect at work, Humborstad and Kuvaas (2013) adopted a measure which is used this research to measure job autonomy. It includes six items, example items include "I expect that my leader allows me to do my job my way", "I expect my leader to solicit my opinion on decisions that may affect me" and "I expect my leader to believe that I can handle demanding tasks".

7/2/4/ Career Competencies:

Finally, Career Competencies Questionnaire developed by Akkermans et al (2013a) has been used to measure Career competencies. It contains 21-item; three item for reflection on motivation (e.g., “I can clearly see what my passions are in my work”), four items for each of reflection on qualities (e.g., “I am aware of my talents in my work), and networking (e.g., “I am able to approach the right persons to help me with my career”), three items for self-profiling (e.g., “I can clearly show others

what my strengths are in my work”), three items for work exploration (e.g., “I am able to explore my possibilities on the labor market”), and four items for career control (e.g., “I can make clear career plans”). All of the measurement items were rated employing a five points Likert scale (1 “strongly disagree” to 5 “strongly agree”). Employees’ demographic variables (sex, age, educational level, job tenure in the organization) were located in the last part of the instrument.

7/3/ Evaluating Validity and reliability of measures:

7/3/1/ Measures Validity:

Validity of the measures was approved by a group of researchers and experts after receiving their viewpoints, their suggestions on some questions, considering their amendments. The researcher conducted a pilot study on a convenience sample which comprised of 50 among academicians drawn from academicians in Zagazig University from five faculties (the faculty of commerce, arts, engineering, pharmacy, and physical excises). Amended questionnaires were distributed in the population to figure out to what extent the statements were understandable easily and minor modifications were made to some survey items based on their feedback. Confirmatory factor analysis was used to examine the research variables’ dimensionality. Table (3) shows the accepted values of several indicators used to evaluate the goodness of fit (GFI) of the model (Hair et al., 2010).

Table (3): Goodness of fit indicators

Indicators	Accepted values
χ^2 to df ratio (χ^2/df)	<5.0
Comparative fit index (CFI)	0.9 - 1.0
Goodness of fit (GFI)	0.9 - 1.0
Normed fit index (NFI)	0.9 - 1.0
Robustness of mean squared error approximation (RMSEA)	<0.08
Tucker–Lewis Index (TLI)	>0.90

SPSS and AMOS version 24 have been used to perform the analysis. In accordance with model fit indicators shown in table (3), antecedents of job crafting model which include proactive personality, autonomy and career competencies (first model) yielded good fit to the data, $\chi^2/ df = 4.201$, NFI = 0.985, TLI = 0.924, CFI = 0.947, RMSEA = 0.079. Whereas, the second model focused on job crafting model which includes 4 sub-

constructs and yielded a good fit to the data $\chi^2/df = 3.352$ NFI = 0.943, TLI = 0.973, CFI = 0.962, RMSEA = 0.076. Table (4) shows the covariance matrix that has been established as input. The maximum likelihood method has been used to estimate models.

Following Hair et al (2010) to evaluate construct validity, convergent validity has been assessed through calculating the standardized factor loadings (ideal when more than 0.4). As shown in Table (4), all constructs items had factor loadings above 0.40 and T values were significant at 0.01. In general, these results suggest that the theoretical model used was valid.

7/3/2/ Measures Reliability:

On the other hand, the analysis of internal consistency of the scale produced a Cronbach's Alpha that transcended 0.7 (Sekaran and Bougie, 2013) which showed satisfactory reliability for all measures where α (Cronbach alpha) for these measures recorded satisfying numbers ranging from 0.70 to 0.90, therefore it is said that the scales developed are reliable as shown in Table (4).

7/3/3/Data collection:

Overall, self-administered structured questionnaires were designed, distributed to collect data from a Stratified sample which comprised of 359 among academicians drawn from different faculties in Zagazig University. A total of 318 questionnaires were returned yielding a usable response rate of 88.6%. The research was conducted in the period July–August 2017.

7/3/4/ Data Analysis and results:

After the satisfying response rate has been achieved, data analysis process started to test the research hypotheses. From the returned instruments, the researcher coded and entered the data into the computer using SPSS 24 for statistical analysis has been used for data analysis to calculate different statistical techniques which included the following:

- (1) Descriptive statistics to describe the employees' views about the study variables.
- (2) Pearson correlation analysis to find out whether the correlation relationships among study variables as expected or not.

Multiple regression analysis to test proactive personality, job autonomy, and career competencies as antecedents of job crafting among academicians in Zagazig University and the relative importance of each.

Table (4): Instrument validity (standardized confirmatory factor-analysis) and reliability (cronbach' alpha)

variable –items	Standardized loadings	t-value	P value	Cronbach' alpha
Proactive Personality				
1. I am constantly on the lookout for new ways to improve my life	0.683	9.959	0.000	0.74
2. Whenever I have been, I have been a powerful force for constructive change	0.664	9.745	0.000	
3. Nothing is more exciting than seeing my ideas turn into reality.	0.744	10.597	0.000	
4. If I see something I don't like, I fix it.	0.758	10.735	0.000	
5. No matter what the odds, if I believe in something I will make it happen	0.688	10.013	0.000	
6. I love being a champion for my ideas, even against others' opposition.	0.638	9.458	0.000	
7. I excel at identifying opportunities.	0.611	9.147	0.000	
8. I am always looking for better ways to do things.	0.622	9.271	0.000	
9. If I believe in an idea, no obstacle will prevent me from making it happen.	0.668	9.793	0.000	
10. I can spot a good opportunity long before others can.	0.613 ^a	---	---	
Autonomy:				
11. I expect my leader to solicit my opinion on decisions that may affect me.	0.742 ^a	---	---	0.82
12. I expect my leader to believe that I can handle demanding tasks	0.837	13.722	0.000	
13. I expect my leader to believe in my ability to improve even when I make mistakes.	0.711	11.912	0.000	
14. I expect my leader to express confidence in my ability to perform at a high level.	0.537	8.965	0.000	
15. I expect my leader to allow me to do my job my way	0.533	8.890	0.000	
16. I expect my leader to make it more efficient for me to do my job by keeping the rules and regulations simple	0.628	10.513	0.000	
Career competencies				
Reflection on motivation				
17. I know what I like in my work.	0.566 ^a	---	---	0.90
18. I know what is important to me in my career.	0.446	6.849	0.000	
19. I can clearly see what my passions are in my work	0.536	7.329	0.000	
Reflection on qualities				
20. I know my strengths in my work	0.538	7.931	0.000	0.90
21. I am familiar with my shortcomings in my work	0.457	6.989	0.000	
22. I am aware of my talents in my work.	0.481	7.275	0.000	
23. I know which skills I possess	0.548	8.043	0.000	

Table (4): Instrument validity (standardized confirmatory factor-analysis) and reliability (cronbach' alpha)(continued)

variable-items	Standardized loadings	t-value	P value	Cronbach' alpha
Networking				
24. I know a lot of people within my work who can help me with my career	0.631	8.893	0.000	
25. I know a lot of people outside of my work who can help me with my career	0.461	7.040	0.000	
26. I know how to ask for advice from people in my network	0.490	7.383	0.000	
27. I am able to approach the right persons to help me with my career	0.512	7.645	0.000	
Self-profiling				
28. I can clearly show others what my strengths are in my work	0.564	8.220	0.000	
29. I am able to show others what I want to achieve in my career	0.668	9.235	0.000	
30. I can show the people around me what is important to me in my work	0.439	6.769	0.000	
Work exploration				
31. I know how to find out what my options are for becoming further educated	0.435	6.713	0.000	
32. I know how to search for developments in my area of work	0.629	8.872	0.000	
33. I am able to explore my possibilities on the labor market	0.542	7.978	0.000	
Career control				
34. I can make clear career plans	0.617	8.755	0.000	
35. I know what I want to have achieved in my career a year from now	0.534	7.889	0.000	
36. I can create a layout for what I want to achieve in my career	0.760	10.015	0.000	
37. I am able to set goals for myself that I want to achieve in my career	0.764	10.047	0.000	
Job crafting				
Increasing structural job resources				
38. I try to develop my capabilities	0.666 ^a	---	---	
39. I try to develop myself professionally	0.409	10.626	0.000	
40. I try to learn new things at work	0.675	10.020	0.000	
41. I make sure that I use my capacities to the fullest	0.579	8.815	0.000	
42. I decide on my own how I do things.	0.474	7.379	0.000	
Decreasing hindering job demands				
43. I make sure that my work is mentally less intense.	0.524 ^a	---	---	
44. I try to ensure that my work is emotionally less intense.	0.409	5.792	0.000	
45. I manage my work so that I try to minimize contact with people whose problems affect me emotionally	0.480	6.514	0.000	

Table (4): Instrument validity (standardized confirmatory factor-analysis) and reliability (cronbach' alpha)(continued)

variable-items	Standardized loadings	t-value	P value	Cronbach' alpha
1. I organize my work so as to minimize contact with people whose expectations are unrealistic	0.491	6.609	0.000	
2. I try to ensure that I do not have to make many difficult decisions at work	0.590	7.453	0.000	
3. I organize my work in such a way to make sure that I do not have to concentrate for too long a period at once	0.641	7.814	0.000	
Increasing social job resources				
4. I ask my supervisor to coach me	0.583 ^a	---	---	
5. I ask whether my supervisor is satisfied with my work	0.635	8.390	0.000	
6. I look to my supervisor for inspiration	0.640	8.434	0.000	
7. I ask others for feedback on my job performance	0.447	6.464	0.000	
8. I ask colleagues for advice	0.568	7.767	0.000	
Increasing challenging job demands				
9. When an interesting project comes along, I offer myself proactively as project co-worker.	0.462 ^a	---	---	
10. If there are new developments, I am one of the first to learn about them and try them out.	0.705	7.603	0.000	
11. When there is not much to do at work, I see it as a chance to start new projects.	0.712	7.636	0.000	
12. I regularly take on extra tasks even though I do not receive extra salary for them.	0.722	7.679	0.000	
13. I try to make my work more challenging by examining the underlying relationships between aspects of my job.	0.646	7.321	0.000	

Note: ^aFixed parameters.

P value is significant at less than 0.001

8/ Descriptive statistics and correlations:

For the purpose of hypotheses testing, means, standard deviations have calculated for dependent and independent variables, and a correlation matrix has been created. Table (5) shows the previous techniques details.

Table (5): Descriptive Statistics and Correlation Matrix of Constructs

Variables	Mean	Std. deviation	1	2	3	4
Proactive Personality	3.2021	0.39044	1			
Job Autonomy	2.7062	0.55782	0.420**	1		
Career competencies	3.0114	0.38811	0.637**	0.446**	1	
Job crafting	2.8390	0.28900	0.610**	0.536**	0.547**	1

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

Note: Numbers 1-4 in the top row represent the variables as mentioned in the first column

As shown in Table (5), respondents indicated weak levels of mean score for Job crafting (M=2.8390, SD=0.28900), whereas Proactive Personality and Autonomy obtained (M=3.2021, SD=0.39044) and (M=2.7062, SD=0.55782), respectively. Finally, the mean score for Career competencies was (M=3.0114, SD=0.38811). Next, the researcher calculated the correlations between the variables of the study and found significant and positive relationships among job crafting and its expected antecedents with high correlations. In general, the correlations pattern is consistent with prior relevant research and fitted our hypotheses.

9/ Hypotheses Testing:

Multiple regression analysis was done to investigate how much of the job crafting variance could be explained by proactive personality, job autonomy and career competencies. Regression preconditions have been all met where Durbin-Watson test was conducted and confirmed no Autocorrelation. Moreover, Multi-collinearity was denied through VIF which recorded high score. Finally, Kolomogrov-Siminrov was calculated to ensure that sample scores follow normal distribution. Results are shown in tables (6).

Table (6): Summary of multiple regression analysis results

Variables	Coefficient beta		sig	Collinearity statistics (VIF)
	Unstandardized	Standardized		
Constant	1.909	----	0.000	-----
Proactive Personality	0.274	0.371	0.000	1.750
Autonomy	0.156	0.302	0.000	1.299
Career competencies	0.131	0.176	0.002	1.798
$R^2 = 0.484$ Adjusted $R^2 = 0.479$ F value =92.283 Sig= 0.000 Durbin-watson =1.861 Kolmogrove- Smirnov Test (sig) = 0.202				

P value is significant at less than 0.001

As depicted in Table (6), the adjusted R^2 is 0.484 indicating that Proactive Personality, Autonomy, and Career competencies explain 47.9 % of variance in job crafting (the dependent variable). Durbin-Watson of 1.861 indicating that there is no auto-correlation problem, variation inflation factors VIF are all lesser than (10).

Proactive personality significantly affects job crafting ($\beta = 0.274$, $P < 0.01$) and explains 27% of the variation in job crafting. Therefore, H1 is supported. Autonomy has significantly affects job crafting ($\beta = 0.156$, $P < 0.01$) as it explains approximately 16% of the variation in job crafting. Therefore, H2 is supported. Career competencies has a significant positive effect on job crafting ($\beta = 0.131$, $P < 0.01$) as it explains approximately 13% of the variation in job crafting. Therefore, H3 is supported.

Regression coefficients are significant for the three proposed antecedents (where $F=92.283$, $P < 0.01$) which are Proactive Personality, autonomy and Career competencies. Moreover, t-test values are significant at $P < 0.01$ for the previous three antecedents). The three significant antecedents have been ranked according to standardized Coefficient beta as follows as follows; Proactive Personality, Autonomy and Career competencies which recorded 0.371, 0.302, and 0.176, respectively.

10/ Discussion and conclusions:

One of the challenges in a rapidly changing business world is how to make employees craft their jobs in response to numerous changes. One of the central goals for organization management is to push employees to craft their jobs, therefore, this study aimed at exploring proactive personality, job autonomy and career competencies as antecedents of job crafting in Egypt. The study findings mostly support our hypotheses through revealing first; that there is a positive and significant relationship between proactive personality and job crafting which is consistent with previous findings (Bakker et al., 2012; Plomp et al., 2016; Tims et al., 2013a, b). This result supports the notion that proactive employees are likely to take initiatives to better align their job characteristics with their own preferences, skills and abilities by crafting their jobs.

Second, there is a positive and significant relationship between job autonomy and job crafting. This finding corroborates the findings of Tims and Bakker (2016), Wong et al (2016), and Vanbelle et al (2017), this point is very important to all employees especially older employees. Job autonomy might, for example, enable older employees to demonstrate their mastery and expertise which might in turn add to their motivation to craft their jobs. Finally, there is a positive and significant relationship between career competencies and job crafting is consistent with previous findings (Akkermans et al. ,2013b; Akkermans and Tims 2017). Therefore, the close relation between job-level and career-level concepts have been confirmed, therefore, they should be integrated more in scientific research. This is in accordance with Hall and Heras (2010) who noted that there are many common elements between jobs and careers although lately; many studies have been isolated from each other.

In sum, three theoretical gaps could be filled through the findings of this research. First, the current study extends the knowledge about antecedents of job crafting. Second, the current study contributed to Job Demands-Resources Model (Bakker and Demerouti, 2014; Bakker et al., 2014) through arguing that proactive personality may be tantamount to personal resources where job autonomy and career competencies may be tantamount to job resources that can enhance job crafting. Third, this study contributed to exploring antecedents that are appropriate for job crafting in developing countries context.

According to our knowledge, this is the first study which explores uncover roles proactive personality, job autonomy and career competencies as antecedents of job crafting among academicians in Zagazig university. Finally, the study contributes to raise the understanding of job crafting behaviors in Egypt.

11/ Practical implications:

According to the findings of this study, the following section lists several implications for practice. First, it was concluded that it is possible to measure the proactive personality, therefore, organizations can use proactive personality scales to recruit employees with high proactive personality. Subsequently, organizations may benefit from recruiting those employees, given the joint influence of this individual difference variable in job crafting. It is more likely that proactive employees could identify and utilize job crafting than others who are not proactive (to facilitate their career goals) which makes investment in such programs more profitable for the organization.

Second, the results indicate that employees should be provided with sufficient autonomy jobs and policy makers and managers should support this trend. As a result, employees will see the possibility to make adjustments in order to create a better person –job fit. Instead, organizations should work on raising awareness among employees concerning the possibilities to engage in job crafting (Tims et al., 2014). The management should open unofficial communication channels with employees in order to have insights about their job demands and required job resources.

Moreover, when current job characteristics or personal needs of employees mismatched their preferences, they will learn how to identify and act. At the same time, the findings also confirmed that career competencies are good antecedents of job crafting, thus thirdly, managers should work on equipping employees with tools by which their career-related skills and abilities could be enhanced as they are closely related to job crafting. It is meaningful also that human resources policies related to job redesign should be integrated with training and development so that employee well-being is optimized and thereby sustained and effective organization is enhanced.

In addition, the appraisal procedure and organization's career development policies should contain career competency development. These human resources practices are supposed to increase employee performance and their commitment and can enhance job crafting behaviors. Finally, when

organizations offer employees career counseling and care for their career development, they will understand themselves better (Colakoglu, 2011; De Vos et al., 2011). However, employees should assess their own competencies in a realistic way and work on realizing career goals.

12/ Limitation and future directions:

In spite of the great importance of the current study's results, there are some limitations. First, interpretation of indirect relationships is limited in this study and causal relations could not be determined because the study was cross sectional, therefore, the causal relations between variables should be examined using experimental and quasi-experimental methods.

Second, all of the questionnaires were self-reported ones. Reducing participants' evaluation apprehension was a technique used to minimize this problem in addition to emphasizing there were no right or wrong answers.

Third, the current research variables were positioned in the model according to previous literature (Akkermans and Tims, 2017; Plomp et al, 2016) and even though, the findings about the relationships among variables need to be generalized through future research. Other antecedents such as leadership styles could be also studied.

Fourth, the continuous tradeoff between organizational goals and employees' goals needs more investigating. In addition, it makes sense to better clarify the benefits organizations gain from investing in employees' development.

Fifth, the current study examined relationships among variables as a whole, however, future researchers are advised to test relationships among variables dimensions as well, specially job crafting forms or behaviors.

Sixth, a number of antecedents have been investigated, however, individual characteristics such as self-efficacy and employee adaptability are suggested for future investigation as moderators in the relationship between job crafting and its antecedents.

Seventh, as this study focused on several job crafting antecedents, a complete model of antecedents and consequences of job crafting is recommended for future researchers.

Eighth, as this study focused on academicians in Zagazig University, future research needs to re-examine the study model in other sectors.

References:

- Akkermans, J. and Tims, M., 2017. Crafting your career: How career competencies relate to career success via job crafting. *Applied Psychology*, 66(1), pp.168-195.
- Akkermans, J., Brenninkmeijer, V., Huibers, M. and Blonk, R.W., (2013a). Competencies for the contemporary career: Development and preliminary validation of the Career Competencies Questionnaire. *Journal of Career Development*, 40(3), pp.245-267.
- Akkermans, J., Brenninkmeijer, V., Schaufeli, W.B. and Blonk, R.W., 2015. It's all about CareerSKILLS: Effectiveness of a career development intervention for young employees. *Human Resource Management*, 54(4), pp.533-551.
- Akkermans, J., Schaufeli, W.B., Brenninkmeijer, V. and Blonk, R.W.B., (2013b). The role of career competencies in the Job Demands—Resources model. *Journal of Vocational Behavior*, 83(3), pp.356-366.
- Baker, A.B. and Demerouti, E., 2016. Job Demands—Resources Theory: Taking Stock and Looking Forward. *Journal of Occupational Health Psychology*, 22(3), pp. 273-285.
- Bakker, A.B. and Demerouti, E. (2014), “Job demands – resources theory”, in Chen, P.Y. and Cooper, C.L. (Eds), *Work and Wellbeing: Wellbeing: A Complete Reference Guide Volume III*, John Wiley and Sons, Inc, New York, NY.
- Bakker, A.B. and Demerouti, E., 2007. The job demands-resources model: State of the art. *Journal of managerial psychology*, 22(3), pp.309-328.
- Bakker, A.B., Demerouti, E. and Euwema, M.C., 2005. Job resources buffer the impact of job demands on burnout. *Journal of occupational health psychology*, 10(2), pp.170-180.
- Bakker, A.B., Demerouti, E. and Sanz-Vergel, A.I., 2014. Burnout and work engagement: The JD–R approach. *Annu. Rev. Organ. Psychol. Organ. Behav.*, 1(1), pp.389-411.
- Bakker, A.B., Tims, M. and Derks, D., 2012. Proactive personality and job performance: The role of job crafting and work engagement. *Human relations*, 65(10), pp.1359-1378.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

- Bandura, A., 2001. Social cognitive theory: An agentic perspective. *Annual review of psychology*, 52(1), pp.1-26.
- Bateman, T.S. and Crant, J.M., 1993. The proactive component of organizational behavior: A measure and correlates. *Journal of organizational behavior*, 14(2), pp.103-118.
- Berg, J.M., Dutton, J.E. and Wrzesniewski, A., 2008. What is job crafting and why does it matter?. Retrieved from the website of *Positive Organizational Scholarship* on April, 15, pp.2011-2019.
- Berg, J.M., Grant, A.M. and Johnson, V., (2010a). When callings are calling: Crafting work and leisure in pursuit of unanswered occupational callings. *Organization Science*, 21(5), pp.973-994.
- Berg, J.M., Wrzesniewski, A. and Dutton, J.E., (2010b). Perceiving and responding to challenges in job crafting at different ranks: When proactivity requires adaptivity. *Journal of Organizational Behavior*, 31(2-3), pp.158-186.
- Bowers, K.S., 1973. Situationism in psychology: An analysis and a critique. *Psychological review*, 80(5), pp.307-336.
- Briscoe, J.P. Arnold Hall, D.T., 2006. The interplay of boundaryless and protean careers: Combinations and implications. *Journal of Vocational Behavior*, 69(1), pp.4-18.
- Colakoglu, S.N., 2011. The impact of career boundarylessness on subjective career success: The role of career competencies, career autonomy, and career insecurity. *Journal of Vocational Behavior*, 79(1), pp.47-59.
- Crant, J.M., 1995. The Proactive Personality Scale and objective job performance among real estate agents. *Journal of applied psychology*, 80(4), pp.532-537.
- Crant, J.M., 2000. Proactive behavior in organizations. *Journal of management*, 26(3), pp.435-462.
- De Vos, A., De Hauw, S. and Van der Heijden, B.I., 2011. Competency development and career success: The mediating role of employability. *Journal of Vocational Behavior*, 79(2), pp.438-447.
- De Vos, A., De Clippeleer, I., and Dewilde, T. (2009). Proactive career behaviours and career success during the early career. *Journal of Occupational and Organizational Psychology*, 82(4), pp. 761-777.

- Demerouti, E., and Bakker, A. B. (2014). Job crafting. In M. C. W. Peeters, J. De Jonge and T. W. Taris (Eds.), *An introduction to contemporary work psychology*. (pp. 414-433). Chichester, UK: Wiley-Blackwell.
- Demerouti, E., Bakker, A.B. and Gevers, J.M., 2015. Job crafting and extra-role behavior: The role of work engagement and flourishing. *Journal of Vocational Behavior*, 91, pp.87-96.
- Demerouti, E., Bakker, A.B., Nachreiner, F. and Schaufeli, W.B., 2001. The job demands-resources model of burnout. *Journal of Applied psychology*, 86(3), pp.499-512.
- Eby, L.T., Butts, M. and Lockwood, A., 2003. Predictors of success in the era of the boundaryless career. *Journal of organizational behavior*, 24(6), pp.689-708.
- Grant, A.M. and Parker, S.K., 2009. Redesigning work design theories: the rise of relational and proactive perspectives. *Academy of Management annals*, 3(1), pp.317-375.
- Hackman, J.R. and Oldham, G.R., 1976. Motivation through the design of work: Test of a theory. *Organizational behavior and human performance*, 16(2), pp.250-279.
- Hair, J. F., Black, W. C., Babin, B. J., and Anderson, R. E. 2010. *Multivariate data analysis*, (7th edn) Upper addle River, NJ: Prentice Hall.
- Hall, D.T.T. and Heras, M.L., 2010. Reintegrating job design and career theory: Creating not just good jobs but smart jobs. *Journal of Organizational Behavior*, 31(2-3), pp.448-462.
- Harju, L.K., Hakanen, J.J. and Schaufeli, W.B., 2016. Can job crafting reduce job boredom and increase work engagement? A three-year cross-lagged panel study. *Journal of Vocational Behavior*, 95, pp.11-20.
- Hetland, J., Hetland, H., Bakker, A.B. and Demerouti, E., 2018. Daily transformational leadership and employee job crafting: The role of promotion focus. *European Management Journal*, 30, pp.1-11.
- Hornung, S., Rousseau, D.M., Glaser, J., Angerer, P. and Weigl, M., 2010. Beyond top-down and bottom-up work redesign: Customizing job content through idiosyncratic deals. *Journal of Organizational Behavior*, 31(2-3), pp.187-215.

- Humborstad, S.I.W. and Kuvaas, B., 2013. Mutuality in leader–subordinate empowerment expectation: Its impact on role ambiguity and intrinsic motivation. *The Leadership Quarterly*, 24(2), pp.363-377.
- Wong, S.I., Škerlavaj, M. and Černe, M., 2017. Build Coalitions to Fit: Autonomy Expectations, Competence Mobilization, and Job Crafting. *Human Resource Management*, 56(5), pp.785-801.
- Kass, S.J., Vodanovich, S.J. and Callender, A., 2001. State-trait boredom: Relationship to absenteeism, tenure, and job satisfaction. *Journal of business and psychology*, 16(2), pp.317-327.
- Katz, D. and Kahn, R.L., 1978. *The social psychology of organizations* (2nd ed.). New York, NY: Wiley.
- Kim, H., Im, J. and Qu, H., 2018. Exploring antecedents and consequences of job crafting. *International Journal of Hospitality Management*, 75, pp.18-26.
- King, Z., 2004. Career self-management: Its nature, causes and consequences. *Journal of vocational behavior*, 65(1), pp.112-133.
- Kooij, D.T., Tims, M. and Akkermans, J., 2017. The influence of future time perspective on work engagement and job performance: the role of job crafting. *European Journal of Work and Organizational Psychology*, 26(1), pp.4-15.
- Kuijpers, M.A., Schyns, B. and Scheerens, J., 2006. Career competencies for career success. *The Career Development Quarterly*, 55(2), pp.168-178.
- Kulik, C.T., Oldham, G.R. and Hackman, J.R., 1987. Work design as an approach to person-environment fit. *Journal of vocational behavior*, 31(3), pp.278-296.
- Leana, C., Appelbaum, E. and Shevchuk, I., 2009. Work process and quality of care in early childhood education: The role of job crafting. *Academy of Management Journal*, 52(6), pp.1169-1192.
- LePine, J.A., Podsakoff, N.P. and LePine, M.A., 2005. A meta-analytic test of the challenge stressor–hindrance stressor framework: An explanation for inconsistent relationships among stressors and performance. *Academy of Management Journal*, 48(5), pp.764-775.

- Lu, C.Q., Wang, H.J., Lu, J.J., Du, D.Y. and Bakker, A.B., 2014. Does work engagement increase person–job fit? The role of job crafting and job insecurity. *Journal of Vocational Behavior*, 84(2), pp.142-152.
- Major, D.A., Turner, J.E. and Fletcher, T.D., 2006. Linking proactive personality and the Big Five to motivation to learn and development activity. *Journal of applied psychology*, 91(4), pp.927-935.
- Mäkikangas, A., 2018. Job crafting profiles and work engagement: A person-centered approach. *Journal of Vocational Behavior*.106,pp.101-111.
- Mattarelli, E. and Tagliaventi, M.R., 2015. How offshore professionals' job dissatisfaction can promote further offshoring: Organizational outcomes of job crafting. *Journal of Management Studies*, 52(5), pp.585-620.
- Nadin, S.J., Waterson, P.E. and Parker, S.K., 2001. Participation in job redesign: An evaluation of the use of a sociotechnical tool and its impact. *Human factors and Ergonomics in Manufacturing*, 11(1), pp.53-69.
- Niessen, C., Weseler, D. and Kostova, P., 2016. When and why do individuals craft their jobs? The role of individual motivation and work characteristics for job crafting. *human relations*, 69(6), pp.1287-1313.
- Oldham, G.R., Hackman, J.R., Smith, K.G. and Hitt, M.A., 2005. How job characteristics theory happened. *The Oxford handbook of anagement theory: The process of theory development* organizations (2nd ed.). New York, NY: Wiley.
- Parker, S.K. and Ohly, S., 2008. Designing motivating jobs. *Work motivation: Past, present, and future*, pp.233-284.
- Parker, S.K., 1998. Enhancing role breadth self-efficacy: the roles of job enrichment and other organizational interventions. *Journal of applied psychology*, 83(6), pp.835-852.
- Parker, S.K., 2014. Beyond motivation: Job and work design for development, health, ambidexterity, and more. *Annual review of psychology*, 65, pp.661-691.
- Parker, S.K., Williams, H.M. and Turner, N., 2006. Modeling the antecedents of proactive behavior at work. *Journal of applied psychology*, 91(3), pp.636- 652.

- Paul, R.J., Niehoff, B.P. and Turnley, W.H., 2000. Empowerment, expectations, and the psychological contract—managing the dilemmas and gaining the advantages. *The Journal of Socio-Economics*, 29(5), pp.471-485.
- Petrou, P. and Bakker, A.B., 2016. Crafting one's leisure time in response to high job strain. *human relations*, 69(2), pp.507-529.
- Petrou, P., Demerouti, E. and Schaufeli, W.B., 2018. Crafting the change: The role of employee job crafting behaviors for successful organizational change. *Journal of Management*, 44(5), pp.1766-1792.
- Plomp, J., Tims, M., Akkermans, J., Khapova, S.N., Jansen, P.G. and Bakker, A.B., 2016. Career competencies and job crafting: How proactive employees influence their well-being. *Career Development International*, 21(6), pp.587-602.
- Porath, C.L. and Bateman, T.S., 2006. Self-regulation: from goal orientation to job performance. *Journal of Applied Psychology*, 91(1), pp.185-192.
- Schaufeli, W.B., Bakker, A.B. and Van Rhenen, W., 2009. How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational behavior*, 30(7), pp.893-917.
- Sekaran, U & ,Dan, R. Bougie. R. 2013. Research Methods for Business: A Skill-Building Approach. John Wiley & Sons.
- Tims, M. and Bakker, A.B., 2010. Job crafting: Towards a new model of individual job redesign. *SA Journal of Industrial Psychology*, 36(2), pp.1-9.
- Tims, M., B. Bakker, A. and Derks, D., 2014. Daily job crafting and the self-efficacy–performance relationship. *Journal of Managerial Psychology*, 29(5), pp.490-507.
- Tims, M., Bakker, A.B. and Derks, D., 2012. Development and validation of the job crafting scale. *Journal of Vocational Behavior*, 80(1), pp.173-186.
- Tims, M., Bakker, A.B. and Derks, D., 2015. Job crafting and job performance: A longitudinal study. *European Journal of Work and Organizational Psychology*, 24(6), pp.914-928.

- Tims, M., Bakker, A.B. and Derks, D. (2013a). The impact of job crafting on job demands, job resources, and well-being. *Journal of occupational health psychology*, 18(2), pp.230-240.
- Tims, M., Bakker, A.B., Derks, D. and van Rhenen, W., (2013b). Job crafting at the team and individual level: Implications for work engagement and performance. *Group & Organization Management*, 38(4), pp.427-454.
- Tims, M., Derks, D. and Bakker, A.B., 2016. Job crafting and its relationships with person–job fit and meaningfulness: A three-wave study. *Journal of Vocational Behavior*, 92, pp.44-53.
- Tsui, A.S. and Ohlott, P., 1988. Multiple assessment of managerial effectiveness: Interrater agreement and consensus in effectiveness models. *Personnel Psychology*, 41(4), pp.779-803.
- Vanbelle, E., Van den Broeck, A. and De Witte, H., 2017. Job Crafting: Autonomy and workload as antecedents and the willingness to continue working until retirement age as a positive outcome. *Psihologia Resurselor Umane*, 15(1), pp.25-41.
- Vogt, K., Hakanen, J.J., Brauchli, R., Jenny, G.J. and Bauer, G.F., 2016. The consequences of job crafting: a three-wave study. *European Journal of Work and Organizational Psychology*, 25(3), pp.353-362.
- Vos, A., Clippeleer, I. and Dewilde, T., 2009. Proactive career behaviours and career success during the early career. *Journal of Occupational and Organizational Psychology*, 82(4), pp.761-777.
- Wang, Z., Zhang, J., Thomas, C.L., Yu, J. and Spitzmueller, C., 2017. Explaining benefits of employee proactive personality: The role of engagement, team proactivity composition and perceived organizational support. *Journal of Vocational Behavior*, 101, pp.90-103.
- Wrzesniewski, A. and Dutton, J.E., 2001. Crafting a job: Revisioning employees as active crafters of their work. *Academy of management review*, 26(2), pp.179-201.
- Wrzesniewski, A., Berg, J.M. and Dutton, J.E., 2010. Managing yourself: Turn the job you have into the job you want. *Harvard Business Review*, 88(6), pp.114-117.
- Wrzesniewski, A., Dutton, J.E. and Debebe, G., 2003. Interpersonal sensemaking and the meaning of work. *Research in organizational behavior*, 25(1), pp.93-135.