

ANTECEDENTS OF BETTER PERFORMING TEAMS: TEST OF PERCEIVED  
TEAM JOB CRAFTING MODEL

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ANTECEDENTS OF BETTER PERFORMING TEAMS: TEST OF PERCEIVED  
TEAM JOB CRAFTING MODEL

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Approval of the Graduate School of Social Sciences

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## **ABSTRACT**

### **ANTECEDENTS OF BETTER PERFORMING TEAMS: TEST OF PERCEIVED TEAM JOB CRAFTING MODEL**

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This present study examined the relationship between team performance and its antecedents such as team task characteristics (autonomy, feedback, skill variety, task identity, and task significance), team personality (proactivity, collective efficacy) and interpersonal trust under job demands and resources framework model. Also, the sequential mediating effect of team job crafting and team work engagement in this relationship was investigated. The study surveyed 147 people, comprised of 46 teams, from different regions of Turkey and various jobs and or sectors including engineers, marketers, salespeople, consultants and educators in fields of automotive, banking, textile, telecommunication, IT, and defense industry. Data were analyzed bot at the individual perception level and team level. Based on the study results, it was found that the abovementioned antecedents with the exception of proactive personality had positive influence on team performance through sequential mediation of team job crafting and team work engagement. The results were discussed and limitations of the study were noticed with future research suggestions.



**Keywords:** Team Performance, Team Job Crafting, Team Work Engagement, Team Task Characteristics, Team Interpersonal Trust

## ÖZ

### BAŞARILI TAKIM PERFORMANSININ ÖNCÜLLERİ: ALGILANAN TAKIMIN İŞ ŞEKİLLENDİRMESİ MODELİNİN TESTİ

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Bu çalışmada, iş gerekleri ve kaynakları modeline dayanarak takım performansı ile takımın iş karakteristikleri (özerklik, geribildirim, beceri çeşitliliği, görev kimliği, görevin önemi), kişilik özellikleri (proaktivite, kolektif yeterlilik) ve kişilerarası güven arasındaki ilişki test edilmiştir. Aynı zamanda, takımın iş şekillendirmesi ve iş tutkunluğunun (team work engagement) bu ilişkideki sıralı aracılık rolü test edilmiştir. Bu çalışma, Türkiye'nin farklı bölgelerinde, üretim ve servis işi yapan farklı meslek gruplarından (otomotiv, bankacılık, tekstil, Telekom, BT ve savunma sanayi sektörlerinde mühendis, pazarlama, satış personeli, danışman, eğitimci) 39'u takım lideri 147 kişi ve 46 takımla yapılan anketler aracılığıyla gerçekleştirilmiştir. Çalışma sonuçlarına göre, proaktif kişilik öncülü dışında kalan tüm öncüller için takım performansı ile pozitif korelasyon tespit edilmiş olup ve bu ilişkiye takımın iş şekillendirmesi ve iş tutkunluğu sıralı aracılık etmiştir. Çalışmanın sonuçları tartışılmış, sınırlılıkları belirtilmiş ve gelecekteki çalışmalar için öneriler yapılmıştır.

**Anahtar Kelimeler:** Takım Performansı, Takımın İş Şekillendirmesi, Takımın İş Tutkunluğu, Takımın İş Karakteristikleri, Takımda Kişiler Arası Güven

*To My Dear Family...*

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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1. Overview**

The new and more demanding era is compelling organizations to find out new work designs since firms are now facing more with such troubles as decrease in productivity and employee dedication, increase in work absenteeism, turnover; and counterproductive work behaviors. From the employee point of view, employees' expectation from the work, motivator factors have changed during years. Today's generations, which is classified as Y, Z do not want or require authority; on the contrary, this generation wants to express themselves, fulfill their self, and develop personal skills, are also incredibly sophisticated, technology-wise, less loyal, and more demanding. In the business world, they are more prone to seek support from the employer, constructive feedback, open communication, meaningful work, and autonomy. Therefore, the teams could be the best structure for them.

From the work side, works' have shifted from stability to continuous change like dynamic work environment and dynamic job descriptions, monoculture to diversity, working alone to teamwork meaning that collaborating with people, detailed job descriptions to job crafting, vertical hierarchy to horizontal networks like matrix structures, external supervision, directions and control to self-control and empowerment, which means autonomous work. Also, they are changing from dependence on organization to employability (and having own responsibility), fixed schedules and patterns to flexible working arrangements, physical demands to mental and emotional demands (Schaufeli, 2014, p.9). Hence, it's time for a change.

In the near future, the whole work life will be comprised of new generation, new and more dynamic work settings, and diverse prevalent team structure. One such an alternative to deal with such problems and catch the era in the business is “job crafting” approach as a result of the Positive psychology movement, which is defined as “the scientific study of optimal human functioning with the aim of discovering and promoting the factors that allow individuals and communities to thrive” (Seligman, 1999, p.2); in the Industrial and Organizational Psychology field, positive occupational psychology, which is the scientific study of optimal employee functioning with the aim of discovering and promoting the factors that allow employees and organizations to thrive. The present study aims at finding antecedents of job crafting at team level and discover the association path with team performance.

## **1.2. Theoretical Background and Hypotheses**

The ultimate goal of business organizations is profit maximization. From the Human Resources Management (HRM) point of view, this can be achieved by boosted employee performance.

Business practices and organizational structure have changed throughout the years along with working generations. In order to capture the era, organizations are forced to change their mechanistic and hierarchical organizational structures to horizontal and more flexible types. Rather than firm departmental divisions, flexible project teams and work groups are more preferable now. Hence, teams are prevalent and important in today’s organizational settings (O’Leary-Kelly, Martocchio, & Frink, 1994; Sundstrom, De Meuse, & Futrell, 1990; Tasa, Taggar, & Seijts, 2007).

Teams in organizations are community of stakeholders who come together for common values and interests to achieve specific goals. Teams share common identity, commitment, individual and mutual interaction, and common goals. Furthermore, they may identify a common approach in the area in which they are responsible and complement each other as a result of different skills and abilities

(Guzzo & Dickson, 1996; Proehl, 1996; Straub, 2002). Cohen and Bailey (1997) pointed out that teams are communities in which team members are dependent on each other in execution of tasks, presenting mutual outcomes, known and distinguishable within the organization, and also managing their relations outside of the organization. A more comprehensive team definition was offered by Salas, Dickinson, Converse, and Tannenbaum (1992). They pointed out that teams are complex entities that are socially and harmoniously interacting, sharing mutual goals, hierarchically structured, limited lifespan, distributed diverse expertise and roles within team, influencing and be influenced by ongoing work processes and performance outcomes, with consisting of two or more people. Although, there is no absolute judgement in the matter of optimal team size, empirical studies suggest that the ideal team is comprised of between five and nine members. Adding more people into a team means adding more communication lines which will increase the relationship building difficulties. As team size increases, building a constructive relationship among team members, active participation, and reconciliation for actions become difficult. Logistics, time and action management and therefore sustaining mutual goals would be quite difficult in large teams and would result in decreased interpersonal trust, satisfaction, and performance (Curral, Forrester, Dawson, & West, 2001; Hackman & Wageman, 2005). Also, when team size is increased, people may show less effort since they may think they are less responsible for the output known as social loafing, defined by Ingham, Levinger, Graves, and Peckham (1974). Therefore, it is probable to create damage to the sole aim of increase in productivity in case of big team size.

Although teamwork started as having positive effect on organizations, there are both positive and negative findings regarding its effectiveness. For example, teamwork may create low productivity if the tasks were basic which are better to be executed by individuals (Robbins & Judge, 2013) and there is prolongation of decision-making process (Woodcock & Francis, 2008). However, some studies pointed out that teamwork affects positively both productivity and employee satisfaction, namely work performance and attitudes. Kwak (2004) pointed out that people exhibit more creativity and problem solving skills when they work in teams instead of individual working alone model. Furthermore, a study, conducted in

Turkey, pointed out that teamwork brings higher productivity, lower labor costs and increases individual performance due to synergy created by the different abilities of team members (Özler & Koparan, 2006).

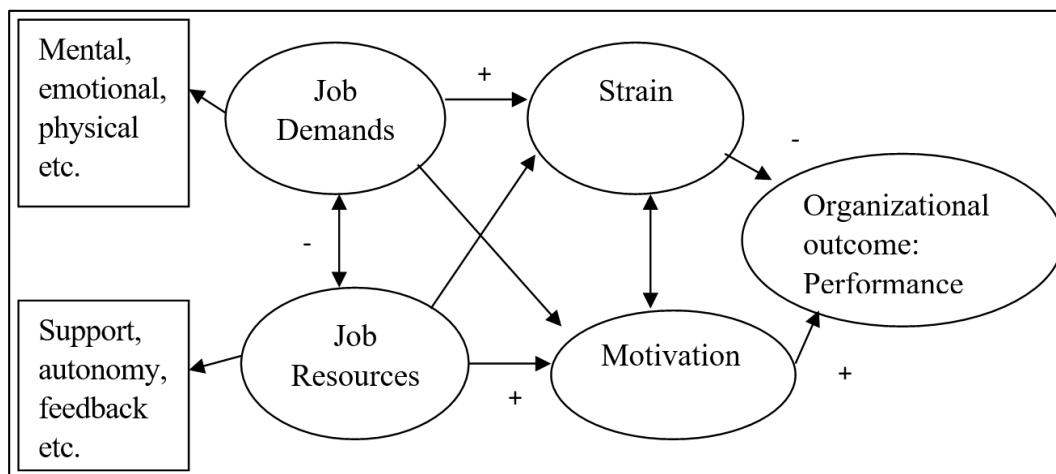
The ability of organizations to adapt to dynamic and competitive work environment and sustain their competitive advantage depends on employees' motivation and well-being in the workplace (Tims & Bakker, 2010). As a result of successful teamwork, the motivation of team members and individual performance increases, and correspondingly team performance raises (Guzzo & Shea, 1992).

In order to enhance motivation and well-being of the employees, job redesign and improving working conditions are most frequently used methods. In traditional job redesign process, managers make decisions and changes from top to bottom and employees are expected to adapt themselves in a reactive way (Wrzesniewski, LoBuglio, Dutton, & Berg, 2013). Therefore, the desired motivation and well-being of employees actually would not be achieved since the majority of work design changes are achieved based on mainly managers' viewpoints without considering employee interests, wishes, and needs. On the other hand, job crafting explains the phenomenon of individuals shaping their jobs in various ways according to their wishes, interests, skills and goals. Thus, there might be relationship between job crafting and job performance.

In the present study, job crafting is followed under Job Demands-Resources (JD-R) framework theory, which was developed by Bakker and Demerouti (2007). Job crafting is defined as employees' proactively changing work demands and job resources with the sole aim of changing the meaning of their work according to their own preferences, values, and skills without involvement of managers (Tims & Bakker, 2010). In this terminology, employees are given more autonomy and accountability on their actions, and therefore it is expected to employees invest more effort on their actions. According to JD-R framework, all job characteristics can be categorized into either job demands or job resources. Job characteristics which are linked with physiological or psychological costs and fostering growth, learning and development are called as job demands, whereas job characteristics



which are needed to sustain physical and/or both cognitive and emotional psychological effort or skills are defined as job resources (Bakker & Demerouti, 2007, p.312). Under this framework, job crafting includes four dimensions: increasing structural job resources (as an example, learning new things, developing new skills), increasing social job resources (for instance, asking for feedback and advice), increasing challenging job demands (for instance, desire for a new project and more responsibility), and decreasing hindering job demands (to illustrate, reducing cognitive and emotional demands) (Tims, Bakker, & Derks, 2012). Hence, employees try to balance job demands and resources by looking resources seeking, challenges seeking, and demands reducing in line with their personal interests, abilities and preferences. By adaptation JD-R approach into team job crafting by Tims, Bakker, Derks, and van Rhenen (2013), JD-R model tries to improve person-job fit, identify motivational and health-impairing job characteristics under increasing structural/social job resources and demands and decreasing hindering job demands. The figure below represents the basic JD-R model. The present study is interested in antecedents of team job crafting contributing to work engagement and enhanced team performance.



*Figure 1.* The Job Demands-Resources Model, Adapted from Bakker and Demerouti (2007). The job demands-resources model: State of the art. *Journal of managerial psychology*, 22(3), 309-328.

In fact, there are many studies, which pointed out the positive relationship between job crafting and performance. However, antecedents of job crafting and potential mediating variables influencing job crafting and performance relationship was

rarely studied. The employees with a promotion focus (i.e. driven by growth and challenges) instead of employees with a prevention focus (i.e. driven by obligations and security) have a tendency to craft their jobs (Petrou, 2013). Furthermore, positive correlation between job enlargement and increasing social resources dimension of job crafting was negatively moderated by self-competence (Berdicchia, Nicolli, & Masino, 2016). In a study conducted in Netherlands with 402 participants, it was found that employees craft in a challenging and resourceful work environment if high-quality relationships with supervisors; in other words, leader-member exchange (LMX) exists; and this resulted in work engagement and enhanced performance (Radstaak & Hennes, 2017). Person-job fit and work orientation are found to be potential antecedents of job crafting (Ko, 2011). In addition, contextual factors such as autonomy and supportive work climate have been found to be antecedent of job crafting, which may result in improved employee well-being (workplace positive affect, workplace negative affect and job satisfaction) (Slemp, Kern, & Vella-Brodrick, 2015). Person-job fit mediates both individual and team level job crafting and work engagement association (Chen, Yen, & Tsai, 2014). Guan and Frenkel (2018) study suggests that a strong Human Resources System with distinctive and consistent HRM practices would foster work engagement and job crafting behaviors, then result in employee performance. The adverse effect of value incongruence on both employee engagement and job performance can be lessened due to job crafting (Vogel, Rodell, & Lynch, 2016). In a very recent study, it was found that individual employee factors (i.e. self-efficacy for teamwork and daily affect), team features (i.e. team cohesion and team climate) and the organizational factors (i.e. engaging leadership and organizational resources for teamwork) were found to be antecedents of team job crafting (Mäkikangas, Bakker, & Schaufeli, 2017).

It is evident that the transition from individual work modeled structure to the organizations modeled as teamwork is inevitable (Schaufeli, 2014, p.9), but there is need to struggle with structural problems that may arise during this transition. From this point of view, it is necessary to examine some concepts increasing team performance. Within the scope of requirement, “task characteristics”, “proactivity”, “collective efficacy” and “interpersonal trust” which will be

explained below were tested as antecedents of team job performance in this study. Team job crafting and team work engagement were positioned as mediators in this relationship.

### **1.2.1. Team Performance**

Job performance is defined as “scalable actions, behaviors and passion intended for organizational goals and objectives” (Viswesvaran & Ones, 2000, p. 216) and job performance is a multidimensional behavioral construct (Roe & Ester, 1999; Sonnentag & Freese, 2005; Spector, Bauer, & Fox, 2010; Viswesvaran & Ones, 2000). It is suggested that job performance has mainly two constituent; task performance and contextual performance (Viswesvaran & Ones, 2000). Task performance bases upon to the organization’s core business, which is about directly dealing with technical processes and requirements in the organization. On the other hand, contextual performance does not have a direct contribution to firms’ core technical issues; rather it enables to sustain the environment to better functioning of technical processes. In other saying, task performance is called as in-role performance, while contextual performance is named as extra-role performance and also defined as organizational citizenship behaviors (OCBs). Contextual performance was defined by Organ (1988) as “a set of behaviors that are not clearly defined by performance reward systems, that do not have the duty or obligation of the individual, but that contribute positively to organization’s productivity” (p. 547).

When work groups and teams examined, it is clear that teams are more productive and show more enhanced performance than work groups which include individuals gathered randomly. Therefore, “team” and “performance” are inseparable two concepts according to Katzenbach, Smith, and Muallimoğlu (1998). This is so as a result of the concept of team spirit. Since team spirit is created due to bringing together team members who have different levels of experience, competence, and knowledge towards the common goals and values of the team, team performance is evaluated as total performance of team consisting of members rather than individual and independent team members’ performance (Straub, 2002). Team

performance have two sub dimensions; “team success” and “team efficiency”. Team success is a sub-factor presenting more immediate concrete and achieved predetermined goals results, whereas abstract concepts such as processes, relationships, psychological factors, cooperation and communication are termed as team efficiency (Gladstein, 1984). Furthermore, team performance measurement should not be designed as aggregation of individuals’ performance; instead, team performance evaluation system should be designed to cover both team and individual performance, consider individual and the team interaction and compatibly with the objectives of the organization.

According to JD-R model, job crafting and work engagement are two antecedents of work performance (Bakker, Rodríguez-Muñoz, & Sanz Vergel, 2016; Torrente, Salanova, Llorens, & Schaufeli, 2012; Tims et al., 2013; Tims, Bakker, & Derks, 2014). However, in the team performance concept in the present study, team level job crafting and engagement will be mentioned as antecedents of team performance.

### **1.2.2. Job Crafting**

Job design and redesign are usually seen as top-down processes; employees are selected by the top and any change regarding job, task, and roles are revealed by the top. Consequently, employees were assessed in a passive role. On the contrary, there is an alternative model, which is named as job redesign on the individual level (Tims & Bakker, 2010); proposing that initially firms select employees and then employees start to reshape their job with regards to their abilities and preferences (Berg, Dutton, & Wrzesniewski, 2008) and hence employees are given accountability on their works.

Job crafting model was developed with the basis of this switch in job redesign theory. Job crafting was firstly described as the process of changes in physical and cognitive changes revealed by employees to redesign the tasks, relationships, and roles to create a more meaningful work (Wrzesniewski & Dutton, 2001). Here, bottom-up approach is adopted and employees are seen as active crafters of their

jobs. Job crafting techniques are entitled with three categories: task, relational and cognitive crafting. Task crafting means that employees customize tasks by adding or dropping tasks and changing the devoted time, energy and attention towards on each tasks based on employees' skills. Relational crafting refers to altering interaction among people and determined by task discretion and task complexity. Cognitive crafting is termed as altering employees' perception towards tasks and relationships based on task complexity (Ghitulescu, 2006). Later, Tims and Bakker (2010) defined individual job crafting as employee's proactive change of one's job demands and resources. Tims et al. (2012) developed job crafting model by utilizing job demands-resources (JD-R) framework, suggesting that individual job crafting can occur through increasing job (structural/social) resources, increasing challenging job demands or decreasing hindering job demands.

In our rapidly changing knowledge economy, firms are now give emphasis on employee proactivity (Grant & Ashford, 2008), initiative taking (Frese & Fay, 2001) to facilitate innovativeness and adaptability for themselves and enabling employees to engage in a meaningful work experience. Also, today's generations Y are seen themselves as "be anything they want to be" (Twenge, 2006, p.72) and expansion of work dissatisfaction and hence such demographic changes and workplace trends promotes the importance of job crafting (Berg, Dutton, & Wrzesniewski, 2013).

Individual job crafting is quite a new construct in the Industrial and Organizational Psychology, which was broached in the early of twenty first century, but gained a lot attention from researchers recently. The literature suggests that job crafting offer positive outcomes for both the employee (person-job fit, enhanced meaningful work, job satisfaction and work engagement) (Christian, Garza, & Slaughter, 2011; Demerouti, Cropanzano, Bakker, & Leiter, 2010; Shusha, 2014; Tims & Bakker, 2010; Tims et al., 2012; Tims et al., 2013; Wrzesniewski & Dutton, 2001; Yavuz, 2018) and organization (commitment, organizational citizenship behaviors (OCBs), performance reduced personnel turnover and intention to stay in the organization) (Irvin, 2017; Kristof-Brown, Zimmerman, & Johnson, 2005; Leana, Appelbaum, & Shevchuk, 2009; Lyons, 2008; Tims &

Bakker, 2010). This outcome was found in different samples. For instance, a study including sample of 232 teachers working in different day care centers indicated that job crafting have a positive relationship with job satisfaction, performance, and commitment and negatively related to intention to leave the organization (Leana et al., 2009) Also, a three year cross-lagged panel study in Finland revealed that job boredom can be lessened by job crafting, and job crafting also positively affects in employee engagement (Harju, Hakanen, & Schaufeli, 2016). Although job crafting has gained popularity internationally, job crafting is quite new study area in Turkey literature. Only three studies mentioned job crafting terminology (Akın, Sariçam, Kaya, & Demir, 2014; Mamak, 2018; Yavuz, 2018). The first study, which was conducted by Akın et al. (2014) was regarding Turkish adaptation of Tims et al. (2012) job crafting scale. Mamak (2018) pointed out that proactive people are more probable to craft their jobs and show higher task performance and affectively committed to the organization. Yavuz (2018) study, which was carried out 688 participants from 35 various occupations by dividing into two category; people who have to work in the organizations such as; police officers, pilots, academicians, flight attendants, and nurses, and people who are not obliged to work in the organizations such as, doctors, hairdressers, fashion designers, software developers, psychologists, architects and lawyers have revealed that job crafting positively affects OCBs and intention to stay in the organization. In addition, external prestige perception and institutional support perception are moderators for both two relationships. The final inference from the study is that job crafting has a positive relationship with task performance. However, their work was related to individual level crafting rather than team level.

Leana et al. (2009) drew attention to the team level crafting and propounded collaborative job crafting term, with a definition of the process of team members decide together how they can change their work to accomplish mutual work goals. At a later study, team job crafting was defined as “the extent to which team members combine efforts to shape job resources and demands” (Tims et al., 2013, p.432). According to them, team job crafting is attainable by four ways: increasing structural (for instance, utilizing the capacity and know-how of all team members) and social job resources (for instance, feedback facilitation to other

teammates), increasing challenging job demands (for instance, taking more responsibility as a team) and decreasing hindering job demands (for instance, reducing monotonous tasks and emotional burden). Team crafting does not mean everybody crafts same job resources and demands, that is the term is not the same as the sum of individual job crafting. Instead, it means deciding what and how to craft team processes (Tims et al., 2013). Hence, team job crafting is a collective process that requires interaction among team members. Individual and team job crafting have different structures but have the same outcomes. With the basis of JD-R theory, teams that can craft their jobs look for new job resources in order to fulfill job demands and attain shared team goals. Therefore, team job crafting is worth to research.

There is a limited team job crafting literature available related to the relationship between team job crafting and team positive outcomes. Team job crafting is positively linked with team job satisfaction, commitment, lower turnover intentions (Leana et al., 2009), team efficacy (McClelland, Leach, Clegg, & McGowan, 2014) work engagement and enhanced individual and team performance (Mäkikangas, Aunola, Seppälä, & Hakanen, 2016; Tims et al., 2013).

As there are many ways of crafting the job, the effect of each method may vary on an outcome. Team crafting by increasing (social and structural) job resources and challenges and decreasing hindering job demands was positively related with team work engagement and team performance, whereas team crafting via decreasing the hindering job demands is negatively related with team performance and unrelated with team work engagement (Tims et al., 2013). In a meta-analysis study that examined 48 studies, it was found that there is a positive and significant relationship between individual job crafting and individual work engagement. While there is a positive significant relationship among individual work engagement and individual job crafting, dimensions of social job resources, structural job resources and challenging job demands, negative significant relationship was found with diminishing hindering job demands (Rudolph, Katz, Lavigne, & Zacher, 2017). However, in the present study, job crafting will be considered as unidimensional concept. The present study will examine the

relationship between team job crafting and team work engagement based on the studies found that most of the time job crafting was related to job engagement (Tims et al., 2013).

*H1: Team job crafting is positively linked with team work engagement.*

### **1.2.3. Work Engagement**

Work engagement is termed as positive, fulfilling, work-related state of mind that is characterized by vigor (energetic and resilience, and willing to invest effort in one's job, not being easily fatigued, and persistence in the face of difficulties), dedication (being highly involved in work, accompanied by feelings of enthusiasm and significance, and by a sense of pride and inspiration) and absorption (being highly concentrated in work, characterized by time passing quickly and being unable to detaching oneself from the job) (Schaufeli, Salanova, González-Romá, & Bakker, 2002, p.74). Work engagement, which results in joy, happiness and satisfaction goes against the grain of employee burnout, which results in anger, anxiety and depression (Myers, 2000). Engaged employees are active agents who show high energy and self-efficacy, create their own positive feedback with respect to appreciation, recognition, and success (Bakker & Demerouti, 2008). They have values that match with the organization and they work hard since they consider working as a fun (approach motivation), not like workaholics' strong inner drive towards working hard (compulsive inner drive) with the avoidance motivation (the idea of not working is stressful) (Bakker & Demerouti, 2008). Engaged workers may be satisfied with the work although they may sometimes feel tired, they are also engaged outside work, have good social relations; are securely attached with the job. On the contrary, workaholics may experience work dissatisfaction, poor health and social relations; insecurely attached with the job. (van Beekun & Banta, 1989). Previous studies pointed out that work engagement is a different construct. Although it sounds similar, it should be distinguished from such constructs as job satisfaction, job involvement, and work commitment (Christian et al., 2011) because work engagement is a broader construct (Hallberg & Schaufeli, 2006; Langford, 2010; Rich, Lepine, & Crawford, 2010) that is more



effective in organizational success (Rich et al., 2010). Work engagement is critical for high performance, high job satisfaction and commitment, low turnover and absenteeism that are the ultimate goals of many organizations.

An engaged worker shows better performance in comparison with nonengaged workers since they tend to experience such positive emotions as happiness, joy, enthusiasm, experience better health, generate their own job and personal resources and spread their engagement to other people (Bakker & Demerouti, 2008) Work engagement is positively linked with better performance at both individual (Bakker, Demerouti, & Verbeke, 2004; Bakker & Demerouti, 2008) and team level. According to Salanova, Llorens, Cifre, Martinez, and Schaufeli (2003), under time pressure condition, teams with high collective efficacy show work engagement and better performance. Similarly, Torrente et al. (2012) study pointed out that team work engagement has a mediational role between social job resources perceived at the team level and enhanced team performance where supervisors were assessors of team performance. Based on Christian et al. (2011) study applied with the sample of 9712 people, it was found that work engagement adds unique variances into both task and contextual performance. Engaged employees are motivated, present and they pay off; meaning that work engagement has positive contribution to motivational performance, which have indicators of contextual performance, intrinsic work motivation, personal initiative, proactive behavior, and Human Resources performance indicators like less absenteeism and turnover and also result in economic performance indicating financial turnover and business unit performance such as profitability, productivity, turnover and customer loyalty (Schaufeli, 2012).

Job resources, leadership and personality traits have been found as drivers of work engagement. For example, conscientiousness (Furnham, Petrides, Jackson, & Cotter, 2002), extraversion (Macey & Schneider, 2008; Watson & Clark, 1997; Judge & Ilies, 2002) and proactive personality (Bateman & Crant, 1993; Crant, 1995; Christian et al., 2011; Bakker, Tims, & Derks, 2012) have positive association with work engagement.

The empirical evidences pointed out that job resources like autonomy, skill variety, performance feedback, learning opportunities, and social support of supervisors and teammates are positively linked with work engagement (Schaufeli & Bakker, 2004; Hakanen, Bakker, & Schaufeli, 2006; Bakker & Demerouti, 2007; Schaufeli & Salanova, 2007). Work engagement is positively influenced by both transformational leadership and LMX quality (Bass & Avolio, 1990; Macey & Schneider, 2008; Christian et al., 2011). There are several studies suggesting that job crafting directly results in better performance (Leana et al., 2009; Lyons, 2008). On the contrary, lots of studies proposed that job crafting indirectly cause increased performance via work engagement at both individual (Bakker et al., 2012; Christian et al., 2011; Demerouti et al., 2010; Tims & Bakker, 2010) and team level (Tims et al., 2013) in terms of both task and contextual performance. This means that engaged people better perform their tasks in an efficient and effective way. Also, when employees are engaged, they show teamwork, helping, voice and other desired behaviors for organizations with regards to contextual performance (Podsakoff, Whiting, Podsakoff, & Blume, 2009).

Most of work engagement studies were about individual work engagement and team work engagement was ignored (Richardson & West, 2010). Team work engagement is defined as a shared, positive, fulfilling work-related psychological state that is characterized by team vigor, dedication and absorption, which occurs via the interaction and shared experiences of team members (Torrente et al., 2012, p. 107). Team work engagement increases in cases better task performance (Salanova et al., 2003), supportive team climate (Salanova, Agut, & Peiró, 2005; Torrente et al., 2012), coordination (Torrente et al., 2012), collective positive affect and collective efficacy beliefs (Salanova, Llorens, & Schaufeli, 2011), team service recovery performance (Luu, 2017) and individual level work engagement (Bakker, van Emmerik, & Euwema, 2006).

*H2: Team work engagement is positively related with enhanced team performance.*

#### **1.2.4. Mediating Role of Team Work Engagement between Team Job Crafting and Team Performance**

Previous research suggests that the positive relationship between job crafting and team performance is mediated by work engagement. Bakker et al. (2016) study also pointed out that an individual who demonstrates job crafting behaviors in an organization also encourages others to develop similar crafting behaviors and both of individuals are better engaged and performed. In addition, in terms of age, it was recently found that both young and elderly people show job crafting behaviors; indeed, younger ones are affected from others in the organizations while crafting their jobs (Baroudi & Khapova, 2017).

Team members can be engaged with their works thanks to team job crafting and therefore show enhanced performance. Torrente et al. (2012) study results demonstrated that team work engagement plays a mediational role between team social resources, which are supportive team climate, coordination and teamwork and both in-role and extra-role team performance. Similarly, in a study conducted with occupational health service teams pointed out that team job crafting has a positive correlation with individual performance through both job crafting and work engagement at both individual and team level (Tims et al., 2013).

*H3: The relationship between team job crafting and team performance is mediated by team work engagement.*

#### **1.2.5. Antecedents of Team Job Crafting**

Task characteristics is a commonly studied framework in the literature both individual and team levels. At the individual level, Hackman and Oldman (1975) developed Job Characteristic Model (JCM), which identifies five sub dimensions, which are skill variety, task identity, task significance, autonomy, and feedback and these characteristics were found to be modestly related with psychological and behavioral outcomes at individual level (Fried & Ferris, 1987).

Job crafting literature is predominantly carried out Western culture, so job crafting studies with sample of different cultures would be valuable for the literature (Wang & Bakker, 2017). Based on our knowledge, job crafting at team level has gained less attention at the literature looking antecedents of team job crafting (Mäkikangas et al., 2017) and outcomes (Leana et al., 2009; McClelland et al., 2014; Tims et al., 2013) and even there is no such a study conducted in Turkey. If it is reconsidered, teams that interiorize this bottom-up approach in job redesign theory might result in enhanced performance. The aim of this study is to investigate the association between team job crafting and team performance. Job crafting fundamentally relies on three things: job and task characteristics, personality and interpersonal trust.

#### **1.2.5.1. Task Characteristics**

##### Team characteristics model (TCM)

Strubler and York (2007) extended Job Characteristics Model (JCM), which was developed by Hackman and Oldham (1980) with Team Characteristics Model (TCM) by defining task characteristics at team level. Team Characteristics Model is formed by five core JCM dimensions converting into three team tasks characteristics, which are task meaningfulness, task autonomy and feedback. Task meaningfulness is composed of skill variety, task identity, and task significance. In case employees evaluate their work as worthwhile, important and valuable, task meaningfulness would appear (Strubler & York, 2007). One of team members' meaningfulness experiences has a direct effect on teammate's meaningfulness. Since employees evaluate they are doing something valuable and worthwhile, their job satisfaction and motivation towards work would be higher and therefore they show better performance (Batt & Appelbaum, 1995; Hackman & Oldham, 1980; Grant, 2007; Rosso, Dekas, & Wrzesniewski, 2010). The positive link between task meaningfulness and team performance were also found in Stewart (2006) study. Team task autonomy is defined as the degree to which a team released or anticipated to do their own work and the work managed by team with freedom, independence and discretion of their work (Strubler & York, 2007). Autonomy has

a positive association with opportunity for acquiring new skills (Parker, 1998), job crafting (Wrzesniewski & Dutton, 2001; Tims & Bakker, 2010) job satisfaction and motivation (van Mierlo, Rutte, Kompier, & Doorewaard, 2005) and performance (Stewart, 2006). Team task feedback is the degree to which a team was informed about their work quality (Strubler & York, 2007). Since people can learn the result of their work as a result of feedback, individuals can monitor and reshape their work behaviors and, therefore, enhance job performance (Cohen, Ledford, & Spreitzer, 1996; Ergün & Eyisoy, 2018; Spreitzer, Cohen, & Ledford, 1999) and also seeing the result of work activities may create internal work motivation (Cohen et al., 1996; Hackman & Oldham, 1975) as a result of task-related feedback. Moreover, work motivation, job satisfaction and job performance of virtual teams were positively influenced by task feedback (Geister, Konradt, & Hertel, 2006).

Related to task characteristics and job crafting relationship, Mattarelli and Tagliaventi (2015) study pointed out that when a threat to task identity, which is one of task characteristics dimensions is perceived, employees tend to apply job crafting in order to enhance both individual and organizational development. Also, it was found that when employees have autonomy on tasks, which is seen as task characteristics, they craft their jobs and this contributed positively to workplace welfare (Slemp et al., 2015).

Task characteristics and team performance relationship was studied in China with a sample of 100 teams comprised of 100 managers and 382 team members (Li, Li, & Wang, 2009) Among team task characteristics, task meaningfulness was found to have a positive correlation with team performance, whereas task autonomy and feedback dimensions were indirectly correlated with team performance through mediational effect of team member satisfaction.

There are only a few studies concerning task characteristics and team performance in the literature. That is to say, there is a gap in the literature regarding how team performance is influenced by task characteristics. Chiu and Chen (2005) suggests that it is possible to improve team performance thanks to task design or redesign;

that is, task enrichment and task enlargement, by enlarging skill variety and challenges, or recognize team's importance for company operations. This would suggest us to test whether task characteristics, may be considered as job resources are positively related to team job crafting. If team members believe that they have a meaningful work, autonomy on their job and feedback is provided, then they are more inclined to craft their job. Hence, task characteristics are seen as the first antecedent of team job crafting.

*H4: Team task characteristics (task meaningfulness (task identity, skill variety, task significance), task autonomy and feedback) are positively related to team job crafting.*

This study tries to investigate the relationship between task characteristics at team level and team performance through team job crafting and team work engagement. In other words, team task characteristics and team performance relationship was examined particularly with the potential mediating roles of team job crafting and team work engagement. Although there are several studies investigating the relationship between task characteristics and individual job crafting (Bizzi, 2017; Mattarelli & Tagliaventi, 2015; Slemp et al., 2015) and performance (Cohen et al., 1996; Spreitzer et al., 1999; Li et al., 2009), this is the first study investigating the mediational roles of team job crafting and team work engagement in task characteristics and team performance relationship.

*H5: Team task characteristics (task meaningfulness, task autonomy and feedback) have a positive relationship with team performance, through first team job crafting and then team work engagement (sequential mediation).*

In addition to the team task characteristics on team performance through job crafting, there are other factors might be related to the team performance. Studies show that these factors are team level personality namely proactive personality and collective efficacy.

### **1.2.5.2. Team Personality**

The rapid change of organizations, societies and technology experienced in nowadays requires that employees constantly manage change in their environment and in them. Organizations also need innovative employees who can take responsibility for their survival in this ever-changing competitive environment, change leaders, and anticipate problems (Crant, Hu, & Jiang, 2017). Hence, job crafting might be related to personality characteristics of the people at teams. Proactivity and collective efficacy are personality related to crafting studied at the literature.

#### **a. Proactive Personality – Team Proactivity**

People are not passive towards environmental processes, they want to be active in shaping in their world (Buss, 1987; p. 1220). Proactive personality has a theoretical basis of Bandura's (1977) interactional perspective. Based on this view, person, behavior and environment; these three are continuously affected from each other (Bandura, 1986). This means that human behaviors can influence and be influenced incidences and environment. Hence, proactive people are not passive, and they strive for shaping the environment (Crant, 2000; Parker & Collins, 2010). Bateman and Crant (1993) define proactive personality as "the relatively stable inclination to influence environmental change" (p. 103). Individuals who have proactive personality can identify opportunities, take action and initiative, and sustain till they create positive and meaningful change in the environment (Crant, 1995). There is no relationship between proactive personality and demographical variables; such as gender (Crant et al., 2017; Spitzmuller, Sin, Howe, & Fatimah, 2015), age (Thomas, Whitman, & Viswesvaran, 2010; Tornau & Frese, 2013), seniority and education (Tornau & Frese, 2013). Moreover, previous studies suggest that proactive personality is a personality type that can capture some unique elements of personality not accounted by Big Five (Crant & Bateman, 2000; 66).

Previous studies pointed out that proactive personality is a valuable predictor of desired organizational outcomes. Proactive personality has a positive association with entrepreneurial intention (Crant, 1996; Rauch & Frese, 2007), organizational citizenship behaviors (OCBs) through need satisfaction (Greguras & Dienfendorff, 2010) better job performance, innovativeness (Seibert, Kraimer, & Crant, 2001), individual and team effectiveness (Crant, 2000). Thompson (2005) explains proactive people are better performing through taking personal initiative and engagement in network building. Furthermore, the job crafting model, developed by Bakker et al. (2012), suggests that proactive employees tend to craft their jobs, engaged with the work and show high in-role performance. Likewise, Mamak (2018) study with 225 academicians and educators pointed out that proactive people have an inclination to craft their jobs and it would result in enhanced job performance. In this study, with respect to job crafting dimensions, increasing structural job resources and challenging job demands have partially mediated the relationship between proactive personality and task performance, but there is no mediational effect seen in job crafting dimensions of increasing social job resources and decreasing hindering job demands.

On the basis of job crafting model, which looks for the effect of proactive personality on individual level performance (Bakker et al., 2012; Mamak, 2018; Yavuz, 2018), this study focus on team proactivity (teams comprised of proactive people who play in active role in shaping and influencing their environment) and team performance association. Hence, this study will contribute to the proactive personality literature due to team level approach. Also, it was tested that the association between team proactivity and team performance was mediated through team job crafting and team work engagement.

*H6: Teams comprised of proactive people are more readily to engage in job crafting behaviors.*

*H7: Team proactivity has a positive association with team performance, through first team job crafting and then team work engagement (sequential mediation).*



## **b. Collective Efficacy**

Self-efficacy is firstly defined as people's beliefs regarding their capabilities to produce desired levels of performance that exercise influence over events affecting their lives (Bandura, 1994). Self-efficacy beliefs determine how individuals feel, think, motivate themselves and behave; and a person with high self-efficacy has a belief and ability to carry out the required tasks. Since such people resist to obstacles and believe themselves, high levels of self-efficacy are associated with proactive behaviors like job-crafting behaviors (Niessen, Weseler, & Kostova, 2016; Rudolph et al., 2017; Vough & Parker, 2008) such as taking personal initiatives (Speier & Frese, 1997) high levels of challenge demands (Salanova, Schaufeli, Xanthopoulou, & Bakker, 2010) and positively resulted in work engagement (Bakker et al., 2006; Xanthopolou, Bakker, Demerouti, & Schaufeli, 2007) and better task performance (Bell & Kozlowski, 2002) and contextual performance (Speier & Frese, 1997). Moreover, high self-efficacious people are more inclined to resume the task even in the event of failure and show enhanced performance (Cervone & Peake, 1986; Weinberg, 1986). In a longitudinal study of Tims et al. (2014), it was found that employees who felt more self-efficacy on a day were more inclined to show job crafting behaviors in terms of shaping job resources on those days. Moreover, work engagement and job performance of employees increased on those days; hence, work engagement plays a mediational role between daily job crafting and job performance.

People do not live in isolation, they live and work together and challenges arise from collective working in organizations. Since team and organization performance depends on collective effort, collective efficacy is of vital importance. Collective efficacy is termed as “a group’s shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given level of attainments.” (Bandura, 1997, p. 477). Similar to self-efficacy, if employees evaluate their team as competent, teams are inclined to show proactive behaviors. Based on the findings of self-efficacy research, high self-efficacy beliefs have positive effects on individual performance; it is possible to deduce that team performance will be higher in case high self-efficacy beliefs exist among

the team members. Collective efficacy is the most influential factor on team competence and motivation (Solansky, 2008), team work engagement (Salanova et al., 2011) and team performance (Chou, Lin, Chang, & Chuang, 2013; Gully, Beaubien, Incalcaterra, & Joshi, 2002) in various team context such as sports (Kozub & McDonnell, 2000), education (Parker, 1994) and organizations (Gibson, 2003).

In Whitney (1994) study, which was conducted with 108 people comprising of thirty-six teams, pointed out that work groups with high level of self efficacy were better performing than groups consisting of moderate level of self efficacy. Furthermore, in case of collective efficacy, group goal commitment and group cohesiveness were higher and more committed and more cohesive groups show better performance under difficult goal conditions. Likewise, in case of high team efficacy, teams implement better tactics that result in enhanced team performance when there exists difficult team-set goals (Durham, Knight, & Locke, 1997). Likewise, in a longitudinal study by Peterson, Mitchell, Thompson, and Burr (2000) conducted with American and Australian samples, collective efficacy and shared mental models predicted high performance in groups. The study findings were valid for both Americans and Australians. In a repeated-measure study, collective efficacy and performance behaviors of eight self-managed work teams in a manufacturing setting at four times were measured: and it was found that higher collective efficacy was related to higher levels of performance (Little & Madigan, 1997). Also, collective efficacy was found positive predictor of team performance in interactive sport teams such as basketball, rugby, football, hockey, soccer, lacrosse, and softball (Manning, 2007), in football teams (Myers, Feltz, & Short, 2004), ice-hockey teams (Myers, Paiement, & Feltz, 2007), and student teams (Silver & Bufanio, 1996; Tasa et al., 2007).

In terms of efficacy and performance relationship, it was found that team collective efficacy and team performance relationship was higher than the individual self-efficacy and team performance relationship (Feltz & Lirgg, 1998). In addition, efficacy and performance relationship might change with respect to culture. To illustrate, self-efficacy is more effective to overcome the stress in

individualistic cultures like American, whereas collective efficacy becomes more of an issue in collectivistic culture like Hong-Kong (Schaubroeck, Lam, & Xie, 2000) In a very recent study investigating antecedents of daily team job crafting conducted with 119 employees working in 46 teams, that self-efficacy for team work was one of the antecedents of team job crafting. (Mäkikangas et al., 2017). Similar to self-efficacy and job crafting association, collective efficacy is expected to be an antecedent of team job crafting and results in team performance.

*H8: The collective efficacy is related to team job crafting.*

*H9: Team job crafting and team work engagement have sequential mediation role in the relationship between collective efficacy and team performance.*

In addition to team job characteristics and team personalities, trust towards teammates may function as an antecedent of team performance.

### **1.2.5.3. Interpersonal Trust**

Trust is seen as critical for all types of organization and the main motive of all in-organization relationship. Professional relationships are built on trust and commitment. In the literature, trust is defined by utilizing some theories. To begin with, social exchange theory highlights that trust is a reciprocal relationship and dynamic concept. According to Lewicki, Tomlinson, and Gillespie (2006), people are at a zero baseline, that is neutral state at the beginning and trust progresses in time. Moreover, trust is based on reciprocity; both parties' (a trusting party, called as trustor and someone to be trusted, named as trustee. (Driscoll, 1978; Scott, 1980) actions determine trust or distrust. Based on social information processing theory, trust at the team level is developed by sharing similar information among team members. Another approach, people form groups with respect to gender or profession and this generates social categories. (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987; Williams, 2001) and if team members have similar backgrounds, tastes, wants, they can communicate with each other easily, trust develops in a natural and quick way. The most widely accepted and cited definition of trust is

“the willingness to be vulnerable to the actions of another party”, which was provided by Mayer, Davis, and Schoorman, (1995, p. 712).

Current trends in the workplace propose that the importance of trust probably will increase for the coming years. To begin with, there is an expectation towards increase in diversity in the workforce (Jamieson & O’Mara, 1991; Schaufeli, 2014, p.9) and this will lead to close contact and communication among individuals with different backgrounds (Jackson & Alvarez, 1992). Also, changes in the workplace with regard to participative management styles involving employee suggestions, coordination, sharing responsibilities, and integrating workers to decision-making process (Keen, 1990; Lawler, 1992) will raise the importance of trust. Moreover, self-directed teams and reliance on empowered workers (Golembiewski & McConkie, 1975; Larson & LaFasto, 1989) raised the importance of trust towards teammates. Trust gains more importance for environments where high interdependency, cooperation, teamwork, and flexibility required (Salas, Sims, & Burke, 2005). To have such a team success, developing trust and, therefore, good relationship among team members is the key. According to Erdem, Ozen and Atsan (2003), trust is evaluated as hygiene factor, which is a must but not sufficient itself criteria because reaching team goals is highly depended on intensive cooperation that is developed by trust. In case of lack of trust, it can be experienced that communication, delegation, empowerment, and quality related problems (Owen, 1996).

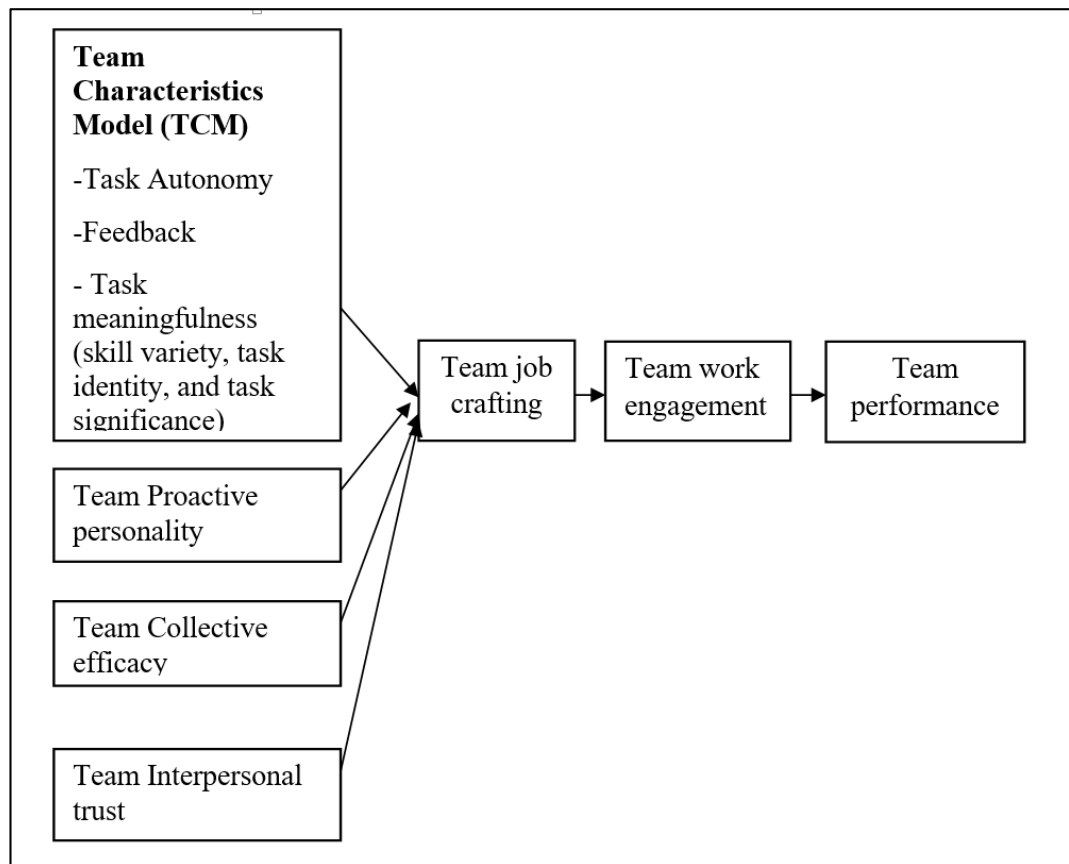
Empirical research has demonstrated that interpersonal trust has a positive association with such organizational outcomes as better sales volume and profit ratio, lower employee turnover (Davis, Schoorman, Mayer, & Tan, 2000), group performance (Costa, 2003; Hafizoglu, 2010; Klimoski & Karol, 1976), communication (Mellinger, 1959; O’Reilly & Roberts, 1974), enhanced cooperation among employees (Gambetta, 1988), knowledge sharing (Mooradian, Renzl, & Matzler, 2006), and decision making (Zand, 1972). Also, a company which is able to develop trustworthy relationship has one of the most important sources of competitive advantage over the ones that did not have such relationship (Barney & Hansen, 1994).

In the extant literature, there is a gap regarding how trust in colleagues affect team job crafting (Tims et al., 2013). Parker, Williams, and Turner (2006) proposed that people may be encouraged to try things beyond core tasks thanks to existence of trust in colleagues and show proactive work behaviors. In line with this finding of the literature, the influence of interpersonal trust on team performance through team job crafting and work engagement is expected. The main motive behind this construct is that interpersonal trust may facilitate employees to shape job demands and resources in a way that resources seeking and hindering job resources which requires cognitive and emotional demand.

*H10: Interpersonal trust is positively linked with team job crafting.*

*H11: Team job crafting and team work engagement have sequential mediation role in the relationship between interpersonal trust and team performance.*

In this study, in line with the literature team size, task interdependence, work experience, time with current team were chosen as control variables (Leana et al., 2009; McClelland et al., 2014; Wrzesniewski & Dutton, 2001). As team size gets bigger, coordination and taking action becomes more difficult (Curral et al., 2001; Hackman & Wageman, 2005). Moreover, if there is a high employee turnover in an organization, this will negatively influence on task completion and performance (Moreland, 1999; Okhuysen, 2001). In addition, when task interdependence increases, shaping a job by oneself might become difficult since interdependence will force people to spend time with others for collaboration and negotiation in order to take actions (Leana et al., 2009). The model related to the study hypotheses were presented in Figure 2 below:



*Figure 2.* Research Model: Research Model: Antecedents of Better Performing Teams: Test of Perceived Team Job Crafting Model (Sequential Mediation of Team Job Crafting and Team Work Engagement)

## **CHAPTER 2**

### **METHOD**

#### **2.1. Participants**

G\*power is used to find out the required sample size to conduct this study. Based on G\*power calculations, for a medium effect size (.15) and power of .95 at  $\alpha=.05$  this study can be conducted with 119 participants. Besides, Tabachnick and Fidell (2007, p.123) offers such a method to determine the required sample size that  $N > 50 + 8m$ ;  $m$  = number of independent variables; hence, 98 study participants were needed.

The previous job crafting studies used homogenous samples meaning participants were selected from one particular occupation only. Therefore, there is a need to conduct studies utilized participants from different occupations and or jobs for the generalizability of the results (Leana et al., 2009; Petrou, Demerouti, & Schaufeli, 2015). Although in some jobs it is easier to do job crafting as in hairdressing as compared to other some well-defined occupations such as physicians. Nonetheless, the literature suggests that every employee might find a way to craft the job (Wrzesniewski & Dutton, 2001). Therefore, this study aimed to reach a heterogeneous sample from different occupations.

Data were collected from different regions of Turkey and different organizations such as start-up firms, public and private organizations with different job types such as engineers, marketers, salespeople, consultants, and educators in fields of automotive, banking, textile, telecommunication, IT, and defense industry. In terms of sectorial distribution, only eight of the participants were students, whereas 19.73% of the participants were from public and 74.83% of them were from private sectors. Jobs were divided into two broad categories as production and

service jobs. Most of the participants were service sector employees (123 out of 139 working people). On the other hand, 11.51% of participants were production employees and or job holders.

The study sample consists of 46 teams with 147 individuals (of them, 46 were team leaders) based on convenient sampling. Of them 51.7% of participants were female with mean age of 29.24 (SD= 6.02, ranges between 19 and 52). Average work experience was 80.09 months, which equals 6.66 years (SD=69.44, ranges between 1 to 408 months). Team members know each other for a long time since study participants were working together with their current team on average 29.10 months, approximately 2.5 years (SD=29.087, range between 1 to 184 month). Mean team size was 6.20 (SD=4.37) (See Table 1).

Table 1. *Demographic Characteristics of Study Sample*

<b>Variables</b>	<b>N=147</b>	<b>%</b>	<b>Mean</b>	<b>SD</b>
<b>Gender</b>	<b>147</b>		<b>1.48</b>	<b>.50</b>
Male	71	48.30		
Female	76	51.70		
<b>Age*</b>	<b>147</b>		<b>29.24</b>	<b>6.02</b>
18-25	44	29.93		
26-33	70	47.62		
34-40	27	18.37		
41-50	4	2.72		
51+	2	1.36		
<b>Work Sector</b>	<b>147</b>		<b>1.69</b>	<b>.57</b>
Non-worker (Student)	8	5.44		
Public Sector	29	19.73		
Private Sector	110	74.83		
<b>Work Type</b>	<b>139</b>		<b>1.78</b>	<b>.53</b>
Production	16	11.51		
Service	123	88.49		
<b>Work Tenure (month)*</b>	<b>147</b>		<b>80.09</b>	<b>69.44</b>
0-5 years	78	53.06		
5-10 years	34	23.13		
10-15 years	25	17.01		
15+ years	10	6.80		
<b>Time (month) with your current team*</b>	<b>147</b>		<b>29.10</b>	<b>29.09</b>
< 1 year	56	38.10		
1-2 year	41	27.89		
2-4 year	41	27.89		
4+ year	9	6.12		
<b>Task Interdependence</b>	<b>147</b>		<b>3.74</b>	<b>1.11</b>
1 (Totally independent)	7	4.76		
2	11	7.49		
3	39	26.53		
4	46	31.29		
5 (Totally dependent)	44	29.93		
<b>Role in the team</b>	<b>147</b>			
Team leader	39	26.53		
Team player	108	73.47		
<b>Team Size</b>	<b>147</b>		<b>6.02</b>	<b>5.13</b>

\* The questions were asked as direct age, month/year; the frequencies were also obtained.



## **2.2. Measures**

### **2.2.1. Team Task Characteristics**

Hackman and Oldham's (1980) Job Diagnostic Survey (JDS) were utilized to measure individuals' perceptions of task characteristics of their job. Turkish adaptation of the scale was done by Varoğlu (1986). Respondents answered questions on a 5-point Likert type scale ranging from 1 (very inaccurate) to 5 (very accurate). The scale consists of 15 items and five sub dimensions, which are autonomy, feedback, skill variety, task identity, and task significance. Each dimension consists of three items in the questionnaire. Of 15 items, there are four reverse items, which belong to skill variety, autonomy, feedback and task significance dimensions. In this study, only the task characteristics scale includes reverse items.

In Yalçın (2017) study, although Cronbach Alpha values for the task characteristics subscales were low, ranging from .42 to .61, the total scale Alpha value was reported as .78, which is a good internal consistency reliability.

In the present study, the average score of all item scores in the task characteristics scale was used as a team task characteristics score. The same procedure was followed in all other scales. (See Appendix C for the items of the team task characteristics).

### **2.2.2. Team Proactive Personality**

Perceived proactive personality of study participants were measured by Proactive Personality Scale (PPS) (Bateman & Crant, 1993).

The scale was adapted by Akin and Arıcı (2015), and consists of single factor with 10 items, in which there are no reverse items (See Appendix C). The factor loadings of the items were between .60 and .75 and Cronbach Alpha was found as .86 in their study (Akin & Arıcı, 2015). Based on this study, the scale had

acceptable reliability. The response scale of the questionnaire is from 0 never to 5 always.

### **2.2.3. Team Collective Efficacy**

Perceived team collective efficacy was measured with a questionnaire including nine items, which was developed by Italian researchers (Borgogni, Petitta, & Mastorilli, 2010; Petitta & Falcone, 2007; Russo, Dammacco, & Borgogni, 2007) (See Appendix C). The response scale of the questionnaire is from 1 (strongly disagree) to 5 (strongly agree).

The scale was adapted to Turkish by Arikan (2009). The Cronbach Alpha of the scale is .96 in Arikan (2009) study, and it shows that the scale has a high internal reliability.

### **2.2.4. Team Interpersonal Trust**

Individuals' perceptions towards team interpersonal trust was measured by Erdem, Ozen and Atsan's scale (2003) (See Appendix C). Respondents answered seven questions on a 5-point scale, from 1 strongly disagree to 5 strongly agree. The questionnaire was tested with 50 teams, consisting of 279 team members, who are working ten different organizations. The scale has a good internal reliability with Cronbach's Alpha is .82.

### **2.2.5. Team Job Crafting**

Team level job crafting scale was generated by Tims et al. (2013) utilizing individual job crafting scale, which was developed by Tims et al. (2012). Cronbach's Alpha for the team job crafting scale was .81 in Tims et al. (2013) study.

The individual job crafting scale was adapted to Turkish by Akın et al. (2014). It includes 21 items and four sub dimension. Cronbach's Alpha values for dimensions of the scale were, ranging .72 and .90 in their study (Akın et al., 2014).

In this present study, Akin et al. (2014) scale was adapted at team level, by indicating “we” type sentences rather than “I” focused in order to measure perceived team job crafting. The participants of this study answered 21 questions on a 5-point scale, ranging from 1 strongly disagree to 5 strongly agree (See Appendix C). The current study used the scale as a unidimensional one.

#### **2.2.6. Team Work Engagement**

Work engagement scale, which named as Utrecht Work Engagement Scale (UWES) was developed by Schaufeli, Bakker, and Salanova, 2006. The scale consists of nine questions covering three dimensions of work engagement: vigor (three items), dedication (three items), and absorption (three items). Team work engagement scale was developed by Torrente et al. (2012) through adaptation of UWES. Team work vigor, team work dedication and team work absorption are the sub dimensions of team work engagement scale, and each of dimension of is measured with three questions similar to UWES. Cronbach’s alpha values for dimensions had an acceptable level; team work vigor was. 88, team work dedication was. 84 and team work absorption was .84 in Torrente et al. (2012) study.

The UWES-TR scale was adapted by Dalay (2007). The Cronbach Alpha of the scale is. 97 in Dalay (2007) study, and it shows that the scale has a high internal reliability. In this present study, Dalay (2007) scale was adapted at team level by indicating “we” type sentences rather than “I” focused in order to measure team work engagement. Therefore, to measure perceived team work engagement, nine items were asked, and the respondents replied on a 5-point scale, ranging from 1 strongly disagree to 5 strongly agree (See Appendix C). In this study, team work engagement was evaluated as a single dimension.

#### **2.2.7. Team Performance**

Individuals’ perceptions of team performance were measured with six items (See Appendix C), which was developed by Erdem and Ozen’s scale (2003). The

Cronbach's Alpha of the scale was .89. There is a single factor without any reverse item in the scale, and the items were responded on a 5-point scale, from 1 strongly disagree to 5 strongly agree.

#### **2.2.8. Control Variables**

In addition to the control variables found in the literature (team size, task interdependence, work tenure, time with current team), study participants also reported whether they are student team or working team, if working, their work sector as public/ private, work type either production or service job, age, and gender. Task interdependence was measured by a question asked "how do you evaluate the relationship of the tasks with performed by different people in your department (team)". This question was responded on a 5-point scale, from 1 "totally independent, everyone does own tasks" to 5 "totally dependent, one of us fault or success influences our performance. The questions for the demographic information were provided in Appendix C.

Study analysis were done at both individual and team data set. Team data set were obtained by aggregating each scale in the individual data set. These two data sets have different significant control variables as the relationships with the dependent variables were different in each set. At the individual level analysis, role in the team, task interdependence, gender, working or student team, and work type found to be significantly correlated with outcome variables of the study, which are team job crafting, team work engagement and team performance. On the other hand, task interdependence, team size, working or student team, and work type were found to be significantly correlated with outcome variables in the team data set. Hence, these control variables were controlled in the statistical analysis.

#### **2.3. Procedures**

In order to put this study into practice, permission from Middle East Technical University Human Subjects Ethics Committee at METU were taken first. After permission, questionnaires were prepared and distributed online. Initially,

informed consent form (See Appendix B) were provided to participants. Then, participants were asked for their role in the team in order to distinguish team leaders and team members. Then, all participants (both team leaders and team members) answered all items in the respected scales. The team leaders were also considered as regular team members. Lastly, debriefing form (See Appendix D) was provided and participants were informed about the study progress and it was asked to invite their teammates to participate in the present study.

## **2.4. Statistical Analysis**

Both individual and team level statistical analyses were performed by The Statistical Package for Social Sciences (SPSS), version 21. The Mediation analyses were done via PROCESS (Hayes, 2017) Model in SPSS with Model 4 for mediation and Model 6, which allows up to four mediators testing for sequential mediation analyses were utilized.

## **CHAPTER 3**

### **RESULTS**

This section includes four parts. The initial part mentions about tests to check cautions against common method variance. Data screening and cleaning was given in the second part. In the third part, descriptive statistics and bivariate correlations among study variables were provided. Hypothesis testing results were discussed in the last part.

#### **3.1. Test to Check for Cautions Against Common Method Variance (CMV)**

The study was conducted by utilizing only one data collection technique, which is self-report measures. Since self-report questionnaires were used for data collection at the same time from the same participants, it is probable to create common method variance, which is a systematic bias type in results. Common method variance is seen as a threat for construct validity of the study because of inflated or deflated variable correlations (Reio, 2010). Hence, Harman's Single Factor Test is used to control common method variance (CMV) in order to check whether or not variance in the data can be largely explained by a single factor.

Harman's Single Factor technique can be done by loading all study variables onto a single factor without rotation (Podsakoff, MacKenzie, Lee and Podsakoff, 2003). When this loaded factor has an explanation power of more than 50% of the variance, it is considered to be the indication of the common method bias.

In this study, SPSS was used to conduct Harman's Single Factor Test and it was found that all scale items were loaded onto a single factor and the loaded factor only explained 35.06% the variance (less than 50% required for the single factor condition). Hence, there is no common method variance problem in our study.

Harman's Single Factor is required but not sufficient for CMV check. Lindell and Whitney (2001) suggests that marker variable technique can be used to check CMV. This technique is done by determining a variable, that has the smallest association with one of the manifest variables in the study. This variable is called as marker variable and in accordance with correlation ( $r_m$ ) an CMV adjusted correlation with study variables were computed through formula given below and then t-statistics was conducted to test adjusted correlation is still significant after partialling out the effect of CMV. If it is still significant after partialling out the effect of CMV, it was decided that CMV is not a problem.

( $r_u$  = correlation between two study variables,  $r_m$ =marker variable correlation,

$r_a$  = adjusted correlation between two study variables,  $n$ = sample size)

$$r_a = r_u - r_m / (1-r_m)^2$$

$$t \text{ statistic} = r_a / \sqrt{[(1-r_a^2) / (n-3)]}$$

In the study, age was used as a marker variable, which did not have any significant correlation with any of the study variables. The smallest correlation of age with team work engagement was .01 and it was called as  $r_m$  while testing CMV. For the correlation of two study variables, the correlation between team performance and team job crafting was .70, ( $r_u=.70$ ), and adjusted correlation,  $r_a$ , is calculated as .57 for the same two variables, team job crafting and team performance. T test was used for the significance of adjusted correlation and it was found to be significant ( $t(147) = 11.44, p < .001$ ) Hence, in the light of marker variable test, the common method variance was not a problem in the study data set as with single factor method.

### 3.2. Data Screening and Cleaning

Prior to testing the hypothesis, all variables were controlled via SPSS Descriptives and Frequencies for the accuracy of data entry, minimum-maximum values,

missing values and the assumptions of multivariate analyses (Tabachnick & Fidell, 2007).

Initially, 180 people participated in this study. Of these 180 participants, 30 of them were attended this study as alone. Since, it is a team study, those 30 participant's data were excluded. Remaining 150 people, comprised of 46 teams were evaluated as study participants. 150 questionnaires were obtained out of 180 potential candidates; therefore, return rate is 83%. In the 150 questionnaires, no one left the scales blank completely. Nonetheless, several missing items were seen in some cases. To evaluate whether missing items were random or not, Little's MCAR test were done. Since Little's MCAR test was not significant, missing data points are completely random ( $\chi^2=2235.774$ ,  $p=.335$ , ns.). In addition, no variables in the study had a missing data point above 5%. In the light of these findings, all missing values were replaced with mean of the related variable because missing values are below the threshold and randomly missing. There were not any missing data points for demographic variables.

Data were checked for univariate and multivariate outliers. In the individual level, univariate outliers are found for study variables through box plots in 150 cases. Then, multivariate outliers were detected through Mahalanobis Distance. Only three cases with both univariate and multivariate outliers were deleted and following analyses were conducted with 147 cases. At the team level, there is no outlier problem in both univariate and multivariate outlier analyses among 46 teams as the team scores were the aggregations of the individual scores.

Both individual and team data were tested for following assumptions and all assumptions were met. To begin with, normality assumption was tested by skewness and kurtosis values. Since skewness and kurtosis values of this study variables (See: Table 2) are within the acceptable range (that is, skewness should be within the range -2 and +2, and kurtosis values should be -7 and +7 range), normality assumption was met. The study data were also checked linearity, multicollinearity, independence of residuals and homoscedasticity assumptions. Linearity assumption was tested via scatter plots of binary combinations of



variables. Since the relationship patterns were linear, linearity assumption was met. Multicollinearity assumption was tested by tolerance and variance inflation factor (VIF) values for all study variables. In case of VIF value is higher than 5 and tolerance value is  $<.20$  (Hair, Black, Babin, & Tatham, 2010), then multicollinearity may be a concern. Multicollinearity was not appeared to cause a problem since this study variable were within acceptable ranges. Durbin-Watson value is supposed to be a value near to 2 to meet independence of residuals assumption. Durbin Watson value was expected as 1.88; hence, independence of residuals assumption was met. Finally, homoscedasticity assumption was assessed via scatter plots and the assumption was met.

### 3.3. Descriptive Statistics for Study Variables

Descriptive information for study variables were provided in Table 2. The correlation matrices of study variables were also shown in Table 3.

Table 2. *Descriptive Statistics of Study Variables (Individual Level)*

<b>Variables</b>	<b>Min.</b>	<b>Max.</b>	<b>Skewness</b>	<b>Kurtosis</b>	<b>#of items</b>
Team Task Characteristics	2.27	4.87	-.36	-.31	15
Team Proactive Personality	1.60	5.00	-.19	-.19	10
Team Collective Efficacy	1.00	5.00	-1.14	1.83	9
Team Interpersonal Trust	1.00	5.00	-1.01	1.51	7
Team Job Crafting	1.05	5.00	-.56	.93	21
Team Work Engagement	1.33	5.00	-.69	.21	9
Team Performance	1.50	5.00	-.88	1.44	6

At the individual level, among demographic variables age, time with the current team, work tenure, and work sector were not significantly correlated with any other study variables. On the other hand, there were five variables were found to be significantly correlated with the study variables. To begin with, task interdependence was positively correlated with team job crafting ( $r=.26, p<.001$ ), team work engagement ( $r=.23, p<.001$ ) and team performance ( $r=.20, p<.01$ ). Secondly, working or student team was positively related with study variables; team job crafting ( $r=.21, p<.01$ ), team work engagement ( $r=.20, p<.01$ ) and team performance ( $r=.17, p<.01$ ). These positive significant correlations mean that student teams were more inclined to team job crafting, team work engagement and

enhanced team performance than the work teams. On the other hand, work type was negatively correlated with team job crafting ( $r=-.23, p<.001$ ), team work engagement ( $r=-.17, p<.01$ ) and team performance ( $r=-.17, p<.01$ ). This means that rather than service type jobs, production jobs were more related with team job crafting, team work engagement and team performance. Role in the team was negatively correlated with team job crafting ( $r=-.17, p<.001$ ), team work engagement ( $r=-.21, p<.001$ ) and team performance ( $r=-.15, p<.01$ ). This negative association suggest that team leaders were better crafted their jobs, engaged with their jobs and show better performance as compared to their team members. Gender was negatively correlated with team job crafting ( $r=-.19, p<.01$ ) and team work engagement ( $r=-.22, p<.001$ ). This would indicate that women rated job crafting higher than men and women were engaged with the jobs than men do.

All study variables were significant and positively correlated with each other. Team task characteristics was positively correlated with team proactive personality ( $r=.34, p<.001$ ), team collective efficacy ( $r=.52, p<.001$ ), team interpersonal trust ( $r=.44, p<.001$ ), team job crafting ( $r=.48, p<.001$ ), team work engagement ( $r=.52, p<.001$ ), and team performance ( $r=.45, p<.001$ ). Team proactive personality was positively correlated with team collective efficacy ( $r=.26, p<.001$ ), team job crafting ( $r=.35, p<.001$ ), team work engagement ( $r=.32, p<.001$ ) and team performance ( $r=.26, p<.001$ ). Furthermore, team collective efficacy was positively correlated with team interpersonal trust ( $r=.81, p<.001$ ), team job crafting ( $r=.81, p<.001$ ), team work engagement ( $r=.75, p<.001$ ) and team performance ( $r=.76, p<.001$ ). Team interpersonal trust had significant and positive association with team job crafting ( $r=.73, p<.001$ ), team work engagement ( $r=.66, p<.001$ ), and team performance ( $r=.77, p<.001$ ). Team job crafting had significant and positive correlation with both team work engagement ( $r=.85, p<.001$ ) and team performance ( $r=.70, p<.001$ ). Team work engagement also had a significant and positive correlation with team performance ( $r=.74, p<.001$ ).

All study variables had high internal consistency reliabilities. The Cronbach Alpha values of the scales ranged from .80 to .95. Table 3 shows the means, standard deviations, and correlations among the study variables. The diagonal values of the

correlation matrix refer to the internal consistency of the scales used in the present study. Team task characteristics scale consisted of 15 items ( $\alpha = .80$ ), including five sub dimensions; task autonomy, feedback, skill variety, task identity and task significance. Team proactive personality scale was comprised of 10 items ( $\alpha = .82$ ), and team collective efficacy had the highest reliability ( $\alpha = .95$ ) among the scales used in the present study including nine items in the scale. Team interpersonal trust scale included seven items with high internal consistency reliability ( $\alpha = .92$ ). Team job crafting has four sub dimensions; job resources (social and structural), job demands (challenging and hindering) and 21 items in the scale with the Cronbach Alpha value is. 94. Team work engagement scale consisted of nine items ( $\alpha = .92$ ).

Table 3. Means, Standard Deviations, Reliabilities and Bivariate Correlations of the Study Variables- Individual Level Data

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Role in the Team	-																
2. Task Interdependence	.01	-															
3. Age	-.22**	.10	-														
4. Gender	-.00	.03	.18*	-													
5. Team Size	.15	.04	-.13	-.11	-												
6. Time with your current team	-.26**	.14	.30**	.23**	-.00	-											
7. Work Tenure	-.13	.15	.82**	.20*	-.11	.44**	-										
8. Working or Student	-.08	.14	-.19*	.01	-.02	.00	-.21*	-									
9. Work Sector	.04	-.04	-.04	-.03	.01	.02	-.02	-.72**	-								
10. Work Type	.03	-.26**	.17*	-.09	.09	-.08	.11	-.81**	.50**	-							
11. Team Task Characteristics	-.22**	.36**	.07	-.09	-.16	.06	.11	.09	-.03	-.12	(.80)						
12. Team Proactive Personality	-.04	.13	-.03	-.02	-.12	.06	.07	.18*	-.10	-.22**	.34**	(.82)					
13. Team Collective Efficacy	-.16	.29**	-.03	-.14	-.29**	.07	-.06	.22**	-.13	-.22**	.52**	.26**	(.95)				
14. Team Interpersonal Trust	-.12	.18*	-.05	-.09	-.36**	.06	-.05	.15	-.11	-.14	.44**	.16	.81**	(.92)			
15. Team Job Crafting	-.18*	.26**	-.06	-.19*	-.28**	.00	-.03	.21*	-.13	-.23**	.48**	.35**	.81**	.73**	(.94)		
16. Team Work Engagement	-.23**	.23**	.01	-.22**	-.22**	-.02	-.01	.20*	-.09	-.17*	.52**	.32**	.75**	.66**	.85**	(.92)	
17. Team Performance	-.19*	.20*	-.01	-.04	-.38**	.08	-.02	.17*	-.15	-.17*	.45**	.26**	.76**	.77**	.70**	.74**	(.90)
Mean	1.73	3.74	-	1.48	6.20	-	-	1.05	-	1.78	3.64	3.48	3.91	3.98	3.66	3.74	3.94
Standard Deviation	.44	1.11	-	.50	4.37	-	-	.23	-	.53	.56	.72	.84	.78	.71	.84	.75

Note. \*p<.05; \*\*p<.01 level entries in the diagonal are the reliabilities of the scales

### **3.4. Hypothesis Testing – Individual Level Data**

#### **3.4.1. The Relationship between Team Job Crafting, Team Work Engagement and Team Performance**

The first two hypotheses of the study are about the positive relationship among team job crafting, team work engagement and team performance constructs.

The first hypothesis was that team job crafting is positively linked with team work engagement. Regression analysis showed that after controlling participants' role in team, task interdependence, gender and team size variables, job crafting was positively correlated with team work engagement ( $\beta = .85, p < .001$ ). Therefore, Hypothesis 1 was supported.

The second hypothesis was that team work engagement is positively related with enhanced team performance. Based on regression analysis results, after controlling team size, team work engagement predicted team performance positively ( $\beta = .74, p < .001$ ). Hence, Hypothesis 2 received support.

#### **3.4.2. The Mediating Effect of Team Work Engagement on Team Job Crafting and Team Performance**

The study investigated the mediating effect of team work engagement on team job crafting and team performance.

This mediation analysis was revealed by Process Macro SPSS Model 4 with 5000 bootstrap was used. Results show that, team job crafting positively predicted team work engagement in line with Hypothesis 1 results ( $b = .96, t(140) = 17.20, p < .001$ ). Since  $b$  value is positive, as team job crafting increased, team work engagement increased (and vice versa). The  $R^2$  value tells that team job crafting explained 73% of the variance in team work engagement. Secondly, in case of team work engagement construct was not in the model, the total effect of team job crafting on team performance was significant ( $b = .29, t(139) = 2.65, p = .009$ ).

Team work engagement also significantly predicted team performance ( $b = .47$ ,  $t(139) = 5.00$ ,  $p < .001$ ). The positive  $b$  value means that as team work engagement increased, team performance increased.  $R^2$  value pointed out that the model explained 58% of the variance in team performance. When looking both team job crafting and team work engagement effects on team performance, team job crafting positively predicts team performance ( $b = .75$ ,  $t(140) = 10.97$ ,  $p < .001$ ). Based on the  $R^2$  value, it explained 50% of the variance in team performance. Indirect effect of team job crafting on team performance estimated as  $b = .45$  with the confidence interval of  $[.28, .65]$ . Since this confidence interval range do not include zero, there is likely to be a mediator variable between team job crafting and team performance. After team work engagement added into to model, the effect of team job crafting on team performance was still significant; so the relationship between team job crafting and team performance mediated by team work engagement. Hence, Hypothesis 3 received support. Figure 3 shows the result of this analysis.

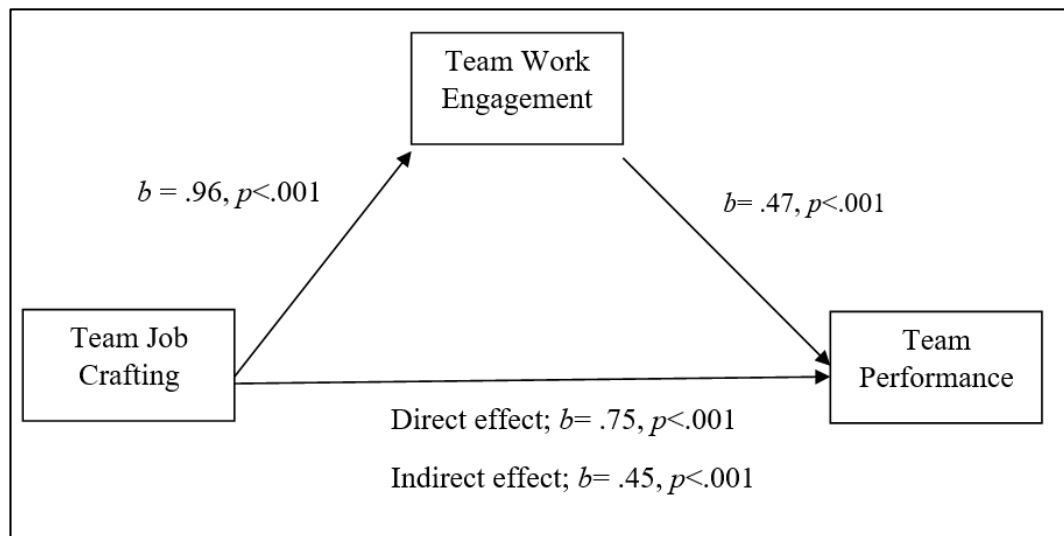


Figure 3. Mediation Analysis with Outcome Variable: Team Performance

### **3.4.3. Sequential Mediation Analyses for Team Task Characteristics, Team Proactive Personality, Team Collective Efficacy and Team Interpersonal Trust Constructs – Individual Data**

The study investigated antecedents of better performing teams through sequential mediation of team job crafting and team work engagement. The antecedents; in other words, independent variables were team task characteristics, team proactive personality, team collective efficacy, and team interpersonal trust.

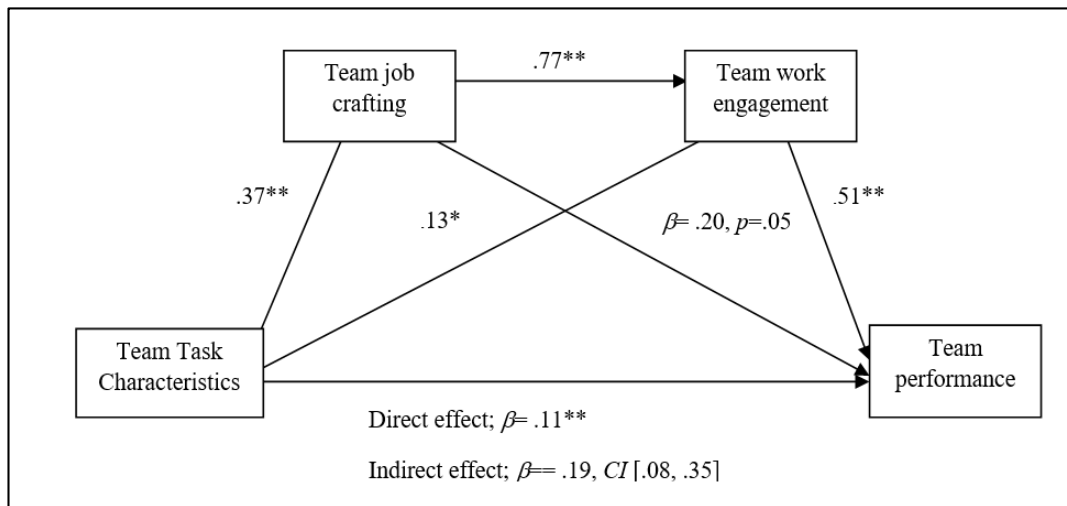
Double mediation analysis with Process Macro SPSS Model 6 (5000 bootstrap) was used with 147 participants. In the study, four sequential mediation analyses were conducted. The outcome variable was team performance. The mediators were set in the order in which they are supposed to be in the model. So, team job crafting was the first mediator, whereas the second mediator was team work engagement in this study. Control variables for both dependent variable and mediators were coded as covariates in the model. Role in the team, task interdependence, team size, working or student team and work type were significantly correlated with team performance; in addition to these control variables gender was found to be correlated with mediators. The effect of independent variables on team performance was tested through partial and sequential mediation paths.

The first mediation analysis conducted for the effect of team task characteristics on team performance through team job crafting and team work engagement. The first model describing the effect of team task characteristics on team job crafting was significant  $F(7,139) = 10.55, p < .001$ . Team task characteristics explained 35% of the variance in team job crafting. Team task characteristics positively predicted team job crafting ( $b = .48, t(139) = 4.78, p < .001$ ). This pointed out that Hypothesis 4, which stated at the positive link between team task characteristics and team job crafting was supported (See Figure 4). Team size effect on team job crafting was also wanted to be seen and it predicted team job crafting ( $b = -.04, t(139) = -3.23, p = .002$ ). Moreover, gender also predicted team job crafting ( $b = -.28, t(139) = -2.80, p = .006$ ). Secondly, both team task characteristics ( $b = .19, t$

(138) = 2.44,  $p=.016$ ) and team job crafting ( $b = .90$ ,  $t (138) =14.39$ ,  $p<.001$ ) positively predicted team work engagement. The model explained 74% of the variance in team work engagement ( $F (8,138) = 49.97$ ,  $p<.001$ ).

Team task characteristics predicted team performance ( $b =.50$ ,  $t (139) = 4.67$ ,  $p<.001$ ). Team size predicted team performance ( $b =-.06$ ,  $t (139) = -4.48$ ,  $p<.001$ ). Team task characteristics explained 32% of the variance in team performance ( $F (7, 139) = 9.41$ ,  $p<.001$ ). After controlling relevant variables, it was found that team job crafting and team work engagement mediated the relationship between task characteristics and team performance ( $b = .19$ ,  $SE = .07$ ) 95%  $CI [.09, .35]$ ). The model including task characteristics, team job crafting and team work engagement explained 62% of the variance in team performance ( $F (9,137) = 24.53$ ,  $p<.001$ ).

Therefore, Hypothesis 5 was supported, that is team task characteristics have a positive relationship with team performance, through first job crafting and then work engagement. The results of this analysis were presented in Figure 4.



**Figure 4.** Team Task Characteristics and Team Performance Relationship Through Sequential Mediation of Team Job Crafting and team Work Engagement ( $\beta$  values)

Note: \* $p<.05$ ; \*\* $p<.001$  level



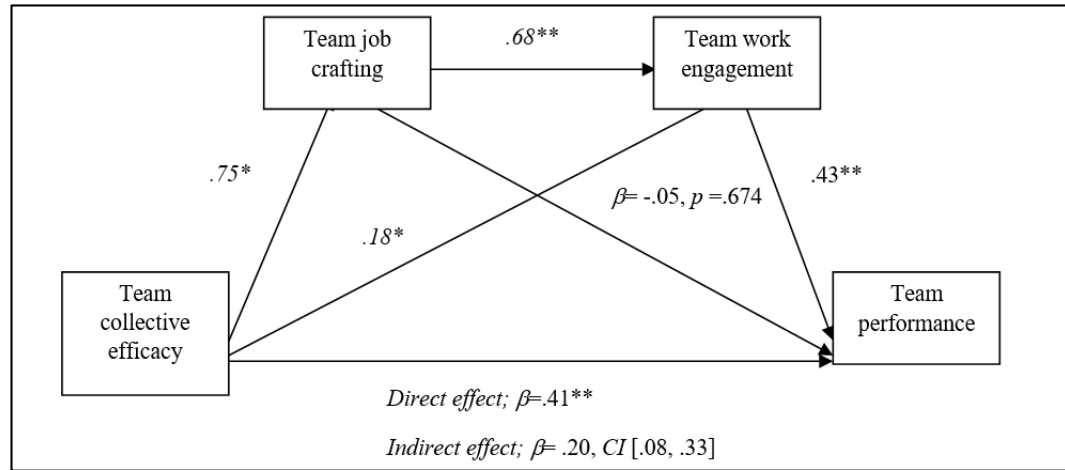
The second antecedent of team job crafting is team proactive personality. The first model describing the effect of team proactive personality on team job crafting was significant  $F(7, 139) = 8.54, p < .001$ . Team proactive personality explained 30% of the variance in team job crafting. Team proactive personality positively predicted team job crafting ( $b = .26, t(139) = 3.49, p = .001$ ). This pointed out that Hypothesis 6, which looks at the positive link between team proactive personality and team job crafting was supported. Team task interdependence predicted team job crafting ( $b = .14, t(139) = 2.84, p = .005$ ). On the other hand, team size ( $b = -.04, t(139) = -3.54, p = .001$ ) and gender ( $b = -.32, t(139) = -3.14, p = .002$ ) had negative link with team job crafting. Secondly, team job crafting predicted team work engagement ( $b = .95, t(138) = 15.35, p < .001$ ), whereas team proactive personality did not predict team work engagement ( $b = .04, t(138) = .68, p = .507$ ). The model has an explanation power of .73 variances in team work engagement ( $F(8, 138) = 47.38, p < .001$ ).

Team proactive personality did not predict team performance in total effect ( $b = -.011, t(139) = -.182, p = .856$ ). Since there was not direct relationship with team proactive personality and team performance, there was no mediational effect between these two variables. Therefore, Hypothesis 7, which stated sequential mediation effect between team proactive personality and team performance did not receive a support.

The third analysis was conducted to test the effect of team collective efficacy on team performance through sequential mediation of team job crafting and team work engagement. The first model describing the effect of team collective efficacy on team job crafting was significant  $F(7, 139) = 40.29, p < .001$ . Team collective efficacy explained 67% of the variance in team job crafting. Team collective efficacy positively predicted team job crafting ( $b = .64, t(139) = 13.46, p < .001$ ). This pointed out that Hypothesis 8, which pointed the positive link between team collective efficacy and team job crafting was supported (See Figure 5). Secondly, both team collective efficacy ( $b = .18, t(138) = 2.37, p = .019$ ) and team job crafting ( $b = .80, t(138) = 9.09, p < .001$ ) predicted team work engagement. The model explained 74% of the variance in team work engagement ( $F(8, 138) = 49.79, p < .001$ ).

Team collective efficacy predicted team performance ( $b = .64$ ,  $t(139) = 11.81$ ,  $p < .001$ ). Team size predicted team performance ( $b = -.03$ ,  $t(139) = -2.86$ ,  $p = .005$ ). The model explained 61% of the variance in team performance ( $F(7, 139) = 30.85$ ,  $p < .001$ ). After controlling relevant variables, it was found that team job crafting and team work engagement mediated the relationship between team collective efficacy and team performance ( $b = .20$ ,  $SE = .06$ , 95%  $CI [.08, .33]$ ). The model explained 68% of the variance in team performance ( $F(9, 137) = 31.99$ ,  $p < .001$ ).

Therefore, Hypothesis 9, that is team collective efficacy has a positive relationship with team performance, through first team job crafting and then team work engagement (sequential mediation) was supported (See Figure 5).



*Figure 5. Team Collective Efficacy and Team Performance Relationship Through Sequential Mediation of Team Job Crafting and Team Work Engagement ( $\beta$  values)*

Note:  $*p < .05$ ;  $**p < .001$  level

The last analysis was conducted to test the effect of team interpersonal trust on team performance through sequential mediation of team job crafting and team work engagement. The first model describing the effect of team interpersonal trust on team job crafting was significant  $F(7, 139) = 28.61$ ,  $p < .001$ . Team interpersonal trust explained 59% of the variance in team job crafting. Team interpersonal trust positively predicted team job crafting ( $b = .60$ ,  $t(139) = 10.91$ ,  $p < .001$ ). This pointed out that Hypothesis 10, which stated positive link between team

interpersonal trust and team job crafting was supported (See Figure 6). In addition, gender had negatively correlated with team job crafting ( $b = -.22$ ,  $t(139) = -2.79$ ,  $p = .006$ ). Secondly, team interpersonal trust did not predict team work engagement ( $b = .11$ ,  $t(138) = 1.53$ ,  $p = .129$ ), whereas team job crafting predicted team work engagement ( $b = .88$ ,  $t(138) = 10.93$ ,  $p < .001$ ). The model explained 74% of the variance in team work engagement ( $F(8, 138) = 48.27$ ,  $p < .001$ ).

Team interpersonal trust predicted team performance in total effect ( $b = .44$ ,  $t(139) = 6.46$ ,  $p < .001$ ). Team size predicted team performance ( $b = -.02$ ,  $t(139) = -2.033$ ,  $p = .044$ ). Team interpersonal trust explained 61% of the variance in team performance ( $F(7, 139) = 31.31$ ,  $p < .001$ ). After controlling relevant variables, it was found that team job crafting and team work engagement mediated the relationship between interpersonal trust and team performance ( $b = .21$ ,  $SE = .06$ ) 95% CI [.10, .34]. The model explained 70% of the variance in team performance ( $F(9, 137) = 36.02$ ,  $p < .001$ ).

Therefore, the last hypothesis was supported, that is team interpersonal trust has a positive relationship with team performance, through first job crafting and then work engagement (sequential mediation) (See Figure 6).

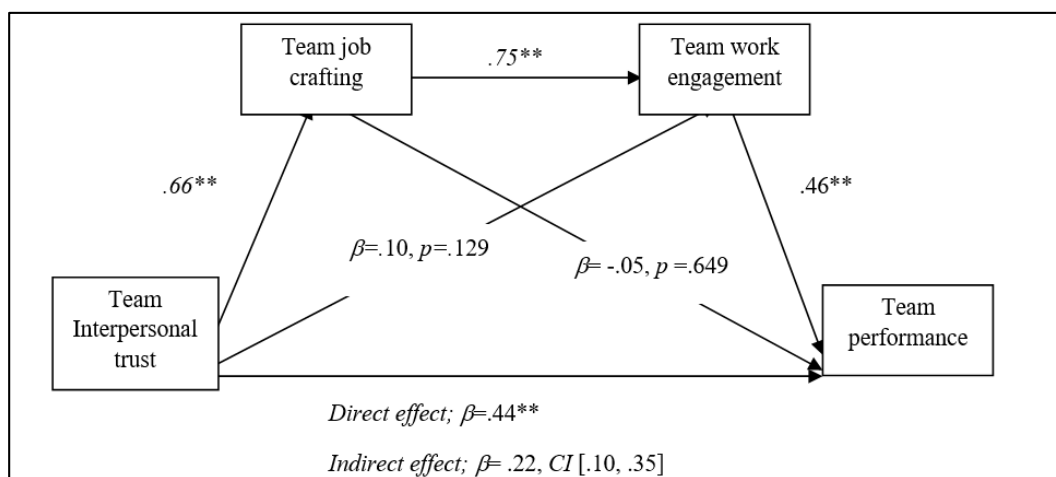


Figure 6. Team Interpersonal Trust and Team Performance Relationship Through Sequential Mediation of Team Job Crafting and Team Work Engagement ( $\beta$  values)

Note: \* $p < .05$ ; \*\* $p < .001$  level

#### 3.4.4. Team Level Analysis

In addition to individual level analysis, team level analysis was also conducted as ancillary analysis. The present study utilized 46 teams, which were comprised of 147 individuals. By aggregation of each scale in the individual data set, team level data set were acquired. Same variables and procedures were done in team level analysis. Team task characteristics, team proactivity, team collective efficacy and team interpersonal trust were independent variables, team performance was the outcome variable, and the mediators were team job crafting and team work engagement. Sequential mediation analyses were conducted via PROCESS in order to test study hypotheses in team level.

Minimum-maximum scores, skewness and kurtosis values of the scales were calculated to provide information about study variables at team level (See Table 4). The correlation matrices of study variables at team level were also presented in Table 5.

Table 4. *Descriptive Statistics of Study Variables (Team Level)*

Variables	Min.	Max.	Skewness	Kurtosis	#of items
Team Task Characteristics	2.58	4.40	-.44	.50	15
Team Proactive Personality	1.85	4.55	-.97	2.00	10
Team Collective Efficacy	2.25	4.95	-.65	.20	9
Team Interpersonal Trust	2.57	5.00	-.56	-.08	7
Team Job Crafting	2.62	4.78	.07	-.30	21
Team Work Engagement	2.03	4.91	-.53	.08	9
Team Performance	1.92	5.00	-1.13	2.67	6

At team level correlations, team size, role in the team, working or student team and work type were found to be significantly correlated with outcome variables. Other demographic variables were not significantly correlated with any other study variables; hence, they were not included in statistical analyses. To begin with, working or student team was positively linked to team job crafting ( $r=.33, p<.01$ ) and team work engagement ( $r=.31, p<.01$ ). On the other hand, team size was negatively correlated with team job crafting ( $r=-.40, p<.001$ ), team work engagement ( $r=-.32, p<.01$ ) and team performance ( $r=-.60, p<.001$ ). Moreover, work type was negatively correlated with team job crafting ( $r=-.38, p<.01$ ) and

team work engagement ( $r=-.30, p<.01$ ). Role in team had negative association with team job crafting ( $r=-.35, p<.01$ ) and team work engagement ( $r=-.33, p<.01$ ).

Team task characteristics correlations were significant for all study variables except for team proactive personality ( $r=.28$ ). Team task characteristics were positively correlated with team collective efficacy ( $r=.70, p<.001$ ), team interpersonal trust ( $r=.61, p<.001$ ), team job crafting ( $r=.62, p<.001$ ), team work engagement ( $r=.72, p<.001$ ) and team performance ( $r=.59, p<.001$ ). Team proactive personality correlations were significant with the exception of team interpersonal trust. Team proactive personality was positively correlated with team collective efficacy ( $r=.36, p<.01$ ), team job crafting ( $r=.59, p<.001$ ), team work engagement ( $r=.56, p<.001$ ) and team performance ( $r=.39, p<.001$ ). Team collective efficacy had positive and significant correlation with all study variables. It was positively correlated with team interpersonal trust ( $r=.84, p<.001$ ), team job crafting ( $r=.85, p<.001$ ), team work engagement ( $r=.83, p<.001$ ) and team performance ( $r=.87, p<.001$ ). Furthermore, team interpersonal trust had significant and positive correlation with team job crafting ( $r=.72, p<.001$ ), team work engagement ( $r=.70, p<.001$ ) and team performance ( $r=.85, p<.001$ ). Team job crafting had significant and positive correlation with both team work engagement ( $r=.91, p<.001$ ) and team performance ( $r=.78, p<.001$ ). Team work engagement also had a significant and positive correlation with team performance ( $r=.81, p<.001$ ).

Table 5. Means, Standard Deviations, Reliabilities and Bivariate Correlations of the Study Variables - Team Level

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Role in the Team	-																
2. Task Interdependence	-.04	-															
3. Age	.00	.24	-														
4. Gender	.11	-.18	-.23	-													
5. Team Size	.00	.00	.06	.06	-												
6. Time with your current team	.05	.35*	.34*	-.03	-.15	-											
7. Work Tenure	.06	.84**	.26	-.15	-.02	.50**	-										
8. Working or Student	.18	-.29	.00	-.02	-.10	.03	-.29*	-									
9. Work Sector	-.06	-.02	-.09	.01	-.06	.01	.00	-.75**	-								
10. Work Type	-.34*	.27	-.11	.07	.10	-.10	.18	-.81**	.52**	-							
11. Team Task Characteristics	.36*	-.02	.06	-.23	-.24	.12	.04	.15	-.02	-.22	-						
12. Team Proactive Personality	.19	-.24	-.18	-.21	-.22	.13	.08	.33*	-.18	-.40**	.24	-					
13. Team Collective Efficacy	.26	-.14	-.08	-.46**	-.24	.08	-.11	.32*	-.17	-.34*	.70**	.36*	-				
14. Team Interpersonal Trust	.16	.01	.10	.52**	-.09	.16	.06	.23	-.15	-.20	.61**	.28	.84**	-			
15. Team Job Crafting	.25	-.20	-.18	-.40**	-.35*	.10	-.06	.33*	-.15	-.38*	.62**	.59**	.85**	.72**	-		
16. Team Work Engagement	.27	-.14	-.18	-.32*	-.33*	.10	-.02	.31*	-.09	-.30*	.72**	.56**	.83**	.70**	.91**	-	
17. Team Performance	.21	-.01	.06	-.60**	-.16	.12	.05	.24	-.19	-.26	.59**	.39**	.87**	.85**	.78**	.81**	-
Mean	3.83	-	-	6.01	1.71	-	-	1.07	-	1.74	3.68	3.46	3.93	3.67	4.00	3.75	3.95
Standard Deviation	.76	-	-	5.13	.27	-	-	.25	-	.58	.37	.49	.62	.51	.58	.63	.93

Note. \*p&lt;.05; \*\*p&lt;.01

#### **3.4.4.1. Sequential Mediation Analysis for Team Task Characteristics, Team Proactive Personality, Team Collective Efficacy and Team Interpersonal Trust Constructs – Team Data**

The present study utilized 46 teams. The study hypotheses were tested also with team level data set. To investigate antecedents of better performing teams, sequential mediation of team job crafting and team work engagement were conducted. Same antecedents in the individual data, which are, team task characteristics, team proactive personality, team collective efficacy, and team interpersonal trust were also utilized in team level analyses.

Sequential mediation analyses were also done with team data via Process Macro SPSS Model 6 with 5000 bootstrapping. In the study, four sequential mediation analyses were conducted. The outcome variable was team performance. Independent variables were team task characteristics, team proactive personality, team collective efficacy and team interpersonal trust. The mediators were set in the order in which they are supposed to be in the model. So, team job crafting was the first mediator, whereas the second mediator was team work engagement in this study. Control variables for both dependent variable and mediators were coded as covariates in the model. Team size was the only significantly correlated with team performance; team size, role in the team, working or student, and work type are significantly correlated with both team job crafting and team work engagement. The effect of independent variables on team performance was tested through partial and sequential mediation paths.

The first mediation analysis conducted for the effect of team task characteristics on team performance through team job crafting and team work engagement. The first model describing the effect of team task characteristics on team job crafting was significant  $F(5,40) = 9.79, p < .001$ . Team task characteristics explained 55% of the variance in team job crafting. Task characteristics at the team level positively predicted team job crafting ( $b = .64, t(40) = 4.03, p < .001$ ). The result pointed out that Hypothesis 4, which looks at the positive link between team task characteristics and team job crafting was also supported in the team level data (See

Figure 7). Team size effect on team job crafting was also wanted to be seen and it predicted team job crafting ( $b = -.03$ ,  $t(40) = -2.46$ ,  $p = .018$ ). Secondly, both team task characteristics ( $b = .44$ ,  $t(39) = 3.60$ ,  $p < .001$ ) and team job crafting ( $b = .97$ ,  $t(39) = 9.40$ ,  $p < .001$ ) positively predicted team work engagement. The model explained 88% of the variance in team work engagement ( $F(6,39) = 47.02$ ,  $p < .001$ ).

Team task characteristics predicted team performance in total ( $b = .69$ ,  $t(40) = 4.17$ ,  $p < .001$ ). Team size predicted team performance ( $b = -.05$ ,  $t(40) = -4.79$ ,  $p < .001$ ). Team task characteristics explained 60% of the variance in team performance ( $F(5,40) = 12.01$ ,  $p < .001$ ). After controlling relevant variables, it was found that team work engagement mediated the relationship between team task characteristics and team performance ( $b = .25$ ,  $SE = .13$ , 95%  $CI [.02, .52]$ ). In addition to partial mediation of team work engagement, team task characteristics and team performance relationship was sequentially mediated through team job crafting and team work engagement ( $b = .35$ ,  $SE = .18$ , 95%  $CI [.04, .73]$ ). The model including team task characteristics, team job crafting and team work engagement explained 79% of the variance in team performance ( $F(7,38) = 20.42$ ,  $p < .001$ ).

In sum, team task characteristics and team performance relationship would be mediated by team work engagement. Besides, the effect of sequential mediation of team job crafting and team work engagement would be more powerful due to bigger indirect effect  $b$  value. Therefore, Hypothesis 5 was also supported in team data, that is team task characteristics (task meaningfulness, task autonomy and feedback) have a positive relationship with team performance, through first team job crafting and then team work engagement (sequential mediation) (See Figure 7).



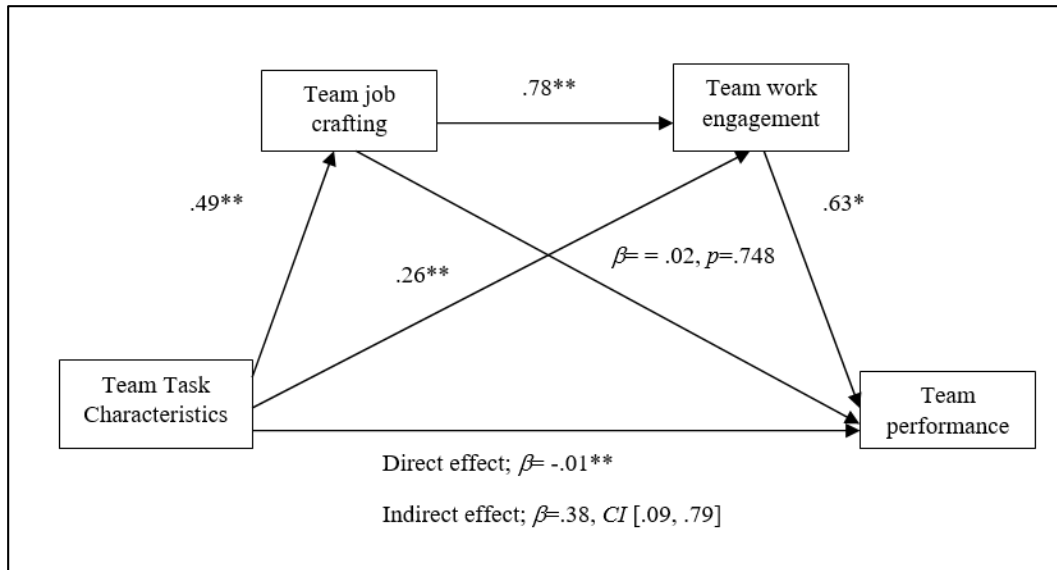


Figure 7. Team Task Characteristics and Team Performance Relationship Through Sequential Mediation of Team Job Crafting and Team Work Engagement ( $\beta$  values) (team level)

Note: \* $p < .05$ ; \*\* $p < .001$  level

The second antecedent was team proactive personality. The first model describing the effect of team proactive personality on team job crafting was significant  $F(5,40) = 8.05, p < .001$ . Team proactive personality explained 50% of the variance in team job crafting. Team proactive personality positively predicted team job crafting ( $b = .43, t(40) = 3.28, p = .002$ ). This pointed out that Hypothesis 6, which looks at the positive link between proactive personality and team job crafting was supported in team data, too. Team size effect on team job crafting was also wanted to be seen and it predicted team job crafting ( $b = -.03, t(40) = -2.56, p = .014$ ). Secondly, team job crafting predicted team work engagement ( $b = 1.13, t(39) = 10.09, p < .001$ ), whereas team proactive personality did not predict team work engagement ( $b = .07, t(39) = .68, p = .499$ ). The model has an explanation power of .84 variances in team work engagement ( $F(6,39) = 34.16, p < .001$ ).

Team proactive personality did not predict team performance in total effect ( $b = .24, t(40) = 1.55, p = .13$ ). Since there was not direct relationship with team proactive personality and team performance, there was no mediational effect between these two variables. Therefore, Hypothesis 7, which mentions about

sequential mediation effect between proactive personality and team performance did not receive a support at team level.

The third analysis was conducted to test the effect of team collective efficacy on team performance through sequential mediation of team job crafting and team work engagement. The first model describing the effect of team collective efficacy on team job crafting was significant  $F(5,40) = 24.20, p < .001$ . Team collective efficacy explained 75% of the variance in team job crafting. Team collective efficacy positively predicted team job crafting ( $b = .63, t(40) = 7.86, p < .001$ ). This pointed out that Hypothesis 8, which looks at the positive link between team collective efficacy and team job crafting was also supported at team level (See Figure 8). Secondly, collective efficacy did not predict team work engagement ( $b = .23, t(39) = 1.88, p = .068$ ); while team job crafting positively predicted team work engagement ( $b = .94, t(39) = 6.16, p < .001$ ). The model explained 85% of the variance in team work engagement ( $F(6,39) = 37.33, p < .001$ ).

Team collective efficacy predicted team performance in total ( $b = .71, t(40) = 8.96, p < .001$ ). Team size predicted team performance ( $b = -.03, t(40) = -3.17, p = .003$ ). Team collective efficacy explained 81% of the variance in team performance ( $F(5,40) = 33.93, p < .001$ ). After controlling relevant variables, it was found that team job crafting and team work engagement mediated the relationship between team collective efficacy and team performance ( $b = .26, SE = .10$ ) 95% *CI* [.08, .48]). The model explained 85% of the variance in team performance ( $F(7,38) = 31.11, p < .001$ ).

Therefore, Hypothesis 9, that is collective efficacy has a positive relationship with team performance, through first team job crafting and then team work engagement (sequential mediation) was supported also supported with team level data (See Figure 8).

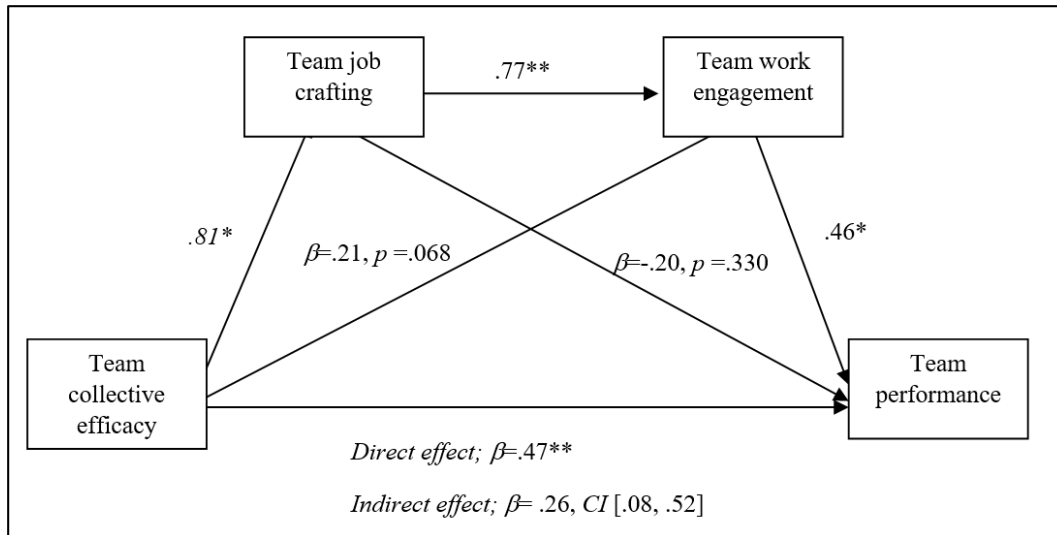


Figure 8. Team Collective Efficacy and Team Performance Relationship Through Sequential Mediation of Team Job Crafting and Team Work Engagement ( $\beta$  values) (team level)

Note: \* $p < .05$ ; \*\* $p < .001$  level

The last analysis was conducted to test the effect of team interpersonal trust on team performance through sequential mediation of team job crafting and team work engagement. The first model describing the effect of team interpersonal trust on team job crafting was significant  $F(5,40) = 13.55, p < .001$ . Team interpersonal trust explained 63% of the variance in team job crafting. Team interpersonal trust positively predicted team job crafting ( $b = .56, t(40) = 5.43, p < .001$ ). This pointed out that Hypothesis 10, which looks at the positive link between team interpersonal trust and team job crafting was also supported team level (See Figure 9). In addition, role in team matters in prediction of team job crafting ( $b = -.48, t(40) = -.43, p = .014$ ). Secondly, team interpersonal trust did not predict team work engagement ( $b = .16, t(39) = 1.46, p = .152$ ); while team job crafting positively predicted team work engagement ( $b = 1.01, t(39) = 7.89, p < .001$ ). The model explained 84% of the variance in team work engagement ( $F(6,39) = 35.37, p < .001$ ).

Team interpersonal trust predicted team performance in total ( $b = .39, t(40) = 4.13, p = .002$ ). Team size predicted team performance ( $b = -.02, t(40) = -2.50, p = .017$ ). Team interpersonal trust explained 77% of the variance in team performance ( $F$

(5,40) = 26.72,  $p < .001$ ). After controlling relevant variables, it was found that team job crafting and team work engagement mediated the relationship between team interpersonal trust and team performance ( $b = .30$ ,  $SE = .10$ ) 95%  $CI$  [.11, .51]). The model explained 87% of the variance in team performance ( $F(7,38) = 36.65$ ,  $p < .001$ ).

Therefore, the last hypothesis was supported for the team level, that is interpersonal trust has a positive relationship with team performance, through first team job crafting and then team work engagement (sequential mediation) (See Figure 9).

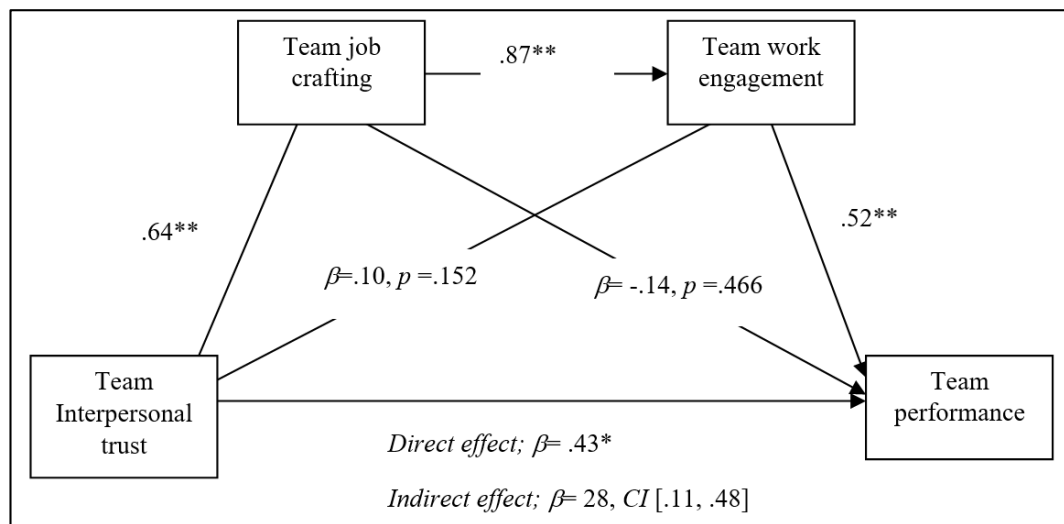


Figure 9. Team Interpersonal Trust and Team Performance Relationship Through Sequential Mediation of Team Job Crafting and Team Work Engagement ( $\beta$  values) (team level)

Note: \* $p < .05$ ; \*\* $p < .001$  level

All antecedents of team job crafting were positively linked with team job crafting at both individual and team level data set. Among antecedents of team job crafting, team collective efficacy had a bigger positive effect on team job crafting both within and across team (See Table 6). If team collective efficacy exists, team members do not hesitate to share information, skills, abilities and positive synergy among each other even in case of workloads, challenges and difficulties (Jex &

Bliese, 1999) in nursing job, which is identified as close coordination and cooperation requirement (Jensen, Holten, Karpatschhof, & Albertsen, 2011). This will enable team members are able to balance job demands based on their teams' skills, interests and preferences; so team job crafting will occur. Team motivation may be increased, while strain may be decreased.

Table 6. *Antecedents of Team Job Crafting*

<b>Antecedents</b>	<b>Coefficient (<math>\beta</math>)</b>	<b>Standard error</b>	<b>p-value</b>	<b>R<sup>2</sup></b>
<b><i>Within-team level</i></b>				
Team Task characteristics	.37	.10	<.001	.35**
Team Proactive personality	.26	.07	<.001	.30**
Team Collective efficacy	.75	.05	<.001	.67**
Team Interpersonal trust	.66	.06	<.001	.59**
<b><i>Between-team level</i></b>				
Team Task characteristics	.49	.16	<.001	.55**
Team Proactive personality	.44	.13	<.01	.50**
Team Collective efficacy	.81	.08	<.001	.75**
Team Interpersonal trust	.64	.10	<.001	.63**

The results for the multilevel regression modelling were provided in Appendix E.

## **CHAPTER 4**

### **DISCUSSION**

The objective of the present study was to find antecedents of better performing teams by testing team job crafting model. In line with the literature, team task characteristics, team proactive personality, team collective efficacy and team interpersonal trust were positioned as antecedents. The positive effects of these antecedents on team performance were tested through sequential mediation of team job crafting and team work engagement.

The research model was tested at both individual level and team level data set. The study findings will be explained by comparison of individual and team data set results. Since these two data sets have different significant control variables, the effects of control variables in the model will be explained separately.

#### **4.1. Major Findings**

The first three hypotheses were about the relationship among team job crafting, team work engagement and team performance. Based on study findings, team job crafting was positively correlated with team work engagement. This means that, when team job crafting increases (decreases), team work engagement also increases (decreases). According to JD-R theory framework, job crafting by increasing job resources, either structural or social, increases motivation and satisfaction. This may enable employees flourish and enhance their well-being which are outcomes of work engagement. Similarly, team work engagement had positive association with team performance, meaning that as team work engagement increased, team performance increased in line with the literature suggesting that engaged workers perform better than non-engaged workers (Bakker, 2008; Bakker, 2011; Bakker, Demerouti, & Lieke, 2012; Reijseger,

Peeters, Taris, & Schaufeli, 2017; Troisi, 2014). Since engaged employees are likely to be energetic, enthusiastic, resilient and show high concentration, effort, and persistence even in case of difficulties, which are the keys for performance, they are able to present enhanced performance. Study findings suggest that team members feel engaged in their work due to team job crafting and engaged teams show enhanced team performance (Torrente et al., 2012; Tims et al., 2013). Hence, team work engagement has a mediational effect on the relationship between team job crafting and team performance. Based on JD-R theory framework, teams are flexible in shaping their jobs according to their own personal interests, skills, abilities and preferences in a way that resources and challenges seeking in order to increase employee motivation and satisfaction, and reducing emotional and cognitive job demands that is possible to create strain. This will facilitate work engagement through vigor, dedication and absorption. If teams are engaged with their works, their performance will be boosted.

The research model was tested at both individual level and team level data set. Both individual and team level analysis findings were similar, suggesting there exist positive relationship between all antecedents and team job crafting. Furthermore, sequential mediation effect of team job crafting and team work engagement was valid for among all antecedents on team performance except for team proactive personality. Team task characteristics, team collective efficacy and team interpersonal trust have been found job resources that enhance motivation and lessen strain and therefore craft their jobs and ultimately enhanced team performance.

The results indicated that task characteristics were positively related to team job crafting both at individual and team level data sets. This means that tasks which provide autonomy, feedback, identity, significance and skill variety were conducive to team job crafting. If individuals in teams find their jobs worthwhile, important and valuable, they may feel they are working on meaningful tasks and they may be more enthusiastic about shaping their jobs. If different skills were required for tasks, then people will better craft their jobs; since they may feel like challenging. Also, if individuals in teams are anticipated their own work and

manage their works by freedom, meaning people in teams may feel more autonomy on tasks and they may be more readily to craft their jobs. So, if job resources are designed in a manner that more autonomous, challenging, significant and feedback provided, teams are able to show crafting behaviors. On the contrary, a new study pointed out that task characteristics dimensions may have different effect on job crafting. To illustrate, autonomy and feedback positively affected job crafting; while task significance dimension had a negative association with job crafting (Bizzi, 2017). In addition to team job crafting, task characteristics given above also are positively related with team work engagement. This means that it is possible to engage with work if tasks are characterized by autonomy, feedback, identity, significance and skill variety. In other words, employees will work vigorously and dedicatedly in jobs rich in terms of job characteristics. Extant literature showed that such task characteristics have a direct link with team performance both within team and across teams; autonomy (Slemp et al., 2015; Stewart, 2006), feedback (Cohen et al., 1996; Ergün & Eyisoy, 2018; Geister et al., 2006; Spreitzer et al., 1999) and task meaningfulness, which comprised of task identity, task significance and skill variety (Batt & Appelbaum, 1995; Hackman & Oldham, 1980; Grant, 2007; Rosso et al., 2010). Consistent with team performance literature, in the present study, task characteristics (task meaningfulness, task autonomy and feedback) had a positive relationship with team performance, through first team job crafting and then team work engagement (sequential mediation effect) both within and between teams. Therefore, explanation power of positive correlation between team task characteristics and team performance would be raised by adding team job crafting and team work engagement. In addition to sequential mediation of team job crafting and team work engagement, it was found in team level analysis that team task characteristics and team performance relationship was partially mediated by team work engagement.

In the study, team proactive personality was the second tested antecedent of better performing teams. As hypothesized, employees with proactive personality are more readily to engage in job crafting behaviors (Bakker et al., 2012; Mamak, 2018). So, proactive people are desired for teams for job crafting purposes in line with the literature suggesting that proactive people are not passive, and they want



to shape their environment (Crant, 2000; Parker & Collins, 2010). Both individual and team level analyses suggest that there was no significant direct link found between team proactive personality and team performance although there exists positive correlation between proactive personality and job performance (Crant, 2000; Seibert et al., 2001). This may be because of that proactive people may not be desired in such team compositions executing very secure jobs such as defense industry. Regardless of the sector, if proactive people have different desires, wishes and interests regarding their jobs, then this may create confusion and decision making. Therefore, taking an action as a team may become difficult. Additionally, team job crafting was related to task interdependence ( $b = .14$ ,  $t(139) = 2.84$ ,  $p = .005$ ) within teams. This positive correlation pointed out that in case tasks are more dependent each other, one of team mates' faults or success may influence team performance (team performance increases or decreases). If team task dependence is high, proactive people in team trigger others to show better effort to craft their jobs. In other words, proactive people stimulate others to craft their jobs. Since proactive people are actively shape their environment, they are more inclined to show such crafting behaviors in case of task dependency.

Team collective efficacy was another tested antecedent of better performing teams. Based on the study results, employees with collective efficacy seem to be readily to engage in job crafting behaviors. Also, people with collective efficacy are engaged with their work consistent with the team work engagement literature (Salanova et al., 2011). This means that when team has a shared belief in teams' capabilities to organize and do the required actions to produce desired attainments: they are more inclined to craft and engage with their jobs. Team collective efficacy has a direct positive link with team performance consistent with the literature (Durham et al., 1997; Little & Madigan, 1997; Manning, 2007; Myers et al., 2004; Myers et al., 2007; Silver & Bufanio, 1996; Tasa et al., 2007; Whitney, 1994). The study results suggest that the positive relationship between team collective efficacy and team performance are established through sequential mediation of team job crafting and team work engagement. It was also found in the present study that, team performance was negatively related to the team size within and across teams

as expected (Curral, Forrester, Dawson, & West, 2001; Hackman & Wageman, 2005).

The last predictor variable of better performing teams was team interpersonal trust. Based on the study results, as interpersonal trust exists among team members, they may engage in job crafting behaviors. This offers a unique contribution to job crafting literature since there is a gap regarding how trust among the team members may affect team job crafting (Tims et al., 2013; Parker et al., 2006). If people see their team mates' competencies, skills and expertise, and they feel like sharing sources, facilitation of presenting different ideas and proposals and respect to such different thoughts, interpersonal trust among team members would be developed. All these factors motivate teams to shape their job resources. Interpersonal trust offers enhanced team performance in line with the meta-analysis study with 7.763 teams (de Jong, Dirks, & Gillespie, 2016) indicated that intra-team trust have a positive influence on enhanced team performance. Consistent with the literature, the present study findings suggested that there is a positive correlation between team interpersonal trust and team performance. The positive link with team interpersonal trust and team performance were strengthened through sequential mediation of team job crafting and team work engagement.

When the relationship between control variables and study variables were examined, these relationships might offer some insights into the team composition. For example, gender has an effect on team job crafting individual level analysis, meaning that women are more readily to craft their jobs in a significant manner. Task interdependence only had positive influences on team job crafting and team performance at the individual level analysis in case of proactive personality. Team size has a small but negative effect on both team job crafting and team performance outcomes at individual and team level. The negative correlation means that that the bigger the teams, the most difficult to craft the jobs and less performing teams. Therefore, there might be an optimal point for team size for desired outcomes of team job crafting and team performance.

## 4.2. Implications for Practice

This study offers a new and broad perspective for teams due to its tested team job crafting model in terms of providing suggestions and insights as to how HRM practices (personnel selection, team structure, motivation, performance management) utilizes the team related constructs.

As stated through hypotheses, the aim of the present study is to identify the role of task characteristics, personality on team performance through sequential mediation of job crafting and work engagement. In the light of study findings, if such conditions team task characteristics (task meaningfulness, task autonomy, task feedback) provided to the team members, composed of proactive people with high collective-efficacy; and interpersonal trust exists among team members, team job crafting may happen. Then, team job crafting is probable to be influential on team work engagement, which has dimensions of vigor, dedication and absorption. Engaged teams are demanded as they apparently perform better. Since employees craft their jobs, and have autonomy on their jobs, they have a greater sense of making a real progress on meaningful work and all this will contribute to organization with workers who are *creative problem solver, motivated, and engaged with the job, team and the organization*. Hence, selecting teams based on proactivity and collective efficacy and offering them autonomy, feedback and meaningful jobs and tasks may result in crafting their jobs. Therefore, the process will facilitate better team performance through team work engagement (Leana et al., 2009; Tims et al., 2013; Torrente et al., 2012).

Regarding the job itself, jobs and tasks should be designed in a way that employees feel like they are worthwhile, important and valuable for the organization. Therefore, providing feedback to employees about their role, emphasizing the task significance and also give them autonomy to create their own meaningful tasks and new skill acquisitions would create desired such outcomes as team job crafting, team work engagement, and ultimately enhanced team performance. One such an alternative as team structure compatible with job crafting approach is “autonomous” or “self-managed” team designs. Self-managed

teams (SMTs) are non-hierarchical work groups (Hackman, 1986; Moravec, Johannessen, & Hjeltmas, 1998) consisting empowered team members who have the responsibility and autonomy on their own work and involved in decision-making and problem solving processes regarding production or service (Wellins et al., 1990; Pearce & Manz, 2005). As opposed to traditional work groups, self-managed teams give emphasis on bottom-up coordination process and self-organization (Cohen et al., 1996; Druskat & Pescosolido, 2002) Furthermore, since women are positive in influencing job crafting within teams, the positive effect of women in team composition should not be disregarded for job crafting purposes. Besides, team size has a small but negative influence on team job crafting and team performance, meaning that the bigger the teams, the most difficult to craft the jobs and decrease team performance.

Increasing collective efficacy and interpersonal trust among team members would be valuable for team job crafting and enhanced team performance. Collective efficacy had positive and large correlation with team job crafting (both individual level and within team analyses). Therefore, creating a belief shared by team members this team is capable of organizing and executing the required action would be valuable source for team job crafting, work engagement and enhanced performance. Collective efficacy would be achieved by sharing the information, skills and abilities among team members to achieve mutual objectives, team coordination and positive synergy in case of challenges, difficulties and workloads. In this aspect, team leaders and HRM people in the organizations would take motivational teamwork activities to create such environments.

#### **4.3. Strengths and Limitations of the Study, and Recommendations for Future Research**

Using heterogeneous sample by different occupations and different regions of the country was an important strength of this study. Since data was collected from different region of Turkey and different work sectors such as private and public; and data source was both team leaders and team members from different occupations such as engineers, marketers, salespeople, consultants, educators in

fields of automotive, banking, textile, telecommunication, IT, and defense industry, study results would be generalizable. Also, if it was reconsidered that there is a gap in the literature in terms of homogenous samples in job crafting studies up to now; hence, it is an important achievement for generalizability of the study findings. In addition, this is the first study concerning team job crafting model in Turkey. After all, job crafting is quite a new study area in our country despite of its international popularity.

There were some limitations in the study. To begin with, there is only one data collection technique, namely, self-report utilized. Supporting this study with interviews with team leaders, team members and also applying Human Resources Managers viewpoints would be valuable. Moreover, collecting data at different time intervals (i.e. longitudinal study) would offer stronger results. Also, actually structural equation modeling (SEM) technique would be better to estimate indirect effects. But, since the current study had smaller sample, PROCESS can be useful for mediation analysis (Hayes, 2018; Hayes, Montoya, & Rockwood, 2017).

The effect of dispositional variables would be tested in team job crafting studies. To illustrate, dark triad which are narcissism, Machiavellianism and psychopathy would be a moderator between team characteristics and team job crafting (Roczniewska & Bakker, 2016). In addition, the association between team job crafting and burnout in teams might be studied.

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## APPENDICES

### A. APPROVAL OF METU HUMAN SUBJECTS ETHICS COMMITTEE

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ  
APPLIED ETHICS RESEARCH CENTER



ORTA DOĞU TEKNİK ÜNİVERSİTESİ  
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11 ARALIK 2018

Konu: Değerlendirme Sonucu

Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu  
(İAEK)

İlgi: İnsan Araştırmaları Etik Kurulu Başvurusu

Sayın Prof.Dr. Reyhan BİLGİÇ

Danışmanlığını yaptığınız Tuğba PURTUL'un "Kendi kendini yöneten takımların iyi performans göstermesinin nedenleri: Bir model testi" başlıklı araştırması İnsan Araştırmaları Etik Kurulu tarafından uygun görülerek gerekli onay 2018-SOS-185 protokol numarası ile araştırma yapması onaylanmıştır.

Saygılarımla bilgilerinize sunarım.

Prof. Dr. Tülin GENÇÖZ

Başkan

Prof. Dr. Ayhan SOL

Üye

Prof. Dr. Ayhan Gürbüz DEMİR

Üye

Prof. Dr. Yaşar KONDAKÇI (4.)

Üye

Ali Emre TURGUT

Üye

Doç. Dr. Emre SELÇUK

Üye

Doç. Dr. Üyesi Pınar KAYGAN

Üye

**B. INFORMED CONSENT FORM / ARAŞTIRMAYA GÖNÜLLÜ  
KATILIM FORMU**

**Lütfen okuyup, çalışmaya gönüllü katılımınızı beyan ediniz.**

Bu çalışma, ODTÜ Endüstri ve Örgüt Psikolojisi Yüksek Lisans öğrencisi Tuğba Purtul tarafından Prof. Dr. Reyhan Bilgiç danışmanlığındaki yüksek lisans tezi kapsamında yürütülmektedir. Çalışmanın amacı, takım performansı ve takımın iş şekillendirmesinin unsurlarını belirleyerek bir model geliştirmektir.

**Bize Nasıl Yardımcı Olmanızı İsteyeceğiz?**

Araştırmaya katılmayı kabul ederseniz, ankette yer alan birlikte çalıştığınız takımınıza yönelik bir dizi soruyu derecelendirme ölçeği üzerinde yanıtlamanız beklenecektir. Öncelikle çalışma ekibiniz için bir rumuz (takma ad) belirlemeli, tüm takım üyeleri aynı rumuz ile ankete giriş yapmalıdır. Bu çalışmaya katılım yaklaşık 15-20 dakika sürmektedir.

**Katılımınızla ilgili bilmeniz gerekenler:**

Araştırmaya katılımınız tamamen gönüllülük temelinde olmalıdır. Çalışmada sizden kimlik veya kurum belirleyici hiçbir bilgi istenmemektedir. Cevaplarınız tamamıyla gizli tutulacak ve sadece araştırmacılar tarafından değerlendirilecek elde edilecek bilgiler yalnızca bilimsel yayınlarda kullanılacaktır.

**Araştırmayla ilgili daha fazla bilgi almak isterseniz:**

Bu çalışmaya katıldığınız için şimdiden teşekkür ederiz. Çalışma hakkında soru ve yorumlarınız için Psikoloji Bölümü öğretim üyelerinden Prof. Dr. Reyhan Bilgiç (E-posta: [rey@metu.edu.tr](mailto:rey@metu.edu.tr)) ya da araştırmacı Tuğba Purtul (E-posta: [tugba.purtul@gmail.com](mailto:tugba.purtul@gmail.com)) ile iletişim kurabilirsiniz.

***☐ Yukarıdaki bilgileri okudum ve bu çalışmaya tamamen gönüllü olarak katılıyorum.***

Tarih ---/---/----

### C. QUESTIONNAE OF THE STUDY

Ekibiniz için belirlediğiniz rumuz: \_\_\_\_\_

**Çalışma arkadaşlarınızla bir araya gelerek ortak bir rumuz belirleyiniz.**

**(Tüm takım üyeleri ortak belirledikleri rumuzu girmelidir).**

**Takımdaki rolünüz yönetici/koordinatör/başkan ise lütfen belirtiniz.**

- ☐ Evet  
☐ Hayır

#### **TEAM TASK CHARACTERISTICS / TAKIMIN İŞ**

#### **KARAKTERİSTİKLERİ**

Aşağıda şu anda yapmakta olduğunuz işinizin temel özellikleri ile ilgili sorular bulunmaktadır. Lütfen her bir soru için 1'den 5'e doğru uzanan cevap seçeneklerini kullanarak en uygun cevabı yansıtan rakamı daire içine alınız.

**Örnek:** İşinizi nasıl yapacağınıza ne derece kendiniz karar verebilirsiniz?

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Çok az; bu iş tabiatı gereği iş kişiye nasıl ve ne zaman çalışılacağı konusunda hemen hemen hiç karar verme imkanı tanımaz.		Orta derecede; birçok şey standart hale getirildiğinden bu iş yapının kontrolü altında değildir, ama işle ilgili bazı kararlar alınmasına imkan tanır.		Çok fazla; bu işte ne zaman ve nasıl çalışılacağı konusundaki karar tamamen işi yapının sorumluluğu altındadır.

**NOT:** Eğer işinizi nasıl yapacağınıza orta dereceden az bir şekilde kendinizin karar verebildiğinizi düşünüyorsanız 2 seçeneğini, orta dereceden daha fazla bir şekilde kendinizin karar verebildiğinizi düşünüyorsanız 4 seçeneğini işaretleyiniz.

1. İşinizi nasıl yapacağınıza ne derece kendiniz karar verebilirsiniz?

1	2	3	4	5
Çok az; bu iş tabiatı gereği iş kişiye nasıl ve ne zaman çalışılacağı konusunda hemen hiç karar verme imkanı tanımaz.		Orta derecede; birçok şey standart hale getirildiğinden bu iş yapanın kontrolü altında değildir, ama işle ilgili bazı kararlar alınmasına imkan tanır.		Çok fazla; bu işte ne zaman ve nasıl çalışılacağı konusundaki karar tamamen işi yapanın sorumluluğu altındadır.

2. İşiniz ne ölçüde kendi içinde bir bütündür? Yani, yaptığınız şey belirli bir başı ve sonu olan bütün bir iş midir? Yoksa başkaları ve ya otomatik makineler tarafından bitirilen bir işin sadece küçük bir parçası mıdır?

1	2	3	4	5
Bu iş bir bütünün son derece ufak bir parçasıdır. Çalışmalarımın sonucu nihai ürün veya hizmette görülmez.		Bu iş bir bütünün orta büyüklükte bir parçasıdır. Çalışmalarım nihai ürün veya hizmette görülebilir.		Bu iş başından sonuna kadar benim bitirdiğim bir bütünü kapsar. Çalışmalarımın sonucu kolaylıkla nihai ürün veya hizmette görülür.

3. İşinizde ne derece çeşitlilik vardır? Yani, işiniz çeşitli beceri ve yetenekleri kullanarak birçok değişik şey yapmayı ne ölçüde gerektirir?

1	2	3	4	5
Çok az; bu iş sürekli olarak aynı alışılmış şeyleri tekrar tekrar yapmayı gerektirir.		Orta derecede çeşitlilik vardır.		Çok fazla; bu iş birçok değişik beceri ve yetenekleri kullanarak bir çok şey yapmayı gerektirir.

4. Genel olarak, işiniz ne derece önemli ve anlamlıdır? Yani, yaptığınız işin sonucu insanların hayatlarını veya durumlarını önemli derecede etkiler mi?

1	2	3	4	5
Çok anlamlı değil; çalışmalarımın sonucunun diğer insanlar üzerinde fazla bir etkisi yoktur.		Orta derecede anlamlı ve önemlidir.		Çok fazla; çalışmalarımın sonucunun diğer insanlar üzerinde çok önemli etkisi vardır.

5. Performansınızın iyi olup olmadığına yönelik bilgiyi işin kendisinden almak ne derece mümkündür? Yani, amirlerinizden veya mesai arkadaşlarınızdan edinilebilecek performans değerlendirmesi dışında, işin kendisine bakmak başarılı olup olmadığınız konusunda ne kadar ipucu sağlar?

1	2	3	4	5
Çok az; bu iş öyle düzenlenmiştir ki işi yapan nasıl yaptığı konusunda bir bilgiye sahip olmadan devamlı çalışır.		Orta derecede; bu işi yapmak bazen işi yapana performansla ilgili bilgi sağlar.		Çok fazla; bu işin düzenleniş biçimi işin nasıl yapıldığı hakkında sürekli bilgi verir.

Aşağıda, herhangi bir işi tanımlamak için kullanılabilen ifadeler sıralanmıştır. Bu ifadelerin işinizi ne kadar doğru tanımladığını belirtiniz. Buna karar verirken işinizi sevip sevmediğinize bakmaksızın değerlendirmelerinizi yapmanız gerekmektedir. Değerlendirmenizi yaparken aşağıda “çok yanlış” tan (1), “çok doğru” ya (5) doğru uzanan cevap seçeneklerini kullanınız.

**Verilen ifade işiniz için ne derece geçerlidir?**

1	2	3	4	5
Çok yanlış	Kısmen yanlış	Emin değilim	Kısmen doğru	Çok doğru
			1	2
			3	4
			5	
6.	İşim bir dizi karmaşık ve yüksek düzeyde beceri kullanmayı gerektirir.			
7.	İşim bir bütün işi başından sonuna kadar yapmaya olanak tanıyacak biçimde düzenlenmiştir			
8.	İşimin gerektirdiklerini yapmak başarıyı belirlemek açısından birçok imkan sağlar.			
9.	İşim oldukça basit ve tekrarlanan bir niteliktedir.(*)			
10.	İşimin nasıl yapıldığı birçok kişiyi etkiler			
11.	İşim kişisel inisiyatifimi veya yargımı kullanmama asla imkan tanımaz. (*)			
12.	İşim başladığım iş bölümlerini tamamen bitirmeme olanak sağlar.			
13.	İşim ne derece başarılı olduğum konusunda bana çok az ipucu sağlar.(*)			
14.	İşimi nasıl yapacağım konusunda bağımsızlık ve özgürlüğüm vardır.			
15.	İşim burada yapılan işlerin toplamı düşünüldüğünde, çok önemli ve anlamlı değildir.(*)			

(\*) Reverse-coded.

## **TEAM PROACTIVE PERSONALITY / TAKIM PROAKTİVİTESİ**

Aşağıda sizi kısmen tanımlayan (ya da pek tanımlayamayan) bir takım özellikler sunulmaktadır. Lütfen aşağıda verilen özelliklerle ilgili katılma derecenizi belirtiniz.

0	1	2	3	4	5
Asla	Nadiren, pek az, seyrek	Bazen, Ara sıra	Sık sık	Genellikle	Daima, Her zaman

	0	1	2	3	4	5
Kendi yaşamımı geliştirmek için sürekli yeni yollar araştırırım.						
Nerde olursam olayım, yapıcı bir değişim için güçlü bir etkiye sahibim.						
Hiçbir şey beni kendi düşüncelerimi gerçeğe dönüştürmekten daha çok heyecanlandıramaz.						
Eğer hoşlanmadığım bir şey görürsem, onu düzeltirim.						
Ne kadar tuhaf olursa olsun, bir şeye inanırsam onu yaparım.						
Diğerlerinin görüşlerine uymasa bile kendi düşüncelerimi savunmayı severim.						
Fırsatları saptamada uzmanım.						
Her zaman bir şeyin en iyisini yapmanın yollarını ararım.						
Eğer bir şeye inanırsam, hiçbir şey onu gerçekleştirmemi engelleyemez.						
Olanakları diğer insanlardan daha iyi tespit ederim.						

## **TEAM COLLECTIVE EFFICACY / TAKIMIN KOLEKTİF YETERLİLİĞİ**

Lütfen, *üyesi olduğunuz ekibi düşünerek*, aşağıda belirtilen her bir ifadeye *ne ölçüde katıldığınızı işaretleyiniz*.

*İnanıyorum ki ekip olarak...*

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Kesinlikle katılmıyorum	Katılmıyorum	Kararsızım; Ne katılıyorum, ne katılmıyorum	Katılıyorum	Kesinlikle katılıyorum

		1	2	3	4	5
1.	Karşılaştığımız zorlukları aşmak için koordine olmayı daima becerebiliriz.					
2.	En zor anlarımızda bile uyumumuzu koruyabiliriz.					
3.	Ortak hedeflerimize ulaşabilmek için daima bütünleşebiliriz.					
4.	Ortak başarımız için farklı bilgi, beceri ve deneyimlerimizi paylaşabiliriz.					
5.	Çok iş yükümüz olduğu zamanlarda bile ortak hedeflerimize ulaşmayı başarabiliriz.					
6.	Her zaman birbirimize destek olabiliriz.					
7.	Farklı görüşlere sahip olsak bile alınan kararlarda herkesin katılımını sağlayabiliriz.					
8.	Bilgi, beceri ve deneyimlerimizi en iyi şekilde bütünleştirebiliriz.					
9.	En zor anlarda bile sinerjimizi koruyabiliriz.					



### **TEAM INTERPERSONAL TRUST / TAKIMDA KİŞİLER ARASI GÜVEN**

Lütfen, *üyesi olduğunuz ekibi düşünerek*, aşağıda belirtilen her bir ifadeye *ne ölçüde katıldığınızı işaretleyiniz*.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Kesinlikle katılmıyorum	Katılmıyorum	Kararsızım; Ne katılıyorum, ne katılmıyorum	Katılıyorum	Kesinlikle katılıyorum

		1	2	3	4	5
1.	Birlikte çalıştığım ekip üyeleri üstlendiği görevleri başarıyla yerine getirir.					
2.	Birlikte çalıştığım ekip üyeleri, etkili ekip performansı için gerekli niteliklere sahiptir.					
3.	Ekibimdeki üyelerin uzmanlığına güvenebilirim.					
4.	Ekip üyelerinden rahatlıkla yardım alabilirim.					
5.	Ekip üyeleri her zaman bütün kaynakları diğer takım arkadaşlarıyla paylaşırlar.					
6.	Ekip üyeleri, birbirlerini farklı düşünce ve öneriler sunmaya teşvik ederler.					
7.	Ekip üyeleri birbirlerinin duygu ve düşüncelerine saygı duyarlar.					

## **TEAM JOB CRAFTING**

### **(TAKIMIN İŞ ŞEKİLLENDİRMESİ/ZANAATKARLIĞI)**

Lütfen, *üyeli olduğunuz ekibi düşünerek*, aşağıda belirtilen her bir ifadeye *ne ölçüde katıldığınızı işaretleyiniz*.

1	2	3	4	5
Kesinlikle katılmıyorum	Katılmıyorum	Kararsızım; Ne katılıyorum, ne katılmıyorum	Katılıyorum	Kesinlikle katılıyorum

		1	2	3	4	5
1.	Becerilerimizi geliştirmeye çalışırız.					
2.	Kendimizi mesleki olarak geliştirmeye çalışırız.					
3.	İşte yeni şeyler öğrenmeye çalışırız. / Projemiz üzerinde çalışırken yeni şeyler öğrenmeye çalışırız.					
4.	Ekip üyelerinin kapasitelerini sonuna kadar (en üst düzeyde) kullandığından eminiz.					
5.	Bir şeyleri nasıl yapacağımıza kendimiz karar verebiliriz.					
6.	İşimizi çok uzun süre boyunca konsantre olmak zorunda kalmayacağım şekilde organize ederiz.					
7.	Birbirimizden tavsiye isteriz.					
8.	İş performansımızla ilgili birbirimizden geri bildirim isteriz.					
9.	Yöneticilerimize (danışman/koordinatör) çalışmalarımızdan memnun olup olmadığını sorarız.					
10.	Daha fazla sorumluluk almak isteriz.					
11.	İşimizin zihinsel olarak yoğunluğunun daha az olmasını sağlamaya çalışırız.					
12.	İşimizin duygusal olarak yoğunluğunun daha az olmasını sağlamaya çalışırız.					
13.	Kendi işimizi yönettiğimiz için, bizi duygusal olarak etkileyen kişilerle ilişkimizi en düşük düzeyde tutmaya çalışırız.					
14.	Kendi işimizi organize ettiğimiz için; gerçekçi beklentileri olmayan insanlarla ilişkimizi en düşük seviyede tutmaya çalışırız.					
15.	İş hayatında çok zor kararlar vermek zorunda kalmamaya çalışırız.					
16.	Yöneticilerimizden bizi yetiştirmelerini isteriz.					
17.	Yöneticilerimizin tarzından esinleniriz.					
18.	İlginç bir proje fırsatı çıktığında, projeye katılmak için proaktif davranırız.					
19.	Eğer yeni gelişmeler varsa; onları ilk öğrenen ve deneyen kişilerden biri olurum.					
20.	Çok fazla iş olmadığında, bu durumu yeni projelere başlamak için bir şans olarak görürüz.					
21.	İşimizin farklı yönlerinin arasındaki ilişkileri inceleyerek; işimizi daha zorlayıcı hale getirmeye çalışırız.					

### **TEAM WORK ENGAGEMENT / TAKIMIN İŞ TUTKUNLUĞU**

Lütfen, *üyeyi olduğunuz ekibi düşünerek*, aşağıda belirtilen her bir ifadeye *ne ölçüde katıldığınızı işaretleyiniz*.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Kesinlikle katılmıyorum	Katılmıyorum	Kararsızım; Ne katılıyorum, ne katılmıyorum	Katılıyorum	Kesinlikle katılıyorum

		1	2	3	4	5
1.	Çalışırken, ekipçe enerji dolu hissederiz.					
2.	Çalışırken güçlü ve dinç hissederiz.					
3.	Ekibim iş konusunda oldukça heveslidir.					
4.	İşimiz/ Görevlerimiz bize ilham verir.					
5.	Çok uzun saatler çalışabiliriz.					
6.	Yaptığımız işten gurur duyarım.					
7.	Çalışırken işe dalıp giderim.					
8.	Çalıştığımız zaman yaptığımız işe kapılıp gideriz.					
9.	Çalışırken zamanın nasıl geçtiğini anlamayız.					

### **TEAM PERFORMANCE / TAKIM PERFORMANSI**

Lütfen, *üyesi olduğunuz ekibi düşünerek*, aşağıda belirtilen her bir ifadeye *ne ölçüde katıldığınızı işaretleyiniz*.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Kesinlikle katılmıyorum	Katılmıyorum	Kararsızım; Ne katılıyorum, ne katılmıyorum	Katılıyorum	Kesinlikle katılıyorum

		1	2	3	4	5
1.	Çalışma ekibimiz yüksek kalitede iş ortaya koymaktadır.					
2.	Ekibimiz işimizin esasını oluşturan ana görevlerimizi başarıyla yerine getirmektedir.					
3.	İşimizi yaparken zamanı verimli bir şekilde kullanabilmekte ve iş planlarına bağlı kalmaktayız.					
4.	İşi başarılı bir şekilde yapabilmek için gerekli teknik bilgiyi görevlerimizi yerine getirirken etkili bir şekilde kullanabilmekteyiz.					
5.	Ekibimiz olumlu bir değerlendirmeye layıktır.					
6.	Ekibimizin performansı diğer gruplarinkini aşmaktadır.					

Bölümünüzde farklı kişilerin yaptığı işlerin birbiri ile ilişkisini beşli ölçekte nasıl değerlendirirsiniz?

1	2	3	4	5
Birbirinden bağımsız. Herkes kendi işini yapıyor.				Tamamen birbirine bağlı. Birimizin hatası ya da başarısı hepimizin performansını etkiliyor.

## DEMOGRAFİK BİLGİLER

Yaş: \_\_\_\_\_

Cinsiyet: \_\_\_\_\_

Takımınızdaki kişi sayısı: \_\_\_\_\_

Mevcut takımınızla geçirdiğiniz çalışma süresi: (gün/ay/yıl belirtiniz):

\_\_\_\_\_

### Öğrenci iseniz

Bölümünüz: \_\_\_\_\_

### Çalışıyorsanız

Çalıştığınız sektör (Kamu, bankacılık, kimya, otomotiv vb.): \_\_\_\_\_

Kurum tipi: (Kamu, aile şirketi, özel sektör, uluslararası, startup, KOBİ):

\_\_\_\_\_

Çalışma hayatındaki toplam süreniz (ay/yıl belirtiniz): \_\_\_\_\_

## D. DEBRIEFING FORM / KATILIM SONRASI BİLGİLENDİRME FORMU

Çalışmaya katılımınız ve değerli katkılarınız için teşekkür ederiz.

Bu araştırma, daha önce de belirtildiği gibi, ODTÜ Endüstri ve Örgüt Psikolojisi Yüksek Lisans Programı öğrencisi Tuğba Purtul tarafından Prof. Dr. Reyhan Bilgiç danışmanlığında yürütülen bir tez çalışmasıdır.

Araştırmanın amacı, başarılı takım performansının nedenleri üzerine bir model geliştirmektir. Bu bağlamda iş karakteristikleri (yetenek çeşitliliği, görevin kimliği, görevin önemi, özerklik ve geri bildirim) ve kişilik özelliklerinin (proaktivite, kolektif yeterlilik) takımın iş şekillendirmesi, işe tutkunluğu ve nihayet performansa nasıl etki edeceği ve kişilerarası güvenin bu ilişkideki güçlendirici rolü araştırılmaktadır.

Bu çalışmadan elde edilecek verilen 2019 yılının ilk yarısında elde edilmesi amaçlanmaktadır. Elde edilecek bilgiler sadece bilimsel araştırma ve yazılarda kullanılacaktır.

Çalışmanın sağlıklı ilerleyebilmesi ve bulguların güvenilir olması için tüm **takım arkadaşlarınızın sizinle aynı rumuzda bu çalışmaya dâhil olmasını** ve diğer kişilerle çalışma ile ilgili detaylı bilgi paylaşımında bulunmamanızı rica ederiz.

Araştırmanın sonuçlarını öğrenmek ya da daha fazla bilgi almak için Tuğba Purtul'a (tugba.purtul@gmail.com) başvurabilirsiniz.

## **E. MULTILEVEL REGRESSION MODELING RESULTS**

The results for the multilevel regression modelling revealed via SPSS version 21 mixed model showed that team collective efficacy, team interpersonal trust and team work engagement had positive correlation with team performance. To begin with, team collective efficacy was positively correlated with team performance at team level (standardized estimate = .35,  $p < .001$ ), meaning that the higher collective efficacy, the better team performance. Team interpersonal trust, in turn, was positively correlated with team performance: standardized estimate = .42,  $p < .001$  at team level. This positive correlation tells that as team interpersonal trust increases, team performance increase. Team work engagement standardized estimate = .43,  $p < .001$  at team level, which means that the higher team work engagement result in better team performance across teams. On the other hand, team task characteristics (standardized estimate = -.26,  $p < .01$ ) and team job crafting (standardized estimate = -.22,  $p < .05$ ) negatively influence team performance.

## F. TURKISH SUMMARY / TRKE ZET

### GİRİŞ

alıřan kuřakların deęiřmesiyle birlikte iřletmelerde uygulama ve organizasyon yapısı aısından yıllar iinde deęiřiklikler olmuřtur. Yeni ve daha talepkar olan aędař toplumda, alıřanların iře ynelik azalan zverisi, verimlilik dřř, devamsızlık ve iřten ayrılmalarda artıř gibi sebeplerle firmalar yeni iř sreleri tasarlamak zorunda kalmaktadır. Yıllar iinde iřin doęasında da eřitli deęiřiklikler meydana gelmiřtir. rneęin, gnmz iř dnyasında stabilite yerine daha dinamik iř ortamı ve iř tanımı, eřitlilik; tek bařına alıřmak yerine takım alıřması; alıřanlara detaylı iř tanımları sunmak yerine alıřanların iři řekillendirmesine (zanaatkrlıęı) olanak tanınması; sabit alıřma saatleri ve standart iř kalıpları yerine esnek alıřmaya ynelik dzenlemeler gibi deęiřiklikler grlmektedir (Schaufeli, 2014, s.9). Dolayısıyla, iřletmelerin bu deęiřikliklere uyum saęlayabilmesi iin mekanik ve hiyerarřik organizasyon yapılarını yatay ve daha esnek yapılara dnřtrmeleri gerekmektedir.

İř dnyasında yaygınlařan bu sorunlarla bařa ıkmak ve mevcut aęı yakalamanın alternatiflerinden biri olarak iř řekillendirmesi (zanaatkrlıęı) olgusu grlmektedir. Mevcut alıřma, Bakker ve Demerouti (2007) tarafından geliřtirilen iř kaynakları ve gerekleri teorisine dayandırılmaktadır. Bakker ve Demerouti (2007), tm iř karakteristiklerinin iř kaynakları ya da gerekleri řeklinde kategorize edilebileceęini ifade etmiřlerdir. İř gerekleri, ęrenme, byme ve geliřimi saęlayan fizyolojik veya psikolojik maliyetler ierirken; fiziksel, duygusal ve zihinsel birtakım aba ve becerileri gerektiren alıřanların motivasyonuna pozitif katkıda bulunan fiziksel, sosyal ve rgtsel iř karakteristikleri ise iř kaynakları olarak adlandırılır (Bakker & Demerouti, 2007, s. 312). alıřana saęlanan zerklik, geribildirim verilmesi iř gerekleri rnekleri iken, yeni bir



projeye başlamak ya da duygusal ve bilişsel yüklerin paylaşılması iş kaynakları olarak örneklenebilir.

Mevcut çalışma, takımın iş şekillendirmesi öncüllerini bulmayı ve takım performansı ile ilişkilendirme yolunu keşfetmeyi amaçlamaktadır.

**Takım Performansı:** İş performansı, “kurumsal amaç ve hedefleri gerçekleştirmeye yönelik ölçeklenebilir eylem, davranış ve tutku” olarak tanımlanmaktadır (Viswesvaran & Ones, 2000, s. 216). İnsanların raslantısal bir araya gelmesiyle oluşturulan gruplardan ziyade farklı tecrübe, yetkinlik ve bilginin ortak amaç ve değerlere yönelik bir araya getirilmesiyle oluşturulan takımların (Guzzo & Dickson, 1996; Proehl, 1996; Straub, 2002) verimliliği ve performansı daha yüksektir. Bundan dolayı, “takım” ve “performans” kavramları birbirinden ayrılmaz iki kavramdır (Katzenbach, Smith, & Muallimoğlu, 1998).

Bakker ve Demerouti (2007) tarafından geliştirilen iş gerekleri-kaynakları modeli doğrultusunda iş şekillendirme (zanaatkarlık) ve işe tutkunluk performansın öncülleri olarak görülmüştür (Bakker, Rodríguez-Muñoz, & Sanz Vergel, 2016; Torrente, Salanova, Llorens, & Schaufeli, 2012; Tims ve ark., 2013; Tims, Bakker, & Derks, 2014). Takım performansını konu alan bu çalışma ise, iş şekillendirme ve iş tutkunluğunun takım düzeyinde görülmesinin takım performansının öncülleri olarak değerlendirilmektedir.

**Takımın İş Şekillendirmesi:** İş şekillendirmesi (zanaatkârlığı) kavramı ilk olarak Wrzesniewski ve Dutton (2001) tarafından çalışanların daha anlamlı bir iş yaratmak amacıyla görevlerin, ilişkilerin ve rollerin fiziksel ve bilişsel olarak değiştirilmesi olarak tanımlanmıştır. Burada, klasik iş tasarımı kavramının aksine aşağıdan yukarıya doğru gelişen bir değişim, çalışanların aktifliği söz konusudur. İş şekillendirmesinin üç alt boyutu bulunmaktadır. Bunlardan görevlerin şekillendirilmesi (zanaatkârlığı) çalışanların kendi becerileri doğrultusunda görevin cinsiyle (mevcut görevlerine harcayacağı zaman, enerji ve dikkatin şekillendirilmesi) ve görev sayısı (yeni görev ekleme/çıkarma) ilgili iken; İlişkisel şekillendirme (zanaatkârlığı) ise görevlerin dikkat gerekliliği ve

karmaşıklığına göre kişiler arası etkileşimin çalışanlar tarafında şekillendirilmesi anlamına gelmektedir. Bilişsel şekillendirme (zanaatkârlık) de görevlerin karmaşıklığına göre çalışanların görev ve ilişkileri algılama şeklinin (kendini işin bir parçasında yoksa bütününde mi gördüğüyle ilgili) değiştirilmesi şeklinde ifade edilmiştir (Ghitulescu, 2006). Daha sonra, Tims ve Bakker (2010) tarafından iş şekillendirmesi kavramı çalışanların iş gerekleri ve kaynaklarında yaptıkları proaktif değişiklikler olarak tanımlanmış; Bakker, Tims, ve Derks (2012) ise Bakker ve Demerouti (2007) tarafından geliştirilen iş gerekleri ve kaynakları modeli çerçevesinde iş şekillendirmesinin (zanaatkârlığı) dört farklı şekilde gerçekleştirilebileceğini önermiştir: yapısal/sosyal iş kaynaklarını artırmak, zorlu iş gereklerini artırmak ve engelleyici iş gereklerini azaltmak.

Yirmibirinci yüzyılın başlarında ortaya çıkan iş şekillendirmesi (zanaatkârlığı), Endüstri ve Örgüt Psikolojisi alanında nispeten yeni ortaya çıkan bir kavram olmasına rağmen, son yıllarda araştırmacılar tarafından oldukça çok ilgi görmüştür. Literatür, iş şekillendirmesinin (zanaatkârlığı) hem çalışan açısından (kişi-iş uyumu, anlamlı iş, iş tatmini ve iş tutkunluğu (Christian, Garza, & Slaughter, 2011; Demerouti, Cropanzano, Bakker, & Leiter, 2010; Shusha, 2014; Tims & Bakker, 2010; Tims ve ark., 2012; Tims ve ark., 2013; Wrzesniewski & Dutton, 2001; Yavuz, 2018) hem de işletme açısından (kurum aidiyeti, örgütsel vatandaşlık davranışları, performans, işten ayrılma niyetinin azalması (Irvin, 2017; Kristof-Brown, Zimmerman, & Johnson, 2005; Leana, Appelbaum, & Shevchuk, 2009; Lyons, 2008; Tims & Bakker, 2010) olumlu sonuçlar ürettiğini göstermektedir.

Literatürde takımın iş şekillendirmesinin öncülleri ve sonuçları hakkında henüz az miktarda çalışma mevcuttur. Takımın iş şekillendirmesi, takımın iş tatmini, işe bağlılığı, işten ayrılma niyetinin azalması (Leana ve ark., 2009), takım yeterliliği (McClelland, Leach, Clegg, & McGowan, 2014), iş tutkunluğu, bireysel ve takım performansını (Mäkikangas, Aunola, Seppälä, & Hakanen, 2016; Tims ve ark., 2013) pozitif yönde etkilemektedir.

**Takımın İş Tutkunluğu:** İş tutkunluğu, canlı ve enerjik olma, işe çaba sarf etme konusunda istekli olma, çalışırken zamanın nasıl geçtiğini anlamadan, konsantre olarak sıkılmadan çalışma, zorluklar karşısında dirençli olabilme gibi olumlamalar şeklinde tanımlanmaktadır (Schaufeli, Salanova, González-Romá, & Bakker, 2002). Takım üyelerinin birbiriyle olan etkileşimi ve deneyim paylaşımı sayesinde aynı olumlamaların takım düzeyinde görülmesi takımın işe tutkunluğu olarak tanımlanmaktadır. Önceki çalışmalar, iş kaynaklarını (iş arkadaşları ve yöneticilerinin sosyal desteği, performans hakkında geribildirim, görev çeşitliliği, özerklik ve öğrenme fırsatlarının varlığını) (Schaufeli & Bakker, 2004; Hakanen, Bakker, & Schaufeli, 2006; Bakker & Demerouti, 2007; Schaufeli & Salanova, 2007), dönüşümsel liderlik ve lider-üye etkileşimini (Bass & Avolio, 1990; Macey & Schneider, 2008; Christian ve ark., 2011) iş tutkunluğunun öncülleri olarak tespit etmiştir.

İşine tutkun bir çalışan, hissettiği pozitif duygular sayesinde (mutluluk, eğlence, heves), kendi kaynaklarını üretebilme ve bu işe angaje olma halini başkalarına da yansıtabilmektedir. Bu sayede de daha iyi performans göstermektedir (Bakker & Demerouti, 2008). İş şekillendirme (zanaatkârlık) ve iş performansı arasındaki pozitif ilişkinin doğrudan (Leana, Appelbaum, & Shevchuk, 2009; Lyons, 2008) ve işe tutkunluğun aracılığıyla olduğunu ortaya koyan çalışmalar bulunmaktadır. Bu aracılı ilişki hem bireysel (Bakker ve ark., 2012; Christian ve ark., 2011; Demerouti ve ark., 2010; Tims & Bakker, 2010) hem de takım düzeyinde (Tims ve ark., 2013) gerçekleşmektedir. Takımın iş şekillendirmesinin sosyal kaynakların artırılması (destekleyici takım iklimi, koordinasyon ve takım çalışması) boyutu takımın işe tutkunluğu ve nihayet takım performansını olumlu yordamaktadır (Torrente ve ark., 2012). Benzer şekilde sağlık sektöründe çalışan 525 kişi ve 54 takım ile yapılan çalışma hem bireysel hem takım düzeyinde işe tutkunluğun iş şekillendirme ve performans arasındaki olumlu ilişkide aracılık ettiğini ortaya koymuştur (Tims ve ark., 2013).

Bu çalışma takımın iş şekillendirmesinin takım performansını olumlu yordayıcı ilişkisinin takımın işe tutkunluğu aracılığıyla gerçekleşeceğini test etmektedir.

**Takımın İş Şekillendirmesinin Öncülleri:** Takımın iş şekillendirmesinin öncülleri (Mäkikangas, Bakker, & Schaufeli, 2017) ve sonuçları (Leana, Appelbaum, & Shevchuk, 2009; McClelland, Leach, Clegg, & McGowan, 2014; Tims2013) literatürde çok az çalışılmış ve hatta Türkiye’de bu konuda henüz çalışma yapılmamıştır. Bu çalışmada takımın iş şekillendirmesi öncülleri olarak takımın iş karakteristikleri, kişilik özellikleri (takımın proaktivitesi, takımın kolektif yeterliliği) ve takımda kişiler arası güven test edilmektedir.

**A. Takımın İş Karakteristikleri:** Hackman ve Oldham (1980) beş faktörlü iş karakteristikleri modelinin takım seviyesinde tanımlanmasıyla Strubler ve York (2007) tarafından takım iş karakteristikleri modeli geliştirilmiştir. Görev kimliği, görev önemi ve beceri çeşitliliği kavramlarının bir araya gelmesiyle işin anlamlılığı kavramı geliştirilmiştir. İşin anlamlılığı ve takım performansı arasında doğrudan pozitif yordayıcı bir ilişki görülmektedir (Stewart, 2006). Çalışanlar yaptıkları işi değerli ve önemli görürlerse, iş tatminleri ve motivasyonları artacak ve dolayısıyla daha iyi performans göstereceklerdir (Batt & Appelbaum, 1995; Hackman & Oldham, 1980; Grant, 2007; Rosso, Dekas, & Wrzesniewski, 2010). Takımın işlerini yaparken ve süreçleri yönetirken ne kadar özgür ve bağımsız hareket edebildikleri takımın özerkliği şeklinde tanımlanmaktadır. Özerklik, yeni beceriler edinme (Parker, 1998), işe tutkunluk (Wrzesniewski & Dutton, 2001; Tims & Bakker, 2010), motivasyon ve iş tatmini (van Mierlo, Rutte, Kompier, & Doorewaard, 2005) ve performansı (Stewart, 2006) olumlu yordamaktadır. İş karakteristiklerinin geribildirim boyutu da yapılan işlerin sonuçlarına yönelik alınan değerlendirmeler ışığında kişilerin davranışlarını yönetmesi ve yeniden şekillendirerek daha iyi performans sergilendiğini göstermiştir (Cohen, Ledford, & Spreitzer, 1996; Ergün & Eyisoy, 2018; Spreitzer, Cohen, & Ledford, 1999).

İş karakteristikleri ve iş şekillendirmesi ilişkisi hakkında birtakım çalışmalar yapılmıştır. Mattarelli ve Tagliaventi’nin (2015) çalışmasına göre çalışanlar işin kimliğine yönelik bir tehdit hissettiklerinde kişisel ve organizasyonel gelişimi sağlamak amacıyla iş şekillendirmesi (zanaatkârlığı) davranışı göstermeye yatkın olmaktadır. Bunun yanı sıra, özerklik çalışanların iş şekillendirmesi (zanaatkârlığı) ve iş refahının olumlu yordayıcısıdır (Slomp ve ark., 2015).

İş karakteristikleri ve takım performansı ilişkisi yazında çok az çalışılmıştır. Çin’de 100 yönetici ve 382 takım üyesinden oluşan 100 takımla yapılan çalışma (Li, Li, & Wang, 2009) işin anlamlılığı (görev kimliği, görevin önemi, beceri çeşitliliği) ve takım performansı arasında doğrudan pozitif bir ilişki olduğunu belirtmişlerdir. Ayrıca, özerklik ve geri bildirim boyutları ile takım performansı ilişkisinin ise takım üyelerinin iş tatmini aracılığıyla yordandığını ortaya koymuştur. Chiu ve Chen’in (2005) çalışması, takım performansının, takım görevlerinin yeniden tasarlanması ve görevlerin çeşitlendirilmesi gibi çeşitli yöntemlerle artırılabilirliğini önermektedir. Mevcut çalışmada, takım üyelerinin yaptıkları işin anlamlı olduğunu düşünmeleri, özerklik ve geribildirim mevcut olması halinde iş şekillendirmesi yapabileceklerini, işlerine tutkun olacaklarını ve daha iyi performans sergileyecekleri test edilmektedir.

**B. Proaktif Kişilik:** Çevresini değiştirme yönünde aktif davranışlar sergilemeye yönelik eğilim proaktif kişilik olarak tanımlanmaktadır (Bateman & Crant, 1993, s. 103). Bunların, kişisel inisiyatif almaları ve kendi ağındaki kişilerle ilişki geliştirmeleri sebebiyle proaktif kişiler iyi performans göstermektedirler (Thompson, 2005). Proaktif kişilerin başarılı performans göstermesinin nedeni, bu kişilerin işi şekillendirmelerine (zanaatkarlık) bağlanmıştır (Bakker, Tims, & Derks, 2012; Mamak, 2018). Bireysel düzeyde proaktif kişilik, iş şekillendirmesi ve performans çalışmalarından hareketle bu çalışma, çevresini etkileme ve şekillendirme konusunda aktif olan proaktif kişilerden oluşan takımların iş şekillendirme ve takım performansını olumlu yönde etkilemeleri test edilmektedir.

**C. Kolektif Yeterlilik:** Hedefleri gerçekleştirebilmek için takım üyelerinin organizasyon ve uygulama becerilerinin yeterli olduğu yönelik ortak inanç şeklinde tanımlanmaktadır (Bandura, 1997, s. 477). Kolektif yeterlilik, takım yeterliliği ve motivasyonu (Solansky, 2008), takımın işe tutkunluğu (Salanova, Llorens, & Schaufeli, 2011) ve takım performansı (Chou, Lin, Chang, & Chuang, 2013; Gully, Beaubien, Incalcaterra, & Joshi, 2002; Gibson, 2003; Kozub & McDonnell, 2000; Parker, 1994) anlamına gelmektedir. Mevcut çalışma, takımın kolektif yeterliliği takımın iş şekillendirmesinin bir öncülü olarak test etmekte ve takımın kolektif yeterliliği ve takım performansı ilişkisinin takımın iş

şekillendirmesi ve takımın işe tutkunluğu aracılıklarıyla yordayıcılığı test edilmektedir.

**D. Kişiler arası güven:** Güvenin en yaygın kabul görmüş tanımı “karşı tarafın eylemlerine karşı savunmasız olma isteği” dir (Mayer, Davis, & Schoorman, 1995, s.712). İşgücünde çeşitliliğin artması (Jamieson & O’Mara, 1991; Schaufeli, 2014, s.9), işyerinde sorumlulukları paylaşan ve çalışanları karar alma süreçlerine dâhil eden otonom takımların uygulanması (Golembiewski & McConkie, 1975; Keen, 1990; Lawler, 1992; Larson & LaFasto, 1989), takım çalışması ve esnekliğin gerekli olduğu ortamlarda (Salas, Sims, & Burke, 2005) kişiler arası güvenin önemi artmaktadır.

Görgül araştırmalar, kişilerarası güvenin daha iyi satış hacmi ve kar oranı sağladığı (Davis, Schoorman, Mayer, & Tan, 2000) ve takım performansını (Costa, 2003; Hafizoğlu, 2010; Klimoski & Karol, 1976) artırdığını bulmuşlardır. Ayrıca yine, kişilerarası güvenin iletişim (Mellinger, 1959; O’Reilly & Roberts, 1974), çalışanlar arasında işbirliği (Gambetta, 1988), bilgi paylaşımı (Mooradian, Renzl, & Matzler, 2006) ve karar verme (Zand, 1972) üzerinde olumlu etkilerinin olduğu gösterilmiştir.

Takımlarda kişiler arası güvenin takımın iş şekillendirmesini nasıl etkileyeceği yönünde literatürde bir boşluk olduğu bu görgül araştırmalarda ifade edilmiştir (Tims ve ark., 2013). Parker, Williams ve Turner’ın (2006) çalışması, insanlar takım arkadaşlarına duydukları güven sayesinde temel görevlerin ötesinde bir şeyler denediklerini ve proaktif iş davranışları gösterebileceklerini öne sürmüştür.

Bu doğrultuda, mevcut çalışmada takımda kişilerarası güvenin takımın iş şekillendirmesinin yordayıcısı olduğu, takımın işe tutkunluğunun ve takım performansını olumlu etkileyeceği test edilmektedir.

Yukarıdaki açıklamalar ışığında bu araştırmada değişik hipotezler test edilmiştir. Bu hipotezler, H1 den H11 e kadar aşağıda verilmiştir.

*H1: Takımın iş şekillendirmesi takımın işe tutkunluğunu olumlu yordamaktadır.*

H2: *Takımın işe tutkunluğu takım performansını olumlu yordamaktadır.*

H3: *Takımın iş şekillendirmesinin takım performansı ilişkisine takımın işe tutkunluğu aracılık etmektedir.*

H4: *Takımın iş karakteristiklerinin takımın iş şekillendirmesinin olumlu yordayıcısıdır.*

H5: *Takımın iş şekillendirmesi ve takımın iş tutkunluğunun takımın iş karakteristikleri ve takım performansı arasındaki sıralı aracılık rolü bulunmaktadır.*

H6: *Takımın proaktif kişiliği takımın iş şekillendirmesinin olumlu yordayıcısıdır.*

H7: *Takımın iş şekillendirmesi ve takımın iş tutkunluğunun takımın proaktif kişiliği ve takım performansı arasındaki sıralı aracılık rolü bulunmaktadır.*

H8: *Takımın kolektif yeterliliği takımın iş şekillendirmesinin olumlu yordayıcısıdır.*

H9: *Takımın iş şekillendirmesi ve takımın iş tutkunluğunun takımın kolektif yeterliliği ve takım performansı arasındaki sıralı aracılık rolü bulunmaktadır.*

H10: *Takımda kişiler arası güven takımın iş şekillendirmesinin olumlu yordayıcısıdır.*

H11: *Takımın iş şekillendirmesi ve takımın iş tutkunluğunun takımda kişiler arası güven ve takım performansı arasındaki sıralı aracılık rolü bulunmaktadır.*

## **YÖNTEM**

### **Katılımcılar**

Bu çalışma için gereken örneklem sayısı, G\* Power programı kullanılarak 119 olarak hesaplanmıştır. Tabachnick ve Fidell'in önerisine göre ise ( $N > 50 + 8m$  ; m

= bağımsız değişken sayısı) minimum 98 katılımcılı bir çalışma örneklemini uygun bulunmuştur.

İş şekillendirmesi (zanaatkârlığı) konusunda yapılan görgül çalışmaların homojen yani sadece bir meslek grubundan örneklem seçilerek yürütülmesi sebebiyle (Leana, Appelbaum, & Shevchuk, 2009; Petrou, Demerouti, & Schaufeli, 2015) literatürde örneklem çeşitlendirmesinin eksik olduğu gerekçesiyle mevcut çalışma, Türkiye'nin farklı bölgelerinden farklı iş ve meslek grupları örneklemiyle yürütülmüştür.

Çalışmanın örneklemini 147 kişi (39'u takım lideri olan) 46 takım oluşturmaktadır. Çalışmaya katılanların 76'sını kadınlar, 71'ini ise erkekler oluşturmaktadır. Katılımcıların yaş aralıkları 19 ile 52 arasında dağılım göstermekte olup büyük çoğunluğunun 26-33 yaş aralığında (%47.62) olduğu görülmektedir. 18-25 yaş aralığında olan katılımcı sayısı ise örneklemin %29.93'ünü oluşturmaktadır. Katılımcıların ortalama iş tecrübeleri 6.5 yıldan fazla olmakla birlikte mevcut ekipleriyle ortalama 2.5 yıldır birlikte çalışmakta ve birbirlerini uzun süredir tanımaktadırlar. Sektörel dağılım açısından, sadece sekiz katılımcı öğrenci olup, katılımcıların % 19.73'ü kamu sektöründe, % 74.83'ü ise özel sektörde çalışmaktadır. Katılımcıların büyük çoğunluğu servis işleriyle uğraşırken (%88,49), sadece % 11,51'i üretim işi yapmaktadır. Çalışmaya katılan takımlar ortalama altı kişiden oluşmaktadır.

Katılımcılarla çevrim içi (online) ortamda paylaşılan ölçekler ise aşağıdaki gibidir:

### **Ölçekler**

**Takımın İş Karakteristikleri Ölçeği:** Algılanan takımın iş karakteristiklerini ölçmek için Hackman ve Oldman (1980) tarafından hazırlanan İş Tanılama Anketinin Varoğlu (1986) tarafından uyarlanan Türkçe versiyonu kullanılmıştır. Ölçek 15 madde ve görev kimliği, görevin önemi, beceri çeşitliliği, özerklik ve geri bildirim boyutlarından oluşmaktadır. Ölçeğin, Yalçın (2017) tarafından Türkiye örnekleminde kullanılan güvenilirlik analizi sonucu Cronbach Alfa değeri



.78 olarak hesaplanmıştır. Bu ölçekte ve çalışmada kullanılan diğer ölçeklerde ölçek ortalamaları alınarak ölçek puanı hesaplanmıştır.

**Takımın Proaktif Kişiliği Ölçeği:** Kişiler tarafından algılanan takımın proaktif kişiliğini ölçmek için Bateman ve Crant (1993) tarafından geliştirilen PKÖ kullanılmıştır. Ölçek, Akın ve Arıcı (2015) tarafından Türkçeye uyarlanmış olup tek faktör ve 10 maddeden oluşmaktadır. Ölçek maddelerinin faktör yükleri .60 ve .75 arasında olup. Bu çalışmada Cronbach Alfa değeri .86 olarak bulunmuştur.

**Takımın Kolektif Yeterliliği Ölçeği:** İtalyan araştırmacılar Borgogni, Petitta, ve Mastrorilli (2010), Petitta ve Falcone (2007) ve Russo, Dammacco, ve Borgogni (2007) tarafından geliştirilen ve Arıkan (2009) tarafından Türkçe uyarlaması yapılan dokuz maddelik takımın algılanan kolektif yeterlilik ölçeği kullanılmıştır. Bu çalışmada Cronbach Alfa değeri .96 olarak bulunmuştur.

**Takımda Kişiler Arası Güven Ölçeği:** Takımın algılanan kişiler arası güvenini ölçmek için Erdem, Ozen ve Atsan (2003) tarafından geliştirilen tek faktörlü yedi maddelik ölçek kullanılmıştır. Ölçeğin Cronbach Alfa değeri .82 olup güvenilirlik değeri kabul edilebilir düzeydedir.

**Takımın İş Şekillendirmesi (Zanaatkârlığı) Ölçeği:** İş şekillendirmesi (zanaatkârlığı) ölçeği Tims, Bakker ve Derks (2012) tarafından geliştirilmiş olup ölçeğin takım düzeyine uyarlaması da Tims ve ark. (2013) tarafından yapılmıştır. İş şekillendirme (zanaatkârlığı) ölçeği Akın, Sarıçam, Kaya ve Demir (2014) tarafından Türkçeleştirilmiş olup Cronbach Alfa değeri .81dir. Mevcut çalışma, Akın ve ark. (2014) ölçeğindeki “ben” ifadelerinin “biz” e dönüştürülerek algılanan takımın iş şekillendirmesi (zanaatkârlığı) değişkeni ölçümlenmiştir.

**Takımın İşe Tutkunluğu Ölçeği:** Schaufeli, Bakker ve Salanova (2006) tarafından geliştirilen iş tutkunluğu (work engagement) ölçeği dokuz madde ve üç alt boyuttan oluşmaktadır. Ölçeğin takım düzeyine uyarlaması Torrente, Salanova, Llorens ve Schaufeli (2012) tarafından geliştirilmiştir. İş tutkunluğu ölçeği Dalay (2007) tarafından Türkçeye çevirilmiş olup, Cronbach Alfa değeri .97dir. Bu

çalışmada, Dalay (2007) ölçeğindeki “ben” ifadesinin “biz” olarak dönüştürülmesi yoluyla algılanan takımın iş tutkunluğu ölçeği oluşturulmuştur.

**Takım Performansı Ölçeği:** Katılımcılar tarafından algılanan takım performansını ölçmek için Erdem ve Ozen (2003) tarafından geliştirilen altı maddelik ölçek kullanılmıştır. Ölçeğin Cronbach Alfa değeri .89’dır.

**Kontrol Değişkenleri:** Bireysel seviye analizlerde katılımcıların takımdaki rolü (lider olup olmadıkları), görev bağımlılığı, takım büyüklüğü, cinsiyet, çalışan/öğrenci takımı, iş türü (üretim/servis) değişkenlerinin çalışmadaki değişkenlerle korelasyonu anlamlı bulunmuş ve kontrol edilmiştir. Takım seviyesindeki analizlerde görev bağımlılığı, takım büyüklüğü, çalışan/öğrenci takımı ve iş türü (üretim/servis) değişkenleri kontrol değişkeni olarak alınmıştır.

## **Süreç**

Verilen toplanması öncesinde, Orta Doğu Teknik Üniversitesi İnsan Araştırmaları Etik Komitesi’nden etik onayı alınmıştır. Hazırlanan anketler çevrimiçi (online) olarak dağıtılmıştır. Başlangıçta, katılımcılara bilgilendirilmiş onam formu sağlanmıştır. Takım liderlerini ayırt etmek için katılımcılara takımdaki rolleri sorulmuş, ardından tüm katılımcılar anket sorularını yanıtlamıştır. Son olarak, katılım sonrası bilgilendirme formu sunulmuş, katılımcılardan çalışma ekibindeki arkadaşlarını bu çalışmaya davet etmeleri istenmiştir.

## **İstatistiksel Veri Analizi**

İstatistiksel analizler, Sosyal Bilimler için İstatistik Paketi’nin (SPSS) Windows için 21. sürümü kullanılarak yapılmıştır. Aracılık testleri için Hayes PROCESS Macro’nun ilgili modelleri (Model 4 ve Model 6) kullanılmıştır (Hayes, 2017).

## **BULGULAR**

Analize başlamadan önce veri seti minimum-maksimum değerler, hatalı veri girişleri, kayıp veriler için kontrol edilmiştir. Kayıp veri analizi yapılmış, Little’s

MCAR testi ile kayıp verilerin rassal dağıldığı saptanmıştır ( $\chi^2=2235.774$ ,  $p=.335$ , anlamsız). Kayıp veri sayısının veri setinin %5'inden az olması sebebiyle kayıp veriler ortalama değer ataması yapılarak doldurulmuştur. Akabinde yapılan tek boyutlu uç değerler SPSS aracılığıyla “boxplot” grafikleri incelenerek belirlenmiş; çok boyutlu değişkenlerin belirlenmesi için ise Mahalanobis Uzaklığı değerleri kullanılmıştır. Bu analiz sonunda üç katılımcının verileri uç değer belirlenmiştir. Çok boyutlu regresyon analizinin varsayımları da test edilmiş olup istatistiksel analizler bu uç değerlerin atılmasıyla 147 katılımcıyla gerçekleştirilmiştir.

Çalışmanın değişkenlerinin minimum-maksimum değerleri, ortalama ve standart sapma değerleri Tablo 3.3 (bireysel veri seti) ve Tablo 3.4'de (takım veri seti); değişkenlerin birbiri ile olan korelasyon değerleri Tablo 3.3.1 de (bireysel veri seti) ve Tablo 3.4.1 de (takım veri seti) bulunmaktadır.

Katılımcıların rolü, görev bağımlılığı, cinsiyet ve takım büyüklüğü değişkenleri kontrol edildiğinde, ilk hipotez takımın iş şekillendirmesi ve takımın iş tutkunluğu arasındaki pozitif ilişki ( $\beta=.85$   $p<.001$ ) ; ve takım büyüklüğü değişkeni kontrol edildiğinde ikinci hipotez, takımın iş tutkunluğunun takım performansını yordayacağı ( $\beta=.74$ ,  $p<.001$ ) desteklenmiştir.

Takımın iş tutkunluğunun takımın iş şekillendirmesi ve takım performansı arasındaki kısmi aracılık rolü, üçüncü hipotez de desteklenmiştir. Takımın iş şekillendirmesi ve takımın iş tutkunluğu arasında pozitif yönlü bir ilişki ( $b = .96$ ,  $t(140) = 17.20$ ,  $p<.001$ ); takımın iş şekillendirmesi; takımın iş tutkunluğundaki varyansın %73'ünü tek başına açıklamıştır. Takımın iş şekillendirmesinin takım performansı üzerindeki toplam etkisi de anlamlı bulunmuş ( $b = .75$ ,  $t(140) = 10.97$ ,  $p<.001$ ); takımın iş şekillendirmesi takım performansındaki varyansın %50'sini tek başına açıklamıştır. Takımın iş tutkunluğu modele eklendiğinde takımın iş şekillendirmesinin takım performansı üzerindeki direkt etkisinin düştüğü ancak hala anlamlı olduğu görülmektedir. Takımın iş tutkunluğunun modele eklenmesiyle takım performansındaki açıklanan varyans %58'e yükselmiştir. Bu sonuç, takımın iş şekillendirmesinin takım performansına etkisine

takımın iş tutkunluğunun kısmi aracılık ettiği hipotezinin doğrulandığını göstermektedir.

Takımın iş karakteristiklerinin takımın iş şekillendirmesinin olumlu yordayıcılığı dördüncü hipotez desteklenmiştir ( $b = .48, t(139) = 4.78, p < .001$ ). Takımın iş karakteristikleri ve takım performansı üzerindeki etkisi anlamlıdır ( $b = .50, t(139) = 4.67, p < .001$ ) ve takım performansındaki varyansın %32'si takımın iş karakteristikleri tarafından açıklanmıştır. Takımın iş şekillendirmesi ve iş tutkunluğu modele eklendiğinde takımın iş karakteristiklerinin takım performansı üzerindeki direkt etkisinin düştüğü ancak hala anlamlı olduğu görülmektedir ( $b = .19, SE = .07$ ) 95% CI [.09, .35]). Takımın iş karakteristikleri, takımın iş şekillendirmesi ve takımın işe tutkunluğundan oluşan bu modelle takım performansındaki açıklanan varyans %62'e yükselmiştir. Bu sonuç, Hipotez 5'i desteklenmiştir, yani takımın iş karakteristikleri (görev kimliği, görev önemi, beceri çeşitliliği, görev özerkliği ve geri bildirim), takımın iş şekillendirmesi ve iş tutkunluğunun sıralı aracılığı yoluyla takım performansı ile pozitif yönlü bir ilişkiye sahiptir.

Takımın proaktif kişiliğinin takımın iş şekillendirmesinin olumlu yordayıcılığı altıncı hipotez desteklenmiştir ( $b = .26, t(139) = 3.49, p = .001$ ). Takımın iş şekillendirmesi ve iş tutkunluğunun takımın proaktif kişiliği ve takım performansı arasındaki sıralı aracılık rolü, yedinci hipotez olarak test edilmiştir. Takımın proaktif kişilik ve takım performansı üzerindeki toplam etki anlamsız bulunduğu için hipotez desteklenememiştir ( $b = -.011, t(139) = -.182, p = .856$ ).

Takımın kolektif yeterliliğinin takımın iş şekillendirmesinin olumlu yordayıcılığı sekizinci hipotez desteklenmiştir ( $b = .64, t(139) = 13.46, p < .001$ ). Takımın kolektif yeterliliği ve takım performansı üzerindeki toplam etki anlamlıdır ( $b = .64, t(139) = 11.81, p < .001$ ) ve takım performansındaki varyansın %61'i takımın kolektif yeterliliği tarafından açıklanmaktadır. Takımın iş şekillendirmesi ve iş tutkunluğu modele eklendiğinde takımın kolektif yeterliliğinin takım performansı üzerindeki direkt etkisinin düştüğü ancak hala anlamlı olduğu görülmektedir ( $b = .20, SE = .06$ ) 95% CI [.08, .33]). Takımın kolektif yeterliliğine ilaveten, takımın

iş şekillendirmesi ve takımın işe tutkunluğunun modele eklenmesiyle takım performansındaki açıklanan varyans %68'e yükselmiştir. Hipotez 9 desteklenmiştir, yani takımın kolektif yeterliliği takımın iş şekillendirmesi ve iş tutkunluğunun sıralı aracılığı yoluyla takım performansı ile pozitif yönlü bir ilişkiye sahiptir.

Takımda kişilerarası güvenin takımın iş şekillendirmesinin olumlu yordayıcılığı onuncu hipotez desteklenmiştir ( $b = .60$ ,  $t(139) = 10.91$ ,  $p < .001$ ). Takımda kişilerarası güvenin ve takım performansı üzerindeki toplam etki anlamlıdır ( $b = .44$ ,  $t(139) = 6.46$ ,  $p < .001$ ) ve takım performansındaki varyansın %61'i takımda kişilerarası güven tarafından açıklanmaktadır. Takımın iş şekillendirmesi ve iş tutkunluğu modele eklendiğinde takımda kişilerarası güvenin takım performansı üzerindeki direkt etkisinin düştüğü ancak hala anlamlı olduğu görülmektedir ( $b = .21$ ,  $SE = .06$ ) 95% CI [.10, .34]). Takımda kişilerarası güvene ilave olarak, takımın iş şekillendirmesi ve takımın iş tutkunluğunun modele eklenmesiyle takım performansındaki açıklanan varyans %70'e yükselmiştir. Hipotez 11 desteklenmiştir, yani takımda kişilerarası güven takımın iş şekillendirmesi ve iş tutkunluğunun sıralı aracılığı yoluyla takım performansı ile pozitif yönlü bir ilişkiye sahiptir.

Takımın iş şekillendirmesinin öncülleri arasında en büyük etki takımın kolektif yeterliliği değişkenine aittir. Eğer takım üyeleri arasında kolektif yeterlilik hâkimse, takım üyeleri birbirleriyle bilgi, beceri ve yeteneklerini paylaşmaya, iş yükü ve zorluklara rağmen olumlu sinerjinin hâkim olacaktır (Jex & Bliese, 1999).

Tüm hipotezler takım düzeyinde de test edilmiş olup benzer sonuçlar elde edilmiştir.

## **TARTIŞMA**

Çalışma sonuçlarına göre, takımdaki kişilerin algıladıkları iş karakteristikleri, takımın proaktif kişiliği, takımın kolektif yeterliliği ve takımda kişilerarası güven hem takım içi hem takımlar arası düzeyde takımın iş şekillendirmesinin

(zanaatkârlığı) pozitif yordayıcısı olarak belirlenmiştir. Takımın proaktif kişiliği dışındaki tüm öncüller ve takım performansı arasındaki pozitif yönlü ilişki takımın iş şekillendirmesi ve iş tutkunluğu sıralı aracılığıyla gerçekleşmektedir.

Bireysel analizlerde, kadınların takım içinde iş şekillendirmeye daha yatkın oldukları görülmüştür. Hem bireysel hem takım analiz sonuçlarına göre, takım büyüklüğü, takımın iş şekillendirmesi ve takım performansı üzerinde küçük ama olumsuz bir etkiye sahiptir. Çalışmanın sonuçları, takımdaki kişi sayısı arttıkça takımın iş şekillendirmesi zorlaşabileceğini ve takım performansının düşebileceğine işaret etmektedir. Bu nedenle, takım büyüklüğü konusunda da optimal kişi sayısı (5-9) ile ilerlemek iş şekillendirme ve performans amaçları için iyi olacaktır.

## **UYGULAMA ÖNERİLERİ**

İş karakterisikleri ve takımın iş şekillendirmesi arasındaki pozitif korelasyon sebebiyle iş tanımları çalışanların kurum ve dünya için değer yaratacak ve anlamlı işler yaptıkları şeklinde tasarlanmalıdır. Çalışanlara görevlerinin önemini vurgulayan rolü hakkında geri bildirim sağlamak, çalışanlara iş yapma şekilleri konusunda özerklik tanımak ve yeni beceri kazanımlarını desteklemek takımların iş şekillendirmesine ve sonuç olarak takım performansının artmasına destek olacaktır. Takımın iş şekillendirmesi yaklaşımıyla uyumlu olarak “otonom, kendi kendini yöneten takım” yapısı uygun olabilir. Kendi kendini yöneten takımlar, işlerinde sorumluluk ve özerkliğe sahip (işin planlaması ve görev paylaşımı), karar alma süreçlerine ve problem çözümlerine dâhil olan hiyerarşik olmayan takımlardır (Hackman, 1986; Moravec, 1998; Pearce & Manz, 2005; Wellins ve ark., 1990).

Kolektif yeterlilik ve takım üyeleri içinde güvenin sürdürülmesi takımın iş şekillendirmesi ve başarılı takım performansı için değerli olacaktır. Kolektif yeterlilik hem takım içinde hem takımlar arasında iş şekillendirmenin en büyük belirleyicisidir. Takım üyelerinin ortak hedeflere ulaşabilmek için gerekli bilgi, beceri ve yeteneklerin birbirleri arasında paylaşılması, becerilerin

çeşitlendirilmesi, zorluklar ve iş yükleri olduğunda dahi takım içinde olumlu bir sinerji ve etkileşimin sağlanmasına yönelik takım liderleri ve organizasyondaki İnsan Kaynakları uzmanları tarafından bu tür ortamları oluşturacak, motivasyonu artıracak takım aktivitelerinin yapılması faydalı olacaktır.

## **ÇALIŞMANIN GÜÇLÜ YANLARI VE SINIRLILIKLARI, GELECEK ÇALIŞMALAR İÇİN ÖNERİLER**

Farklı meslek gruplarından ve ülkenin farklı bölgelerinden heterojen bir örneklemin kullanılması çalışmanın en güçlü yanlarından biri olmuştur. Çalışmada hem özel hem özel sektör çalışanlarından, mühendislik, satış, otomotiv, bankacılık, tekstil gibi farklı meslek gruplarından veri toplanması ve veri kaynağı olarak hem takım liderleri hem de takım üyelerinin kullanılmış olması çalışma sonuçlarının genellenebilir olmasına zemin hazırlamaktadır. İş şekillendirmesi akademik çalışmaları uluslararası popülaritesine rağmen ülkemizde oldukça yeni bir çalışma alanı olup takımın iş şekillendirmesi modeliyle Türkiye’de ilk çalışmadır.

Çalışma, ankette bireysel beyana dayalı bir veri toplama yöntemi kullanılması sebebiyle sonuçlar düşündürücüdür. Bu çalışmayı, takım liderleri, takım üyeleri ve aynı zamanda İnsan Kaynakları yöneticileri ile birebir görüşmeler yaparak desteklemek ve farklı zaman dilimlerinde veri toplayarak daha güçlü sonuçlar sunmak faydalı olacaktır. Mevcut çalışmada örneklem sayısı az olduğu için yapısal eşitlik modeli (SEM) yerine aracılık analizleri PROCESS Macro ile yapılmıştır (Hayes, 2018; Hayes, Montoya, & Rockwood, 2017).

Kişilik özelliklerinin takımın iş şekillendirmesine etkileri özellikle karanlık üçlü olarak tanımlanan kişilik özelliğinin takımın iş şekillendirmesi üzerindeki moderatör etkisi çalışılması faydalı olacaktır (Roczniewska & Bakker, 2016). Ayrıca, takımın iş şekillendirmesi ve takım tükenmişliği ilişkisi çalışılabilir.

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