ABOUT THE JOURNAL

Research Journal of Business and Management (RJBM) is a scientific, academic, peer-reviewed, quarterly and open-access online journal. The journal publishes four issues a year. The issuing months are March, June, September and December. The publication languages of the Journal are English and Turkish. RJBM aims to provide a research source for all practitioners, policy makers, professionals and researchers working in all related areas of business, management and organizations. The editor in chief of RJBM invites all manuscripts that cover theoretical and/or applied researches on topics related to the interest areas of the Journal.

Editor-in-Chief
Prof. Suat Teker

Editorial Assistant
Inan Tunc


Ethics Policy
RJBM applies the standards of Committee on Publication Ethics (COPE). RJBM is committed to the academic community ensuring ethics and quality of manuscripts in publications. Plagiarism is strictly forbidden and the manuscripts found to be plagiarised will not be accepted or if published will be removed from the publication.

Author Guidelines
All manuscripts must use the journal format for submissions. Visit www.pressacademia.org/journals/rjbm/guidelines for details.

CALL FOR PAPERS

The next issue of RJBM will be published in March, 2020. Submit manuscripts to rjbm@pressacademia.org or http://www.pressacademia.org/submit-manuscript/
Web: www.pressacademia.org/journals/rjbm
EDITORIAL BOARD

Orhan Akova, Istanbul University, Turkey
Adel Bino, University of Jordan, Jordan
Sebnem Burnaz, Istanbul Technical University, Turkey
Isik Cicek, Mediterranean University, Turkey
Cigden Aricigil Cilan, Istanbul University, Turkey
Cuney Dirican, Arel University, Turkey
Raindra Dissanayake, University of Kelaniya, Sri Lanka
Gabriel Dwomoh, Kumasi Polytechnic, Ghana
Ozer Ertuna, Bosphorus University, Turkey
Emel Esen, Yildiz Technical University, Turkey
Nadziri Ab Ghani, Universiti Teknologi Mara, Malaysia
Syed Reza Jalili, Sharif University of Technology, Iran
Pinar Bayhan Karapinar, Hacettepe University, Turkey
Selcuk Kendirli, Gazi University, Turkey
Youngshl Lu, Sun Yat-Sen University, China
Michalle McLain, Hampton University, USA
Ghassan Omet, University of Jordan, Jordan
Rafisah Mat Radzi, Universiti Sains Malaysia, Malaysia
Lihong Song, Shantou University, China
Tifanie Turner, Hampton University, USA
Adilya Yamaltdinova, Kyrgyzstan-Turkey Manas University
Ugur Yozgat, Marmara University, Turkey

REFEREES FOR THIS ISSUE

Rafiuddin Ahmed, University of Dhaka of Bangladesh
Sayed Shah Alam, Masha University of Malaysia
Unal Battal, Eskisehir Technical University
Jason Colquitt, University of Georgia
Vildan Durmaz, Eskisehir Technical University
Dilek Esen, Dokuz Eylul University
Jiing Lin Farh, China Europe International Business School
Gulten Gumustekin, Canakkale Onsekiz Mart University
Omer Erdem Kocak, Medipol University
Saed Metovalli, Universiti Pendidikan Sultan University of Malaysia
Salami Mutiu Olegoke, Universiti Pendidikan Sultan University of Malaysia
Sayed Abidur Rahman, Sultan Qaboos University of Oman
Metehan Tolan, Haci Bayram Veli University
Ibrahim Turkcuer, Pamukkale University
Mustafa Turhan, Istanbul Okan University
Ensar Yesilyurt, Pamukkale University
Ercan Yildiz, Baskent University
Mo Wang, University of Florida
## CONTENT

<table>
<thead>
<tr>
<th>Title and Author/s</th>
</tr>
</thead>
</table>
| 1. The relationship between gender discrimination perception and mobbing from the perspective of European Union and Turkey  
  Nilufer Yoruk Karakilic  
  DOI: 10.17261/Pressacademia.2019.1154  
  RJBM-V.6-ISS.4-2019(1)-p.213-231 | 213-231 |
| 2. Guanxi vs talent acquisition: evaluating the effects of Guanxi referrals in Sino-Foreign Colleges  
  Boidurjo Mukhopadhyay  
  DOI: 10.17261/Pressacademia.2019.1155  
  RJBM-V.6-ISS.4-2019(2)-p.232-242 | 232-242 |
| 3. The effect of departmental productivity on performance-based additional pament in university hospitals: a model proposal  
  Murat Taser, Huseyin Cakir  
  DOI: 10.17261/Pressacademia.2019.1156  
  RJBM-V.6-ISS.4-2019(3)-p.243-270 | 243-270 |
| 4. Effect of technological changes on airport security personnel: age-related analysis  
  Savas S. Ates  
  DOI: 10.17261/Pressacademia.2019.1157  
  RJBM-V.6-ISS.4-2019(4)-p.271-280 | 271-280 |
| 5. Interaction effect of leader-member exchange and stress mindset on challenge stressor and job performance relationship  
  Hsiao-Ling Chen, Shih-Chieh Fang  
  DOI: 10.17261/Pressacademia.2019.1158  
  RJBM-V.6-ISS.4-2019(5)-p.281-290 | 281-290 |
| 6. The impacts of underemployment and careerism on organizational trust and creativity: the moderating roles of personality and organizational collectivism  
  Ibrahim Bouzidani, Alev Torun  
  DOI: 10.17261/Pressacademia.2019.1159  
  RJBM-V.6-ISS.4-2019(6)-p.291-305 | 291-305 |
| 7. Poverty alleviation through self-sustaining new entrepreneurs program: a case study in Bangladesh  
  MFM Amir Khashru, Chieh-Yu Lin  
  DOI: 10.17261/Pressacademia.2019.1160  
  RJBM-V.6-ISS.4-2019(7)-p.306-314 | 306-314 |
| 8. Returns and risk on Bitcoin: a volatility measurement by unit root test  
  Ibrahim Mert  
  DOI: 10.17261/Pressacademia.2019.1161  
  RJBM-V.6-ISS.4-2019(8)-p.315-319 | 315-319 |
| 9. Economic challenges of drug policy in Georgia  
  Lali Khurtsia, Vano Tsitsvadze  
  DOI: 10.17261/Pressacademia.2019.1161  
  RJBM-V.6-ISS.4-2019(9)-p.320-325 | 320-325 |
THE RELATIONSHIP BETWEEN GENDER DISCRIMINATION PERCEPTION AND MOBBING FROM THE PERSPECTIVE OF EUROPEAN UNION AND TURKEY

DOI: 10.17261/Pressacademia.2019.1154
RJBM-V.6-ISS.4-2019(1)-p.213-231

Nilüfer Yoruk Karakilic
Afyon Kocatepe University, Department of Management and Organization, ANS Campus, Afyonkarahisar, Turkey.
nilyoruk@aku.edu.tr, ORCID: 0000-0002-6609-4068

Date Received: September 20, 2019 Date Accepted: December 5, 2019

To cite this document
Permemant link to this document: http://doi.org/10.17261/Pressacademia.2019.1154
Copyright: Published by PressAcademia and limited licenced re-use rights only.

ABSTRACT

Purpose - Discrimination is an individual's exposure to unfair behaviors due to some factors such as gender, age, race, income and social status. The perception of gender-based discrimination was evaluated from the perspective of European Union and Turkey and it was aimed to explain the relationship between the perception of gender-based discrimination and mobbing in this study.

Methodology - In this study, a survey was conducted to the academicians working at Afyon Kocatepe University. For the validity and reliability of the survey Structural Equation Model was tested with SPSS 16 and AMOS 19 programmes and the hypotheses were tested by AMOS 19 programme. In the study analyzed whether the perception of gender discrimination increased the emotional violence in workplaces or not, in other words its relation with mobbing.

Findings- According to the outputs of Structural Equation Model, the presence of the effect of the perception of hostile gender discrimination was identified; however, it was revealed that the perception of benevolent gender discrimination had no effect on mobbing.

Conclusion- In the studies to decrease the perception of gender discrimination in society should be conducted in order to prevent the incidence of mobbing. The most important step to take for EU countries and Turkey about mobbing is to legislate in this field. Legal practices and sanctions to prevent mobbing should be implemented. It is also important to create awareness in the society in this issue. This awareness should be supported by mass media to enhance the awareness.

Keywords: Gender discrimination, mobbing, structural equation model, European Union countries, Turkey.

JEL Codes: J16, M50, M54

1. INTRODUCTION

Gender discrimination includes all types of gender-based discriminations, exclusions and restrictions, which aim to prevent and restrict the use of human rights and freedoms for women based on the equality of women and men in political, economic, social, cultural, personal or other fields. Women are exposed to gender-based discrimination in both business and social life and they need to fight against to overcome it. In fact, there is a need to focus on gender discrimination within the scope of Constitution based on providing equal rights and freedoms to all humanbeings and prevent it. Discrimination is all types of behaviors intending to prevent rights and freedoms to be benefited equally by all humanbeings. Gender discrimination is one of the discrimination types and it is a phenomenon that needs to be eliminated due to its various negative effects on both social and business life. It is a situation preventing a person from certain powers and responsibilities due to the gender despite being the competent of the work, in other words depriving someone from some rights due to the gender and some examples can be seen in both European countries and Turkey.

The rest of this paper contains five sections. Section 2 provides literature review on gender discrimination and mobbing. Section 3 includes the relationship between the perception of gender discrimination and mobbing in European Union countries and Turkey. Section 4 describes our data and analyses that consist of sample selections, data, and variables.
measurement. Section 4 reports the findings of this study including descriptive statistics, correlation analysis, and Structural Equation Model for hypothesis testing. Section 5 recommendation and concludes.

2. CONCEPTUAL FRAMEWORK

Discrimination is defined as behaving someone in an undeserved way and in a manner different from others due to various reasons. Discrimination may happen in various ways. There may be discrimination for many reasons such as language, religion, race and physical appearance, place of birth, financial status, and social status of a person. In the study gender discrimination was evaluated.

Mobbing is a concept defined as emotional violence as well as it is cruel treatements and behaviours on people in workplaces. Mobbing is a social phenomenon that is analyzed in the whole world and needs to be prohibited and prevented.

2.1. Gender Discrimination

When we look at the literature, we can see lots of studies on gender discrimination and its reasons. Stainback et al. (2011) researched the reasons of social gender discrimination. Öztan (2004) in his study researched the regulations needed to be done in order to create and develop discrimination policies to ensure social gender equality. Sarı (2017) researched the role of gender-based discrimination in business and political life of women in Turkey, Şen (2018) in his study evaluated the gender-based wages equality within the scope of European Union and Turkey. Konuk (2014) researched the gender discrimination from the perspective of European Union Law. Çifçi (2010) in his study concluded that income difference between men and women affected the tendency for labour force participation through the econometrics practice in 15 European countries and Turkey. Sipe et al. (2016) in their studies tried to determine the perception of gender discrimination in the research conducted between 2006 and 2013. Khan et al. (2018) measured the gender discrimination perceptions of university students. In the survey study with 150 students from different countries they concluded that the gender factor made a significant difference in the perception of gender discrimination; however, education and age factors did not. Skewes et al. (2018) researched the relationship between the perception of gender equality and the gender role in the surveys and they conducted the study in two different countries. Snizek and Neil (1992) in their study analyzed the underlying processes of gender discrimination. In the survey in Australia with 625 female and 512 male participants they concluded that 37% of the women and 41% of the men experienced the discrimination everyday. Sipe et al. (2009) tried to determine the expected gender discrimination perception of students. In the survey that they conducted with 1373 university students they argued that the perception of female students would be higher. Zeher (2011) focused on the importance of gender inequality and gender discrimination. He stated that organizational factors and stereotyped prejudices about gender may cause the discrimination. After analyzing 209 court files about gender discrimination, he emphasized the effects of cultural, structural and interactional processes on gender discrimination.

What makes Ambivalent Gender Discrimination Theory remarkable in the field of discrimination is the perception of benevolent and hostile gender discrimination. A patriarchal understanding regards women as weak and powerless; and therefore, they need to be protected by men who are stronger than women and suggests that women need to be helped and supported economically, and it is dominant in benevolent gender discrimination. There are more negative attitudes which argue that women are not sufficiently grateful for what men do for them in hostile gender discrimination in which a dominant patriarchy is effective. Patriarchy serves to men’s dominance in the society no matter how gender discrimination occurs in the society either in a hostile or benevolent manner. This relationship in a hostile gender discrimination works as intersexual competitive differentiation; however, it works in benevolent gender discrimination as intersexual complementary differentiation. Establishing the superiority of men to women by comparing them and satisfying personal emotions by exaggerating this superiority include intersexual competitive differentiation. The differences between men and women are presented in order to trivialize women. However, intersexual complementary differentiation regards women and men as two parts complementing each other. It presents the traditional sexual differences by accepting the idea that women and men need each other. With the thought that men have to work outside, but women have to work inside it legalizes the traditional gender roles and the distribution of these roles under the cover of doing a favour for women. Finally, heterosexuality is one of the important resources of gender discrimination. The most effective way that heterosexuality uses in order to be a resource of gender discrimination is that a romantic relationship to be established with the opposite sex is the primary condition for the happiness in life (Glick and Fiske, 1996: 493).
2.2. Mobbing

When the word mobbing is ethimologically analyzed, “mob” comes from the word “mobile vulgus” which means “the fickle crowd” in Latin. The concept of mobbing was used for the first time by Konrad Lorenz in 1960’s in order to define the behaviors of animals to throw away a foreign person or a hunting enemy. In 1970, Swedish Dr. Peter-Paul Heinemann studied on the bullying and tyranny behaviors among children and used the word mobbing. (Davenport, et al., 2003: 3). It is known that the word mobbing in business life was used for the first time by Swedish industrial psychologist Heinz Leymann. We can see that Leyman used this concept as a result of the findings obtained from his studies among the employees. This kind of behaviors in business life has not been recognized and defined by anybody else before Leymann. Therefore, Leymann’s views and studies have formed a basis for the studies on mobbing behaviors in workplace around the world. Leymann has not only indicated the presence of mobbing behavior in workplaces, but also emphasized the specific qualities of the behavior, its incidence, mostly affected people from the violence and potential psychological consequences (Tinaz, 2006: 14).

Leymann (1990) who had the most important studies on mobbing in literature revealed the presence of mobbing in Sweden and in other countries in his study. Leymann (1996) studied on mobbing in Sweden and analyzed the factors that would be related with mobbing. Koonin and Green (2007) have identified the causes of mobbing in the workplace and suggested solutions to eliminate it. Göl et al. (2011) studied mobbing and burnout syndrome on academicians. Stefanovic (2012) in his study examined the role of trade unions in the prevention process of mobbing. Sobre-Denton (2012) analyzed mobbing in terms of race, class and gender. Tomic (2012) tried to determine the level of mobbing in his study on 369 participants. They determined that 80, 87% of the survey participants were exposed to mobbing at least once. Jenkins et al. (2012) in their study questioned the reasons of mobbing by focusing on the perspectives of mobbed people. Escartin et al. (2013) analyzed the bullying at work in their study on 494 employees in 19 different organizations.

Mulder et al. (2017) identified the concept of gender as an important factor affecting the mobbing process. Nielsen and Einarsen (2018) analyzed the reasons and consequences of mobbing. Şenal et al. (2015) tried to determine the level of exposure to mobbing in the academic environment. Çögenli and Döner (2015) focused on mobbing to the academics in Turkey. Sarıçam (2016) investigated the relationship between the meaning of work and the concept of mobbing and social trust and satisfaction. Baillien et al. (2018) investigated the relationship between organizational change process and mobbing. McCormack et al. (2018) analyzed the relationship between gender and emotional violence. In their study in Uganda on 125 teachers they determined the relationship between gender and bullying at work. Yanik (2018) evaluated the underlying reasons of reactive and unreactive behaviours of individuals exposed to emotional violence at work against intimidation. Aşkın and Aşkın (2018) researched the incidence, direction, frequency and reasons of sexist mobbing to women in business life. Haşçal and Güloğlu (2019) analyzed the effects of mobbing behaviour called as psychological intimidation on employees’ efficiency. They carried out fieldwork on administrative staff in SMEs manufacturing in Manisa Organized Industrial Zone and determined that efficiency level of the employees exposed to mobbing increased unlike the expectations. Kement and Batga (2016) analyzed the effect of mobbing on organizational commitment.

Mobbing is characterised as the systematic psychological abuse or humiliation of a person by an individual or a group in workplaces in order to damage his/her reputation, honour, human dignity and integrity, and ultimately drive him/her to quit the job (www.eurofound.europa.eu, 2007). According to Leymann, mobbing is not just about every day quarrels, disputes, frictions, ironic remarks, sarcasm, mocking and so on. But it is about doing these over and over, repeatedly, so that they will have a result, eventually, it will become disturbing, painful and even destructive (Dargomi, 2018: 410). Mobbing is also called as emotional violence in literature and there will be its reflections in all workplaces. Mobbing in workplaces is the most severe form of the violations of labor rights, social, economic and fundamental human rights in general. It gives serious and permanent psychological and health damages to its victims and also causes economic damage to companies or institutions and the countries’ economies in general (Stefanovic, 2012:401). Mobbing as emotional violence in workplaces takes place in three different categories on social, organizational and individual levels (McCormack et al., 2018:265). Swedish psychologist Leymann, who raised the topic of psychological abuse to be discussed the fields of industrial and organizational psychology, defined mobbing as “directing a systematic” hostile and unethical communication. Others by a person or more than one person and included the expression of “psychological terror” (Leymann, 1996: 165). Leymann stated that mobbing can be performed at work both by the managers and the colleagues (Leymann, 1990:119).

3. THE RELATIONSHIP BETWEEN THE PERCEPTION OF GENDER DISCRIMINATION AND MOBBING IN EUROPEAN UNION COUNTRIES AND TURKEY

In the literature, many studies have been conducted to reveal mobbing and gender discrimination in many countries. For example; Carnero et al. (2010) investigated the reasons of mobbing in Spain and emphasized the importance of gender in
mobbing. Poussard et al. (2018) found that the main reason for mobbing was discriminatory elements such as differences in political and religious views. Kovacic et al. (2017) analyzed whether mobbing depended on gender, age and status. Buttigieg et al. (2011) investigated the relationship between discrimination and bullying and mobbing. In their study they identified the presence of common determiners between discrimination and bullying. Kara et al. (2018) tried to determine the effects of mobbing on female employees. They studied on 373 women working in a five star hotel in Turkey. They concluded that the mobbing behaviour of the managers decreased the quality of life of the female employees. Salin (2003) evaluated the literature in the field of mobbing.

A number of regulations have been made by the EU Parliament on mobbing and gender discrimination in EU countries. Resolution A5-0283/2001 of the EU Parliament recommends the EU member states which modify their respective legislations to include the phenomena of mobbing and sexual abuse in the workplace. According to the resolution, harmonising the definition of the ‘mobbing’ term is the most successful approach in order to achieve this goal. The European Parliament Report on harassment in the workplace (2001/2339 INI) defines certain responsibilities for the Committee on Employment and Social Affairs. Additionally, the report includes a recommendation of the Committee for Women’s Rights and Gender Equality, which addresses to the member states to impose on the public and private sectors, and the social partners the duty to define a policy in the prevention of mobbing (Stefanovic, 2012: 403).

Among the initiatives to legally regulate mobbing at EU level, the Directive of European Parliament and Council dated on 23rd September 2002 amending the directive on the implementation of the principle of equal treatment among women and men in employment, vocational education, promotion and working conditions related to equality. In this directive the member states are requested to take the necessary measures to prevent all types of abuses in workplaces. The statement that member countries will accept sexual abuse as a gender-based discrimination with the adoption of this directive is included in the directive (Ergin, 2013: 69).

When we analyze mobbing, according to study results conducted in UK, 53% of the employees were exposed to mobbing and 78% of them witnessed it. According to the findings of a statistical study conducted in Sweden, mobbing was the reason for 10-15% of suicides committed within one year. We can see in registries that hundred of thousands of mobbing victims in Sweden and Germany retired early and they were hospitalized and treated in psychiatry clinics. It is reported that there are more than one million mobbing victims in Italy. Various studies on the fight against mobbing have been carried out in European Union countries. Unions in European Union member countries conduct very strong lobbying activities so that the laws against mobbing can be implemented. In Scandinavian countries mobbing is included in laws as a direct crime. Among these countries the greatest development about mobbing is in Sweden. Mobbing is defined as a crime in Sweden with Business Safety and Worker’s Health Law issued in 1994. The articles indicating that mobbing was the violation of collective agreement were included in collective labour agreements. In Germany mobbing victims may offer early retirement. There are civil centres that mobbing victims would request help from around the country. Mobbing is a legal crime in France and it is provided for one-year imprisonment and 15000 Euros fine. In France “victimologie” professorship was established about mobbing victims in university in 1994. In Italy laws against mobbing were legally issued and the problems occurring as a result of mobbing were included in the scope of work accidents (Tinaz, 2006: 15).

Countries such as the UK resisted introducing specific legislation against bullying despite pressure from anti-bullying advocacy groups, leaving the legal situation somewhat ambiguous. With no particular legislation addressing the issue, when a victim of bullying pursues a course of legal action, one or more general legal provisions could form the basis of the case, including among others (Policy Department for Citizens Rights’ and Constitutional Affairs, 2018: 49).

The European Working Conditions Survey (EWCS) by the European Foundation is the most comprehensive survey of the prevalence of bullying at work across the EU based on interviews with about 1,000 respondents in each country. According to the 6th EWCS in 2015, 5% of the respondents reported being subjected to bullying/harassment over the last twelve months. The reported exposure was somewhat higher in Western and in Northern countries compared to Southern and Eastern countries. Exposure to bullying was common in France, Luxembourg, Ireland, Belgium and the Netherlands most. The lowest prevalence rates were found in Bulgaria, Portugal, Hungary and Greece (Policy Department for Citizens Rights’ and Constitutional Affairs, 2018: 15).

Table 1: Prevalence of Bullying and Sexual Harassment at Work in EU Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Bullying/Harassment</th>
<th>Sexual Harassment</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>12.2 %</td>
<td>0.4 %</td>
</tr>
<tr>
<td>Ireland</td>
<td>8.1 %</td>
<td>0.7 %</td>
</tr>
</tbody>
</table>

DOI: 10.17261/Pressacademia.2019.1154
All women and men were subjected to bullying and sexual harassment during the course of work over the last 12 months (%).

As shown in Table 1; in 2018, the highest exposure to mobbing rate occurred in France, Ireland, and Belgium; however, the lowest exposure rate was in Portugal.

The countries in European Union have regulations on gender discrimination and mobbing supported by laws. These regulations are as follows;

**Germany** - All people are equal before the law. Men and women have equal rights. The state encourages to actually ensuring men and women equality and making efforts to eliminate the disadvantages. Nobody can be mistreated and no privileges can be granted to anyone due to their gender, blood, race, language, homeland and origin, belief, religion or political views. Nobody can be mistreated due to handicaps and disabilities (Eroğlu, 2011: 3).

**Belgium** - Belgium is of interest as Belgian legislation developed in a somewhat different way from most other countries. The Welfare Act (or Welfare Law) was enacted in 1996, and it has been amended several times since then. In 2002 an amendment was enacted to combat ‘undesirable behavior’ in the workplace (bullying, harassment including sexual harassment, and violence). In 2014 the Prevention of All Psychosocial Risks at Work came into force. The new Act is not limited to bullying and sexual harassment but covers all psychosocial risks that could lead to occupational stress. The Act puts harassment in a more general framework of psychosocial risks and states that employers must recognise harassment like any other risk to employees’ health (Policy Department for Citizens Rights’ and Constitutional Affairs, 2018: 48).

**Bulgaria** - All citizens are equal before the law. No privileges or restrictions will be granted to anyone in rights on the grounds of race, nationality or social origin, ethnical identity, gender, education, opinion, political connections, personal or social status or property status (Eroğlu, 2011: 3).

**Finland** - Nobody will be discriminated from others because of gender, age, origin, language, religion, belief, opinion, health, handicap or another reasons related with a person without any acceptable reason (Eroğlu, 2011: 3).

Finland is a typical example of countries which primarily address bullying (and harassment) via occupational safety and health legislation. Thus, The Finnish Occupational Health and Safety Act of 2003 include a special section on harassment at work. It is reactive by nature and obliges the employers to take action after being aware of the matter. The section also covers inappropriate behaviour by third parties which means employers have a duty to take action also in those cases where the perpetrator is a third party. The Act also makes it clear that employees themselves have a duty to refrain from harassment. Moreover, it contains particular sections about prevention which is also applied to bullying and harassment, including risk assessment and the employer's general duty of care (Policy Department for Citizens Rights’ and Constitutional Affairs, 2018: 48).

**United Kingdom** - In the UK, there is no specific legal framework for preventing and combating psychological harassment in workplaces. However, general legal regulations provide indirect protection against psychological harassment in workplaces. These are mainly, The Health and Safety At Work Act (1974), the Employment Rights Act (1996), the Protection From Harassment Act (1997) and the Equality Act (2010) (Çukur, 2016: 58).

<table>
<thead>
<tr>
<th>Country</th>
<th>Belgium</th>
<th>Netherlands</th>
<th>Austria</th>
<th>Filland</th>
<th>Germany</th>
<th>UK</th>
<th>Sweden</th>
<th>Denmark</th>
<th>Romania</th>
<th>Spain</th>
<th>Italy</th>
<th>Poland</th>
<th>Portugal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7.5 %</td>
<td>7.1 %</td>
<td>5.2 %</td>
<td>4.9 %</td>
<td>4.8 %</td>
<td>4.6 %</td>
<td>4.5 %</td>
<td>4.0 %</td>
<td>4.0 %</td>
<td>3.3 %</td>
<td>2.9 %</td>
<td>1.0 %</td>
<td>0.9 %</td>
</tr>
<tr>
<td></td>
<td>8.7 %</td>
<td>7.7 %</td>
<td>6.5 %</td>
<td>7.2 %</td>
<td>5.0 %</td>
<td>5.3 %</td>
<td>5.4 %</td>
<td>5.1 %</td>
<td>5.1 %</td>
<td>3.1 %</td>
<td>2.9 %</td>
<td>1.1 %</td>
<td>1.0 %</td>
</tr>
<tr>
<td></td>
<td>6.5 %</td>
<td>6.6 %</td>
<td>4.2 %</td>
<td>2.7 %</td>
<td>4.5 %</td>
<td>4.1 %</td>
<td>3.7 %</td>
<td>3.0 %</td>
<td>3.0 %</td>
<td>3.4 %</td>
<td>3.0 %</td>
<td>0.8 %</td>
<td>0.8 %</td>
</tr>
<tr>
<td></td>
<td>0.8 %</td>
<td>2.4 %</td>
<td>1.2 %</td>
<td>1.1 %</td>
<td>1.1 %</td>
<td>0.8 %</td>
<td>1.9 %</td>
<td>1.0 %</td>
<td>0.1 %</td>
<td>0.5 %</td>
<td>0.1 %</td>
<td>0.3 %</td>
<td>0.9 %</td>
</tr>
<tr>
<td></td>
<td>1.1 %</td>
<td>4.2 %</td>
<td>1.8 %</td>
<td>1.9 %</td>
<td>2.0 %</td>
<td>1.5 %</td>
<td>3.4 %</td>
<td>1.5 %</td>
<td>0.0 %</td>
<td>0.6 %</td>
<td>0.1 %</td>
<td>0.5 %</td>
<td>0.8 %</td>
</tr>
<tr>
<td></td>
<td>0.5 %</td>
<td>0.8 %</td>
<td>0.6 %</td>
<td>0.3 %</td>
<td>0.4 %</td>
<td>0.3 %</td>
<td>0.2 %</td>
<td>0.6 %</td>
<td>0.2 %</td>
<td>0.3 %</td>
<td>0.1 %</td>
<td>0.0 %</td>
<td>0.9 %</td>
</tr>
</tbody>
</table>

France - According to French Social Modernization Law of 2002; “Mobbing is psychological violence that occurs while performing certain activities;” (Tomic, 2012: 244)

It was adopted for the first time by the law in 1992 as only limited with superior-subordinate relationship. French Social Modernization Law adopted in France on 19th December, 2001 was implemented on 17th January, 2002. With this law new articles were added to French Criminal Code and Labour Law. Therefore, mobbing in workplaces was specially regulated as sexual harassment in both Labour Law and Criminal Code. Therefore, France has become a country with the most comprehensive regulation on mobbing in workplaces. Theconciliation method that would be carried out by a mediator out of the enterprise was foreseen in the law in case of moral harassment. The role of the mediator is to solve the problem between parties through conciliation (Kaya, 2015:378)


Ireland - Nobody would be excluded from Irish nationality and citizenship due to gender. The age of eighteen and are not regarded as noncompetent by the law and comply with the provisions of law regulating the election of the members of the House of Representatives have the right to vote in the elections of the members of the House of Representatives (Eroğlu, 2011).

Spain - The Spanish are equal before the law and can in no way be discriminated due to birth, race, gender, religion, opinion or any personal, social conditions or situations (Eroğlu, 2011).

Sixteen percent of workers in the European Union (EU) suffer psychological harassment or “mobbing” on the job, according to study by the University of Alcalá de Henares, in Spain (http://www.ipsnews.net/2002/10/labour-rights-spain-fighting-mobbing-in-the-workplace/).

Sweden - No law or provision may include a negative treatment to anybody due to ethnical origin, colour or a concern with minority group because of other conditions or sexual orientation (Eroğlu, 2011).

Heinz Leyman has found the topic of mobbing in workplaces in this country. Mobbing occurs in Sweden especially among colleagues. It was determined in a study that mobbing occured 44% of rate among the people with the same status, 37% from the top to down and 9% from down to top. It was observed that 55% of the women and 45% of the men were the victims of mobbing in Sweden. Sweden is the first country which has made special legislative regulations against mobbing (Kaya, 2015: 377).

Norway - Norway, which follows a similar way with Finland, is of interest for several reasons. First, the Norwegian Work Environment Act makes it explicit that it is the employer’s responsibility to protect employees against exposure to adverse physical and mental strain’. Second, it implicitly grades possible offences by highlighting various forms of adverse effects including ‘improper conduct’, ‘breach of employees’ dignity and respect’ and ‘harassment’. Third, the dynamic aspects of the law are emphasized that ‘standards shall be continuously developed and improved in accordance with developments in society’. (Policy Department for Citizens Rights’ and Constitutional Affairs, 2018: 48).

Italy - All the citizens are equal before the law and socially equal without any discrimination in terms of gender, race, language, religion, political view, personal and social conditions (Eroğlu, 2011). There is no specific legislation related with mobbing or other forms of harassment. But a body of case law has been developed to clearly establish a definition for an unacceptable behaviour and present what steps an employer should take both to prevent such conduct and deal with problems when they occur. (www.fedee.com/kb/italy-discrimination/). In Italy, targeted research and studies on mobbing started in the 1990s. In 1998, the European Foundation for the Improvement of the Living and Working Conditions estimated that, in Italy, about 4.2% of workers were victims of mobbing. According to data compiled by national experts, at present, the proportion varies between 4% and 6% of the work force, i.e. between 1 million and 1.5 million workers (www.eurofound.europa.eu, 2007)

Poland - Mobbing was firstly regulated legally in Poland with the amendment in law which was implemented on 1st January, 2004. In accordance with the 1st paragraph of 94th article of Polish Labour Law, employers are responsible for preventing
mobbing. Although the definition of mobbing in Polish Labour Law is very broad, illegality of the behaviour of the perpetrator and the importance of health aspect of mobbing are not sufficiently emphasized (Kaya, 2015: 379). Poland’s Supreme Court rendered a decision on 3.08.2011 (case file no. I PK 35/11) in which it emphasised that preventing bullying at the workplace is an obligation to exercise due diligence. This decision is of significance for employers, as it means that when an employer proves that it undertook real action against bullying (rules, trainings), it may be absolved from liability (https://www.schoenherr.eu/publications/publication-detail/poland-internal-employers-regulations/).

Romania - Romania is the common and inseparable homeland of all citizens without any discrimination in terms of race, nationality, ethnical origin, language, religion, gender, opinion, political commitment, property and social origin (Eroğlu, 2011).

Turkey - Everybody is equal before the law without any discrimination due to the reasons such as language, race, colour, gender, policial view, philosophical belief, religion, sect and so on.

When determining the position of women in Turkish society, three main periods as pre-Islamic and post-Islamic and Republican Turkey can be analyzed. In the pre-Islamic period, in Turks there is almost no social gender discrimination targeting women. Women are almost equal to men. They have the right to comment on the management of country with Hakan. They manage home. Physical violence to women by men cannot be observed in Turks. Children are highly valuable in old Turks. When a woman has a child, she becomes a beloved person in the family gradually. Communication and meeting between men and women are completely free in Altai people. During the conservation between young men and women, women do not think to cover her face. Women are not behind the men and isolated from the society in private, family and social life and even in political platform. They are within the life with men and visible in the eye of society (Bingöl, 2014:111). With the acceptance of Islam by Turks, Byzantine, Arabic and Iranian cultures had effects on Turkish culture. Different interpretation of Islam and Islamic ethics actually highly sensitive about women and bestow rights to them changed the position of women in society. This process led women to be behind men and even enabled men to have a chance to marry with four women. Foundation of Turkish Republic has enabled to establish the fundamentals of social gender equality. The republic period has brought rights for women through many legislative regulations (Bingöl, 2014:112). However, along with the components reflecting to the culture socially women have not obtained the equality they deserve even today.

Table 2: Gender discrimination and mobbing regulations of EU countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Gender Discrimination and Mobbing Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>All people are equal before the law. Nobody can be mistreated and no privileges can be granted to anyone due to their gender, blood, race, language, homeland and origin, belief, religion or political views.</td>
</tr>
<tr>
<td>Belgium</td>
<td>Belgian legislation developed in a somewhat different way from most other countries. In 2002 an amendment was enacted to combat ‘undesirable behaviour’ in the workplace (bullying, harassment including sexual harassment, and violence).</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>All citizens are equal before the law. No privileges or restrictions will be granted to anyone in rights on the grounds of race, nationality or social origin, ethnical identity, gender, education, opinion, political connections, personal or social status or property status</td>
</tr>
<tr>
<td>Finland</td>
<td>Nobody will be discriminated from others because of gender, age, origin, language, religion, belief, opinion, health, handicap or another reasons related with a person without any acceptable reason. Finland is a typical example of countries which primarily address bullying (and harassment) via occupational safety and health legislation.</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>There is no specific legal framework for preventing and combating psychological harassment in workplaces. However, general legal regulations provide indirect protection against psychological harassment in workplaces.</td>
</tr>
</tbody>
</table>
France

Workplace bullying, which is known as ‘moral harassment’, is regulated under both the Labour Law and the Criminal Code. The Labour Law applies to both private and public employees, and addresses moral harassment, discrimination, and professional equality between men and women. The Criminal Code imposes a criminal sanction for bullying.

Ireland

Nobody would be excluded from Irish nationality and citizenship due to gender. The age of eighteen and are not regarded as noncompetent by the law and comply with the provisions of law regulating the election of the members of the House of Representatives have the right to vote in the elections of the members of the House of Representatives.

Spain

The Spanish are equal before the law and can in no way be discriminated due to birth, race, gender, religion, opinion or any personal, social conditions or situations.

Sweden

No law or provision may include a negative treatment to anybody due to ethnical origin, colour or a concern with minority group because of other conditions or sexual orientation. Sweden is the first country which has made special legislative regulations against mobbing.

Norway

Norway, which follows a similar way with Finland, is of interest for several reasons. First, the Norwegian Work Environment Act makes it explicit that it is the employer’s responsibility to protect employees against exposure to adverse physical and mental strain’. Second, it implicitly grades possible offences by highlighting various forms of adverse effects including ‘improper conduct’, ‘breach of employees’ dignity and respect’ and ‘harassment’. Third, the dynamic aspects of the law are emphasized that ‘standards shall be continuously developed and improved in accordance with developments in society’.

Italy

All the citizens are equal before the law and socially equal without any discrimination in terms of gender, race, language, religion, political view, personal and social conditions. There is no specific legislation related with mobbing or other forms of harassment. But a body of case law has been developed to clearly establish a definition for an unacceptable behaviour and present what steps an employer should take both to prevent such conduct and deal with problems when they occur.

Poland

Mobbing was firstly regulated legally in Poland with the amendment in law which was implemented on 1st January, 2004. In accordance with the 1st paragraph of 94th article of Polish Labour Law, employers are responsible for preventing mobbing.

Romania

Romania is the common and inseperable homeland of all citizens without any discrimination in terms of race, nationality, ethnical origin, language, religion, gender, opinion, political commitment, property and social origin.

Turkey

Everybody is equal before the law without any discrimination due to the reasons such as language, race, colour, gender, policical view, philosophical belief, religion, sect and so on.

3. GENDER DISCRIMINATION AND MOBBING IN EUROPEAN UNION COUNTRIES AND TURKEY

Table 3 indicates the rank of EU countries which did not perform gender discrimination in general, economical, educational and political contexts covering the years of 2008-2018 as the data of the Global Gender Report. According to the table 3, Sweden, Ireland, France and Denmark were the countries with the lowest levels in gender discrimination in all years in general meaning.
Model of the study was established based on the variables in studies as a result of the literature review. As a result of the literature review, the model and hypotheses established in accordance with the purpose of the study are indicated as follows.

4. Methodology
4.1. Model and Hypotheses of the Study

Model of the study was established based on the variables in studies as a result of the literature review. As a result of the literature review, the model and hypotheses established in accordance with the purpose of the study are indicated as follows.

Table 3: The Global Gender Report

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>3</td>
<td>5</td>
<td>12</td>
<td>37</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Ireland</td>
<td>9</td>
<td>43</td>
<td>5</td>
<td>50</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>France</td>
<td>12</td>
<td>63</td>
<td>1</td>
<td>30</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Denmark</td>
<td>13</td>
<td>38</td>
<td>1</td>
<td>14</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Germany</td>
<td>14</td>
<td>36</td>
<td>9</td>
<td>70</td>
<td>3</td>
<td>29</td>
</tr>
<tr>
<td>UK</td>
<td>15</td>
<td>52</td>
<td>8</td>
<td>53</td>
<td>34</td>
<td>24</td>
</tr>
<tr>
<td>Holland</td>
<td>27</td>
<td>56</td>
<td>1</td>
<td>28</td>
<td>32</td>
<td>25</td>
</tr>
<tr>
<td>Spain</td>
<td>29</td>
<td>80</td>
<td>24</td>
<td>1</td>
<td>72</td>
<td>45</td>
</tr>
<tr>
<td>Belgium</td>
<td>32</td>
<td>49</td>
<td>39</td>
<td>47</td>
<td>36</td>
<td>26</td>
</tr>
<tr>
<td>Portugal</td>
<td>37</td>
<td>44</td>
<td>82</td>
<td>46</td>
<td>31</td>
<td>43</td>
</tr>
<tr>
<td>Poland</td>
<td>42</td>
<td>51</td>
<td>50</td>
<td>29</td>
<td>35</td>
<td>49</td>
</tr>
<tr>
<td>Italy</td>
<td>70</td>
<td>11</td>
<td>8</td>
<td>38</td>
<td>11</td>
<td>60</td>
</tr>
<tr>
<td>Turkey</td>
<td>13</td>
<td>23</td>
<td>1</td>
<td>10</td>
<td>4</td>
<td>14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>4</td>
<td>10</td>
<td>39</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Ireland</td>
<td>5</td>
<td>29</td>
<td>30</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>France</td>
<td>57</td>
<td>62</td>
<td>63</td>
<td>1</td>
<td>46</td>
</tr>
<tr>
<td>Denmark</td>
<td>7</td>
<td>16</td>
<td>1</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>Germany</td>
<td>13</td>
<td>31</td>
<td>83</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>UK</td>
<td>18</td>
<td>33</td>
<td>27</td>
<td>19</td>
<td>12</td>
</tr>
<tr>
<td>Holland</td>
<td>11</td>
<td>24</td>
<td>1</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Spain</td>
<td>26</td>
<td>25</td>
<td>38</td>
<td>27</td>
<td>12</td>
</tr>
<tr>
<td>Belgium</td>
<td>12</td>
<td>36</td>
<td>67</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Portugal</td>
<td>47</td>
<td>55</td>
<td>57</td>
<td>43</td>
<td>35</td>
</tr>
<tr>
<td>Poland</td>
<td>53</td>
<td>72</td>
<td>34</td>
<td>46</td>
<td>42</td>
</tr>
<tr>
<td>Italy</td>
<td>80</td>
<td>10</td>
<td>65</td>
<td>71</td>
<td>74</td>
</tr>
<tr>
<td>Turkey</td>
<td>12</td>
<td>12</td>
<td>10</td>
<td>8</td>
<td>97</td>
</tr>
</tbody>
</table>

DOI: 10.17261/Pressacademia.2019.1154
Hypothesis 1: Perception of hostile gender discrimination affects the incidence of mobbing positively.

Hypothesis 2: Perception of benevolent gender discrimination affects the incidence of mobbing positively.

Hypothesis 3: Perception of gender discrimination in the incidence of mobbing varies according to gender.

Hypothesis 4: Perception of gender discrimination in the incidence of mobbing varies according to marital status.

Hypothesis 5: Perception of gender discrimination in the incidence of mobbing varies according to the place of birth.

Hypothesis 6: Perception of gender discrimination in the incidence of mobbing varies according to the faculty that academicians work for.

Hypothesis 7: Perception of gender discrimination in the incidence of mobbing varies according to position.

4.2. Variables of the Study

Glick, P., and Fiske, S.T.’s (1996) study was adapted in order to measure gender discrimination in the study. The second survey was about mobbing and it was obtained from Leymann, H.’s (1990) study. Gender discrimination scale consists of 22 statements and it has two dimensions as the perception of hostile gender discrimination and the perception of benevolent gender discrimination. The original form of mobbing scale consists of 45 statements. However, the questions in the survey were adapted for academicians and the number of statements was reduced to 20. A pilot study was conducted for the reliability of the scale and surveys began to be applied after the reliability level was measured.

The perception of hostile gender discrimination and the perception of benevolent gender discrimination were exogenous variables; however, mobbing was an endogenous variable in the study.

4.3. Data Collection Method

Surveys in the study were applied to the academic staff in Afyon Kocatepe University. A total of 400 survey papers were handed out and 285 available data were obtained. In the study the data including demographic properties were requested, but personal data were not.

The hypotheses of the study were tested through Structural Equation Model. The Structural Equation Model is basically a combination of factor analysis and regression analysis. It tests the convenience of the predicted covariance matrix established in accordance with the theoretical model with the observed covariance matrix (Hox and Bechger, 1995).

4.4. Data Evaluation Technique

Validity and reliability tests were performed in order to obtain the structural validity of the scale. After the data were entered to SPSS 16.0 package programme, reliability analysis and exploratory factor analysis were performed in SPSS programme and Structural Equation Modelling was performed in AMOS 19 programme to determine the effects of data on each other.
4.5. Testing the Scales in the Study

In order to test the validity of the used scales, by using AMOS19 programme single factoral confirmatory factor analysis was made for the perception of gender discrimination and mobbing scale. Since the fit values generated by scaling models created for testing the validity of scales was not at acceptable ranges, and the modifications recommended by the programme were made. The changes in scales as a result of modifications are indicated in Table 4 and the fit values generated by scaling models are indicated in Table 5.

Table 4: Changes in the Scales

<table>
<thead>
<tr>
<th>Scales</th>
<th>Number of Statements</th>
<th>Number of Extracted Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of Gender Discrimination</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hostile</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Benevolent</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Mobbing Scale</td>
<td>20</td>
<td>6</td>
</tr>
</tbody>
</table>

As can be seen in Table 4, the numbers of statements extracted from the scales are as follows; 1 statement from the perception of hostile gender discrimination scale, 2 statements from the perception of benevolent gender discrimination scale, and 6 statements from the mobbing scale.

Table 5: Fit Values of the Scales

<table>
<thead>
<tr>
<th>Perception of Gender Discrimination Scale</th>
<th>x2</th>
<th>df</th>
<th>x2/df</th>
<th>GFI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of Hostile Gender Discrimination</td>
<td>64,437</td>
<td>34</td>
<td>1,89</td>
<td>0,96</td>
<td>0,97</td>
<td>0,05</td>
</tr>
<tr>
<td>Perception of Benevolent Gender</td>
<td>75,112</td>
<td>25</td>
<td>3,00</td>
<td>0,94</td>
<td>0,93</td>
<td>0,08</td>
</tr>
<tr>
<td>Discrimination</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobbing Scale</td>
<td>219,80</td>
<td>72</td>
<td>3,05</td>
<td>0,90</td>
<td>0,95</td>
<td>0,085</td>
</tr>
</tbody>
</table>

p > .05, x2 = Chi-Square; df = Degree of Freedom; GFI = Goodness of Fit Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation

x2 tests the significance of the difference between the observed covariance matrix and the predicted covariance matrix. It is affected by sample size. Therefore, the larger the sample, the more significant x 2 values will be. For that reason, it is suggested that the value obtained by dividing x2 value by the degree of freedom is taken as the basis when evaluating the model fit. Root Mean Square Error of Approximation (RMSEA) is the square root of the average of the prediction errors. RMSEA is a statistics that provides information about the compatibility of the unknown but optimally planned parameters with the covariance matrix of the main mass. GFI (Goodness of Fit Index) was created to eliminate the problem of increasing the chi-square statistics as the sample grows and is less sensitive to the sample size. The GFI statistic is between 0 and 1 and moves inversely proportional to the degree of freedom; therefore, it can be said that the ratio of sample size to degree of freedom tends to increase as it increases. CFI (Comparative Fit Index) is an improved version of the NFI statistic, which also takes into account the sample size and gives good results even in small samples, one of the most accepted and used statistics. NFI likewise results in a comparison of the zero models with the sample covariance matrix and takes a value between 0 and 1. Approaching 1 increases the suitability of the model (Yaşlıoğlu, 2017: 80-81) (Meydan and Şeşen, 2015: 32-35).

4.6. Findings

Cronbach Alpha and KMO values of the data obtained from the surveys of the study are given below.
Table 6: Cronbach Alpha Coefficient of the Scales

<table>
<thead>
<tr>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of Gender Discrimination Scale</td>
</tr>
<tr>
<td>Mobbing Scale</td>
</tr>
</tbody>
</table>

As Table 6 is analyzed, we can see that reliability of both Perception of Gender Discrimination Scale and Mobbing Scale are high.

- If $0 \leq \alpha < 0.40$, the scale is not reliable,
- If $0.40 \leq \alpha < 0.60$, reliability of the scale is low,
- If $0.60 \leq \alpha < 0.80$, the scale is highly reliable,
- If $0.80 \leq \alpha \leq 1.0$, the scale is highly reliable.

Table 7: KMO Value of the Scale

<table>
<thead>
<tr>
<th>KMO and Bartlett's Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</td>
</tr>
<tr>
<td>Bartlett's Test of Sphericity</td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
</tr>
<tr>
<td>Df</td>
</tr>
<tr>
<td>Sig.</td>
</tr>
</tbody>
</table>

When the criteria are analyzed, result of KMO value of the study is excellent.

- KMO: $1.00 \leq KMO < 0.90 = Excellent$
- KMO: $0.90 \leq KMO < 0.80 = Good$
- KMO: $0.80 \leq KMO < 0.70 = Medium$
- KMO: $0.70 \leq KMO < 0.60 = Poor$
- KMO: $0.60 \leq KMO = Bad$

Table 8: Demographic Properties of Participants

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>186</td>
<td>65.3</td>
</tr>
<tr>
<td>Female</td>
<td>99</td>
<td>34.7</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>203</td>
<td>71.2</td>
</tr>
<tr>
<td>Single</td>
<td>82</td>
<td>28.8</td>
</tr>
<tr>
<td>Place of Birth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Village</td>
<td>11</td>
<td>3.9</td>
</tr>
<tr>
<td>Town/District</td>
<td>7</td>
<td>2.5</td>
</tr>
<tr>
<td>County</td>
<td>56</td>
<td>19.6</td>
</tr>
<tr>
<td>Province</td>
<td>134</td>
<td>47.0</td>
</tr>
<tr>
<td>Metropolitan</td>
<td>77</td>
<td>27.0</td>
</tr>
<tr>
<td>Title</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research Assistant</td>
<td>96</td>
<td>33.7</td>
</tr>
<tr>
<td>Lecturer</td>
<td>53</td>
<td>18.6</td>
</tr>
<tr>
<td>Asst. Prof.</td>
<td>69</td>
<td>24.2</td>
</tr>
<tr>
<td>Assoc.Prof</td>
<td>34</td>
<td>11.9</td>
</tr>
<tr>
<td>Prof.Dr.</td>
<td>33</td>
<td>11.6</td>
</tr>
<tr>
<td>Faculty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School of Economics and Administrative Sciences</td>
<td>43</td>
<td>15.1</td>
</tr>
<tr>
<td>Education And Technology</td>
<td>38</td>
<td>13.3</td>
</tr>
<tr>
<td>Science And Letters</td>
<td>65</td>
<td>22.8</td>
</tr>
<tr>
<td>Law</td>
<td>11</td>
<td>3.9</td>
</tr>
</tbody>
</table>

DOI: 10.17261/Pressacademia.2019.1154
According to the Table 8, 65.3% of the participants are male and 34.7% of them are female, 71.2% are married and 28.8% are single. In this group, 3.8% of the participants were born in villages, 2.5% were born in towns/districts, 19.6% were born in counties, 47.0% were born in provinces and 27.0% of the participants were born in metropolitans. When title is considered, we can see that 33.7% of the academicians are Research Assistants, 18.6% are Lectures, 24.2% are Dr. Lecturers, 11.9% are Associate Professors and 11.6% are Professors. In terms of faculty status, 15.1% of the participants in School of Economics and Administrative Sciences, 13.3% in Education and Technology, 22.8% in Science and Letters, 3.9% in Law, 8.4% in Veterinary, 9.5% in Fine Arts, 5.6% in Tourism, 0.7% in Theology, 15.1% in Engineering, 1.8% in Vocational High School, 1.8% in Foreign Language and 1.1% in Physical Education and Sports.

4.7. Structural Equation Model

Since the fit values of the model in Figure 2 were not at acceptable ranges, the numbers of statements extracted from the scales are as follows; 1 statement from the hostile gender discrimination scale, 1 statement from the benevolent gender discrimination scale, and 1 statement from the mobbing scale.

**Figure 2: Structural Equation Model**
As a result of the conducted modification, it was observed that fit values of the model were within the good fit value ranges and sufficient proofs indicating that model were structurally suitable were obtained. Fit values of the model are indicated in Table 9.

**Table 9: Fit Values of Structural Equation**

<table>
<thead>
<tr>
<th></th>
<th>x²</th>
<th>df</th>
<th>x²/df</th>
<th>GFI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the statements were extracted</td>
<td>1025,411</td>
<td>520</td>
<td>1,97</td>
<td>0,82</td>
<td>0,89</td>
<td>0,06</td>
</tr>
<tr>
<td>After the statements were extracted</td>
<td>740,828</td>
<td>424</td>
<td>1,74</td>
<td>0,86</td>
<td>0,93</td>
<td>0,05</td>
</tr>
<tr>
<td>Goodness Fit Values</td>
<td>≤ 3</td>
<td>≥ 90</td>
<td>≥ 0,97</td>
<td>≤ 0,05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acceptable Fit Values</td>
<td>≤ 3</td>
<td>0,89-0,85</td>
<td>≥ 95</td>
<td>0,06-0,08</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

β coefficients, standard error, p and x² values between variables according to the established model are indicated in Table 10.

**Table 10: β Coefficients, Standard Error, p and x² Values between Variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>Standard error</th>
<th>P</th>
<th>x²</th>
<th>CR</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis 1: Perception of hostile gender discrimination affects the incidence of mobbing positively.</td>
<td>-0,115</td>
<td>0,06</td>
<td>0,05</td>
<td>0,03</td>
<td>-1,905</td>
<td>Accepted</td>
</tr>
<tr>
<td>Hypothesis 2: Perception of benevolent gender discrimination affects the incidence of mobbing positively.</td>
<td>-0,009</td>
<td>0,07</td>
<td>0,90</td>
<td>0,02</td>
<td>-0,117</td>
<td>Rejected</td>
</tr>
<tr>
<td>Hypothesis 3: Perception of gender discrimination in the incidence of mobbing varies according to gender.</td>
<td>Female</td>
<td>-0,015</td>
<td>0,10</td>
<td>0,88</td>
<td>0,02</td>
<td>-0,146</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>-0,192</td>
<td>0,09</td>
<td>0,04</td>
<td>0,03</td>
<td>-2,030</td>
</tr>
<tr>
<td>Hypothesis 4: Perception of gender discrimination in the incidence of mobbing varies according to marital status.</td>
<td>Single</td>
<td>-0,104</td>
<td>0,10</td>
<td>0,10</td>
<td>0,03</td>
<td>-1,03</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>-0,124</td>
<td>0,07</td>
<td>0,09</td>
<td>0,02</td>
<td>-1,69</td>
</tr>
<tr>
<td>Hypothesis 5: Perception of gender discrimination in the incidence of mobbing varies according to place of birth.</td>
<td>Town/District</td>
<td>-0,115</td>
<td>0,060</td>
<td>0,05</td>
<td>0,02</td>
<td>-1,905</td>
</tr>
<tr>
<td></td>
<td>County</td>
<td>-0,237</td>
<td>0,118</td>
<td>0,04</td>
<td>0,08</td>
<td>-2,004</td>
</tr>
<tr>
<td></td>
<td>Province</td>
<td>-0,06</td>
<td>0,101</td>
<td>0,52</td>
<td>0,02</td>
<td>-0,637</td>
</tr>
<tr>
<td></td>
<td>Metropolitan</td>
<td>0,067</td>
<td>0,090</td>
<td>0,46</td>
<td>0,01</td>
<td>0,740</td>
</tr>
<tr>
<td>Hypothesis 6: Perception of gender discrimination in the incidence of mobbing varies according to the faculty that academicians work for.</td>
<td>School of Economics And Administrative Sciences, Tourism, Foreign Language</td>
<td>0,06</td>
<td>0,121</td>
<td>0,60</td>
<td>0,02</td>
<td>0,515</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>-0,241</td>
<td>0,113</td>
<td>0,03</td>
<td>0,32</td>
<td>-2,13</td>
</tr>
<tr>
<td></td>
<td>Faculty of Sciences</td>
<td>0,06</td>
<td>0,114</td>
<td>0,55</td>
<td>0,07</td>
<td>0,58</td>
</tr>
<tr>
<td></td>
<td>Law, Theology, Fine Arts, Vocational High School</td>
<td>-0,488</td>
<td>0,267</td>
<td>0,06</td>
<td>0,20</td>
<td>-1,82</td>
</tr>
</tbody>
</table>
Hypothesis 1. Perception of hostile gender discrimination affects the incidence of mobbing positively. Since the value is \( p < 0.05 \) in the relationship between the perception of hostile gender discrimination and mobbing, there is a significant relationship and the hypothesis is accepted.

Hypothesis 2. Perception of benevolent gender discrimination affects the incidence of mobbing positively. Since the value of \( p < 0.05 \) is not obtained in the relationship between the perception of benevolent gender discrimination and the value is \( p = 0.90 \), the hypothesis is rejected.

Hypothesis 3. In the hypothesis of the perception of gender discrimination, in the incidence of mobbing varies according to gender, the value is \( p = 0.88 \) for females and it is \( p < 0.04 \) for males. So, it means that the perception of gender discrimination of females and males in the incidence of mobbing makes a difference; therefore the hypothesis is accepted.

Hypothesis 4. In the hypothesis of the perception of gender discrimination in the incidence of mobbing varies according to marital status the values are \( p = 0.09 \) for single academicians and \( p = 0.10 \) for married ones. It means that the perception of gender discrimination of single and married academicians in the incidence of mobbing makes no significant difference, therefore the hypothesis is rejected.

Hypothesis 5. In the hypothesis of the perception of gender discrimination, in the incidence of mobbing varies according to the place of birth the values are \( p = 0.05 \) for town/district, \( p = 0.04 \) for county, \( p = 0.52 \) for province and \( p = 0.46 \) for metropolitans. \( p \) values of the academicians grown in towns/districts and counties are \( p < 0.05 \). In other words, the perception of gender discrimination of the academicians grown in towns/districts and counties is high. Therefore the hypothesis is accepted.

Hypothesis 6. The perception of gender discrimination in the incidence of mobbing varies according to the faculty that academicians work for. The value is \( p = 0.60 \) for School of Economics And Administrative Sciences, Tourism, Foreign Languages and Faculty of Sciences. The value is \( p = 0.03 \) in Faculty of Education, \( p = 0.55 \) in Faculty of Science, \( p = 0.06 \) in Faculty of Law, Theology, Fine Arts and Vocational High School, and \( p = 0.05 \) in Faculty of Veterinary and Engineering. When we look at \( p \) value among the faculties, we can see that the perception of gender discrimination in the incidence of makes significant difference. \( p = 0.03 \) in the Faculty of Education and \( p = 0.05 \) in the Faculty of Veterinary and Engineering. Therefore, it shows that the perception of gender discrimination affects the formation of mobbing. But the other faculties \( p \) values are not obtained \( p < 0.05 \) values. Therefore the hypothesis is accepted.

Hypothesis 7. The perception of gender discrimination in the incidence of mobbing varies according to title. The obtained values are \( p = 0.26 \) in research assistants, \( p = 0.07 \) for lecturers, \( p = 0.45 \) for Assistant Professors and Professors. The value of \( p < 0.05 \) is obtained for Associate Professors and Professors. Therefore the hypothesis is accepted.

5. CONCLUSION AND RECOMMENDATIONS

As well as discrimination is a social problem, we can see that the laws and regulations legitimizing the discrimination and also culture of the society have an important role in the incidence of gender discrimination. Supporting the search of equality is a prerequisite in social and cultural sense besides the legislative amendments and regulations. Otherwise, secondary position of women in society will continue as being exposed to exploitation, exclusion and oppression through their genders.

In this study, in which we aimed to present the perception of gender discrimination preventing the promotion of women employees to administrative positions in business life. They deserve and determine the effect of that perception on the incidence of mobbing it was observed that women employees exposed to many discriminations besides gender...
discrimination. This study has indicated that individuals in the society and the cultural values of these individuals have a great effect on gender discrimination. It has been determined that this effect triggers the incidence of mobbing.

The results of the hypothesis are as follows:

Perception of hostile gender discrimination affects the incidence of mobbing positively. Since the value is p<0, 05 in the relationship between the perception of hostile gender discrimination and mobbing, there is a significant relationship and the hypothesis is accepted. Perception of benevolent gender discrimination affects the incidence of mobbing positively. Since the value of p<0,05 is not obtained in the relationship between the perception of benevolent gender discrimination and the value is p=0,90, the hypothesis is rejected. In the hypothesis of the perception of gender discrimination, in the incidence of mobbing varies according to gender, the value is p=0, 88 for females and it is p=0, 04 for males. So, it means that the perception of gender discrimination of females and males in the incidence of mobbing makes a difference; therefore the hypothesis is accepted. In the hypothesis of the perception of gender discrimination in the incidence of mobbing varies according to marital status the values are p=0, 09 for single academicians and p=0, 10 for married ones. It means that the perception of gender discrimination of single and married academicians in the incidence of mobbing makes no significant difference, therefore the hypothesis is rejected. In the hypothesis of the perception of gender discrimination, the incidence of mobbing varies according to place of birth the values are p=0, 05 for town/district, p=0, 04 for county, p=0, 52 for province and p=0, 46 for metropolitans. p values of the academicians grown in towns/districts and counties are p<0,05. In other words, the perception of gender discrimination of the academicians grown in towns/districts and counties is high. Therefore the hypothesis is accepted. The perception of gender discrimination in the incidence of mobbing varies according to the faculty that academicians work for. The value is p=0, 03 in Faculty of Education, p=0, 55 in Faculty of Science, p=0, 06 in Faculty of Law, Theology, Fine Arts and Vocational High School, and p=0,05 in Faculty of Veterinary and Engineering. When we look at p value among the faculties, we can see that the perception of gender discrimination in the incidence of makes significant difference. p = 0.03 in the Faculty of Education and p= 0.05 in the Faculty of Veterinary and Engineering. When we look at p value among the faculties, we can see that the perception of gender discrimination in the incidence of makes significant difference. When the p values were examined, a significant difference was found between gender discrimination and mobbing in Education, Veterinary and Engineering faculties. In other faculties, there is no difference. Therefore the hypothesis is accepted. The perception of gender discrimination in the incidence of mobbing varies according to title. The obtained values are p=0,26 in research assistants, p=0,07 for lecturers, p=0,45 for Assistant Professors, p=0,05 for Associate Professors and Professors. The value of p<0, 05 is obtained for Associate Professors and Professors. Therefore the hypothesis is accepted.

When the results of the hypotheses are analyzed, it can be seen that the perception of social gender is an important factor for the incidence of mobbing. It has been determined that the demographic factors such as gender, place of birth, marital status, the faculty that academicians work for and title affect the attitudes about discrimination and lead to the incidence of mobbing. The hypothesis that marital status leads to the incidence of mobbing affecting the attitudes about gender discrimination has been rejected.

The incidence of mobbing creates negative individual, social and organizational consequences. It is important to eliminate these negative consequences. While individual consequences affect the mental health and life quality of an individual, social effects of mobbing are more serious. It has been determined that mobbing has a performance decreasing effect for a business in terms of organizational aspect. In this concept mobbing is a phenomenon that measures should be taken for eliminate. It can be seen in the literature that the mobbers are usually males and this triggers the incidence of gender discrimination-based mobbing. It has also been identified in our study that the perception of gender discrimination is important in the incidence of mobbing. For that reason, studies to decrease the perception of gender discrimination in society should be conducted in order to prevent the incidence of mobbing. The most important step to take for EU countries and Turkey about mobbing is to legislate in this field. Legal practices and sanctions to prevent mobbing should be implemented. It is also important to create awareness in the society in this issue. This awareness should be supported by mass media to enchance the awareness.

DOI: 10.17261/Pressacademia.2019.1154
REFERENCES


Nielsen, M.B. and Einarsen, S.V. (2018), what we know, what we do not know, and what we should and could have known about workplace bullying: An overview of the literature and agenda for future research, Aggression and Violent Behavior 42, 71–83, https://doi.org/10.1016/j.avb.2018.06.007.


The objective of the research is to investigate how teaching quality, courses delivered and their learning outcomes, student impact on learners and staff satisfaction.

Guanxi can be commonly understood as ‘personal relationship’ or ‘social connection’. This research looks at how Guanxi referrals benefitting their hiring or position, c) learners from three foreign University-partnered colleges in China. Considering the aim, the research strategy was adopted within a qualitative study research design that has applied a thematic analysis.

Findings: The investigation compares faculties who were hired on Guanxi basis and those who were not, and elucidates on a) A mismatch of staff expertise, courses delivered and learning outcomes, b) Absence of platform to share ‘best practices’, c) Lack of multi-cultural learning ecosystems in staff rooms, d) Missed learning objectives and teacher-student office hours, and e) Varying financial and moral incentives

Conclusion- There are clear challenges coming from guanxi-led hired staff not working closely with non-guanxi counterparts (even when they are teaching on the same course), the lack of access of staff profiles and inability of non-guanxi staff to communicate with guanxi-based staffs. The effects on the wider scale falls on student learning, image of foreign Universities, very high staff attrition rate, quality control measures and falling reputation of these colleges nationally within mainland China.

Keywords: Guanxi, China, higher education, academic recruitment, university partnerships, learning outcomes, Sino-Foreign collaboration institutions

JEL Codes: M00, M10, M50

1. INTRODUCTION

Guanxi hails from a Confucian culture that rules social behaviours between people. The core value of Confucianism is Ren, meaning ‘treat others well’ and ‘love others’ with a wider goal of the society becoming more tolerant, stable and accommodating. Unlike the strong individualism noted in Western countries, every Chinese is a subordinate to his or her own family and is responsible to the family; in China, the family relationship always takes priority over other social relationships tied through contracts (Alston, 1989). Fundamentally, guanxi is derived from two Chinese words, guan (gate or barrier) and xi (connection or link) – so the word suggests ‘go through the gate and get a connection’. Chinese Authority’s dictionary defines it as ‘certain properties of contacts or relations among people’. Simply put, for the lack of an accurate English word, Guanxi can be commonly understood as ‘personal relationship’ or ‘social connection’. This research looks at how guanxi can be the basis of academic recruitment in selected foreign University-partnered colleges in mainland China and the consequent impact on learners and staff satisfaction.

The objective of the research is to investigate how teaching quality, courses delivered and their learning outcomes, student and staff satisfaction are affected when guanxi and non-guanxi based staffs share the same class cohort and subject levels in
the selected colleges for this study. The aim of the research is to show the implications, using a primary data inspected, thematically analysed findings of how these differences in quality control, lack of transparency in hiring and pay packages of guanxi and non-guanxi based recruited staff members affect Chinese and non-Chinese staff expectations and also overall image of foreign Universities who partner with colleges in mainland China. The structure of this paper initiates by delving into the literature of the traditionally rooted concept of guanxi followed by explaining the methodology and nature of thematic analysis applied for this research, thereafter discusses a mix of broad and specific themes before concluding with research implications.

2. BACKGROUND

In the interest of this research as well as how guanxi is better understood in business context, it is pertinent to note that before 90s, the concept was clearly referred to as a ‘special’ relationship’ or ‘particular’ ties and can be seen differently from other personal relationships (Alston, 1989). Further modern understanding of the concept as China was more accessible after mid 90s, guanxi is a social connection based on mutual interests and benefits, which is usually achieved by exchanging favours and giving social status between guanxi partners (Yang, 1994). Studies have perceived this social concept as an interpersonal utilitarian relationship for reciprocal exchange which is applicable at individual levels (Davies et al., 1995) and equally at the organizational level (Cai, Jun & Yang, 2010; Gu, Huang, & Tse, 2008). In contexts where guanxi also helps in shaping the governance and institutional structure, however, it is a means and also social capital in itself which then would lead to advantages in terms of financial performance, marketing access, recruitment sources and favouring of internal candidates (therefore cannot be necessarily termed as ‘talent pool’) while serving essentially as relationship marketing in Chinese markets (Davies et al., 1995). As an instance however, to clarify further on the individual or group nature of guanxi, it is not always in the form of B2B or C2C, but also can take the shape of B2B2C. Since guanxi is primarily favours, reciprocity in benefits-based, i.e. when one party expects favours from another party, if one party cannot always deliver from their end, he or she will ask others (in their network) to fulfil a favour through his or her guanxi networks. This social capital, under a code or a set of social norms as understood by Chinese users of the concept, is a utilitarian relationship based on exchanging favours. Typically, guanxi starts from inside the network or family, then ventures (rather slowly) to outside acquaintances so Chinese people choose to believe insiders (people with whom they share guanxi) over outsiders (outside the range of guanxi, per se). Similarities of kinship being a key resource can be noted in other cultures that have also been significantly influenced and structured by Confucianism: Kankei in Japan and Kywankye in Korea, and these correspond to similar meaning of blat in Russia.

Moreover, modern contexts and literature investigating various social, economic and anthropological issues would suggest that China is a relationship society in which people rely more on personal relationships than rational laws (Yang, 1994). Educational institutions, alike financial or other business and service sectors, are guided by regulations, frameworks and guidelines – and are no different in China than in rest of the world. However, the need to find guanxi or to establish a guanxi base contain a set of activities that follow Chinese social norms. In the reality of inefficiency and ineffectiveness of Chinese business infrastructure and related institutions, Chinese people depend more on personal guanxi for commercial protection, legal assurance and risk avoidance specifically. While this may give a sense of security and smoothing of business performance curve (due to information sharing, resource acquirment, cost saving, negotiation), the fall out within guanxi network is a major threat that organisations are aware of in practice. On the other hand, to secure a less risky operational scenario recruitment is also done only within the networks of guanxi who are then entitled to special privileges that would seem discriminatory in organisations that are specification, enforcement and rule based rather than social norm based. Guanxi may bring benefits to individuals as well as the organisations they represent but these benefits are obtained at the expense of other individuals or firms and is thus detrimental to society.

Information management and faster access to emerging policies and market trends along with newer business opportunities are some of the added benefits of having guanxi with government authorities. (Davies, et al, 1995). In many ways thus, guanxi is viewed to be the basis of sustainable competitive advantage (Tsang, 1998; Fock and Shing, 1998); and more conveniently relationship marketing (Ambler,1994; Simmons and Munch, 1996). In China, while guanxi may seemingly be an effective and convenient option for personal networks to play and achieve goals, the Hong Kong Independent Commission Against Corruption in a report holds guanxi accounting for up to 5% of total costs in doing business in China (ICAC, 1993).

Empirical understanding of guanxi and the use of the same in modern contexts have different realities in application since the element of ‘mobility’ has changed in societies. Historically, when hukou (living placement and registration of individuals and communities) and danwei (work unit) factors determined job allocation given very few choices available then, this therefore heavily relied on guanxi within limited social circle and reachability in terms of trust based ‘who knows who’. This component of localised culture may have barred individuals and communities to reach out beyond their known circles. Clearly with time, reforms and also less political reliance on command economy, the social scenario and communication reachability
have changed. There may be better and higher options available outside one’s guanxi zone, this would have significant impact on any work where such alternatives are available. The sole reliance on one’s guanxi network would potentially limit better performance, output and business results in general. In the context of this article, when the higher education sector is investigated the matter becomes more important given the variety of emerging courses in subject areas that are replacing older ones with changing times. In this period, in an Economy that was shut to the world Economy until the 90s, the sole reliance on guanxi to be used as a method of academic job recruitment (mainly internal, therefore) would not improve the sector nor would add to organisational knowledge building over time.

Besides the utilitarian and reciprocity aspects of guanxi, the other components tied with the concept would be transferable and long-term intangible elements of it (Danning & Kim, 2007). While it has been discussed that guanxi creation and maintenance need time and resources, it also holds high risk. Similar to growth of speed in the quality of guanxi, the fall can be faster as well if one relationship in the chain is negatively affected and consequently affected all connected guanxi in the chain. In terms of the long-term personal intangibility of guanxi, it becomes harder to formalise these relationships in paper when major decisions including financial, recruitment, promotion are based on the same. In regards to the context based on this research, guanxi based recruitment could pose a significant risk to scrutiny when staff members are higher without the right background, qualification and experience in the role that would otherwise require specific criterion from staff applying from ‘out of guanxi’ range. When such recruitment processes bring in candidates from both guanxi, and non-guanxi referred staffs, the quality control management becomes significantly challenging as the parameters used to judge and appraise employees are not consistent or some may say, even unfair.

Guanxi, Work Performance and Attrition Rate

Guanxi, worker satisfaction and employee attrition tendency hold a relationship in several forms. Research conducted by Zhai, Linderoff & Cooper (2012) shows that a supervisor-subordinate Guanxi can have a causal effect on job satisfaction. On the other hand, a negative effect of Guanxi on job satisfaction where a section of employees feels discontented due to the management favouring some individuals, may result in a high turnover intention (Nguyen, Simkin & Canhoto, 2015). It is important to note that satisfaction and job satisfaction are dependent on job security; insecure employees are both discontented in their employment and may intend to leave for other jobs (Cheung, Wu & Wong, 2013). Organizational justice that explains the employees’ perception of the firm being equitable and fair, can determine the relationship between job security, satisfaction, and turnover intention. Wong, Y., Wong, S., and Wong, Y (2010) argue that Guanxi has a direct relationship with job security from their research in Chinese formal job sector. This research also suggests that an employee would feel more secured at job due to the fact that they were hired on the basis of guanxi and the chances of getting dismissed or missing an opportunity to other (non-guanxi) employees are significantly lower. However, they also suggest that the relationship between the Guanxi and job security is dependent on the performance of the employee; irrespective of a favourable relationship, an underperforming employee may lack job security. The figure below represents the conceptual model that the study will adopt.

Knowledge building exercises get a boost when employees create networks outside their immediate professional relationships; these networks enable access to sensitive information related to jobs and organisations that people work for (Chen et al, 2011). Consequently, professionals become more aware of the treatment and working conditions that organisations are expected to maintain and offer employees, this may be contrary to their personal experiences in firms. Further, employees get dissatisfied with their employees and workplaces when the management is not willing to improve or note the required issues or changes. As things become clearer through communication, employees may get to know how guanxi for example served as the recruitment criterion for some of their colleagues which benefitted them unfairly over others. This dissatisfaction ultimately does affect staff motivation at workplace and subsequently increases willingness to switch over and leave their current workplace. The matter is not always entirely in favour of guanxi referred employees, as there may come a point when employees may get very satisfied in their current roles and would like to experience self-actualisation where the guanxi does not work in favour any longer (Abosag & Naudé, 2014). However, organisational culture and individual performance and performance relationship circumstances may also lead to increase in turnover intention overtime (Scott et al., 2014). Nevertheless, guanxi connected employees may have higher job satisfaction in general due to the fact that they would usually get the employer support necessary for satisfying group and individual goals in the initial (at the very least) years of employment. Conclusively, Guanxi has an almost similar impact on job satisfaction and the turnover intention. As an exception however, and this is where literature falls short of a scenario of low morale and lack of significant achievement of group goals when the work environment hosts both guanxi based and non-guanxi based staffs working together in the same team and towards common shared goals.
3. METHODOLOGY

The core purpose of this research is to investigate the effects of guanxi-based (or ‘favoured’) recruitment of academic staff on quality assurance and effective delivering of learning outcomes in sino-foreign joint educational institutes in mainland China. The primary data is collected from a) candidates who have been hired through guanxi referrals, b) candidates who have been recruited in conventional ways with no social-ties benefitting their hiring or position, c) learners from three sino-foreign joint colleges in China. Considering this aim, the research strategy was adopted within a qualitative study research design. This is in line with important recommendations in the literature (Dana & Dana, 2005, Dana & Dumez, 2015) pointing out the need for expanding research methodologies beyond quantitative studies with a wider inductive and holistic perspectives.

The chosen qualitative approach for the paper has used a thematic analysis. Thematic analysis is a search for themes that emerge as being important to the description of the phenomenon (Daly et al, 1997). Braun and Clarke (2006) views thematic analysis as a method used for ‘identifying, analysing, and reporting patterns (themes) within the data’ (2006: 79). Generally, thematic analysis is the most widely used qualitative approach to analysing interviews. The process involves the identification of themes through ‘careful reading and re-reading the data’ (Rice & Ezzy, 1999: 258). It is a form of pattern recognition within the data, where emerging themes become the categories for analysis.

The primary data collected from 34 Lecturers grade A and grade B faculties, please note table 1 below for more details. Investigating interviewees at the same position or title (i.e. Lecturer) would facilitate the research with a standardised and focused understanding of how guanxi may play a role in candidate profile and also performance related aspects. The contracts are primarily teaching and service heavy with minimal or no research expectations (i.e. with no workload hours or research support grants provided), based on pre-agreements with candidates, with a total 16 full-time and 18 part-time contracts looked at.

Table 1: Respondent Details

<table>
<thead>
<tr>
<th>Number of respondents</th>
<th>Male</th>
<th>Female</th>
<th>Chinese</th>
<th>Foreign</th>
<th>Online profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>13</td>
<td>21</td>
<td>23</td>
<td>11</td>
<td>8 (foreigners only)</td>
</tr>
</tbody>
</table>

3.1. Codes and Themes

A ‘good code’ is one that captures the qualitative richness of the phenomenon, and the coding process involved recognising an important moment and encoding prior to a process of interpretation (Boyatzis, 1998:1). Encoding the information organises the data to identify and develop themes from them. Boyatzis (1998:1) defined a theme as ‘a pattern in the information that at minimum describes and organises the possible observations and at maximum interprets aspects of the phenomenon’. Coding is the process of organising and sorting data since it serves as a way to label, compile and organize data. In linking data collection and interpreting the data, coding becomes the basis for developing the analysis.

Table 2: Modified and Adapted from Crabtree & Miller (1999)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Action taken</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Developing a template of codes</td>
<td>the semi structured interview questionnaire had a set of codes embedded in the questions that were drawn both from literature as well as the conceptual framework</td>
</tr>
<tr>
<td>2</td>
<td>Testing the reliability of codes</td>
<td>Drawing the codes from elements identified from the interviews were further categorised in themes. Some codes were ignored because of the purpose of this research.</td>
</tr>
<tr>
<td>3</td>
<td>Summarising data and identifying initial themes</td>
<td>Following reviewing interview data, the responses were collated and the raw data was systematically summarised. Interview transcripts were summarised separately by outlining the key points made by participants in response to the questions asked.</td>
</tr>
<tr>
<td>4</td>
<td>Connecting the codes and identifying themes</td>
<td>the codes identified from both ‘a priori’ ones and also ‘emerging codes’ contributed to a better list of responses that would provide a higher understanding. Connecting codes is the process of discovering themes and patterns in the data</td>
</tr>
<tr>
<td>5</td>
<td>Corroborating and legitimising themes</td>
<td>The final stage illustrates the process of further clustering the themes that were previously identified from the coded text.</td>
</tr>
</tbody>
</table>
Data analysis followed several stages. First, each interview transcription was scrutinised and themes were generated. Each response provided was examined with respect to the type of staff (Chinese national and non-Chinese national) and the institution they were working for. This helped in creating first order codes. Second order codes were identified and grouped together in what emerged across the interview responses to specific question sets (collected from both primary interviews and questionnaire responses via email) to carry out an analysis systematically. Eisenhardt (1989) viewed that it is important that the data analysis process is based on both 'within' story and 'cross' story analysis. Since most of the themes were generated from collating responses that were pointing towards a common fact or a phenomenon, from a range of interview findings, the analysis shifted from the individual level to collective analyses. This enabled in drawing general conclusion and meaning to a given question if there were common themes generating due to repeat or similar responses.

4. FINDINGS

4.1. A Mismatch of Staff Expertise, Courses Delivered and Learning Outcomes

"My role is primarily about staff administration and overseeing foreign partner recruitment numbers...in addition, liaising with student parents and teaching assistants for smooth running of classes and heading the management of annual automotive-show that is hosted on campus... The international office takes care of on-rolling recruitment and staff requirements round the year”

The role of Academic Dean, a Chinese national, for one of the selected sino-foreign colleges includes being the programme director for all undergraduate programmes in business, engineering, media and IGCSE exams, monitoring quality assurance and arranging peer reviews, employee appraisal and staff reviews, liaising with local industries to host job fair and career support for students. The position has been held by the same person for over 15 years with strong connection/ guanxi with local government authorities, and three vice presidents along with one executive president above him who owns the college financially. None of the role above, however, associated with title of the role has accessible paperwork as an evidence. In many circumstances, some of these above roles are delegated to early career teaching assistants whose responsibilities are largely undefined but includes foreign teacher support as well as school admin work like managing course portfolios and student accommodation management roles. No job descriptions are listed in their contract nor available in detail when contacted. In addition, these staff members don’t have any online profile alike other teaching staff so more information regarding their job suitability monitoring, equally an understanding of their work overload is missing due to lack of clarity of communication and transparency of information.

“The syllabus for IGCSE Mathematics is almost same as it is in Philippines (teacher origin), no teaching license is required to teach IGCSE in this college... The teaching assistant gives us the course portfolio from last year which is enough to get on with. The students have their learning portfolio which they can learn from, in addition to the classes filled with exercises handed down from my predecessor of the course... I do not have to invent any resources.”

The criterion for recruiting certain staff members, including non-Chinese, is also not clear and defined in any paperwork. It is difficult to assess aspects such as teaching pedagogy and therefore strict requirements set by higher education frameworks are hard to monitor and evaluate whether they are delivered in the classroom. There is almost no involvement of foreign partner Universities in recruitment decisions in these three colleges studied, and also no contact is made with staff (both new and old) from these partners institutions. Quality assurance rounds and visits have no regional branch staff participation; therefore, no involvement of faculties is taken on board or best practice shared platform is enabled.

4.2. Absence of a Platform to Share ‘Best Practices’

There is a need for foreign staff to work closely with local staff which becomes all the more important when they are sharing the same students across courses based on specialisation, besides many other student monitoring and development benefits. Data suggests that there is limited or no communication throughout the semester, and the platform where they put their queries forward is via teaching assistants. This may jeopardise the learning setting since students can feel the lack of consistency and connectivity in courses that they have during a semester. The importance of having a common staff room could be emphasised here as also noted by the staffs working in one of the colleges before.

“The readings for listening and other English language courses could better benefit my kids [students] if there is an opportunity to work or meet with their English teachers... This never happens, and the variation noticeable in the standard of reading material in their English classes significantly differs from case study readings that I present for my lessons... Students who score higher grades in their English language assignments are sometimes at a lower rung for my business courses. They can’t understand how this is possible... When asked for English reading materials, the teaching assistant was unable to provide it
and emails/ WeChat were ignored...It would be useful to have a staff meeting or a common staff room where these can be openly discussed perhaps?”

The above quote from a non-Chinese business Lecturer, elucidates the gap in learning and also inability of students to comprehend nature and outcome of their performances due to a) lack of feedback, b) lack of synchronisation between staffs teaching the same student cohort with similar course level learning objectives.

“My teaching assistant for 2nd year Marketing course is a Chinese staff who also teaches a similar strategy course for the third years, however she feels that she doesn’t always feel very confident in delivering the ppt coming from the publishers since she doesn’t have a Master’s degree yet [that I have as a requirement for this post]. It is difficult to build a new assignment, for example, without anybody in the teaching team to discuss and develop ideas with. I don’t see why it is sometimes challenging to work closely with local staffs who are seemingly less qualified and feel shy to come forward for a sound discussion benefitting our students. I have previously shared ideas a few times over with the academic director on this campus, but no action was taken…”

The above quote from another Business Lecturer from the selected college in north-east China shows a different scenario where they are little or no communication between local and non-local staff, but more importantly the fact that they teach similar subject areas of their expertise. From the learners’ viewpoint, however, it is a loss in terms of new input being delivered as opposed to repeat content. The content shared in a second-year course is delivered again during a similar course in third year.

“The assignment is very similar to what we did last year, however the instructor is different. The content is the same but it’s easier to follow this year because the instructor is Chinese and she speaks in Chinese as when needed. Though the content was the same last year, it was difficult to follow the foreigner teachers’ accent and vocabulary as our English levels were not that high”

“...the learning outcomes on the ppt are different to questions in quiz and group presentations...we don’t think the teacher always know what the course level expectations are for us…”

These two above quotes are from a third year International Business student and a second year Marketing student who shares his view on repeat content delivered over two years on similarly named courses, but also how benefits from a Chinese teaching delivery. A peer-review or teaching content monitoring could potentially address issues such as the above.

4.3. Lack of Multi-Cultural Learning Ecosystem in Staff Rooms

“Foreign teachers live their expat life and mostly spent their time on their own, we don’t communicate much on a daily basis unless we are contacted for any support. It is great to have them for our students but we don’t need many communications...Language and culture barrier is a problem when talking at a length...My line manager is the Dean who I also serve as an assistant with occasional visits to our other campuses in China...”

The above quote from a Chinese staff at one of the colleges where she teaches English to first year students. While she expresses understandable reasons for lack of regular communication with non-Chinese staff, the college is designed to be multi-cultural and the culture is aimed at inclusivity and participation of different cultures.

“When I first came, I was told that X would be my contact person and also someone I could contact if I needed any support setting myself up in this foreign land... I didn’t however reach out much to her as I can arrange things for myself and it’s not hard...everything is available within a mile’s distance...a semester later, she was allocated to me as my teaching assistant and I don’t know where her office room is or what her subject areas are...it would be beneficial for the college if local and non-local staff could work together more closely...”

A non-Chinese Lecturer expresses his interest in collaborating with local Chinese staff members. While culture is a strong element in this aspect, it remains much with the higher education institution to foster and emphasise a particular culture to facilitate such collaboration of local and non-local staff for a wider inclusive experience for everyone involved.

“When I joined the college, the Dean (Chinese) confirmed that share of marking exams for large courses and student cohorts will be split in half between me and my teaching assistant (Chinese), however shortly after an assessment was due for one of my 2nd and 4th year courses I had to mark around 650 papers all by myself...the turnaround time was about a week...so there was no sensible way to provide a good quality feedback to the students, simply due to sheer scale of marking...The Dean and also the teaching assistant didn’t respond to their earlier statement of confirmation when asked...There was no one else to report this to...I had asked details of the vice-president of the college who sits directly above the Dean but he was not contactable...it’s in a way explains why the attrition rate is so high here...”
A foreigner Business Lecturer reports this from his experience in working with one of the selected colleges in Jilin province. Given the low staff morale and lack of clarity provided in job description, the attrition rate has been historically high in the college. As with the college in Sichuan province, this college mentioned above don’t provide staff details online or have any HR policy.

4.4. Missed Learning Objectives and Teacher-Student Office Hours

“I am building on the course resources provided to me in the teaching portfolio from previous years. I did not teach microeconomics last year; the previous teacher left these resources for me. From my experiences, the course outlines are set by the partner institutions that are running the courses on their campus in parallel to ours. There is, however, much space and flexibility in delivering our courses delivered here... There is no standardisation mechanism in place, in both delivery and assignment design aspects... This allows teachers to focus on aspects they think is important in a Chinese classroom and remove sections from the curriculum that cannot be covered... Duration of the semester and student capacity are two key important factors to keep in mind when you teach in China.”

Following what this Economics Lecturer, working for this college in Sichuan province, has to say here demonstrates the degree of flexibility in course design and delivery while at the same time illustrates the wide gap or even lack of monitoring or quality assurance mechanism in place. Since there are no staff meetings or regular line manager meetings in place, which happens to be a likeable element amongst the staffs working in the college, there is also zero quality assurance in the courses delivered to colleges. Universities that go through accreditation reviews would at the very least pinpoint at the importance of achieving the learning objectives as defined and shared in the course outlines. However, how much of that is equally delivered by partner colleges abroad also needs significant effort, attention and time.

While most Chinese students are not encouraged to actively participate in classroom from their early years, the same is continued in their years in higher education unless a different class culture is introduced and reinforced through continuity. It is apparent from the teaching pedagogy from the foreign (non-Chinese) lecturers that they try different ways to involve the Chinese students in the classroom, many have struggled to make this happen with little or no support from the college in general. In the context of assignments and its design, an area where a lot of students come forward for clarification, the workload given in office hours is almost negligible. Only 6 of the total interviewed staff members offers a monthly one to two hours of office hours to students, particularly if this is about assignment clarification outside classroom hours and also feedback based language learning sessions. For subject Lecturers, there is almost no provision of office hours where students could connect with their class Tutors outside classroom hours. This leads to significant distress and helplessness amongst students who often complain weighing the amount of fees and support received in exchange.

4.5. Varying Financial and Moral Incentives

Due to the fact that some staff members are either paid in cash or via e-transfer on WeChat, detailed evidence of role-based payments are missing, however interviews suggested that the pay structure is pretty dispersed and uneven. While some foreign staffs are paid according to their highest qualification and other attributes, others (mainly locals) are paid as per agreement and seniority at the institution (not in the sector, in general). On recruitment site, there is a range provided for subject level lecturers, however for local recruits the pay structure varies significantly. In addition, the mismatch of qualification and teaching areas are vastly overlooked which significantly affects the learning objectives of courses that a large cohort of students take as part of their degree programme. The lack of monitoring in this scenario doesn’t benefit or stabilize the pay gap. One of the three colleges studied, with partners in North America and the US did not have an allocated HR division where any such related information could be further researched. They have Finance and International offices as a part of their outreach division, responsible for staff recruitment, pay, administration and student registration/fee management. The lack of HR and paperwork makes it very difficult to monitor and identify these discrepancies. Most staff members working in these international offices and HR divisions in the three colleges, are local and support the guanxi induced job security model discussed earlier in the literature, leading to their long-term employment with their respective employers.

“I applied directly from my job site and was interviewed in line with the competencies set out for the role... I shared my teaching and research interests and also had enquired of support available for conferences and paper submissions... The Dean responded positively to the questions, however after I had started working here then I realised the job is mainly teaching based and no workload hours or pay for research activities are encouraged or available... My qualifications are much higher than my junior Chinese colleagues but their job description and pay is almost the same... This explains why I was unable to read staff profiles online before I arrived... and Chinese staff stay close to the management, we don’t get to talk to know much about them...”
Comments from a foreigner staff member when asked about how he got his job and experiences from her first few months on the new campus.

“My experience with the college has mostly been good... I was a student here myself six years ago and then had went abroad for my Master’s degree, when I came back my family connection at the department and local council helped me quickly secure this job without wasting much time on job hunting in a highly competitive modern China... I get to work closely with the Dean and though I support foreign teachers with their teaching, my job is mainly administrative and operational... My goal is to work here for a few more years since I live with my family close to campus and don’t want to move to another company without knowing anybody or referrals”

This guanxi based recruitment offered the candidate the same position and compensation package when appointed, as the college did to a senior foreigner staff with much higher qualification and HE experience abroad.

Table 3: Identification of Themes

<table>
<thead>
<tr>
<th>First order codes</th>
<th>Second order codes</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undefined staff qualification and misleading entry point conditions</td>
<td>Lack of clarity in roles and faculty requirements during and post - appointment stages</td>
<td>Mismatch between profile and output – affecting learning outcomes</td>
</tr>
<tr>
<td>Separated staff circles within similar subject group interests</td>
<td>Missed opportunity on team work and staff meetings</td>
<td>Best practices (not) shared</td>
</tr>
<tr>
<td>Chinese and non-Chinese staff dynamics</td>
<td>Need based communication, much collegiality missing though mentioned at college goal and mission statements</td>
<td>Need to foster a multi-cultural learning ecosystem in staff room</td>
</tr>
<tr>
<td>Missed learning objectives and teacher-student office hours</td>
<td>A mix of formative assessment details and preparation all in limited class hours, lack of feedback in detail</td>
<td>Course learning objectives need revisiting (before release of final grades)</td>
</tr>
<tr>
<td>Mismatch of curriculum content and staff delivery</td>
<td>Peer-monitoring and teaching reviews could benefit both staff and learners</td>
<td>Lack of monitoring and quality assurance practices</td>
</tr>
<tr>
<td>Varied incentives and pay packages</td>
<td>Missing information from HR and details of pay entitlements could lead to scrutiny and questionable reputation of college</td>
<td>Need for foreign university partners to formalise the processes and get involved in the recruitment loop to avoid corruption</td>
</tr>
</tbody>
</table>

5. DISCUSSION

5.1. Improving Transparency and Collegiality for Sharing ‘Best Practices’

The findings evidences that there is a clear discrepancy in regards to staff qualifications and pay packages when they are compared between Chinese and non-Chinese staff members recruited at the selected colleges studied, and there are deeper implications of these in the long run that can be further discussed and debated. One of the foremost considerations made by the incoming students of these colleges are based on their gao kao (high school, A-level equivalent in China) results are significantly lower than students who would go on to leading and other central Universities in China. The entry requirements for the selected colleges looked at are much lower, however the college fees are almost as high as a foreign university would take in some countries. The typical range of student fees paid to these foreign University-partnered colleges are between 45000-65000 RMB every year, which is substantially higher than what students would pay in a Chinese University. Despite the high fees, the students most often do not get to find out details of their courses and subjects offered during an academic year until the very last minute, this can be two-three days before the semester commences.

As evident from what the data suggests, the staff recruited for teaching subject level and English language courses have significant variation in their qualification, background experience and teaching pedagogy. In addition to these, the dynamics between Chinese and non-Chinese staffs are not found at a level where it would be expected at a foreign University-partnered college environment. Besides the lack of monitoring mechanism and also empirical ignorance of fostering the culture to embed local, non-local staff collaborative learning environment, the student misses out significantly in regards to their overall learning outcomes and course expectations. Teachers without the required right qualifications, reading out from PowerPoint provided either by the publisher or previous year portfolio base are not able to deliver a systematic, participatory and industry-tailored high-quality course. However, some of the staff who are at the right level are found to be neither
encouraged nor supported to deliver a high-quality lesson with all necessary recognition and more importantly, sharing the best practise with other staffs on campus.

5.2. Aligning Staff Recruitment, Quality Assurance and Teaching Evaluation Needs

Since there is only 8 staffs whose profile are visible online with limited information (qualifications, current role and contact details), it is almost difficult to monitor or compare staff recruitment standards, or to see course allocation of individual staff matching their experience and background. It can be observed from the data that lack of monitoring of teaching via peer review of staff meeting practices adversely affects the delivery and quality of teaching in the classroom. While rising student dissatisfaction is an issue, interviews with learners also shows that compliance with the school practices is something that is also a reality amongst students. This allows regular continuation of the same practice year after year on the college campus without any changes. It is however interesting to see how several staff sometimes share the same class cohort while teaching on different modules, a very common reality in Universities, but have no contact with each other. This can be attributed to several causes as understood from the findings a) local and non-local staff do not communicate due to personal fears, dissimilar qualifications (even when teaching at the same level), culture and language barrier, b) the absence of regular (or at least once a term) school meetings and also the lack of a shared staff room, c) the access challenge of reading the course outlines online or when documentation is requested from teaching assistants (mainly guanxi recruited) which would facilitate one staff from another after understanding what content is reviewed and shared with the same learners, d) inability and lack of interest amongst students to go and report to the management to express their dissatisfaction in qualitative differences in lessons.

“We had struggled with over-assessment for an academic skills course last year, and being the student monitor I reported against a particular teacher to the management... no action was taken, no changes were made and the following year we were given the same teacher again... we cannot see eye to eye after that...”

A final (fourth) year international business student shares from this experience in the college. Deviation from the course learning objectives, as discussed earlier in the paper stands as a major challenge as that is something would require monitoring from the partner University abroad. Due to the fact that no such QAA (Quality Assurance Agency for higher education) format reviews are carried out annually, and such inspection is expected from internal management of the college – no revalidation or quality control board/staff meeting takes place. As can be noted above, the quality assurance is another one of the many roles that the Academic Dean is entrusted with but no such reports are available.

“Our teachers have a lot of autonomy with their courses. We do not interfere in the process and provide a lot of admin support as required. When students or their parents complain, we remind them that finishing assignments is their responsibility...We have to maintain the standard set by our partner US school...We do not compromise on that”

The above quote from the Academic Dean from one of the colleges in Jilin province does not cover the grey area of teaching quality assurance and also admin support. The staff from this same college had reported regarding the discrepancy in marking allocation for large student cohorts and lack of moderation or standardisation process. In the overall understanding of this and the clear lack of quality maintenance, it is imperative that the foreign partner University need to exercise some level of control when it comes to course and teaching quality and not simply settle with annual student-intake and financial agreements as it so happens.

5.3. The Degree of Involvement and Association by Foreign Partner Institutions

Following from the previous case in point, the need for foreign partner Universities are paramount and imperative from the findings of the research. While there is an increasing evidence of pressure coming in to these colleges in China from their partner institutions abroad in regards to students who would finish one length of their degree abroad after spending the first 2-3 years in China, little is being done in terms of quality control and staff recruitment. Guanxi based staffs in the colleges do not have an online profile and very often paid in an envelope every month, so a transparent record of transactions, staff numbers, and role-based pay information are all largely missing in paper. Earlier evidence shows that guanxi based teachers are also delivering courses at second- and third-year levels without their right subject background or the right qualification which would otherwise be held mandatory for other/ non-guanxi/ foreign/ other Chinese staff members. There is some evidence from other foreign partner institutions who have branches on china campus, where all the recruitment is done centrally from US or Canada main office. These hired staffs are then allocated to their foreign campuses. Whether or not these processes have favouritism embedded in them, may well be a subject topic for another research, but the control in terms of ensuring consistent pattern of staff hiring based on the right criterion is present.
5. CONCLUSION AND IMPLICATIONS

Further research could address the candidate homogeneity aspect of this research in terms of studying staff at a particular position level (i.e. Lecturer grade A and B) used for data and analytical consistency benefitting this research. Larger data sets across positions and local/ non-local staffs may generate more themes with varied implications. Additionally, studying more such colleges across the mainland territory, similar in scale and operations, would bring in different or similar conclusions. Also, research in other sectors where guanxi is still a criterion of recruitment, that involves triple helix connection could be looked at with higher focus on organisational goals and teaching quality. Finally, similar studies can be conducted in western societies where potentially similar results could be found. A similarity in responses between the two may suggest one of two things: that guanxi has become more of a non-unique sense of social networking and social capital, howsoever defined and perceived culturally.

This research is based on the findings from three comparable foreign University-partnered colleges in China where the senior management is solely composed of Chinese nationals. It shows that there are several areas of discrepancy and lack of transparency when staffs are hired and paid on guanxi basis; challenges coming from guanxi-based staff not working closely with non-guanxi counterparts (even when they are teaching on the same course), the lack of access of staff profiles and inability of non-guanxi staff to communicate with guanxi-based staffs. The effects on the wider scale falls on student learning, image of foreign Universities, very high staff attrition rate, quality control measures and falling reputation of these colleges nationally within mainland China.

The importance of achieving the learning outcomes, high quality teaching and student support, being recognised for student excellence and also graduate recruitment are essential components defining the very foundation and basic success factors of a higher education sector that faces a stiff competition globally. Throughout the past decade in particular, the Chinese higher education sector has opened up to the wider world more than ever before and successful claims in academic research and excellence in teaching offered in mainland colleges and Universities have been loudly marketed. However, the challenges and realities from the inner worlds of sino-foreign colleges, as presented in the paper shows that they could be vulnerable to significant challenges when thoroughly scrutinised under strict academic governance. It is also worth noting that several Sino-British partnership colleges as well as US/ Canada/ Australia/ New Zealand HE institution-partnered colleges are exponentially growing in China and staff recruitment, with reduced dependency on guanxi, is a key area of quality control for world-class teaching delivery as their advertisements usually tend to claim. There is also increasing number of British and Australian Universities who have Chinese campuses and there may be quite a handful to learn when it comes to how recruitment is managed in terms of a) transparency of application procedure for potential faculties b) clear guideline of application and required/essential/desired selection criterion c) suitably providing an online profile of staff members, d) clear and easy access to study portfolio and course handbooks online available for both students and staffs, f) a dedicated HR team organising the basics of benefits and compensation packages. Additionally, colleges can internally manage student evaluation surveys that are actually actionable and not simply for records sake. On a concluding observation, as higher education institutions in China start building on their expansion (operational as well as ambitious student-intake goals) plans coupled with foreign-University partnerships, they would find that potential labour-pool (and the degree and extent of expertise that comes with it) drawn solely through relationship networks will be miniscule and risky, also perhaps too local and interconnected to be able to fulfil any acceptable level and quality of function.

REFERENCES

DOI: 10.17261/Pressacademia.2019.1155


THE EFFECT OF DEPARTMENTAL PRODUCTIVITY ON PERFORMANCE-BASED ADDITIONAL PAYMENT IN UNIVERSITY HOSPITALS: A MODEL PROPOSAL

DOI: 10.17261/Pressacademia.2019.1156

RJBM-V.6-ISS.4-2019(3)-p.243-270

Murat Taser¹, Huseyin Cakir²

¹Gazi University, Informatics Institute Department of Management Information Systems, Ankara, Turkey. mtaser@pau.edu.tr, ORCID: 0000-0001-6871-4171
²Gazi University, Department of Computer and Instructional Technologies Education, Ankara, Turkey hccakir@gazi.edu.tr, ORCID: 0000-0001-9424-2323

Date Received: September 27, 2019 Date Accepted: December 2, 2019

To cite this document
Permanant link to this document: http://doi.org/10.17261/Pressacademia.2019.1156
Copyright: Published by PressAcademia and limited licenced re-use rights only.

ABSTRACT

Purpose- In the research, for the additional payment system applied in university hospitals; It is aimed to create a department-based model that reduces costs, creates an income-expense balance, and will win not only the hard workers but also the efficient and quality employees.

Methodology- In the first stage, incomes and expenses of thirty departments of Pamukkale University Hospitals which constitute the universe of the research were detected and financial productivity values were extracted. Since only financial outputs are not considered sufficient, in the second stage, the resource utilization efficiency of the departments were measured by data envelopment analysis.

Findings- According to the results, the ratio of the income obtained from the provision of health services to the expense is 85%. Only one department was found financially productive and only two departments were efficient. These two results, with a high correlation value such as 0.995 are supported each other. The results may be reflected separately or equally on the additional payment.

Conclusion- As a result, public health care revenues are unable to cover costs and this state the continuity of the service difficult. The personal rights of staff paid from the revolving fund budget must be paid from the university budget with a legal arrangement. In addition, application of performance based on departmental productivity can be added to the existing system.

Keywords: Pay for performance, university hospitals, cost analysis, data envelopment analysis, department productivity

JEL Codes: H83, I18, D24

THE EFFECT OF DEPARTMENTAL PRODUCTIVITY ON PERFORMANCE-BASED ADDITIONAL PAYMENT IN UNIVERSITY HOSPITALS: A MODEL PROPOSAL

DOI: 10.17261/Pressacademia.2019.1156

RJBM-V.6-ISS.4-2019(3)-p.243-270

Murat Taser¹, Huseyin Cakir²

¹Gazi University, Informatics Institute Department of Management Information Systems, Ankara, Turkey. mtaser@pau.edu.tr, ORCID: 0000-0001-6871-4171
²Gazi University, Department of Computer and Instructional Technologies Education, Ankara, Turkey hccakir@gazi.edu.tr, ORCID: 0000-0001-9424-2323

Date Received: September 27, 2019 Date Accepted: December 2, 2019

To cite this document
Permanant link to this document: http://doi.org/10.17261/Pressacademia.2019.1156
Copyright: Published by PressAcademia and limited licenced re-use rights only.

ABSTRACT

Purpose- In the research, for the additional payment system applied in university hospitals; It is aimed to create a department-based model that reduces costs, creates an income-expense balance, and will win not only the hard workers but also the efficient and quality employees.

Methodology- In the first stage, incomes and expenses of thirty departments of Pamukkale University Hospitals which constitute the universe of the research were detected and financial productivity values were extracted. Since only financial outputs are not considered sufficient, in the second stage, the resource utilization efficiency of the departments were measured by data envelopment analysis.

Findings- According to the results, the ratio of the income obtained from the provision of health services to the expense is 85%. Only one department was found financially productive and only two departments were efficient. These two results, with a high correlation value such as 0.995 are supported each other. The results may be reflected separately or equally on the additional payment.

Conclusion- As a result, public health care revenues are unable to cover costs and this state the continuity of the service difficult. The personal rights of staff paid from the revolving fund budget must be paid from the university budget with a legal arrangement. In addition, application of performance based on departmental productivity can be added to the existing system.

Keywords: Pay for performance, university hospitals, cost analysis, data envelopment analysis, department productivity

JEL Codes: H83, I18, D24

ÜNİVERSİTE HASTANELERİNDE BÖLÜM VERİMLİLİĞİNİN PERFORMANSA DAYALI EK ÖDEMEYE ETKİSİ: BİR MODEL ÖNERİSİ

ÖZET

Amaç- Araştırmada üniversite hastanelerinde uygulanan ek ödeme sistemine göre maliyetlerin azaltılması, gelir - gider dengeini kurarak, sadece çok çalışılan değil verimli ve kaliteli çalışılan kazanacak bölmü bir model oluşturulması amaçlanmıştır.

Yöntem- İlk aşamada araştırmanın evrenini oluşturan Pamukkale Üniversitesi Hastaneleri onu anabilim dalının, gelir-giderleri tespit edilerek mali verimlilik değerleri çıkarılmıştır. Sadece finansal çıktılar yeterli görülmüştü, ikinci aşamada veri zarfı analizi ile bölmülerin kaynak kullanım etkinlikleri ölçülmiştir.

Bulgular- Sağlık hizmeti sunumundan elde edilen gelirin, gidere oran % 85’dir. Sadece bir bölüm verimli ve sadece iki bölüm etkin bulunmuştur. Araلانın 0,995 gibi yüksek bir korelasyon değeri bulunan bu iki sonuç birbiriyle desteklenmektedir. Ek ödemeye Katı Verimlilik Katsayısı olarak eşit olarak veya ayrı ayrı yansıtırılabilir.

Sonuç- Sonuç olarak kamu sağlık hizmeti maliyetleri, maliyetlerini karşılayamamakta ve bu durum hizmetin sürekliğini zora sokmaktadır. Çözüm persoñel özük haklarının, yaşsal bir düzene hale döner sermaye yerine üniversite bütçesinden küçürülmesi. Performansın bölüm verimliliğine dayalı uygulanması aynca katki sağlamayıbılır.

Anahtar Kelimeler: Performansa dayalı ek ödeme, üniversite hastaneleri, maliyet analizi, veri zarfı analizi, bölüm verimliliği

JEL Kodları: H83, I18, D24

* Bu makale “Üniversite hastanelerindeki bölüm verimliliğinin performansa dayalı ek ödeme etkisi” başlıklı doktora tezindenidot verilmiştir.
1. GİRİŞ


Sağlık harcamalarının kontrol altında almak amacıyla devletin uyguladığı SUT - Medikal Ulak (Medula) - Global bütçe uygulamaları, özel sağlık kuruluşlarıyla girilen rekabet, maliyetlerin doz ve ekiplerin etkinliğini sürekli artması gibi etkenler kamu hastanelerini olumsuz yönde etkilemektedir. Bu durumda eski dönem gibi sadece hatalı ve eksik kodlama sonucu olabilenler gelir kayıplarının denetlenmesi yeterli olmamaktadır. Artık yöneticiler bölgelerin etkinlik ve maliyet hesaplamalarına da고 mezunun hazırlanmaktadır. Bu süreçte bölgelerde elde edilen gelirler maliyetleri ve kaynakların karşılanmamasını, bu çalışanların etkisini ve ihtiyaç ölçüsünde kullanılmamasını belirlemek, kritik bir yönetim bilgi haline gelmiştir (Kıskakürek, 2010).

Ancak sadece yöneticilerin değil her zaman yerel olmayabilir. Genelde tüm çalışanların, özelde ise her bölüm (Ortopedi, Uroloji, İç Hastalıkları, Enfeksiyon vb.) çalışanlarının kendi ürettiği sağlık hizmetinde maliyet unsurlarına dikkat etmesi ve verimliliğin sağlanması için amacın Cảnh göstermesi, kamu hastanelerinde sürdürülebilir sağlık hizmetinin sunulabilmesini kopolyaşıtırılmaktadır. Çok fonksiyonlu ve iki teknolojik özelliklere sahip tıbbi cihaz isteği, yüksek kalite malzeme ve pahalı ilaç kullanımı, ihtiyaç olandan fazla yardımcı personel talebi gibi konular maliyatın olumsuz etkisini olumsuz etkilemektedir. Ayrıca, hasta randevu, hastaların yatak dolulukları gibi önemli parametrelerin düzenli takip etmemek, ihtiyaç duyulan kapasite artırıcı düzenlemeleri yapamaması ve çalışanların bağımsızlaşıp bulunuldukları birey olumsuz etkileri olarak sayılabilir.

İhtiyaç duyulan verimli ve kaliteli çalışma sevícnesinin sağlanmasını amaçlamakla Sağlık Bakanlığı tarafından 2004 yılında itibaren sağlanıdır. Sağlık çalışanları üzerinde otokontrolu sağlayacak, sağlık yönetimini kopolyaşıtırılmaktadır, istenilen standartlarda ve çok çalışmayı sağlamak için bu süreçte bölümle ortaya çıkılarak çalışmalarda, yönetmelik döndürmek (Kızılkan, Gültekin ve Yıldıran, 2012). Benzer bir performans değerlendirme uygulamalarına bu süreçte bölümüne elde edilen gelirlerin maliyetleri karşıladıktan sonra kara arama etkinliği ve ihtiyaç ölçüsünde kullanılmamasını belirlemek, kritik bir yönetim bilgi haline gelmiştir (Kıskakürek, 2010).


Makalenin birinci kısımda, araştırma problemi, amacı, materyali ve metodu ile önemi açıklanmıştır. İkinci kısımda, araştırmayı kendi ürettiği sağlık hizmetinde maliyet unsurlarına dikkat etmesi ve çok çalışmayı sağlamak için bu süreçte bölümle ortaya çıkılarak çalışmalarda, yönetmelik döndürmek (Kızılkan, Gültekin ve Yıldıran, 2012). Benzer bir performans değerlendirme uygulamasına (Yükseköğretim Kurulu (YÖK) tarafından 2011 yılı itibariyle üniversite hastanelerinde uygulanamaya almıştır.

1.1. Araştırma Problemi


Aşıl olarak hizmete katkı unsurlarının dikkate alındığı bu yönetimle, belirlenen bu kısırlık durumlar, performans sistemini etkileyen bir şekilde uygulamasına olanak tanımak, çalışanların performansını düşürerek “durumu” ve “eksik verimlilik” için bir ödev vermek olmamaktadır. Çalışmaların sonucunda elde edilen sonuçlar, ek ödeme hesaplamalarının ileriye dönük simülasyonlarının yapılmasını ve bu süreçte kullanılabilecek bir stratejik karar ortaya koyulmasını sağlayacaktır (Yükkeoğlu Kursulu, 2011).

Giriş kısmında da belirtildiği üzere çalışanların; iyi peformans gösteren, performanslı çalışanların verimlilik ve kaliteli çalışanın kazanacağı bir model oluşturulması öngörülmüştür. Bu kapsamda çalışmadan, sonuçlarda belirtilen amaçlara ulaşılabilmesini sağlamaktır.

1.2. Araştırma Amacı

Araştırında üniversite hastanelerinde uygulanan ek ödeme sisteminde; maliyetleri azaltan, gelir - gider dengeini kuran, sadece çok çalışanın değil verimli ve kaliteli çalışanın kazanacağı bir model oluşturulması öngörülmüştür. Bu kapsamda çalışmadan, aşağıdaki belirlenen amaçlara ulaşılabilmesini sağlamaktır.

- Yapılan maliyet analizi ve verimlilik çalışması sonucunda, getirisi yüksek olan bölüm çalışanlarının ödüllendirilmesi ve motive edilmiş, düşük olanlarda ise farklılık edilmiş olanların sağlık hizmetlerinin önemi olduğunu, daha adil bir ek ödeme dağılımı için performans sistemindeki mevcut puan tabanlı değerlendirme sisteminin bir sonucu olarak belirlenip belirlenmediği tespit edilebilir.
- Yeni kaynak (personel, tıbbi cihaz, yatak, oda, malzeme vb.) tahsis edilmesi ve motivasyonlu, verimli ve etkili çalışan ve performansa uygun ek ödemelerin getiriye uygun olarak belirlenen Kalite verimlilik Katayısı (KVK) ile çarpılarak veya B puanlarının yönetmeliğinde uygun olarak artırılmasını sağlamak ve bu faiza / pay alması(debugli) sebebiyle, sağlık hizmeti verileri sonucunda, bölümlerde verilen sağlığın hizmeti verimlilik ve hizmet kalitesinin ölçülmesini, bölümlerin ek ödeme hesaplamalarında yansıtılmış mevcut beklentiye karşı olan uyumun kesin bir sonuç vermesi hilafettir.

Yapılan çalışma neticesinde elde edilen sonuçlar, ek ödeme hesaplamalarının ileriye dönük simülasyonlarının yapılmasına ve yeni kaynak tahsis için alacak şube yönetimsel kararlardan kullanılabilir. Sonuçlar aynı zamanda var olan GİP’ in bölümler açısından değerlendirme sistemini, yüksek ve düşük verimlilik etikleriyle çalışanlara, GİP sistemindeki performans dağılımını ve verimliliği tespit edilebilecektir.

1.3. Araştırma Materyali ve Metodu

Günümüzde sağlık hizmetleri sektöründe artan rekabet; hastane işletmeleri açısından maliyet analizinin önemini ortaya koyar. İşletmelerin genel finansal durumunu ortaya koyan kaynak isteyen hasta yönetimleri, yapılan maliyet analizleri advent olmakla birlikte, hizmet veren hekimlerin, stratejik kararlar için de önemlidir. Bu yüzden hastane yöneticileri, maliyet maliyetleri, stratejik karar alma, fiyatlama gibi konularda sağlam bir alt yapıya sahip olmakta olmalardır.

Yapılan analizlerden da anlaşılacağı üzere maliyet analizi çalışması yapılmadan ve bölümlerin arası katkısını yansıtan ortaya koyulan maliyet analizleri, sağlık hizmeti veren ve devlet kurumları arasında inandırıcı olmaya çalıştır.
Literatürde sadece gelir - gider bilgisi, maliyet analizine bağlı olarak oluşturulan ek ödeme modellenin eksik kalacağı, hastanelerde, ilgili finansal görevlerin yanı sıra; yatayların etkisini kullanıcı, doktor ve hemşire etkinliği, poliklinik sayısının artırması, hasta devirini yükseltmeli vb. parametrelerin önemli performans kriterleri olarak kabul edildiği görülmektedir (Tengilimoğlu ve diğerleri, 2012). Meseleyi başka bir açıdan değerlendirecek olursak, normal işletmelerin etkinlik ölçümü için bir yapmak ya da daha fazla mal/ hizmet üretmek yeterli olabilir. Ancak özellikle kamu sağlık hizmetlerini etkinliğinin daha çok hasta muayene etmek, ameliat sayısının artırılması ve daha fazla ciro üretmek gibi hedeflerle ölçülmek, kamu sağlık harcamalarının bilinişcesi artırılsın ve bu araştırma, araştırmanın dışında bırakılmıştır. İhtiyaç duyulan verilere ulaşmak için konu ile ilgili evraklar incelenmiş ve KBV'nin (Kamu Bilgi Yönetim Sistemi) den istenen verilerin sağlanamaması durumunda konu ile ilgili evraklar incelenmiştir. 

Yukarıda verilen açıklamalar dikkate alınarak çalışmanın ikinci aşamasında, bölümlerin girdi ve çıktı etkinlikleri VZA yöntemine ölçülecektir. Girdi olarak metrekare, personel sayısı, yatak sayısı, internetten alınan randevu oranı gibi parametreler ve çıktı olarak ise ayaktan hasta sayıısı, ameliat sayısısı, ciro, yatayların gün sayısı, hasta memnuniyeti oranları gibi parametreler kullanılacaktır.

Charnes, Cooper ve Rhodes tarafından geliştirilmiş bir performans ölçüm tekniği olan VZA, özellikle sağlık sektörü karar verme birimlerinin (KBV) etkinliğinin değerlendirilmesinde sıkça kullanılan yöntemlerdendir. Biriken çok girdi ve birden çok çıktıyı çalışmak için kullanılan KBV, her KBV’deki (benzer girdi ve benzer çıktılar üreten işletme, bölüm gibi organizasyonel birimler) ek insaatı ve kaynakları tanımlamak için KBV’er, tan etkinliğe sahip olanlarınla karşılaştırılacak etkinlik düzeyi olanların belirlenir ve bunların etkinlikleri tabii artrımlabileceğini dair stratejiler, etkin birimler referans verilerek önerilir. VZA, çok girdi ve çok çıktılı üretim ortamlarının verimlilik ölçümünde ve özellikle sağlık sektöründeki performans ölçümünde oldukça iyi sonuçlar vermektedir. (Ayañoğlu, Atan ve Beylik, 2010).

Ağrıbaş; 2011; Kara ve diğerleri; 2015; Kiskürek, Yılmaz ve Kılıç; 2011; Özkân ve Ağrıbaş; 2015; Özsarı ve diğerleri; 2015; Yanık, Ekinci, Kavuncuvaş ve Çakurlu; 2012; Yegimbey ve Yüksel; 2015; Zengin ve diğerleri; 2013. Maliyet analizi araştırmaları, hizmet sunumunda maliyet etkinliğinin sağlanması, performans hesaplamalarında kullanılması, stratejik konularda karar desteği sağlanması veya uygun kaynak tahsisi yapılması gibi konularda yardımcı olabileceği öngörülen bir bitirilmiş, elde edilen sonuçların uygulandığı verimlilik ve performans hesaplamalarına dair bir uygulama yapılmasını.


bölümlerin kendi üzerinden faturalanılan geliri bulunmamaktadır. Klinisyenlere tanı ve tedavilerinde yardımcı olmak İle derecede görüntülène ve laboratuvar hizmetleri sunan bu bölümlerin üretikleri hizmetler Medula sistem gerekir, istemi yapan bölümün gelir olarak kaydedilmektedir. Benzer şekilde Anestezi ve Genetik bölümleri, üretikleri sağlık hizmetinin çoğunun kendi üzerinden faturalanması da, modelin değerlendirmesini saptacak bir miktarda diğer bölümler üzerinden faturalanılan hizmet vermekte ve gelir kaynağı yapamayacaktır.

Çalışma bu konuya açıkçıkl getirmek için verimlilik kriterleri kullanan üniversite hastanelerindeki gelir belirleme örneklerinden yola çıkılarak bir düzenleneme yapılacaktır. İlgili bölümlerde verilen sağlık hizmetlerinin kendi faturalarında yer alıyan kısmının SUT toplam tutan hesaplanarak, belirlenen yuzdelik oranda (% 75) ilgili bölüm sanal gelir olarak yansıtılmıştır (Erciyes Üniversitesi, 2018; Eskişehir Osmangazi Üniversitesi, 2012; Hacettepe Üniversitesi, 2017; İnönü Üniversitesi, 2012; Ondokuz Mayıs Üniversitesi, 2016). Gelirin tamamının %75’inin gelir olarak yansıtılmamasının sebebi; işlem öncesinde istemi yapan bölüm tarafından gerçekleştirilen tetik, tani ve tedavi gibi süreçlerin istemi yapılan sağlık hizmetiyle bağımlı olmasıdır. Mal verimlilik katsaylarının düzgün bir şekilde belirlenmesi için, oluşturulunan sanal gelire eşi büyüklikte belirlenen sanal gider, istem yapma oranına göre hizmeti alan bölümlere yansıtılmıştır. Sonuç olarak istemi yapan bölüm, ilgili belirleme oranının % 100 tüm fatura karşılığı alsa da % 75 ini gelir olarak servis veren bölüme aktarmıştır. Konu çizimi ile hastane kemikleri üzerinden faturalanmış; hizmet veren bölüme karşılığı alması % 75 ini gelir olarak servis veren bölüme aktarmıştır. Konu çizimi ile hastane kemikleri üzerinden faturalanmış; hizmet veren bölüme karşılığı alması % 75 ini gelir olarak servis veren bölüme aktarmıştır. Konu çizimi ile hastane kemikleri üzerinden faturalanmış; hizmet veren bölüme karşılığı alması % 75 ini gelir olarak servis veren bölüme aktarmıştır. Konu çizimi ile hastane kemikleri üzerinden faturalanmış; hizmet veren bölüme karşılığı alması % 75 ini gelir olarak servis veren bölüme aktarmıştır. Konu çizimi ile hastane kemikleri üzerinden faturalanmış; hizmet veren bölüme karşılığı alması % 75 ini gelir olarak servis veren bölüme aktarmıştır. Konu çizimi ile hastane kemikleri üzerinden faturalanmış; hizmet veren bölüme karşılığı alması % 75 ini gelir olarak servis veren bölüme aktarmıştır. Konu çizimi ile hastane kemikleri üzerinden faturalanmış; hizmet veren bölüme karşılığı alması % 75 ini gelir olarak servis veren bölüme aktarmıştır. Konu çizimi ile hastane kemikleri üzerinden faturalanmış; hizmet veren bölüme karşılığı alması % 75 ini gelir olarak servis veren bölüme aktarmıştır. Konu çizimi ile hastane kemikleri üzerinden faturalanmış; hizmet veren bölüme karşılığı alması % 75 ini gelir olarak servis veren bölüme aktarmıştır. Konu çizimi ile hastane kemikleri üzerinden faturalanmış; hizmet veren bölüme karşılığı alması % 75 ini gelir olarak servis veren bölüme aktarmıştır. Konu çizimi ile hastane kemikleri üzerinden faturalanmış; hizmet veren bölüme karşılığı alması % 75 ini gelir olarak servis veren bölüme aktarmıştır. Konu çizimi ile hastane kemikleri üzerinden faturalanmış; hizmet veren bölüme karşılığı alması % 75 ini gelir olarak servis veren bölüme aktarmıştır. Konu çizimi ile hastane kemikleri üzerinden faturalanmış; hizmet veren bölüme karşılığı alması % 75 ini gelir olarak servis veren bölüme aktarmıştır. Konu çizimi ile hastane kemikleri üzerinden faturalanmış; hizmet veren bölüme karşılığı alması % 75 ini gelir olarak servis veren bölüme aktarmı

2.3. Birinci Dağıtım Aşaması

Personel giderleri: Çalışmada bölgelere göre gelir verileri belirlendikten sonra gider belirleme kısmına geçilmiştir. Sağlıkhizmeti veren hastanelerin en büyük gider döküm büyük kredi konsolosunu oluşturutan, ilac ve malzeme gibi giderler ve bunun gibi herhangi bir gider merkezinde doğrudan verilen giderin (doğalgaz gideri – iş merkezi) dağıtılmaktadır. Devamında elektrik, su gibi ölçümlerin toplanıp veya maliyetinden dolayı herhangi bir yönetim ve destek birimine doğrudan yönetilenen genel üretim giderleri, dağıtım anlayışları altında paylaşılan gider merkezlerine dağıtılır. İlgili dağıtım aşamasında birinci dağıtım sonunda YÜGM, YHGM, GYGM ve EÜGM’ de işçilik giderleri, EÜGM de toplanıcaya kadar tekrar dağıtıma tabi tutulur. Bu aşamada giderlerin dağıtımını için beş farklı yöntem izlenmektedir. Hastane maliyet analiz çalışmalarında en sık kullanılanı uygulamada ve anahtar kolvayla bakımdan kademeli dağıtım yöntem birinci dağıtım aşamasında da dağıtım anlayışına göre, birincil RHGM ve YHGM’ nin, son olarak YÜGM’nin gideri EÜGM’ ye dağıtılır. 

İlaç ve tıbbi malzeme giderleri: Çalışmada bölgelere göre gelir verileri belirlendikten sonra gider belirleme kısmına geçilmiştir. Sağlıkhizmeti veren hastanelerin en büyük gider döküm büyük kredi konsolosunu oluşturutan, ilac ve malzeme gibi giderler ve bunun gibi herhangi bir gider merkezinde doğrudan verilen giderin (doğalgaz gideri – iş merkezi) dağıtılmaktadır. Devamında elektrik, su gibi ölçümlerin toplanıp veya maliyetinden dolayı herhangi bir yönetim ve destek birimine doğrudan yönetilenen genel üretim giderleri, dağıtım anlayışları altında paylaşılan gider merkezlerine dağıtılır. İlgili dağıtım aşamasında birinci dağıtım sonunda YÜGM, YHGM, GYGM ve EÜGM’ de işçilik giderleri, EÜGM de toplanıcaya kadar tekrar dağıtıma tabi tutulur. Bu aşamada giderlerin dağıtımını için beş farklı yöntem izlenmektedir. Hastane maliyet analiz çalışmalarında en sık kullanılanı uygulamada ve anahtar kolvayla bakımdan kademeli dağıtım yöntem birinci dağıtım aşamasında da dağıtım anlayışına göre, birincil RHGM ve YHGM’ nin, son olarak YÜGM’nin gideri EÜGM’ ye dağıtılır. 

İlaç ve tıbbi malzeme giderleri: Çalışmada bölgelere göre gelir verileri belirlendikten sonra gider belirleme kısmına geçilmiştir. Sağlıkhizmeti veren hastanelerin en büyük gider döküm büyük kredi konsolosunu oluşturutan, ilac ve malzeme gibi giderler ve bunun gibi herhangi bir gider merkezinde doğrudan verilen giderin (doğalgaz gideri – iş merkezi) dağıtılmaktadır. Devamında elektrik, su gibi ölçümlerin toplanıp veya maliyetinden dolayı herhangi bir yönetim ve destek birimine doğrudan yönetilenen genel üretim giderleri, dağıtım anlayışları altında paylaşılan gider merkezlerine dağıtılır. İlgili dağıtım aşamasında birinci dağıtım sonunda YÜGM, YHGM, GYGM ve EÜGM’ de işçilik giderleri, EÜGM de toplanıcaya kadar tekrar dağıtıma tabi tutulur. Bu aşamada giderlerin dağıtımını için beş farklı yöntem izlenmektedir. Hastane maliyet analiz çalışmalarında en sık kullanılanı uygulamada ve anahtar kolvayla bakımdan kademeli dağıtım yöntem birinci dağıtım aşamasında da dağıtım anlayışına göre, birincil RHGM ve YHGM’ nin, son olarak YÜGM’nin gideri EÜGM’ ye dağıtılır.

Sağlık hizmet alımı giderleri: Türkiye'deki kamu sağlık kurumları gerek ileri teknoloji tibbi cihaz satın almak gerekse de alınmadan sonra işletilmesi noktasında yetişmiş personel aylanması ve gerekse sarf malzeme alımları gibi konularda yeterli kaynak tahsisi yapılamadığı için sağlık hizmeti alımı yoluna gidebilmiştir. gammaknife, Tomoterapi gibi genellikle tek bir bölümün kontrolünde olan bu hizmetlere ait giderler, firma hâkim olduğu ve HBYS verilerindeki elde edilenler ile ilgili bölümlere göre yansıtılabilir. Sağlık hizmet alımı giderleri toplami 10.825.813 ₺'dır. Bu gider toplam giderin ise yaklaşık % 5,5'ıdır.


BAP ve hazine payi giderleri: Üniversite bünyesinde kurulan Sağlık Araştırma ve Uygulama Merkezleri 2547 sayılı kanuna göre elde edilenlerin geri kalanı % 5 % in üniversite genelindeki bilimsel araştırma projelerine aktarmaktadır. Ayrıca yüzde bir hazine payı ayrılmaktadır. Yani her bölümden elde ettiği gelirin yüzde altısı hiç harcamaya yapmadan kaybetmektedir.


BAP ve hazine payi giderleri: Üniversite bünyesinde kurulan Sağlık Araştırma ve Uygulama Merkezleri 2547 sayılı kanuna göre elde edilenlerin geri kalanı % 5 % in üniversite genelindeki bilimsel araştırma projelerine aktarmaktadır. Ayrıca yüzde bir hazine payı ayrılmaktadır. Yani her bölümden elde ettiği gelirin yüzde altısı hiç harcamaya yapmadan kaybetmektedir.


BAP ve hazine payi giderleri: Üniversite bünyesinde kurulan Sağlık Araştırma ve Uygulama Merkezleri 2547 sayılı kanuna göre elde edilenlerin geri kalanı % 5 % in üniversite genelindeki bilimsel araştırma projelerine aktarmaktadır. Ayrıca yüzde bir hazine payı ayrılmaktadır. Yani her bölümden elde ettiği gelirin yüzde altısı hiç harcamaya yapmadan kaybetmektedir.


Genel sarf malzeme giderleri: Hastane genelinde kullanılan çeşitli sarf malzemelerin (temizlik ürünleri, tekstil ürünleri, kirtasiye malzemeleri, yedek parçalar vb.) tüketimi ambardan ara depolara çok yapılarak sağlanır. Her deponun malzeme başına tanımlanmış kotası bulunur ve bu kotaya uygun olarak yeni malzeme istemi ara depoda yapılır, ambordan yapılan uygunluk kontrolü sonrası istem onaylanır veya reddedilir. Tam olarak kullanılan detayların bilinmesi de bellek aralıklarla yapılan ara depo saymaları ile kontrol sağlanır. Çalışmada da 2018 yılı ilk 9 aylık genel sarf malzemesi kullanılına ulaşmak için ambardarı depolarara çoklar temeli alınmıştır. Servis ve ünitelerdeki ara depolarına depolarara yapılan çoklar gider merkezlerine göre sınıflandırılmış ve sarf malzemeler temizlik, tekstil, kırtasiye, teknik ve sterilizasyon adı altında birleştirilmiştir.

Tablo 1: Birinci Dağıtım Sonuç - EÜGM

<table>
<thead>
<tr>
<th>Gider merkezi</th>
<th>Personel</th>
<th>İlaç</th>
<th>Tibbi malzeme</th>
<th>Diğer Giderler</th>
<th>Genel toplam</th>
</tr>
</thead>
<tbody>
<tr>
<td>EÜGM</td>
<td>68.926.579</td>
<td>28.266.669</td>
<td>17.040.823</td>
<td>43.876.580</td>
<td>158.110.651</td>
</tr>
<tr>
<td>Acil Tip</td>
<td>3.779.595</td>
<td>479.566</td>
<td>194.622</td>
<td>692.370</td>
<td>5.146.153</td>
</tr>
<tr>
<td>Adli Tip</td>
<td>408.810</td>
<td>1</td>
<td>394</td>
<td>56.240</td>
<td>465.445</td>
</tr>
<tr>
<td>Aile Hekimiliği</td>
<td>648.561</td>
<td>1.589</td>
<td>564</td>
<td>50.872</td>
<td>701.585</td>
</tr>
<tr>
<td>Anestezi</td>
<td>6.605.883</td>
<td>2.149.637</td>
<td>1.401.093</td>
<td>2.394.009</td>
<td>12.550.621</td>
</tr>
<tr>
<td>Beyin Cerrahi</td>
<td>1.994.479</td>
<td>416.983</td>
<td>1.160.179</td>
<td>2.663.188</td>
<td>6.234.829</td>
</tr>
<tr>
<td>Çocuk Cerrahisi</td>
<td>686.802</td>
<td>143.760</td>
<td>78.994</td>
<td>241.161</td>
<td>1.150.718</td>
</tr>
<tr>
<td>Çocuk Psikiyatri</td>
<td>960.809</td>
<td>4.229</td>
<td>230</td>
<td>214.286</td>
<td>1.179.554</td>
</tr>
<tr>
<td>Dermatoloji</td>
<td>768.229</td>
<td>517.540</td>
<td>7.767</td>
<td>502.368</td>
<td>1.797.904</td>
</tr>
<tr>
<td>Enfeksiyon Hast.</td>
<td>855.180</td>
<td>203.812</td>
<td>17.272</td>
<td>265.430</td>
<td>1.341.697</td>
</tr>
<tr>
<td>Fizik Tedavi</td>
<td>1.966.828</td>
<td>122.514</td>
<td>46.863</td>
<td>1.042.598</td>
<td>3.178.803</td>
</tr>
<tr>
<td>Genel Cerrahi</td>
<td>2.637.256</td>
<td>965.212</td>
<td>706.291</td>
<td>1.198.498</td>
<td>5.507.257</td>
</tr>
<tr>
<td>Genetik</td>
<td>1.119.725</td>
<td>0</td>
<td>0</td>
<td>1.683.888</td>
<td>2.803.613</td>
</tr>
</tbody>
</table>

Taser, Cakır


DOI: 10.17261/Pressacademia.2019.1156 251
Birinci dağıtım sonuçları gider türlerine göre incelendiğinde en yüksek giderin toplam giderin % 47 ile personel gideri olduğu görülmektedir. Personel gideri hesaplanan toplam gelirinde % 53 ünü oluşturmaktadır. Diğer önemi gider kalemli İlaç ve Tıbbi malzeme giderleridir. İlaçlar toplam giderin yüzde 14 üne gelirin ise yüzde 16 sına tekabül etmektedir. Tıbbi malzemeler ise toplam giderin %8,5 i direk gelirin % 10 u kadarıdır.

Veriler gider merkezleri göre değerlendirildiğinde ise en yüksek personel giderinin esas üretim merkezlerinden sonra 13 milyon ₺ yi aşan tutarla genel yönetim merkezlerinde oluşturduğu görülmektedir. Yardımcı üretim merkezlerinin Personel ve Laboratuvar kit giderlerinin yüksek olduğu bir diğer dikkat çeken konudur. Toplam giderin yaklaşık % 79,5 i esas üretim, % 9 u yardımcı üretim, % 7 si genel yönetim, % 4,5 i ise yardımcı hizmet gider merkezlerinde oluşmuştur.

### Tablo 2: Gider Merkezlerine Göre Birinci Dağıtım Aşaması

<table>
<thead>
<tr>
<th>Gider merkezi</th>
<th>EÜGM</th>
<th>YÜGM</th>
<th>YHGM</th>
<th>GYGM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gelir</td>
<td>176.626.118</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personel</td>
<td>68.926.579</td>
<td>7.175.369</td>
<td>4.086.081</td>
<td>13.139.099</td>
</tr>
<tr>
<td>İlaç</td>
<td>28.266.669</td>
<td>216</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Tıbbi malzeme</td>
<td>17.040.823</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sağlık hizmet alımı</td>
<td>10.561.172</td>
<td>264.641</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Laboratuvar</td>
<td>2.423.593</td>
<td>7.437.953</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>BAP&amp;HP</td>
<td>10.597.567</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Yemek Giderleri</td>
<td>7.594.351</td>
<td>300.205</td>
<td>131.817</td>
<td>386.342</td>
</tr>
<tr>
<td>Elektrik&amp; DOğalgaz</td>
<td>5.169.170</td>
<td>633.103</td>
<td>1.372.669</td>
<td>523.284</td>
</tr>
<tr>
<td>Amortisman</td>
<td>3.699.112</td>
<td>1.215.250</td>
<td>0</td>
<td>25.685</td>
</tr>
<tr>
<td>Tamir bakım giderleri</td>
<td>2.036.957</td>
<td>95.541</td>
<td>1.245.801</td>
<td>0</td>
</tr>
<tr>
<td>Genel sarf giderleri</td>
<td>577.344</td>
<td>593.445</td>
<td>1.674.346</td>
<td>305.951</td>
</tr>
<tr>
<td>Tıbbi atık giderleri</td>
<td>1.217.313</td>
<td>246.753</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Gider toplam</strong></td>
<td><strong>158.110.651</strong></td>
<td><strong>17.962.475</strong></td>
<td><strong>8.510.714</strong></td>
<td><strong>14.380.360</strong></td>
</tr>
</tbody>
</table>

### 2.5. İkinci Dağıtım Aşaması

Birinci dağıtım sonunda tüm gider türleri gider merkezlerine dağıtılmıştır. İkinci dağıtım aşamasında esas üretim gider merkezi haricindeki gider merkezlerinde biriken giderlerin dağıtıması gerçekleştirilmştir. Çalışma bu işlem iki aşamada gerçekleştirilmiştir. Birinci aşamada sağlık hizmeti sunamanın genel yönetim ve yardımcı hizmet gider merkezleri en fazla giderden en az gider göre sıralananak kademi dağıtım yöntemi ile esas üretim ve yardımcı üretim gider merkezlerine yüklenmektedir. İkinci aşamada ise yardımcı üretim gider merkezlerinde biriken giderlerin yine kademi dağıtım yöntemiyle esas üretim gider merkezlerine dağıtılcaktır (Ağırbaş, 2014: 439–446; Esatoğlu ve diğerleri, 2010). Bu amaçla öncelikle GYGM ve...


Ev idaresi & çaşırhane giderleri: Ağırlıklı olarak ortak alanların temizliğinde kullanılan personelin ve herhangi bir bölüme dağıtılmayan temizlik sarf malzemelerinin biriktiği bu gider merkezinde, son dağıtılarla birlikte yaklaşık üç milyon % & gider bulunmaktadır. Burada kullanılan en uygun dağıtım anahtarı metrode olarak belirlenmiştir.


Tibbi cihaz servis hizmetleri giderleri: İkinci dağıtımın bu aşamasına kadar ilgili merkezde büyük bir yüzdesi bu birimde çalışan uzman personelin giderlerinden oluşan toplam toplam dört yüz bin lira dokuz bin lira gibi gider birikmiştir. Bu giderlerin dağıtılmaları için ilk doku ay içinde giden ve sonlandırılan iş emri sayısının bölümüle göre gruplu raporu kullanılmaktır.


Eczane giderleri: Eczane, yatan hasta ile ailelerin alım öncesi planlanması, alım sonrası stoklanması ve servislerden gelen isteklere göre dağıtımları sağlayan 7/24 açık bir birimdir. Fakat birimde 1 baş eczacı, 6 eczacı, 9 sekreter ve kalfa, 3 temizlik görevlisi olmak üzere toplam 19 personel görev yapmaktadır. Bu birikken birikten giderlerin dağıtılmaları için birincil dağıtım aşamasında elde edilen bölüm ile tüketim tutarlarının kullanılmasına karar verilmiştir. Yatan hasta kullanımında kanalların çok küçük bir orana oluşturulduğu için kapsam dışında bırakılmaktır.
Kan alma giderleri: Kan alma giderlerinin dağıtılmıştır için ayaktan hastaların laboraturvar tetkik sayılarına göre kan alma giderlerinin %64' une dengen yaklaşık üç yüz bin было kısmını İç Hastalıklar bölümüne yansıtırılmıştır.

Organize sanayi bölgesinde poliklinikler giderleri: Organize sanayi bölgesinde hizmet veren bu polikliniklerin elektrik, ısıtma gibi birçok genel gideri bölge müdürlüğü tarafından karşılandığı, kalan personel giderleri ise bölümlerin burada baktığı hastalar sayılarına göre dağıtılmıştır.

2.6. İkinci Dağıtımın Özeti

İkinci dağıtım sonunda en yüksek gider paylarını, milyon yüz elli bin была ile İç Hastalıkları, yaklaşık üç milyon была ile Çocuk Hastalıkları ve Anestezi bölümleri almıştır. Öte yandan gider payları birinci dağıtımdaki rakamlara oranlandığında, en yüksek gider payını %44 ile Enfeksiyon almıştır. Uroloji, Aile Hekimliği, Plastik Cerrahi bölümlerinin giderleri de yaklaşık %40 artmıştır. İkinci dağıtım işleminin sonunda en yüksek gider payını %44 ile Enfeksiyon almıştır. Diğer bölümlerin gider oranları ise birinci dağıtımın sonunda artıda olan bölümlerden sadece Göğüs Hastalıkları, İç Hastalıkları ve Uroloji' nin gelirleri, yine giderlerden fazla olduğu görülmektedir. Nöroloji, Ortopedi, Radyasyon Onkoloji ve Kalp Damar Cerrahi bölümlerinin geliri ve gider oranı 1’ye yakın iken geri kalan bölümler, ikinci dağıtımın sonunda ekşi değerler vermiştir.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acil Tip</td>
<td>5.486.274</td>
<td>5.146.153</td>
<td>779.078</td>
<td>813.077</td>
<td>6.738.308</td>
<td></td>
</tr>
<tr>
<td>Adılı Tip</td>
<td>267.324</td>
<td>465.445</td>
<td>120.695</td>
<td>402</td>
<td>586.541</td>
<td></td>
</tr>
<tr>
<td>Aile Hekimliği</td>
<td>245.593</td>
<td>701.585</td>
<td>159.566</td>
<td>146.395</td>
<td>1.007.546</td>
<td></td>
</tr>
<tr>
<td>Anestezi ve Reanimasyon</td>
<td>10.449.704</td>
<td>12.550.621</td>
<td>1.337.466</td>
<td>1.520.662</td>
<td>15.408.750</td>
<td></td>
</tr>
<tr>
<td>Beyin Cerrahi</td>
<td>6.696.312</td>
<td>6.234.829</td>
<td>672.660</td>
<td>721.607</td>
<td>7.629.096</td>
<td></td>
</tr>
<tr>
<td>Çocuk Cerrahisi</td>
<td>900.683</td>
<td>1.150.718</td>
<td>177.800</td>
<td>88.584</td>
<td>1.417.103</td>
<td></td>
</tr>
<tr>
<td>Çocuk Psikiyatri</td>
<td>1.000.440</td>
<td>1.179.554</td>
<td>255.396</td>
<td>24.593</td>
<td>1.459.543</td>
<td></td>
</tr>
<tr>
<td>Dermatoloji</td>
<td>2.042.533</td>
<td>1.795.904</td>
<td>318.126</td>
<td>184.515</td>
<td>2.298.545</td>
<td></td>
</tr>
<tr>
<td>Enfeksiyon Hastalıkları</td>
<td>1.037.115</td>
<td>1.341.697</td>
<td>325.245</td>
<td>261.285</td>
<td>1.928.226</td>
<td></td>
</tr>
<tr>
<td>Fizik Tedavi</td>
<td>3.422.430</td>
<td>3.178.803</td>
<td>741.095</td>
<td>137.643</td>
<td>4.057.540</td>
<td></td>
</tr>
<tr>
<td>Genel Cerrahi</td>
<td>6.746.408</td>
<td>5.507.257</td>
<td>752.549</td>
<td>1.036.292</td>
<td>7.296.098</td>
<td></td>
</tr>
<tr>
<td>Genetik</td>
<td>2.859.658</td>
<td>2.803.613</td>
<td>381.573</td>
<td>99</td>
<td>3.185.285</td>
<td></td>
</tr>
<tr>
<td>Göğüs Cerrahi</td>
<td>1.676.585</td>
<td>1.421.053</td>
<td>206.452</td>
<td>222.456</td>
<td>1.849.960</td>
<td></td>
</tr>
<tr>
<td>Göz Hastalıkları</td>
<td>3.665.567</td>
<td>3.517.338</td>
<td>626.237</td>
<td>599.161</td>
<td>4.742.736</td>
<td></td>
</tr>
<tr>
<td>İç Hastalıkları</td>
<td>46.824.443</td>
<td>33.018.471</td>
<td>3.162.054</td>
<td>7.015.538</td>
<td>43.196.063</td>
<td></td>
</tr>
<tr>
<td>Kadın Hast. ve Doğum</td>
<td>4.695.107</td>
<td>4.563.246</td>
<td>771.160</td>
<td>800.466</td>
<td>6.134.872</td>
<td></td>
</tr>
<tr>
<td>Kalp Burun Boğaz</td>
<td>3.460.059</td>
<td>2.913.160</td>
<td>471.038</td>
<td>419.169</td>
<td>3.803.367</td>
<td></td>
</tr>
<tr>
<td>Nöroloji</td>
<td>6.062.781</td>
<td>5.156.902</td>
<td>630.045</td>
<td>472.528</td>
<td>6.232.475</td>
<td></td>
</tr>
<tr>
<td>Nükleer Tip</td>
<td>4.155.290</td>
<td>5.156.578</td>
<td>348.970</td>
<td>62.285</td>
<td>5.567.833</td>
<td></td>
</tr>
<tr>
<td>Patoloji</td>
<td>1.355.603</td>
<td>2.240.879</td>
<td>329.371</td>
<td>0</td>
<td>2.570.250</td>
<td></td>
</tr>
<tr>
<td>Plastik Cerrahi</td>
<td>2.114.674</td>
<td>1.832.026</td>
<td>286.488</td>
<td>422.691</td>
<td>2.541.205</td>
<td></td>
</tr>
<tr>
<td>Psikiyatri</td>
<td>4.024.240</td>
<td>5.111.475</td>
<td>1.344.564</td>
<td>190.703</td>
<td>6.646.742</td>
<td></td>
</tr>
<tr>
<td>Radyoloji</td>
<td>5.462.527</td>
<td>5.485.905</td>
<td>762.309</td>
<td>1.094</td>
<td>6.249.308</td>
<td></td>
</tr>
</tbody>
</table>

DOI: 10.17261/Pressacademia.2019.1156
2.7. İstem Giderleri


2.8. Sonuçların Literatürdeki Çalışmalarla Karşılıklılaştırılması

Çalışmada, giderlerin yaklaşıklık % 26’ı ilk makde ve malzeme giderlerinden, % 47’i sıfırdan giderlerinden ve % 27’i de genel üretim giderlerinden oluşmaktadır. Ancak ilgili hastanede radyoloji ve laboratuvar hizmetleri hizmet alımı yoluyla temin edildiğinden genel üretim giderleri yüksektir çekmaktadır. Gider merkezlerine göre incelendiğinde toplama giderin yaklaşıklık % 55’i EÜGM, % 31’i YÜGM, % 4’ü YHM ve % 10’u GYGM’ ye aittir (Özkan, Kutlu, Aydın, Aydemir ve Ağırbaş, 2014).

Çocuk Psikiyatri 
68,49% 
Nöroloji 
92,19%

Çocuk Sağlığı ve Hastalıkları 
84,02% 
Nükleer Tıp 
73,95%

Dermatoloji 
85,86% 
Ortopedi ve Travmatoloji 
91,15%

Enfeksiyon Hastalıkları 
52,70% 
Patojloji 
52,74%

Fiziksel Tıp ve Rehabilisyon 
81,29% 
Plastik Cerrahi 
79,27%

Genel Cerrahi 
85,54% 
Psikiyatri 
60,37%

Genetik 
89,75% 
Radyasyon Onkolojisi 
91,49%

Göğüs Cerrahi 
83,60% 
Radyoloji 
86,93%

Göğüs Hastalıkları 
93,15% 
Üroloji 
88,88%

Hastane ortalaması 
84,20%

3. KAYNAK KULLANIMI VE SAĞLIK HİZMETİ ÜRETİMİ ETKİNLİĞİ

Temel amacı olarak bir işletmenin performansı değerlendirmesi de kar ölçümü üzerine olması doğaldır. Ancak genel itibariyle geniş bir bölgede kamu hizmeti verenführen üniversite hastanelerinde, kar etme ve cinsiyetli olarak farklılaşmakta ve ayrıntılı analizlerin yapılmasını yerine getirilmesi gerekmektedir. Doğal olarak performans ölçümleri de buna bağlı olarak farklılaşmakta ve ayrıntılı analizlerin yapılmasını yerine getirilmesi, kaynak israfına ve kamu kaynaklarının gereksiz şekilde, çalışılsın bölümün nihai tabloda karlılığı düşük olmaktadır. Ayrıca salt kar odaklı hizmet verme anlayışının,erner etkinliği yoktur. Geleneksel oran analizi ve etkinlik ise özellikleriidir. İlk olarak Charnes, Cooper ve Rhodes tarafından geliştirilmiştir. VZA’yi karşılaştırabilme, ortalama değeri değil en iyi gözlemi sınır olarak kabul etmesi ve bu sınırı etkin kabul edip diğer etkin olman an kari hizmetin bu sınırlar olasılıkta göre etkin değerlendirilmiş olabilmemesi VZA’yi öne çıkaran özellikleridir. 3.1. Veri Zarflama Analizi

VZA, üretim bakımından birbirine benzer karar verme birimlerinin birden çok girdisile birden çok çıktısının göreli kararlaştırmasını yapabilmektedir. Parametrik olan bu etkinlik ölçüm yöntemidir. Birden fazla girdiğle birbirin falza çıkışı kararlaştırılması, ortalama değer değiş en iyı özelliği sınırlarak kabul etmesi ve bu sınırların sadece edin etkin ekon olman karar hizmetinin bu sınırlar olasılıkta göre etkin değerlendirilmiş olabilmemesi VZA’yi öne çıkaran özellikleridir. İk olarak Charnes, Cooper ve Rhodes tarafından geliştirilmişdir (Güçlü, 1999). Geleneksel oran analizi ve


3.2. Sağlık Alanında VZA ile Yapılan Çalışmalar


Tablo 5: VZA Çalışmaları (hastanelerde yapılan) Girdi ve Çıkış Örnekleri

<table>
<thead>
<tr>
<th>Sıra</th>
<th>Ad</th>
<th>Sıklık</th>
<th>Sıra</th>
<th>Ad</th>
<th>Sıklık</th>
<th>Sıra</th>
<th>Ad</th>
<th>Sıklık</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Yatan hasta sayısı</td>
<td>Çok Sık</td>
<td>0</td>
<td>Yatan hasta sayısı</td>
<td>Çok Sık</td>
<td>0</td>
<td>Yatan hasta sayısı</td>
<td>Çok Sık</td>
</tr>
<tr>
<td>1</td>
<td>Ayaktan hasta sayısı</td>
<td>Çok Sık</td>
<td>1</td>
<td>Ayaktan hasta sayısı</td>
<td>Çok Sık</td>
<td>1</td>
<td>Ayaktan hasta sayısı</td>
<td>Çok Sık</td>
</tr>
<tr>
<td>2</td>
<td>Ameliyat sayısı</td>
<td>Çok Sık</td>
<td>2</td>
<td>Ameliyat sayısı</td>
<td>Çok Sık</td>
<td>2</td>
<td>Ameliyat sayısı</td>
<td>Çok Sık</td>
</tr>
<tr>
<td>3</td>
<td>Uzman hekim sayısı - Diğer</td>
<td>Çok Sık</td>
<td>3</td>
<td>Uzman hekim sayısı - Diğer</td>
<td>Çok Sık</td>
<td>3</td>
<td>Uzman hekim sayısı - Diğer</td>
<td>Çok Sık</td>
</tr>
<tr>
<td>4</td>
<td>Asistan sayısı</td>
<td>Çok Sık</td>
<td>4</td>
<td>Asistan sayısı</td>
<td>Çok Sık</td>
<td>4</td>
<td>Asistan sayısı</td>
<td>Çok Sık</td>
</tr>
<tr>
<td>5</td>
<td>Yardımcı sağlık personeli sayısı</td>
<td>Sık</td>
<td>5</td>
<td>Yardımcı sağlık personeli sayısı</td>
<td>Sık</td>
<td>5</td>
<td>Yardımcı sağlık personeli sayısı</td>
<td>Sık</td>
</tr>
<tr>
<td>6</td>
<td>Bölüm eksöme kurulu</td>
<td>Nadir</td>
<td>6</td>
<td>Bölüm eksöme kurulu</td>
<td>Nadir</td>
<td>6</td>
<td>Bölüm eksöme kurulu</td>
<td>Nadir</td>
</tr>
<tr>
<td>7</td>
<td>Toplam gelir</td>
<td>Sık</td>
<td>7</td>
<td>Toplam gelir</td>
<td>Sık</td>
<td>7</td>
<td>Toplam gelir</td>
<td>Sık</td>
</tr>
</tbody>
</table>

DOI: 10.17261/Pressacademia.2019.1156
Toplam gider
Sık
Ilk madde ve malzeme gid.
Nadir
Hasta memnuniyet oranları
Nadir
Yatak doluluk oranları
Nadir
Yatılan gün sayısı
Sık
Diğer çeşitli giderler
Nadir
Idari personel sayısı
Nadir
Randevu süresi
Nadir
Metrekare
Nadir

Toplam gider
Sık
Ilk madde ve malzeme gid.
Nadir
Hasta memnuniyet oranları
Nadir
Yatak doluluk oranları
Nadir
Yatılan gün sayısı
Sık
Diğer çeşitli giderler
Nadir
Idari personel sayısı
Nadir
Randevu süresi
Nadir
Metrekare
Nadir

Bu girdi ve çıktıların hangi çalışmalarda kullanılığı, kullanılan VZA programı, yöntem ve yönelimleri ise aşağıdaki tabloda belirtilmiştir. Tabloda belirtilen girdi ve çıktılar bir üst tabloda belirtilen sıra alanı ile eşleştirilmiştir. Tablo incelendiğinde hastanelerde yapılan çalışmalarda genellikle tüm VZA modellerinin uygulandığı, yönelim olarak ise daha çok girdi yöneliminin benimsendiği görülmektedir. VZA model ve yönelimleri kısmında da belirtildiği üzere çalışmada da bu yol izlenmiştir. Ancak ek ödeme tek bir KVK uygulanabileceği için CCR yöntemi sonucu elde edilen katsayılara kullanılmıştır.

Tablo 6. VZA girdi, çıktı, program, yöntem ve yönetim (girdi-çıkı) örnekleri

<table>
<thead>
<tr>
<th>Araştırmacı, yıl</th>
<th>Yayın türü</th>
<th>Program</th>
<th>Girdi</th>
<th>Çıktı</th>
<th>Yöntem</th>
<th>Yönelim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atmaca ve diğerleri, 2012</td>
<td>Makale</td>
<td>EMS</td>
<td>1,4,15</td>
<td>1,2,10,28</td>
<td>Ccr</td>
<td>Girdi</td>
</tr>
<tr>
<td>Ayanoğlu ve diğerleri, 2010</td>
<td>Makale</td>
<td>EMS</td>
<td>32,33,34, 35,36</td>
<td>7</td>
<td>Ccr, Bcc, Ccr/Bcc</td>
<td>Girdi</td>
</tr>
<tr>
<td>Aytekin, 2011</td>
<td>Makale</td>
<td>Excel</td>
<td>3,4,5,15</td>
<td>7,1,28</td>
<td>Ccr</td>
<td>Çıktı</td>
</tr>
<tr>
<td>Bal, 2010</td>
<td>Doktora tezi</td>
<td>Banxia</td>
<td>3,4,8,15</td>
<td>1,2,7,11</td>
<td>Ccr, Bcc, Ccr/Bcc</td>
<td>Girdi</td>
</tr>
<tr>
<td>Bal ve Bilge, 2013</td>
<td>Makale</td>
<td>Banxia</td>
<td>3,4,5,8,15</td>
<td>1,2,7,11</td>
<td>Ccr, Bcc, Ccr/Bcc</td>
<td>Girdi</td>
</tr>
<tr>
<td>Çakmak ve diğerleri, 2009</td>
<td>Makale</td>
<td>Banxia</td>
<td>15,21</td>
<td>1,2,7,22</td>
<td>Ccr</td>
<td>Çıktı</td>
</tr>
<tr>
<td>Erdoğan, 2015</td>
<td>Makale</td>
<td>Banxia</td>
<td>37</td>
<td>37</td>
<td>Ccr, Bcc</td>
<td>Girdi</td>
</tr>
<tr>
<td>Gülcü, 1999</td>
<td>Doktora tezi</td>
<td>Banxia</td>
<td>3,4,5,15</td>
<td>0,1,2,38,39</td>
<td>G,Ç</td>
<td>Girdi</td>
</tr>
<tr>
<td>Gülsevin, 2012</td>
<td>Makale</td>
<td>EMS</td>
<td>3,5</td>
<td>1,26</td>
<td>Ccr</td>
<td>Girdi</td>
</tr>
<tr>
<td>Pakdil ve diğerleri, 2010</td>
<td>Makale</td>
<td>Messenger</td>
<td>3,4,15</td>
<td>0,1,2,11,25</td>
<td>G,Ç</td>
<td>Girdi</td>
</tr>
<tr>
<td>San, 2015</td>
<td>Y.Lisans tezi</td>
<td>EMS</td>
<td>3,4,5,19</td>
<td>0,1</td>
<td>Ccr, Bcc</td>
<td>G,Ç</td>
</tr>
<tr>
<td>Sülkü, 2011</td>
<td>Makale</td>
<td>DEAP</td>
<td>3,4,15</td>
<td>0,1,2</td>
<td>Ccr, Bcc</td>
<td>Çıktı</td>
</tr>
<tr>
<td>Şahin, 1999</td>
<td>Makale</td>
<td>IDEAS</td>
<td>3,4,5,8,15</td>
<td>0,1,25</td>
<td>Ccr</td>
<td>Girdi</td>
</tr>
<tr>
<td>Şenol, 2017</td>
<td>Makale</td>
<td>EMS</td>
<td>3,5,15</td>
<td>0,2,20</td>
<td>Ccr</td>
<td>Çıktı</td>
</tr>
<tr>
<td>Temür, 2008</td>
<td>Makale</td>
<td>Banxia</td>
<td>3,4,8,15</td>
<td>0,1,2,7,</td>
<td>Ccr, Bcc</td>
<td>G,Ç</td>
</tr>
<tr>
<td>Yiğit, 2007a, 2007b</td>
<td>Makale</td>
<td>Banxia</td>
<td>3,5</td>
<td>1,2,22</td>
<td>Bcc</td>
<td>Girdi</td>
</tr>
<tr>
<td>Yiğit, 2016a</td>
<td>Makale</td>
<td>Banxia</td>
<td>3,4,15</td>
<td>0,1,2,10</td>
<td>Ccr, Bcc</td>
<td>Girdi</td>
</tr>
<tr>
<td>Yiğit, 2016b</td>
<td>Makale</td>
<td>Banxia</td>
<td>3,4,15,32</td>
<td>0,1,7,10</td>
<td>Ccr, Bcc</td>
<td>Girdi</td>
</tr>
<tr>
<td>Yiğit, 2017</td>
<td>Makale</td>
<td>Banxia</td>
<td>0,1,7,10,31</td>
<td>6</td>
<td>Ccr, Bcc</td>
<td>Girdi</td>
</tr>
</tbody>
</table>

3.3. VZA Modeli Girdi-Çıktılarının Belirlenmesi ve Korelasyon Analizi

Table 7: Tanımlayıcı İstatistikler

<table>
<thead>
<tr>
<th>Değişkenler</th>
<th>Minimum</th>
<th>Maksimum</th>
<th>Ortalama</th>
<th>Standart sapma</th>
<th>Ortanca</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gider</td>
<td>245.593</td>
<td>46.824.443</td>
<td>6.102.588</td>
<td>8.561.926</td>
<td>4.089.764</td>
</tr>
<tr>
<td>Gider</td>
<td>1.010.304</td>
<td>46.591.852</td>
<td>7.173.515</td>
<td>8.580.929</td>
<td>5.160.183</td>
</tr>
<tr>
<td>Personel giderleri</td>
<td>322.876</td>
<td>9.069.069</td>
<td>2.312.078</td>
<td>2.025.804</td>
<td>1.942.734</td>
</tr>
<tr>
<td>Ek ödeme</td>
<td>114.226</td>
<td>2.281.050</td>
<td>662.706</td>
<td>475.360</td>
<td>526.325</td>
</tr>
<tr>
<td>Yardımcı sağlık per.</td>
<td>1</td>
<td>90</td>
<td>22</td>
<td>24</td>
<td>11</td>
</tr>
<tr>
<td>Ayaktan hasta</td>
<td>3.882</td>
<td>231.247</td>
<td>35.586</td>
<td>44.752</td>
<td>23.523</td>
</tr>
<tr>
<td>Yatılan gün</td>
<td>1</td>
<td>33.994</td>
<td>6.285</td>
<td>7.066</td>
<td>5.652</td>
</tr>
<tr>
<td>Öğretim üyesi</td>
<td>2</td>
<td>18</td>
<td>6</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Metre kare</td>
<td>200</td>
<td>7.711</td>
<td>2.036</td>
<td>1.740</td>
<td>1.498</td>
</tr>
<tr>
<td>Yatak sayısı</td>
<td>1</td>
<td>133</td>
<td>28</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Araştırma görevlisi</td>
<td>1</td>
<td>36</td>
<td>10</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Akademik personel</td>
<td>3</td>
<td>51</td>
<td>17</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>Yatan hasta</td>
<td>1</td>
<td>5.365</td>
<td>1.324</td>
<td>1.366</td>
<td>996</td>
</tr>
</tbody>
</table>

3.4. VZA Modelinin Belirlenmesi (Senaryo 16)

CCR sonuçlarına göre tam etkin olan bölümler iç hastalıkları ve Radyasyon onkolojisidir. Göğüs hastalıkları, Kalp damar, cerrahi, Nöroloji ve Ortopedi bölümlerinin ise etkinlik değeri 0,9 un üzerinde bulundu. Değerler yüksek olsa da Beyin cerrahisi, Çocuk hastalıkları, Dermatoloji, Fizik tedavi, Genel cerrahi, Genetik, Göğüs cerrahi, Kulak burun boğaz, Radyoloji ve Üroloji bölümlerinin etkinlik değerleri, hasta ve ortalamalar en etkinlik değerlendirmenin yaklaşık 1750 (%64,7) metrekare ve akademisyen sayısı ile birlikte KVB lerden referans verilmesi de sonuçlarda yer almaktadır. Örneğin Beyin cerrahi bölümü için gelir çıktısında herhangi bir değişiklik önerilmezken, bu sayının teknik (BCC) etkinlikte ise altıya yükseldiği görülmektedir. Ortalamalar ise sırasıyla toplam etkinlik 0.77, teknik etkinlik 0.89, çok etkinlik 0.87 ve elde edilen 49.53, 21.27, elde edilen 4.97, 3.34 olarak belirlenmiştir.

Tablo 8: Senaryo 16 Etkinlik Sonuçları

<table>
<thead>
<tr>
<th>KVB</th>
<th>CRS</th>
<th>VRS</th>
<th>Scale</th>
<th>KVB</th>
<th>CRS</th>
<th>VRS</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acil Tip</td>
<td>0.712</td>
<td>0.751</td>
<td>0.949</td>
<td>Göz Hastalıkları</td>
<td>0.760</td>
<td>0.823</td>
<td>0.924</td>
</tr>
<tr>
<td>Adil Tip</td>
<td>0.451</td>
<td>1.000</td>
<td>0.451</td>
<td>İç Hastalıkları</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Aile Hekimliği</td>
<td>0.242</td>
<td>1.000</td>
<td>0.242</td>
<td>Kadin Doğum</td>
<td>0.687</td>
<td>0.730</td>
<td>0.941</td>
</tr>
<tr>
<td>Anestezi</td>
<td>0.670</td>
<td>0.687</td>
<td>0.976</td>
<td>Kalp Damar Cerrahi</td>
<td>0.923</td>
<td>0.949</td>
<td>0.972</td>
</tr>
<tr>
<td>Beyin Cerrahi</td>
<td>0.822</td>
<td>0.858</td>
<td>0.958</td>
<td>Kardiyojoloji</td>
<td>0.782</td>
<td>0.793</td>
<td>0.986</td>
</tr>
<tr>
<td>Çocuk Cerrahisi</td>
<td>0.665</td>
<td>1.000</td>
<td>0.665</td>
<td>Kulak Burun Boğaz</td>
<td>0.842</td>
<td>0.917</td>
<td>0.918</td>
</tr>
<tr>
<td>Çocuk Psikiyatri</td>
<td>0.681</td>
<td>0.899</td>
<td>0.758</td>
<td>Nöroloji</td>
<td>0.920</td>
<td>0.963</td>
<td>0.954</td>
</tr>
<tr>
<td>Çocuk Hastalıkları</td>
<td>0.837</td>
<td>0.853</td>
<td>0.980</td>
<td>Nükleer Tıp</td>
<td>0.765</td>
<td>0.805</td>
<td>0.950</td>
</tr>
<tr>
<td>Dermatoloji</td>
<td>0.856</td>
<td>0.899</td>
<td>0.865</td>
<td>Ortopedi</td>
<td>0.909</td>
<td>0.933</td>
<td>0.974</td>
</tr>
<tr>
<td>Enfeksiyon</td>
<td>0.525</td>
<td>0.710</td>
<td>0.739</td>
<td>Patoloji</td>
<td>0.528</td>
<td>0.781</td>
<td>0.676</td>
</tr>
<tr>
<td>Fizik Tedavi</td>
<td>0.810</td>
<td>0.882</td>
<td>0.919</td>
<td>Plastik Cerrahi</td>
<td>0.791</td>
<td>0.909</td>
<td>0.869</td>
</tr>
<tr>
<td>Genel Cerrahi</td>
<td>0.855</td>
<td>0.891</td>
<td>0.959</td>
<td>Plastik Cerrahi</td>
<td>0.601</td>
<td>0.645</td>
<td>0.931</td>
</tr>
<tr>
<td>Genetik</td>
<td>0.892</td>
<td>0.889</td>
<td>0.902</td>
<td>Radyasyon Onkolojisi</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Göğüs Cerrahi</td>
<td>0.835</td>
<td>1.000</td>
<td>0.835</td>
<td>Radyoloji</td>
<td>0.874</td>
<td>0.920</td>
<td>0.950</td>
</tr>
<tr>
<td>Göğüs Hastalıkları</td>
<td>0.931</td>
<td>0.997</td>
<td>0.934</td>
<td>Urololoji</td>
<td>0.892</td>
<td>0.934</td>
<td>0.954</td>
</tr>
</tbody>
</table>

Ortalamalar: 0.769, 0.887, 0.871

VZA nin avantajları arasında sayılan KVB’lerin etkin olması miktarları ile ayrı ayrı belirlenmiştir. Ayrıca zamanda tam etkinliğe sahip KVB’lerden referans verilmesi de sonuçlarda yer almaktadır. Örneğin Beyin cerrahi bölümü için gelir çıktısında farklı bir değişiklik önerilmezken, girdilerden kapalıları alanın yaklaşık 1750 (%64,7) metrekare ve akademisyen sayısının yaklaşık 3 (%30,44) kişi, giderin ise 1 milyon 450 bin (%17,8) % azaltılması önerilmiştir. Anestezi bölümünde ise kapalıları alanı 1000 (%40) metrekare, akademisyen sayısının 19 (%63) kişi, giderini ise beş milyon % azaltması beklenmektedir. Aşağıdaki tablo girdi ve çıktıların hâlâda sahip oldukları (reel) değerleri ve etkinlik hesaplamaları sonuç olarak gerekli (hedef) değerleri verilmiştir. Göstere olup turan gelirlerin ve yerlere karşı etkinliği ve arz oranını, girdilerin ise ne kadar azaltılması gerektiği verilen hedeflerle belirlenmiştir. Herhangi bir bölüm girdilerine azaltarak hedeflerde belirlenen değerleri ulaşınca etkinlik değeri 1,000 olacaktır.

Tablo 9: Senaryo 16 Girdi-Çıkış, Reel-Hedef Değerleri

<table>
<thead>
<tr>
<th>Senaryo 16</th>
<th>Gelir</th>
<th>Gider</th>
<th>Metrekare</th>
<th>Akademik</th>
</tr>
</thead>
<tbody>
<tr>
<td>(LED)</td>
<td>Reel</td>
<td>Hedef</td>
<td>Reel</td>
<td>Hedef</td>
</tr>
<tr>
<td>Acil Tip</td>
<td>5.486.274</td>
<td>5.486.274</td>
<td>7.663.104</td>
<td>5.459.022</td>
</tr>
<tr>
<td>Adil Tip</td>
<td>267.324</td>
<td>267.324</td>
<td>589.423</td>
<td>265.996</td>
</tr>
<tr>
<td>Aile Hekimliği</td>
<td>245.593</td>
<td>245.593</td>
<td>1.010.304</td>
<td>244.373</td>
</tr>
<tr>
<td>Çocuk Cerrahi</td>
<td>990.683</td>
<td>990.683</td>
<td>1.482.057</td>
<td>985.762</td>
</tr>
<tr>
<td>Çocuk Psiky.</td>
<td>1.000.440</td>
<td>1.000.440</td>
<td>1.461.308</td>
<td>995.470</td>
</tr>
<tr>
<td>Dermatoloji</td>
<td>2.042.533</td>
<td>2.042.533</td>
<td>2.375.566</td>
<td>2.032.386</td>
</tr>
</tbody>
</table>

DOI: 10.17261/Pressacademia.2019.1156 262
3.5. Alternatif Senaryo (Senaryo 2)

etkinlik değeri 0,84 tür. Senaryo 2’ de senaryo 16’ya göre daha yüksek etkinlik değerlere elde edilmiştir. Toplamda 30 bölümün 13 tanesi tam etkin çakıken 3 tanesi etkinlik sınırsına çok yakın bulunmaktadır. Ortalama olarak toplam etkinlikte 0,84, teknik etkinlikte 0,93 ve ölçük etkinlikte ise 0,89’dur. Etkin olmayan böümlerin ortalamaları ise toplam etkinlikte 0,72, teknik etkinlikte 0,88 ve ölçük etkinliğinde ise 0,81 olarak bulunmuştur. Diğer senaryoya göre senaryo 2’ de etkin olmayan bölüm yüzdesi düşmüştür. Etkin olmayan bölüm yüzdeleri CCR ve ölçük etkinliğinde % 57, BCC’ de ise %33’ tür.

Tablo 10: Senaryo 2 Etkinlik Sonuçları

<table>
<thead>
<tr>
<th>KVB</th>
<th>CRS</th>
<th>VRS</th>
<th>Scale</th>
<th>KVB</th>
<th>CRS</th>
<th>VRS</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acil Tıp</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>Göz Hastalıkları</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Adil Tıp</td>
<td>0,477</td>
<td>0,457</td>
<td>0,477</td>
<td>İç Hastalıkları</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Aile Hekimliği</td>
<td>0,121</td>
<td>0,468</td>
<td>0,257</td>
<td>Kadın Doğum</td>
<td>0,509</td>
<td>0,515</td>
<td>0,987</td>
</tr>
<tr>
<td>Anestezi</td>
<td>0,783</td>
<td>1,000</td>
<td>0,783</td>
<td>Kalp Damar Cerrahi</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Beyin Cerrahi</td>
<td>0,839</td>
<td>0,843</td>
<td>0,994</td>
<td>Kardiyoloji</td>
<td>0,896</td>
<td>0,897</td>
<td>0,999</td>
</tr>
<tr>
<td>Çocuk Cerrahi</td>
<td>0,658</td>
<td>1,000</td>
<td>0,658</td>
<td>Kulak Burun Boğazı</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Çocuk Psikyostrası</td>
<td>0,703</td>
<td>0,779</td>
<td>0,902</td>
<td>Nöroloji</td>
<td>0,994</td>
<td>0,997</td>
<td>0,998</td>
</tr>
<tr>
<td>Çocuk Hastalıkları</td>
<td>0,713</td>
<td>1,000</td>
<td>0,713</td>
<td>Nükleer Tip</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Dermatoloji</td>
<td>0,993</td>
<td>1,000</td>
<td>0,993</td>
<td>Ortopedi</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Enfeksiyon</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>Patoloji</td>
<td>0,538</td>
<td>1,000</td>
<td>0,538</td>
</tr>
<tr>
<td>Fizik Tedavi</td>
<td>0,870</td>
<td>1,000</td>
<td>0,870</td>
<td>Plastik Cerrahi</td>
<td>0,614</td>
<td>0,770</td>
<td>0,797</td>
</tr>
<tr>
<td>Genel Cerrahi</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>Psikiyatri</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Genetik</td>
<td>0,697</td>
<td>0,876</td>
<td>0,796</td>
<td>Radyasyon Onkoloji</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Göğüs Cerrahi</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>Radyoloji</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Göğüs Hastalıkları</td>
<td>0,805</td>
<td>0,850</td>
<td>0,947</td>
<td>Uroloji</td>
<td>0,990</td>
<td>0,995</td>
<td>0,995</td>
</tr>
</tbody>
</table>


3.6. VZA Sonuçlarının Literatürdeki Örneklere Karşılaştırılması

Çalışmanın bölüm etkinlikleri belirli bir kısında 18 farklı senaryo çalışması olup bunlardan seçilen 2 tanesinin sonuçları paylaşılacaktır. Ek ödeme hesaplamalarında KVK olarak uygulanacak olan 16 senaryo CCR sonuçlarına göre toplam 30 bölümün yalnızca 2 tane etkin olmaktadır. Etkin olmayan böümlerden istem tutarları ise % 75’tir ve alternatif olarak belirlenen senaryo 2’ nin CCR sonuçlarına göre ise toplam 30 bölümün 13 tanesi etkin olup etkinlik oranı % 43’ tür. Etkin olmayan 17 bölümün ortalaması ise % 72’ dir.

Ayanoğlu ve diğerlerinin (2010) finansal etkinlik ölçümünde dair yaptığı çalışmadan ilk madde ve malzeme, personel ücretleri, dışarıdan sağlanan fayda ve hizmetler, amortisman ve diğer çeşitli giderler girdi, hizmet gelirleri ise çekti olarak alınmıştır.


Tabi ki çalışmanın her iki aşamasında elde edilen değerlere, üniversite hastanelerinin sadece uygulama aşamasının etkinliğini temsil etmemektedir. Eğitim ve araştırma faaliyetlerinin ek ödeme işareti deki payı çok az olduğu için ek ödemeNight}= amaçlanan KVK’ın uçakları etkinliği üzerinden hesaplanmıştır. Yani girdi ve çıktılar üzerinden uygulama tarafından temsil edecek şekilde seçilmesi yöntemi benimsenmiştir. Anabiliere ait olan eğitim ve araştırma etkinliğinin ölçülmesi için ölçüm büyüçüsü, derslik sayısı, uygulama ve teorik ders / vaka sayısı, öğrenci sayısı, araştırma görevlisi sayısı, science citation index (SCI) ve science citation index expanded (SCI-E) kapsamında tarafları dergilerde yayınlanan bilimsel araştırma sayısını gibi girdi ve çıktılar seçilir.
Çalışmanın VZA ile böümlerin etkinliklerinin ölçülmesi ve ek ödeme KVK olarak yansıtılmaması amacı ile, böümler arasında homojen ölçüm yaptığı düşünülen, daha ayrıntılı değerlendirmeler içeren ve birinci bölümdeki mali verimlilik değerleri ile de örtülen senaryo 16 toplam etkinlik değerleri kullanılcaktır. Buna göre verimlilik ve etkinlik sonuçları karşılaştırıldığında, 0,995 ile iki değer arasında pozitif anlamlı yüksek bir korelasyon değeri bulunuyor görülmektedir. İki sonucun灰尘e ortalamaları da sırasıyla 0,7682 ve 0,7686 olup birbirine çok yakın değerlerdir. Benzer şekilde sonuçları arasındaki sora korelasyon değerinin de 0,996 ile pozitif anlamlı yüksek bir korelasyon değer olduğu tespit edilmştir. Toplamba sadece dokuz bölüm sıralamada bir yar 0,915 verimlilik değerine sahip olan bu bölüm, etkinlik değerlendirilmesinde tam etkin yani 1,000 etkinlik değere sahip olan iki bölümden biri olmuştur. Verimlik değerlerinde, özellikle verbal可能な ve olumlu değişikliklerin de mevcut olup bu durum, verimlilik değerlendirmesinde tam etkin yani 1,000 etkinlik değere sahip olan iki bölümden biri olmuştur. Özetle çalışmanın birinci bölümünde yapılan maliyet analizi sonuçnu edilen mali verimlilik sonuçları ile ikinci bölümünde yapılan kaynak kullanım etkinliği çalışmaları sonucu elde edilen değerler birbirini desteklemektedir. Değerler ayrı ayrı da eşit ayrılıklıklar olarak ek ödeme KVK olarak yansıtabilir.

<table>
<thead>
<tr>
<th>Gider merkezi – Karar verme birimi</th>
<th>Mali Verimlilik</th>
<th>Kaynak kullanım etkinliği</th>
<th>Gider merkezi – Karar verme birimi</th>
<th>Mali Verimlilik</th>
<th>Kaynak kullanım etkinliği</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acil Tip</td>
<td>0,7159</td>
<td>0,7120</td>
<td>Göz Hastalıkları</td>
<td>0,7643</td>
<td>0,7600</td>
</tr>
<tr>
<td>Adli Tip</td>
<td>0,4535</td>
<td>0,4510</td>
<td>İç Hastalıkları</td>
<td>1,0050</td>
<td>1,0000</td>
</tr>
<tr>
<td>Aile Hekimliği</td>
<td>0,2431</td>
<td>0,2420</td>
<td>Kadın Doğum</td>
<td>0,6908</td>
<td>0,6870</td>
</tr>
<tr>
<td>Anestezi</td>
<td>0,6736</td>
<td>0,6700</td>
<td>Kalp Damar Cerrahi</td>
<td>0,9274</td>
<td>0,9230</td>
</tr>
<tr>
<td>Beyin Cerrahi</td>
<td>0,8259</td>
<td>0,8220</td>
<td>Kardioloji</td>
<td>0,7635</td>
<td>0,7820</td>
</tr>
<tr>
<td>Çocuk Cerrahisi</td>
<td>0,6685</td>
<td>0,6650</td>
<td>Kulak Burun Boğazı</td>
<td>0,8462</td>
<td>0,8420</td>
</tr>
<tr>
<td>Çocuk Psiyatriyśli</td>
<td>0,6846</td>
<td>0,6810</td>
<td>Nöroloji</td>
<td>0,9242</td>
<td>0,9200</td>
</tr>
<tr>
<td>Çocuk Hastalıkları</td>
<td>0,8409</td>
<td>0,8370</td>
<td>Nükleer Tip</td>
<td>0,7514</td>
<td>0,7650</td>
</tr>
<tr>
<td>Dermatoloji</td>
<td>0,8598</td>
<td>0,8560</td>
<td>Ortopedi</td>
<td>0,9140</td>
<td>0,9090</td>
</tr>
<tr>
<td>Enfeksiyon</td>
<td>0,5273</td>
<td>0,5250</td>
<td>Patoloji</td>
<td>0,5305</td>
<td>0,5280</td>
</tr>
<tr>
<td>Fizik Tedavi</td>
<td>0,8142</td>
<td>0,8100</td>
<td>Plastik Cerrahi</td>
<td>0,7945</td>
<td>0,7910</td>
</tr>
<tr>
<td>Genel Cerrahi</td>
<td>0,8589</td>
<td>0,8550</td>
<td>Psikiyatri</td>
<td>0,6035</td>
<td>0,6010</td>
</tr>
<tr>
<td>Genetik</td>
<td>0,8966</td>
<td>0,8920</td>
<td>Radyasyon</td>
<td>0,9168</td>
<td>1,0000</td>
</tr>
<tr>
<td>Göğüs Cerrahi</td>
<td>0,8394</td>
<td>0,8350</td>
<td>Radyoloji</td>
<td>0,8780</td>
<td>0,8740</td>
</tr>
<tr>
<td>Göğüs Hastalıkları</td>
<td>0,9361</td>
<td>0,9310</td>
<td>Uroloji</td>
<td>0,8963</td>
<td>0,8920</td>
</tr>
</tbody>
</table>

| Korelasyon = 0,995 | Ortalama | 0,7682 | 0,7686 |

Bulunan etkinlik değerleri mevcut SUT değerleri ile edile edilen gelir rakamları ile elde edildiği unutulmamalıdır. İkinci bölümün başında belirtilen, SUT fiyatlarının maliyeti karşılamadığı ve özellikle bazı böümlerin aleyhine bir durum oluşturduğu tespit edilmiştir. Bu noktada yapılan SUT değişikliklerinin verimlilik ve/veya etkinlik değerlerini değiştirebileceği göz önünde bulundurulmalıdır. Benzer şekilde, gelirin belir bir yüzdesi aylık olarak oluşturulun ek ödeme havuzundan tüm böümler yararlandığından, sadece cerrahi böümlerin ürettiği ameliyat sayısı ve Radyoloji, Nükleer Tip, Patoloji gibi birimlerde ölçülen raporlama süresi gibi önemli parametreler, etkinlik hesaplamalarında kapsam dış birakılmaktır. Örneğin sadece cerrahi böümleri içeren bu hesaplamada farklı parametreler kullanılamasyla sonuçlar değişebilir.

5. SONUÇ VE ÖNERİLER

Çalışmanın birinci kısmının sonuçlarından açıkça görülmektedir ki, işçilik giderlerinin fazla olması sadece SUT’a bağlı etkilerle bir yorkışa çekilmiştir. Çalışmanın birinci kısmının son ürünlerinden açıkça görülmektedir ki, işçilik giderlerinin fazla olması (reel gelirin % 56’ sı) diğer parametrelerle birlikte gelirin olmayan

DOI: 10.17261/Pressacademia.2019.1156 266

Tabi ki bunun yapılabilmesi için yasal düzenlemeye ihtiyaç duyulmaktadır. Bu noktada 2547 sayılı kanunun 58. maddesinde düzenlenen ek ödeme dağıtım oranları, sağlık uygulama ve araştırma merkezleri için sınırlı bir eki daha da uzatmakta, alacaklarını uzun bir zaman sonunda tahsil edebilen firmalara, sonrası almılarda daha pahalı teklif vermektedir. Bu durum bir kısır döngü oluşturarak kurum gelir-gider dengesini rahatlatalması, Türkiye’nin sağlık hizmeti üretimi ile alakası olmakta ve üniversite hastanelerinin en büyük sorunları gelirden direkt BAP bütçesine aktarılan % 5 ve hazine hissesine aktarılan % 1'lik ek ödeme tavanı gider otokontrolünü sağlayan, motive eden, aidiyet duygusunu yakalanması için 30 MLR vorhandur. İşte bu durum bir kısır döngü oluşturarak kurum gelir gider dengesinin sürekli gerilemesine yol açmaktadır.

Tabi ki bu durumun en büyük sorumlu olan kuruluşlar, yurtiçler ve destek hizmetlerini sağlayan küçük ölçekli işletmelerin alacaklarını geç tahsil etmesi, sağlık sektöründe ulusal ve bölgesel sorunlara yol açmaktadır, hizmetin sürekliliğini zora sokmaktadır.

Sonuç olarak üniversite hastanelerinin içinde bulunduğu gelirin gideri karşılamaması durumu, kurum borçlarının vadesini karşılamırken, alacakların azalması, alacaklarını uzun bir zaman sonunda tahsil edebilen firmalara, sonrası almılarda daha pahalı teklif vermektedir. Bu durum bir kısır döngü oluşturarak kurum gelir-gider dengesini rahatlatalması, Türkiye’nin sağlık hizmeti üretimi ile alakası olmakta ve üniversite hastanelerinin en büyük sorunları gelirden direkt BAP bütçesine aktarılan % 5 ve hazine hissesine aktarılan % 1'lik ek ödeme tavanı gider otokontrolünü sağlayan, motive eden, aidiyet duygusunu yakalanması için 30 MLR vorhandur. İşte bu durum bir kısır döngü oluşturarak kurum gelir-gider dengesinin sürekli gerilemesine yol açmaktadır.

Tabi ki bu durumun en büyük sorumlu olan kuruluşlar, yurtiçler ve destek hizmetlerini sağlayan küçük ölçekli işletmelerin alacaklarını geç tahsil etmesi, sağlık sektöründe ulusal ve bölgesel sorunlara yol açmaktadır, hizmetin sürekliliğini zora sokmaktadır.

KAYNAKLAR


DOI: 10.17261/Pressacademia.2019.1156 267


EFFECT OF TECHNOLOGICAL CHANGES ON AIRPORT SECURITY PERSONNEL: AGE-RELATED ANALYSIS

DOI: 10.17261/Pressacademia.2019.1157
RJBMR- V.6-ISS.4-2019(4)-p.271-280

Savas S. Ates
Eskisehir Technical University, Faculty of Aeronautics and Astronautics, Aviation Management, Eskisehir, ssates@eskisehir.edu.tr, ORCID: 0000-0003-2462-0039

Date Received: June 28, 2019 Date Accepted: December 8, 2019

ABSTRACT

Purpose- The aim of the study is to determine the impact of technological changes on age-based airport security personnel. Due to its strategic importance, airports have the potential to attract danger. There have been terrorist attacks at airports since the early years of aviation. Security control processes have been developed and implemented at airports since the 1970s. The airport security processes vary depending on the threat profiles. With the September 11, 2001 twin tower attacks, the world’s aviation security processes have completely changed. Over the last decade, changes in the threat profile have occurred. The main purpose of aviation is to provide service to passengers by creating space and time benefits. The balance of passengers' comfort and safety to be maintained by air depends on the type of threats and the technology used in security. For this reason, large investments are made in the development of security technology at airports.

Methodology- 28-item questionnaire was applied to the airport security officers over the internet. 276 security personnel working in airports participated in the study. Age-based analysis was performed using chi-square analysis. In this process, small-scale, relatively simple security systems at the airports, large-scale, high-tech systems were introduced. New technological systems are digital, networked, software oriented and mobile solutions. Although there is a rapid change in airport security technologies, the security personnel and the human element using the technology remain the same. Considering that human factor is the user of technology, the attitude of individuals towards technology is effective in ensuring airport security. Technological change has had a significant impact on the attitudes, behaviors and mental structure of the employees. Technological change causes many psychological effects such as monotony, boredom, fatigue, stress and anxiety.

Findings- In the survey conducted to evaluate the approach of airport security personnel to technological change, 67% of security personnel were exposed to technological changes. The respondents defined technology as convenience and convenience (37%), innovation (36.6%) and efficiency (15.2%). Airport security personnel preferred to provide training and courses on the technology to be applied (48.6%) for the adoption of the new technology and 51.4% stated that they adopted the latest technological development applied in airport security in 7 days and under 6 days. 59.8% of the respondents stated that the technological change in airport security brought about an increase in the level of security.

Conclusion- As a result of findings, it can be said that the management of technological change is important for organizations. Ensuring security at airports is important in terms of minimizing the psychological, social, economic and physical impacts of technology on security personnel due to the key human factor. Training of security personnel before the technological change to be applied increases the interaction between technology and individual and contributes to the personnel to make appropriate decisions because it recognizes the technology.

Keywords: Security technologies, airport security, technological change, age-based analysis.

JEL Codes: L91, L93, L98

1. INTRODUCTION

Developing technology enables individuals to increase their knowledge levels, facilitate information sharing and the way of doing business. Moreover, it is necessary to understand, recognize and learn new technologies that significantly affect business life. The benefits of technological developments in business life depends on the human factor who use technology (Cascio & Montealegre, 2016).

The parallel of the increasing popularity of air transport increases the use of airports. Airports, strategically important for the country, have been the focus of terrorist actions since the first age of the aviation. Therefore, procedures are taken to increase
the security level in airports. In particular, security must be ensured at the entrance to the terminal building, which is the starting point for an illegal action against airports. Security scans for passengers, baggage or personnel at airports are increasingly being carried out with high-tech devices that make it easier to identify potential hazards and threats. However, the assessment of the security level with only technological devices can be wrong in airports. Because the security personnel of the airports, which are technology users, are the decision makers and the assurance person for providing security level (Alards-Tomalin, ve diğerleri, 2014).

Airport authority have to consideration to adaptation problem and effect of the technological changes on the airport security officers. Moreover, it is important to avoid security gaps because of adaptation problem of technological changes.

In the first part of this research; the technological advances in airport security and the impact of technology on the employee. Civil aviation security services, legal regulations, and passenger terminal building security issues are discussed in the second part. At the last section, the findings of the survey “Impact of Technological Changes on Airports Security Personnel” questionnaire applied to 276 people consisting of DHMI and private airport security company security officers were evaluated and explained. SPSS 15.0 program was used for these evaluations and Chi-Square analyzes were performed on the data.

2. LITERATURE REVIEW

The word technology comes from two Greek words, transliterated techne and logos. Techne means art, skill, craft, or the way, manner, or means by which a thing is gained. Logos means word, the utterance by which inward thought is expressed, a saying, or an expression. So, literally, technology means words or discourse about the way things are gained (Oregon State University, 2018).

2.1. Technological Change

Technology is defined as information on the maintenance of daily operations. Technological change can be defined as the increase of this information. It is seen that the products whose technological change mostly occurs in the form of new production methods, new designs that change the important qualities of production, marketing and management techniques (Aydin, 2013).

Technological change not only changes the production process and the nature of the goods produced, but also changes the human in the process starting from its labor. Technological change means the application of new knowledge and skills. This means the change of labor in the production process. The new technology raises the need for well-trained, skilled labor (Dertli, 2008).

2.2. Technological Changes and Developments in Airport Security

All the airports providing air transportation services are included in the international system. Due to the unique sensitivity of airports, large airports with heavy passenger volumes require detailed equipment systems and advanced technology security measures and the importance of personnel selection (Ashford, Stanton, & Moore, 1996). Security scanning technologies are used to check passengers or their baggage (Singh & & Singh, 2013).

Airport security history shows significant changes in security control processes since the early 70s of the last century. During this time, threat profiles have changed dramatically. Since 2001, suicide bombing has become a real risk for civil aviation. In the last 15 years, these changes in the threat profile have made major investments in the development of new security technology, along with efforts to facilitate the transport of passengers by air (Hofer & Wetter, 2012).

It is possible to list some of the important security services at the airports as follows (Kardeş, Yılmaz, Ateş, Sayın, & Gemici, 2014):

- Passenger and baggage screening at terminal entrance control points,
- Screening of passenger and cabin baggage at the check-in points at the purified site,
- Ensuring security of entrance and exit of terminal parking lot,
- Ensuring the security of terminal entrance and exit doors,
- Scanning baggage in the baggage separation area,
- Ensuring the security of the aircraft waiting in the apron parked against external attacks,
- Taking permissible weapons from the aircraft to the weapon delivery point and from the weapon delivery point to the aircraft,
- Transportation of money or valuables from the aircraft to the designated delivery point at the airport or from the delivery point to the aircraft,
• Additional safety screening and checks during the process of loading passengers and cabin baggage to the aircraft,
• Profiling and checking of travel documents while boarding passengers,
• Aircraft search and control service,
• Ensuring the safety of cargo buildings and control of cargo to be loaded onto the aircraft.

In this context, some of the technologies used in airport security worldwide are as follows:

• **Reflective x-ray imaging systems:** This makes it a suitable technology for detecting both liquid and solid explosives as well as for the detection of drugs (Elias, 2009, s. 217).

• **3D Millimetric Wave Scanners:** An imaging system that can penetrate clothing to display items hidden by clothing. These techniques have been produced from microwave holography techniques (Sheen, McMakin, & Hall, 2001). This technology displays an extremely different image that makes it easier to recognize the potentially dangerous object. Microwave hologram imaging, unlike a security scanner has the potential to create clear images for substances that can be overlooked (Sweet, 2009, s. 295).

• **Biometric security systems:** Biometric security systems recognize individual physical characteristics such as fingerprints, signatures, voice, retina. Another popular biometric access control system uses the technique of recognizing three-dimensional data about a person’s hand geometry. Biometric systems are two types: identification and verification. The biometric identification device automatically verifies the identity of a person by measuring a physical property or reproducible action of the person. Verification systems, on the other hand, require the use of identities such as cards that contain some physical characteristics of that person to perform verification procedures (Sweet, 2009, s. 299).

2.2. Effects of Technological Changes on Employees

Personnel providing security at airports are individuals who contribute to the detection of a potential threat (face, baggage or person) with the technologies it uses. Security personnel are expected to make appropriate action plans by increasing the threat level, if necessary. Therefore, security personnel may be asked to operate, monitor, and even undertake other tasks not related to the operation of the technology (Jain & Kumar, 2011, s. 150). Since technological changes will have different effects on each individual, it is important to examine this issue.

2.1. Psychological Effects of Technological Change on Employees

It can be said that technological change has a significant effect on the attitudes, behaviors and psychological structure of the employees. It can be said that technological change has emerged as psychological effects on workers, monotony and boredom, fatigue, stress and anxiety (Dertli, 2008).

2.1.1. Monotony and Boredom

Monotony is the condition of tiredness and boredom caused by repetitive work. Constant and demanding jobs are boring and more monotonous. Technological changes create changes in the quality and nature of the work, resulting in monotony in the workplace. Lack of opportunities to move the body, routine noise, mental and physical fatigue, non-compliance with work, not being able to get used to night shifts may reveal monotony (Dertli, 2008).

2.1.2. Stress and Worry

Stress; it can be defined as physical and emotional reactions caused by imposing, oppression and uncertainty (Gökgöz, 2013). Work stress can be defined as a mismatch arising from the specific structure of the job and the reaction of the employee to his / her own personality while performing the task (Erdoğan, Ünsar, & Süt, 2009). New technology, rapid changes in the business environment, the skills of employees quickly outdated. In addition, the need to know new equipment and systems constantly reveals the threat situation in the individual. This situation becomes a potential stress factor if adequate training is not provided (Okutan & Tengilimoğlu, 2002). Technological innovations and those who do not have enough knowledge and experience to work, is in two-sided fear. First; fear of damaging the machine or equipment; Fear of losing the job because it cannot adapt to the new technology (Dertli, 2008).
2.2. Social Effects of Technological Change on Employees

The social effects of technological change on employees; alienation, inadequacy, education.

2.2.1. Estrangement

Alienation is a person's life, a life style contrary to the essence of human life or human life does not fit into the way of life is imposed (Dertli, 2008). Alienation to work; it can be said that the reluctance, indifference, boredom, burnout and the inefficiency and conflict that this situation brings together (Gürsoy, 2014). Human re-division of technology and technology has become increasingly alienated in working life. Therefore, employees' relations with other people have decreased. Not only the degree of automation in technology, but also the technological change in work affects alienation. Because technological changes are often perceived as a factor that will lead to deterioration of the environment, bringing new risks related to safety and health, the occurrence of desires and the disruption of social integrity.

2.2.2. Inadequacy

Inadequacy is the situation in which those working in a certain position do not care about the knowledge and skills required by new technologies. Technology creates a number of jobs where the knowledge and dexterity of the employees is not sufficient. The replacement of a new invention, a machine, causes many people to change their positions (Adibifar, 2016). The speed of technological change leads to wear and tear of the workers. In addition to the danger of dismissal, the lack of technical knowledge and skills of the employees may also be a source of unrest. Technological change forces people's potential to change.

2.2.3. Training

Increasing the current performance of employees, updating their skills, solving organizational problems, being able to make career planning, keeping up with the changes and even guiding, were the factors that increased the importance of training activities. Training programs are organized to increase and improve the knowledge, skills and abilities of human resources. Technology, automation, changing values, computer, communication, information, environment and organizational changes can be listed as the main factors that increase the importance of education (Örücü & Yumuşak, 2015). Technological changes in organizations greatly change the qualities expected from the individual. The amendments make it necessary to train the employee. As a result of the change in technology, organizations are forced to adapt their employees to the machine. Education, jobs and opportunities should change the self and skills of the employee should change the basis.

2.2.4. Decrease in Communication and Social Relations

Technological change can eliminate staff members' co-workers and non-formal relationships with them. Some of his friends may get out of work, some of them may change their chapters or even be unfair.

2.2.5. Job Dissatisfaction

One of the important changes brought about by technological advances in working life is undoubtedly related to job satisfaction (Şahin, Aydın, & Güler, 2015). Job satisfaction can also be defined as a feeling that an employee experiences when he / she realizes that his / her work and the needs and personal values judgments overlap or allow them to overlap. In enterprises applying advanced technology, job descriptions should also be rearranged. These include; considering that the work is done faster with computers, reducing work hours, keeping wages satisfactory, and acquiring completely new division of labor and business principles can be considered (Can, 2008).

In enterprises applying advanced technology, job descriptions should also be rearranged. These include; considering that work is done faster with computers, reducing work hours, keeping wages satisfactory, and acquiring completely new division of labor and business principles can be considered.
2.3. The Economic Effect of Technological Change on the Employees

Technological change has two economic effects on employees: dismissal and job insecurity. The state of weakness in maintaining the continuity of the threatened work; the difference between the expected level of job security and the level of assurance; feelings of uncertainty as to whether an individual’s job will continue; the perception of a potential threat to the continuity of work is the definitions made about job insecurity. Concerns about job insecurity are accepted as the heaviest period of the unemployment process and reveal the situation before losing the job (Çakır, 2007). Because the new technology can lead to specializations of different qualifications and make the works of those who worked until then become in a situation that they cannot manage.

2.4. Physical Effects of Technological Changes on Employees

Rapid technological developments; on the one hand it serves the welfare of the human being, on the other hand it brings with it the dangers for human life and the environment. Electromagnetic waves are propagated by many natural and man-made sources and the effect of those working on the work environment is inevitable (Dertli, 2008). As a result of technological advances, the use of electromagnetic waves is increasing day by day, and therefore, employees are exposed to high levels of electromagnetic waves in their workplaces. Although electromagnetic waves emitted by some high technology machines and devices cause problems such as headache and insomnia, it has been found to cause short-term effects (Özkan & Purutçuoğlu, 2010). Kerschner and Chelsvig found that age was effective in the adoption of technological innovations, negative opinions about technology increased and technology usage decreased with increasing age (Özkan & Purutçuoğlu, 2010).

3. DATA AND METHODOLOGY

The use of technology in the world and Turkey is increasing in all areas. Understanding the effects of technological developments on individuals is an important research topic. In civil aviation, technology is used as a tool to take measures that threaten security. This research was carried out to determine the effects of technological changes on security personnel who are technology users in ensuring security at airports. Because of security personnel at airports in Turkey research workers cannot be applicable to all of them reached the 276 airport security personnel survey is one of the limitations of this research. In order to determine the impact of technological changes on airport security personnel, a 28-question questionnaire was applied to airport security officers over the internet. The results of this survey were analyzed using the Chi-Square method with SPSS 15.0 program.

4. FINDINGS AND DISCUSSIONS

4.1. Demographic Data

276 security personnel working in airports participated in the study. 274 (99.3%) of the participants were male and 2 (0.7) were female. The age distribution of security personnel working at airports is shown in Table 1. Two (0.7%) of the survey participants were 51 years and over, 124 (44.9%) were in the 41-50 age range, 150 (54.3%) were in the 25-40 age range.

Table 1: Age Distribution Table of Airport Security Personnel

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Frequency</th>
<th>Current Percentile</th>
<th>Total Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>51 years and older</td>
<td>2</td>
<td>.7</td>
<td>.7</td>
</tr>
<tr>
<td>41-50 years old</td>
<td>124</td>
<td>44.9</td>
<td>44.9</td>
</tr>
<tr>
<td>25-40 years old</td>
<td>150</td>
<td>54.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>276</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The education levels of the security personnel working at the airports are as follows 1 (%0.4) primary school, 36 (%13) high school, 80 (%29) associate degree, 150 (%54.3) master’s degree, 9 (%3.3) master’s degree (Table 1).

The seniority periods of the security personnel working at the airport are as shown in Table 5. 4 (1.4%) of the survey participants were between 1-5 years, 13 (4.7%) were between 6-10 years, 46 (16.7%) were between 11-15 years, 213 (77.2%) were more than 16 years has seniority periods.
Table 2: Table of Distribution of Seniority Periods of Airport Security Personnel in the Profession

<table>
<thead>
<tr>
<th>Periods of Airport Security Personnel in the Profession</th>
<th>Frequency</th>
<th>Percentile</th>
<th>Current Percentile</th>
<th>Total Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years</td>
<td>4</td>
<td>1,4</td>
<td>1,4</td>
<td>1,4</td>
</tr>
<tr>
<td>6-10 years</td>
<td>13</td>
<td>4,7</td>
<td>4,7</td>
<td>6,2</td>
</tr>
<tr>
<td>11-15 years</td>
<td>46</td>
<td>16,7</td>
<td>16,7</td>
<td>22,8</td>
</tr>
<tr>
<td>16 years and above</td>
<td>213</td>
<td>77,2</td>
<td>77,2</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>276</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

Table 2 shows the security personnel working at airports that are open to business innovations. The responses of the respondents are as follows: 185 (%67) were totally agree, 81 (%29,3) were agree, 5 (%1,8) were undecided, 2 (%0,7) were disagree, 3 (%1,1) were disagree at all.

4.2. Technological predisposition

The distribution of the meaning of technology for security personnel working in airports is shown in Table 3. “What comes to your mind first when you hear about the concept of technology?” The responses of the respondents for the question are as follows: 101 (%36,6) were innovation, 102 (%37) were convenience and comfort, 42 (%15,2) were efficiency, 10 (%3,6) were problem, 18 (%6,5) were labor and saving, 3 (%1,1) were other.

Table 3: Airport Security Personnel's Perspective on the Work Related Innovations Distribution Table

<table>
<thead>
<tr>
<th>Invention</th>
<th>Frequency</th>
<th>Percentile</th>
<th>Current Percentile</th>
<th>Total Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation</td>
<td>101</td>
<td>36,6</td>
<td>36,6</td>
<td>36,6</td>
</tr>
<tr>
<td>Convenience and comfort</td>
<td>102</td>
<td>37,0</td>
<td>37,0</td>
<td>73,6</td>
</tr>
<tr>
<td>Efficiency</td>
<td>42</td>
<td>15,2</td>
<td>15,2</td>
<td>88,8</td>
</tr>
<tr>
<td>Problem</td>
<td>10</td>
<td>3,6</td>
<td>3,6</td>
<td>92,4</td>
</tr>
<tr>
<td>Labor and Saving</td>
<td>18</td>
<td>6,5</td>
<td>6,5</td>
<td>98,9</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>1,1</td>
<td>1,1</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>276</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

4.3. Analysis of the Relationship between Technological Changes and Age

4.3.1. Investigation of the Relationship between the Type of Psychological Impact Caused by Technological Change and Age

Hypothesis 1: There is no relationship between the monotony and boredom caused by technological change and the age of security personnel (H0). There is a relationship between the monotony and boredom caused by technological change and the age of the security personnel (H1). To test this hypothesis, Chi-Square independence test of the questionnaire was applied.

104 airport security personnel between the ages of 25-40 according to the cross table according to age variable due to the monotony and boredom caused by technological change; 96 security personnel aged 41-50; 98 security personnel over 40 years of age disagreed that the technological change applied caused monotony and annoyance.
Table 4: The chi-square table according to the age variable with the effect of technological change creating monotony and boredom

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>7,944(a)</td>
<td>3</td>
<td>.047</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>9,088</td>
<td>3</td>
<td>.028</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.668</td>
<td>1</td>
<td>.414</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>276</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(a\) 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.02.

As a result of the Chi-Square test in the table data were calculated as: \(\chi^2 = 7,944, sd = 4, p = 0.047\). Since \(\chi^2 (2) = 7,944, p = 0.047 < 0.05\), H0 hypothesis is not accepted and it is stated that there is relationship. Monotony and boredom caused by technological change and the age of security personnel.

### 4.3.2. Investigation of the Relationship between the Form of Social Impact of Technological Change and Age

**Hypothesis 2:** There is no relationship between job dissatisfaction and age of security personnel due to the monotony created by technological change in airport security (H0). There is a relationship between job dissatisfaction and age of security personnel due to the monotony created by technological change in airport security (H1).

100 airport security personnel between 25-40 years old according to the cross-table of age variables and job dissatisfaction due to the monotony created by technological change in airport security; 88 airport security personnel over 40 years of age stated that they do not participate in the job dissatisfaction due to the monotony created by technological change in airport security.

Table 5: Job Dissatisfaction and Age Variables due to the Monotony Created by Technological Change in Airport Security Chi-Square Table

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>3,967(a)</td>
<td>4</td>
<td>.411</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>4,086</td>
<td>4</td>
<td>.395</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.038</td>
<td>1</td>
<td>.846</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>276</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(a\) 2 cells (20.0%) have expected count less than 5. The minimum expected count is 2.74.

As a result of the Chi-Square test in the table data were calculated as: \(\chi^2 = 3,967, sd = 4, p = 0.411\). Since \(\chi^2 (2) = 3,967 p = 0.411 > 0.05\), H0 hypothesis is accepted and it is stated that there is no relationship between job dissatisfaction due to monotony created by technological change in airport security and the ages of security personnel.

### 4.3.3. Examination of the Relationship between the Physical Impact of Technological Change and Age

**Hypothesis 2:** There is no relationship between health problems experienced as a result of technological change in airport security and the age of security personnel (H0). There is a relationship between the health problems experienced as a result of technological change in airport security and the ages of security personnel (H1).

With the increase in health problems as a result of technological change in airport security, 62 airport security personnel between 25-40 years of age and 36 airport security personnel over 40 years of age did not agree with the increase in health problems following the technological change in airport security. 26 airport security personnel over the age of 40 agreed that health problems increased after technological change in airport security (Table 6).
Table 6: Increase in Health Problems as a Result of Technological Change in Airport Security and Age Variants Chi-Square Table

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value (a)</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>5,705</td>
<td>4</td>
<td>,222</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>5,744</td>
<td>4</td>
<td>,219</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>1,161</td>
<td>1</td>
<td>,281</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>276</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.85.

As a result of the Chi-Square test in the table was calculated as $\chi^2 = 5,705, sd = 4, p = 0.222$. Since $\chi^2 (2) = 5.705 p = 0.222 > 0.05$, H0 hypothesis is accepted and there is no correlation between the increase in health problems as a result of technological change in airport security and the age of security personnel.

4.3.4. Investigation of the relationship between the economic impact of technological change and ages

Hypothesis 3: There is no relationship between the concern of dismissal after technological change at the airport and the age of security personnel (H0). There is no relationship between the age of security personnel and the concern of dismissal after technological change at the airport (H1).

96 airport security personnel between the ages of 25-40 according to the cross table according to age variable due to concern about dismissal caused by technological change; 76 airport security personnel over the age of 40 disagreed that the technological change made worries about dismissal.

Table 7: Chi-Square Table according to the Age Variable and the Worry of Dismissal caused by Technological Change

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value (a)</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>3,187</td>
<td>4</td>
<td>,527</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>3,198</td>
<td>4</td>
<td>,525</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>,116</td>
<td>1</td>
<td>,733</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>276</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a 2 cells (20%) have expected count less than 5. The minimum expected count is 3.65.

As a result of the Chi-Square test in Table 27 was calculated as $\chi^2 = 3,187, sd = 40, p = 0.527$. Since $\chi^2 (2) = 4.574 p = 0.527 > 0.05$, H0 hypothesis is accepted and there is no relationship between the concerns of dismissal caused by technological change and the age of security personnel.

5. CONCLUSION

As in many other sectors, the civil aviation sector is one of the sectors where technology is used extensively in its fields of activity. The safe and secure conduct of aviation activities and the minimization of security gaps in airports necessitate the use of technology in airport security. It is important to identify the technology used in airports, developments and changes in this area, the perspectives of airport security personnel who are users of technology, and to what extent and how they are affected by the change. Because the security of airports, taking necessary measures for this depends on the decisions of airport security personnel who are users of technology.

Technological changes can have effects on people such as monotony and boredom, fatigue, dismissal and stress. Technological change management should be performed according to these criteria as these effects vary according to the age, seniority in the profession and educational level. As a matter of fact, monotony and boredom; There is a correlation between the stressful environment effect resulting from technological change and the age of airport security personnel. Monotonous and boredom as a result of technological change in the business environment, stress effect management should be made taking into consideration the age criteria.
As a result of analysis of hypothesis monotony and boredom caused by technological change and the age of security personnel. Moreover there is no relationship between job dissatisfaction due to monotony created by technological change in airport security and the ages of security personnel. And also, there is no correlation between the increase in health problems as a result of technological change in airport security and the age of security personnel. Another result of correlation analysis is that, there is no correlation between the increase in health problems as a result of technological change in airport security and the age of security personnel. And finally there is no relationship between the concerns of dismissal caused by technological change and the age of security personnel.

As a result of all this information, it can be said that the management of technological change is important for organizations. Ensuring security at airports is important in terms of minimizing the psychological, social, economic and physical impacts of technology on security personnel due to the key human factor.

Training of security personnel before the technological change to be applied increases the interaction between technology and individual and contributes to the personnel to make appropriate decisions because it recognizes the technology.

In addition, the adaptation of the person to the technology should be ensured by keeping the inadequacy arising from the lack of information in the face of technology resulting from technological changes in airport security to a minimum.

*This research result presented in Global Business Research Congress (GBRC-2019), 30-31 May 2019.
This research supported by SIHAGUVDER

REFERENCES


INTERACTION EFFECT OF LEADER-MEMBER EXCHANGE AND STRESS MINDSET ON CHALLENGE STRESSOR AND JOB PERFORMANCE RELATIONSHIP

ABSTRACT

Purpose - This study integrated job demands-resources model and concept of stress mindset to examine a three-way interaction model. Testing the effect of challenge stressor, leader-member exchange and positive stress mindset on job performance.

Methodology - Research data were collected from four hundred eighty-seven employees during different business in Taiwan. Hierarchical regression analysis was conducted, and results supported the three-way moderation effect.

Findings - The findings suggested that when supervisors’ social support resources were strong, positive stress mindset can better improve employee’s job performance.

Conclusion - There is a three-way interaction moderation effect of challenge stressors, leader-member exchange and positive stress mindset on job performance. A contribution of the present study to research is that we linked job demands-resources model and stress mindset theory to explain a boundary condition effect in stress issue.

Keywords: Leader-member exchange, stress mindset, three-way interaction

JEL Codes: D23

1. INTRODUCTION

Job stress has always been an important issue for academics and practitioners, because may affect employee attitudes and physical and mental health (Bliese, Edwards, & Sonnentag, 2017; Cooper, Dewe, & O’Driscoll, 2001; Ganster & Rosen, 2013). Early studies have argued that stress is harmful and negatively affects organizations and individuals, thus people must adopt effective strategies to prevent or reduce stress incidence (Atkinson, 2004; Bodenmann, Meuwly, Bradbury, Gmelch, & Ledermann, 2010; McEwen & Seeman, 1999; Schwabe & Wolf, 2010). In fact, there are two types of stressors (Cavanaugh et al., 2000; LePine, Podsakoff, & LePine, 2005; Podsakoff, LePine, & LePine, 2007; Webster, Beehr, & Christiansen, 2010).

Based on job demands-resources (JDR) model, Bakker and Demerouti (2007) proposed that job stress exists in any occupation, and it can be broadly divided into job demands and job resources, and the interaction effect between job demands and job resources can reduce strain or enhance job motivation. Some prior studies on conservation of resources (COR) theory have identified the supplemental resources of supervisors to alleviate employee work stress and lessen negative consequences (Campbell, Perry, Maertz Jr, Allen, & Griffeth, 2013; Thomas & Lankau, 2009). Theoretically, based on JDR model and COR theory, job resources should reduce negative outcomes, but this study suggest that individual’s perception of stressors have an additional...
effect beside job resources. In fact, the nature of work stress might different, and perception of experienced stress during the process of pursuit working goals may differ among people(González-Morales & Neves, 2015).

Overall, we propose that the nature of the stressors and the perceptions of stressors will affect employee subsequent behaviors. We introduce the concept of stress mindset, which refers to the extent to which one believes that stress enhances or debilitates (Crum, Salovey, & Achor, 2013). Specifically, our study focuses on challenge stressors (job demands), leader-member exchange (job resources), and positive stress mindset (perception) will have a three-way moderation effect on job performance. First, we expect this paper contribute to integrate the JDR model and leadership theory to explain the role of job resources and personal characteristic in the relationship between job demands and job performance. Second, we extend the Crum et al. (2013) stress mindset concept to examine its moderating role beyond leader-member exchange in work behaviors. Finally, we highlight the possible three-way moderating role of stress mindset in the job demands-resources model.

2. LITERATURE REVIEW

Cavanaugh et al. (2000) followed transactional theory of stress (Lazarus & Folkman, 1984), classified job stressors into challenge stressors and hindrance stressors. Hindrance stressors were defined as “work-related demands or circumstances that tend to constrain or interfere with an individual's work achievement and that do not tend to be associated with potential gains for the individual,” for instance, role ambiguity, role conflict, hassle, red tape, organizational politics, and job insecurity (Cavanaugh et al., 2000, p. 68). On the other hand, challenge stressors were defined as “work-related demands or circumstances that, although potentially stressful, have associated potential gains for individuals”, such as workload, time pressure, job responsibility, and job complexity (Cavanaugh et al., 2000, p. 68).

2.1. Job Demands-Resources Model

The JDR model was proposed by Demerouti, Bakker, Nachreiner, and Schaufeli (2001), they divided the risk factors of job stress exists in any occupation into two categories: job demands and job resources. Both job demands and job resources involve the physical, psychological, social, and organizational aspects of the job. “Job demands” require that people continue to invest physical and psychological efforts or skills toward work and incur individual's physical and mental depletion (Bakker & Demerouti, 2007), such as workload (Bakker, Demerouti, de Boer, & Schaufeli, 2003), customer aggression (Grandey, Dickter, & Sin, 2004) and organizational change (Rafferty & Griffin, 2006). “Job resources” not only help to achieve goals and reduce the work requirements and physical and mental consumption related to work but also stimulate individual growth and development (Bakker & Demerouti, 2007), such as higher salaries, supervisor or colleague support (Karatepe, Yavas, & Babakus, 2007) and high performance work system (Fu, 2013). The JDR model (Bakker & Demerouti, 2007, 2017) contains two mechanisms, one is job demands deplete an employee’s physical and psychological resources, bring strain, jeopardize the employee’s health, and result in poor job performance; the other is job resources help in achieving work goals; therefore, the employee’s internal motivation is activated, resulting in a good job performance. Besides, job demands and job resources exist interaction effect, such job resources can alleviate the relationship between job demands and strain, whereas job demands can strengthen the relationship between job resources and motivation.

Based on JDR model (Bakker & Demerouti, 2007, 2017; Demerouti et al., 2001) and dyadic viewpoint of stressor (Cavanaugh et al., 2000), hindrance stressor belongs to “bad” job demands and it will obstruct job performance, but challenge stressor belongs to “good” job demand, should be more able to activate job resources and promote job performance and the relationship between job resources and work motivation more relevant (Bakker & Demerouti, 2017; Bakker, Demerouti, & Sanz-Vergel, 2014). Based on our knowledge, challenge stressors are positively related to job satisfaction, motivation, work engagement, loyalty and performance (Abbas & Raja, 2019; LePine et al., 2005; Lin, Ma, Wang, & Wang, 2015; Podsakoff et al., 2007; Wallace, Edwards, Arnold, Frazier, & Finch, 2009; Webster et al., 2010). Therefore, we propose hypothesis 1 as follow:

Hypothesis 1: Challenge stressors have positive effect on job performance.

2.2. Leader-Member Exchange

Leader-member exchange (LMX) theory focuses on the dyadic relationship between leaders and followers, it is the employees’ perceptions of the quality of the interpersonal social exchange between them and their immediate supervisor (Graen, 1976; Liden & Maslyn, 1998). The core notion of LMX is that leaders treat their subordinates differently depending on the quality of the social exchange between them (Graen & Uhl-Bien, 1995; Liden, Sparrowe, & Wayne, 1997). Due to limited resources of the organization and the limited time and ability of supervisors, leaders were unlikely to form a close relationship with all subordinates (Graen & Scandura, 1987), leaders will selectively allocate these resources and form the quality of exchange relations between leaders and
subordinates, thus developed close relations (in-group) and weak relationships (out-group). Low-quality of LMX relationships are regarded as those that entail a unidirectional top-down influence, economic exchange behaviors, and formal role-defined associations. The characteristics of high-quality LMX relationships are the obligation to trust and respect each other (Graen & Uhl-Bien, 1995). Leaders rely more heavily on followers, interact with employees more frequently, and encourage them to undertake more responsibilities in such relationships. Followers assume additional duties and perform beyond their contractual expectations (Dunegan, Duchon, & Uhl-Bien, 1992), and leaders provide subordinates with social support, which is characterized as being empathetic and supportive of subordinates’ needs (Kurtessis et al., 2017; Medler-Liraz, 2014).

2.3. Three-Way Interaction Hypothesis Development

Dweck (2008) defined mindset as a mental frame or lens through which we selectively organize and encode information and guide an individual’s corresponding actions and responses through a unique method of understanding. Crum et al. (2013) proposed that stress mindset is the extent to which an individual believes that stress enhances or debilitates, suggested that changing one’s stress mindset improves a person’s response to stress. Specifically, if an individual’s mindset is stress-is-enhancing (positive stress mindset), they will utilize stress to achieve their goals, which engenders positive consequences. By contrast, if an individual’s mindset is stress-is-debilitating (negative stress mindset), that they will avoid or manage the stress to prevent negative or debilitating outcomes.

When employees encounter challenge stressors, employees are convinced that the job demands provide opportunities for growth and learning. At this time, we proposed that leaders will respect and trust their subordinate can overcome the problem in high-quality LMX situation, and also provide some advice and social support for subordinate (Kurtessis et al., 2017; Medler-Liraz, 2014; Wayne, Shore, & Liden, 1997). In addition to leader may plays supportive role, subordinates will assume additional duties and perform beyond their contractual expectations by invest more effort to complete the challenging task (Dunegan et al., 1992), it will trigger employees to hold a positive stress mindset (Crum et al., 2013), keep positive confident and utilizing their capacity and professional knowledge to help leaders achieve organizational goal and enhance their job performance. Therefore, we propose hypothesis 2 as follow:

Hypothesis 2: There is a three-way interaction of challenge stressors, leader-member exchange (LMX), and positive stress mindset (PSM) in predicting job performance. For employees with high LMX, the relationship between challenge stressors and job performance will be weaker under low PSM situation than under high PSM situation. For employees with low LMX, the relationship between challenge stressors and job performance will be weaker under low PSM situation than under high PSM situation.

3. DATA AND METHODOLOGY

3.1. Sample and Procedure

We designed a questionnaire to test the hypothetical model. In order to measure the individual’s work stressors, leader-member exchange, stress mindset, and their job performance, we have targeted the employees of Taiwan’s general organizations as research participants. The employees must belong to a work team with direct supervisors. Random sampling was conducted to organizations for different occupations, including trading company, restaurants, travel agency, bank, salesperson and staff of gas station and train station. We went to organization to conduct the measurement at the appointed time. Each participant received a letter of ethical information, a questionnaire and an anonymous return envelope.

Eventually, we got 530 employees from different occupations in Taiwan as our research sample. After uncompleted questionnaires were excluded, a final sample of 487 cases were used for data analyses, with 91.89% response rate. Demographics showed that 57.6% of participants were females, with an average age of 26.10 years and average work tenure of 4.94 years. Most were single (85.2%) and educated to college level (76.3%).

3.2. Measure

Challenge stressors. We measured challenge stressors using the 6-item scale of Cavanaugh et al. (2000). A sample item was “The amount of time I spend at work.” The Cronbach’s alpha coefficient was 0.81.

Leader-member exchange. We assessed leader-member exchange using the 7-item scale of Graen and Uhl-Bien (1995). A sample item was “I understand that my supervisor is satisfied with my performance.” The Cronbach’s alpha coefficient was 0.89.

Positive stress mindset. We measured stress mindset using the stress mindset measure—general (SMM-G) 8-item scale of Crum et al. (2013), but we treated the original four of eight positive items as a positive stress mindset and the other four inverted items.
as a negative stress mindset. A sample item was “Experiencing stress facilitates my learning and growth.” The Cronbach’s alpha coefficient was 0.69.

**Job performance.** The 5-item job performance scale developed by Viswesvaran, Ones, and Schmidt (1996) was used. A sample item was “My working quality is high.” The Cronbach’s alpha coefficient was 0.70. All variables in this study followed responses ranging from 1 (strongly disagree) to 5 (strongly agree).

**Control variable.** We included the demography for gender, age, tenure, marriage and education as control variables. Additionally, challenge stressors and hindrance stressors are two relevant variables; thus, we included hindrance stressors as control variables to exclude its effect. We measured hindrance stressors using the 6-item scale of Cavanaugh et al. (2000). A sample item was “The lack of job security I have.” The Cronbach’s alpha coefficient was 0.73.

### 3.3. Common Method Bias Check

Since the collection of research data is came from the same source, which has doubts about the common method bias in research design, we use the Harman’s one-factor test to perform a post hoc remedy of common method bias. According to Podsakoff and Organ (1986) suggestion, we need to consider all variable’s items (including challenge stressors, leader-member exchange, positive stress mindset and job performance) as one-factor, and to judge the variation of the first principle component in the case of unrotated. If the total variance explained by a single factor is greater than 50%, and there is a problem with common method bias. After conducting Harman’s one-factor test, the total variation explained by the first principle component in this study is 29%. Besides, we further include the control variable (i.e. hindrance stressors) in Harman’s one-factor test, the value is reduced to 24%, which means that the problem of common method bias is not serious.

### 3.4. Discriminant Validity

We examined the discriminant validity of variable measures by performing confirmatory factor analysis. Since a limited sample size relative to many parameters estimated in the model is difficult to confirm (Floyd & Widaman, 1995), we created parcels of items for the analysis (including two or three items for each variable except stress mindset). Each parcel was constrained to load onto the latent construct without any error covariance. First, we treated all variables as one-factor model (chi-square = 905.614, df = 90; CFI = 0.551; NFI = 0.477; RMSEA = 0.136; SRMR = 0.117). Second, we treated challenge and hindrance stressors as one factor, and the other three variables as another factor, built two-factor model (chi-square = 708.164, df = 89; CFI = 0.660; NFI = 0.598; RMSEA = 0.120; SRMR = 0.117). Third, we drew out dependent variable (job performance) as a single factor, which formed three-factor model (chi-square = 513.023, df = 87; CFI = 0.766; NFI = 0.717; RMSEA = 0.100; SRMR = 0.097). Then, we separated two moderators as different factors, resulted in four-factor model (chi-square = 382.515, df = 84; CFI = 0.836; NFI = 0.795; RMSEA = 0.085; SRMR = 0.084). Finally, we divided all variables and built five-factor model, the result indicated that the five-factor model (chi-square = 217.232, df = 80; CFI = 0.925; NFI = 0.901; RMSEA = 0.059; SRMR = 0.057) fits the data better than the other four models. These results illustrate that the discriminant validity of each variable was existence.

### 4. FINDINGS

The research framework is a three-way interaction model, we expected that positive stress mindset would have an additional moderating effect beyond the interaction effect of challenge stressor and LMX on job performance. We conducted a hierarchical regression analysis by using SPSS Statistics 22 to test whether the three-way interaction effect exists.

Table 1 showed all variables’ mean, standard deviation, correlation coefficient, and reliability. As you can see, challenge stressor was positively correlated with LMX (r = 0.29, p < 0.001), PSM (r = 0.026, p < 0.001) and job performance (r = 0.56, p < 0.001). These results show initial support for our research hypotheses. The hierarchical regression results were showed in table 2. In model 1, we put in control variables to exclude their effects. Then, we put challenge stressors in model 2, challenge stressors were positive and significantly predicted job performance (β = 0.550, p < 0.001), so our hypothesis 1 was supported. Besides, model 3 also showed that challenge stressors were positively predicted LMX (β = 0.209, p < 0.001) and PSM (β = 0.183, p < 0.001). We further consider three two-way interaction terms to predict job performance in model 4, and there is only the interaction term of challenge stressors and LMX has a significant negative moderated effect on job performance (β = -0.122, p < 0.01). Finally, we put the three-way interaction term to predict job performance in model 5, the results revealed that there is a positive effect (β = 0.159, p < 0.01) on job performance, these findings primary support our hypothesis 2.
Table 1: Correlation Table

<table>
<thead>
<tr>
<th>Variables</th>
<th>Means</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gender</td>
<td>1.57</td>
<td>.50</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Age</td>
<td>26.10</td>
<td>10.71</td>
<td>.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Tenure</td>
<td>4.94</td>
<td>7.92</td>
<td>.06</td>
<td>.88***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Marriage</td>
<td>1.14</td>
<td>.35</td>
<td>.06</td>
<td>.81***</td>
<td>.75***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Education</td>
<td>2.84</td>
<td>.53</td>
<td>.09</td>
<td>.01</td>
<td>-0.9*</td>
<td>-0.9</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. HS</td>
<td>2.72</td>
<td>.69</td>
<td>.00</td>
<td>.05</td>
<td>.03</td>
<td>.06</td>
<td>.02</td>
<td>(.81)</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. CS</td>
<td>3.60</td>
<td>.63</td>
<td>.02</td>
<td>.21***</td>
<td>.16***</td>
<td>.16***</td>
<td>.14**</td>
<td>.22***</td>
<td>(.73)</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. LMX</td>
<td>3.36</td>
<td>.63</td>
<td>-.13**</td>
<td>-.00</td>
<td>-.04</td>
<td>-.02</td>
<td>.04</td>
<td>-.07</td>
<td>.29***</td>
<td>(.89)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>9. PSM</td>
<td>3.62</td>
<td>.56</td>
<td>-.04</td>
<td>-.09</td>
<td>-.09*</td>
<td>-.11*</td>
<td>.05</td>
<td>.01</td>
<td>.26***</td>
<td>.39***</td>
<td>(.69)</td>
<td>-</td>
</tr>
<tr>
<td>10. JP</td>
<td>3.57</td>
<td>.54</td>
<td>-.01</td>
<td>.15**</td>
<td>.13***</td>
<td>.09*</td>
<td>.11*</td>
<td>.56***</td>
<td>.38***</td>
<td>.39***</td>
<td>(.70)</td>
<td>-</td>
</tr>
</tbody>
</table>

*p < 0.05, **p < 0.01, ***p < 0.001

Note: N = 487. Reliabilities are reported in parentheses. HS = hindrance stressor; CS = challenge stressor; LMX = leader-member exchange; PSM = positive stress mindset; JP = job performance.

Table 2: Three-way Moderation Regression Analyses on Job Performance

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Variable</td>
<td>Gender</td>
<td>-.026</td>
<td>-.029</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>.146</td>
<td>.009</td>
<td>.008</td>
</tr>
<tr>
<td></td>
<td>Tenure</td>
<td>.068</td>
<td>.092</td>
<td>.118</td>
</tr>
<tr>
<td></td>
<td>Marriage</td>
<td>-.074</td>
<td>-.067</td>
<td>-.044</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>.111*</td>
<td>.043</td>
<td>.042</td>
</tr>
<tr>
<td></td>
<td>Hindrance Stressor</td>
<td>.103*</td>
<td>-.012</td>
<td>.024</td>
</tr>
<tr>
<td>Independent Variable</td>
<td>Challenge Stressors (CS)</td>
<td>.550***</td>
<td>.427***</td>
<td>.417***</td>
</tr>
<tr>
<td>Moderator</td>
<td>Leader-Member Exchange (LMX)</td>
<td>.209***</td>
<td>.184***</td>
<td>.147***</td>
</tr>
<tr>
<td></td>
<td>Positive Stress Mindset (PSM)</td>
<td>.183***</td>
<td>.204***</td>
<td>.179***</td>
</tr>
<tr>
<td>Two-Way Interaction</td>
<td>CS × LMX</td>
<td>-.122**</td>
<td>-.095*</td>
<td>.051</td>
</tr>
<tr>
<td></td>
<td>CS × PSM</td>
<td>-.061</td>
<td>.051</td>
<td>.116*</td>
</tr>
<tr>
<td>Three-Way Interaction</td>
<td>CS × LMX × PSM</td>
<td>.159**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.049</td>
<td>.318</td>
<td>.409</td>
<td>.426</td>
</tr>
<tr>
<td>F</td>
<td>4.087**</td>
<td>31.968***</td>
<td>36.750***</td>
<td>29.290***</td>
</tr>
<tr>
<td>ΔR²</td>
<td>.270</td>
<td>.091</td>
<td>.016</td>
<td></td>
</tr>
<tr>
<td>ΔF</td>
<td>189.620***</td>
<td>36.774***</td>
<td>4.489***</td>
<td></td>
</tr>
</tbody>
</table>

*p < 0.05, **p < 0.01, ***p < 0.001

To determine the form of the interaction, we following the approach recommended by Aiken and West (1991), the pattern of the three-way interaction between challenge stressors, LMX and PSM on job performance is illustrated in figure 1. Also, we further examined whether pairs of slopes differed significantly at high and low levels (above and below 1 SD) of LMX and PSM by using the slope difference test, and the results are shown in table 3. The results of simple slopes analysis indicate that, for employees
with high LMX, the relationship between challenge stressors and job performance was weaker when PSM is low (β = 0.175, p < 0.01) than PSM is high (β = 0.388, p < 0.001), and the slope difference test shows there is a significant difference between high LMX with high PSM situation and high LMX with low PSM situation (table 3; t = 2.782, p < 0.01). On the other hand, for employees with low LMX, the relationship between challenge stressors and job performance was weaker under low PSM situation (β = 0.379, p < 0.001) than high PSM situation (β = 0.431, p < 0.001), although there is no significant difference between low LMX with high PSM situation and low LMX with low PSM situation (table 3; t = 0.998, ns). These findings support our hypothesis 2.

Figure 1: Three-way Interaction Effects of Challenge Stressors (CS), Leader-Member Exchange (LMX), and Positive Stress Mindset (PSM) on Job Performance

Table 3: Results of Slope Difference Tests

<table>
<thead>
<tr>
<th>Pair of Slopes</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) High LMX high PSM and (2) High LMX low PSM</td>
<td>2.782</td>
<td>0.006</td>
</tr>
<tr>
<td>(1) High LMX high PSM and (3) Low LMX high PSM</td>
<td>-0.710</td>
<td>0.478</td>
</tr>
<tr>
<td>(1) High LMX high PSM and (4) Low LMX low PSM</td>
<td>0.134</td>
<td>0.893</td>
</tr>
<tr>
<td>(2) High LMX low PSM and (3) Low LMX high PSM</td>
<td>-2.588</td>
<td>0.010</td>
</tr>
<tr>
<td>(2) High LMX low PSM and (4) Low LMX low PSM</td>
<td>-3.365</td>
<td>0.001</td>
</tr>
<tr>
<td>(3) Low LMX high PSM and (4) Low LMX low PSM</td>
<td>0.998</td>
<td>0.319</td>
</tr>
</tbody>
</table>

Note. LMX = leader-member exchange; PSM = positive stress mindset

5. DISCUSSIONS

First, our statistical results supported our hypotheses that challenge stressors were positively predicted job performance, and there was a three-way interaction moderation effect of challenge stressors, LMX and PSM on job performance. A contribution of the present study to research is that we linked job demands-resources model and stress mindset theory to explain a boundary condition effect in stress issue. Second, the interaction of high-quality of LMX and person characteristic of positive thinking of stressor play an incremental effect. However, it is worthy to mention, based on slope difference test shows in table 3, for high LMX with low PSM situation, the simple slope is significantly lower than the other three situations (t = 2.782, p < 0.01; t = -2.588,
5.1. Theoretical Implication

First, according to job demands-resources model (Bakker & Demerouti, 2017), job resources can refill employee energy which lost from job demands. Previous studies have emphasized that LMX has a social support role affecting the relationship between job demands and job performance (Loi, Ngo, Zhang, & Lau, 2011). Although, our study has further considered boundary condition of LMX, and found that larger supplemental effect of LMX occur when employee has PSM toward job demands. Second, we agree with Crum et al. (2013) and argue that different stress mindsets can result in different behaviors. However, we improve the methodological way they employed that treated stress mindset as a spectrum based on the degree of stress-is-enhancing or stress-is-debilitating. We divided stress mindset scale into positive and negative factors which provide future researchers with an alternative research option.

5.2. Empirical Implication

We propose practical implications for organizations and managers based on results showed that the interaction of challenge stressor, leader-member exchange and positive stress mindset can enhance job performance. For organization, work tasks can be designed to be more challenging and creating a work atmosphere that overcomes challenges, provide employees with a challenge stressor for growth opportunities, such as setting deadlines for task completion and increasing job responsibilities and task complexity. At the same time, cultivating employees’ positive thinking skills through education and training will help improve work performance. For managers, leaders should conduct suitable relationships with employees, sometimes too much helping social support may have potentially harmful effects (Beehr, Bowling, & Bennett, 2010). We suggest that leaders should keep a favorable relationship quality with employee and assist employees to establish positive mindsets or develop their positive thinking by organizing learning activities or establishing psychological counseling units to help employees rethink the stressors they encountered. In addition, leaders can use LMX to play the role of social support, which will help employees connect their positive mindset to better adapt to the challenge stressors, and thus improve job performance.

5.3. Limitations and Suggestion for Future Research

Our study still has some limitations, and we also provide some suggestions for future research based on limitations. First limitation, we collected data from employee self-reporting source, it leads to common method variance concerns, data may have an inflation effect especially for job performance. Although we conducted Harman’s one-factor test, and result shows that the variation of first principle component is lower than 0.5, means there is no common method variance concerns. However, we still suggest future researchers should use supervisor-employee dyadic questionnaires to avoid common source’s concerns. And our data only be collected once, there is no data at two different time points for non-response bias test. Future researchers should collect data in different time periods to avoid the problem of common methods bias. Second, we divided stress mindset scale into two factors without a pilot study to ensure the reliability, we recommend that follow-up studies should categorize more rigorously. Stress mindset is an individual psychological state after evaluating stressor, some studies have argued that the classification of stressors should vary from different individuals (González-Morales & Neves, 2015). We suggest that future researchers can start with an appraisal perspective and consider more contextual factors. Third, this study only investigated challenge stressors and included hindrance stressors as the control variable, future research could treat hindrance stressors as the research variable to complete the framework. Besides, the future researcher may think about a different source of stress not only in the work task itself, but the stressor comes from organization, leaders, colleges, customers or family, and examine whether the stress mindset play moderating effect. Finally, our sample included only Taiwanese employees, so the results may be insufficient to generalize to other situations. We suggest that future research should increase sample size and use different scales and different occupational samples (such as public sector employees) to validate the results of this study.

DOI: 10.17261/Pressacademia.2019.1158
6. CONCLUSION

This study presented a three-way interaction framework based on the job demands-resources model, which is the additional moderated effect of positive stress mindset behind the interaction effect of challenge stressors and leader-member exchange on job performance. This give advises for practitioner and managers, not only design challenging work task and encouraging the employee to keep positive thinking mindset, but also maintain a favorable relationship quality for leader and subordinates, these can improve job performance for organizations.

REFERENCES


DOI: 10.17261/Pressacademia.2019.1158 288


THE IMPACTS OF UNDEREMPLOYMENT AND CAREERISM ON ORGANIZATIONAL TRUST AND CREATIVITY: THE MODERATING ROLES OF PERSONALITY AND ORGANIZATIONAL COLLECTIVISM

DOI: 10.17261/Pressacademia.2019.1159

Ibrahim Bouzidani1, Alev Torun2

1Marmara University, Department of Organizational Behavior, Istanbul, Turkey. ibrahimbouzidani@marmara.edu.tr, ORCID: 0000-0003-3585-9352
2Marmara University, Department of Organizational Behavior, Istanbul, Turkey. atorun@marmara.edu.tr, ORCID: 0000-0002-4205-4176

Date Received: October 10, 2019 Date Accepted: December 21, 2019

ABSTRACT

Purpose- The present study aimed to explore the contributions of underemployment and careerism to organizational trust and creativity; and to examine the moderating effects of agreeableness, openness to experience, and organizational collectivism on these relationships.

Methodology- The study was conducted in the province of Istanbul/Turkey, among a convenient sample of 156 participants from private organizations. For testing the hypotheses of the present study, simple regression and multiple regression analyses were utilized.

Findings- All underemployment and careerism dimensions were interrelated. Besides, the two dimensions of underemployment were found to be significantly related to the two dimensions of creativity. Also, underemployment and organizational trust, on the one hand, and careerism and creativity, on the other hand, displayed significant relationships. The moderating role was only found for agreeableness on the relationship between behavioral careerism and trust in supervisors.

Conclusion- The impacts of underemployment and careerism on creativity and organizational trust need to be explored further. In addition to that, the moderating roles of other personality traits on these relationships need to be looked at as well.

Keywords: Underemployment, careerism, organizational trust, creativity, moderators.

JEL Codes: B30, O31, M14

1. INTRODUCTION

It is believed that the traditional Weberian approach of a career which is about the involvement of an employee in a long-term relationship with an organization no longer fits the new epoch career system. The new era is pushing forward to transform the traditional employment relationship from a relational to a more transactional psychological contract, where guaranteed employment will be replaced by short-term arrangements and positions (Adams, Srivastava, Herriot, and Patterson, 2012; Sullivan and Baruch, 2009). All these changes are automatically confronted with new attitudes and behavioral coping strategies by employees; for instance, the perception of underemployment and careerism orientation (Adams, et al., 2012). Underemployment and careerism, which are to a large extent human-made psycho-social phenomena, are being considered as negative factors in the workplace. However, the fact that these phenomena are a natural reaction to the new situation imposed on the workforce in modern societies is ignored. As a result of this negative view, many researchers have conducted studies to explore the negative consequences of these two variables on employees and organizations (Feldman & Weitz, 1991; Rousseau, 1990).

Unlike previous studies, this research sought to uncover potential positive effects by looking into the positive side of underemployment and careerism. They may be related to positive consequences such as creativity. Based on Meyer, Allen, and Smith’s (1993) Model of Organizational Commitment (MOC) and the work of Zhou and George (2001), this study argues that
underemployed employees could be beneficial for their organizations. According to the MOC, dissatisfied employees may be creative in terms of finding new ways of solving problems in case they face any challenges because they are overqualified for the job that they are doing (Zhou and George, 2003). The same opinion may be asserted concerning careerism. Employees who are careerism-oriented may be very creative since they have different work experiences in different jobs and organizations. Besides, they are vivid, open to new experiences, and boundaryless in terms of their tasks and working scope (Amabile, 1983; MacKinnon, 1962). Additionally, the present study has put forward another claim based on Amabile’s (1983) Componential Theory of Creativity. According to her, any creative process should be initiated through internal motives, and generally, the main sources of these inner motives are the environmental and personal variables which guide employees. Therefore, and by following Amabile’s (1983) theory, it is suggested that collectivism as a contextual variable and openness to experience as a personal variable will be considered as moderators that would strengthen the positive effects of underemployment and careerism on creativity.

Careerism and underemployment are also expected to be related to the organizational trust. The relationship between these variables is another issue searched in this study. Very few studies have examined these relationships, and they have reported negative results in terms of the trust. For instance, Crawshaw and Brodbeck (2011) have found that employees’ careerist orientations were negatively related to perceptions of trust in their supervisors. Also, Feldman, Leana, and Bolino (2002) have suggested that underemployment may lead to negative job attitudes and job behaviors. Very few researchers have tackled this topic up to now and this study aims to fill the gap in the literature. To examine if the suggested relationships will be affected by individual and contextual variables, firstly it is argued that the trust of an employee who is careerism-oriented might be affected less negatively if he/she has an agreeable type of personality. Since agreeable people are more likely to confide in others, it is assumed that agreeableness could be a moderator which might weaken the relationship between careerism-oriented might be affected less negatively if he/she has an agreeable type of personality. Since agreeable people are more likely to confide in others, it is assumed that agreeableness could be a moderator which might weaken the relationship between careerism and organizational trust. Secondly, it is assumed also and based on Beck’s (1999) theory that, an organizational culture of the collectivist type could moderate the relationship between underemployment and organizational trust. It is expected that the solidarity between organizational members may decrease the negative effect of feeling underemployed over the trust in others.

In the following paragraphs, the literature review regarding the previous variables will be mentioned and discussed. In addition to that, the hypotheses of the study will be formulated upon that.

2. LITERATURE REVIEW

2.1. The Relationship between Underemployment and Careerism

According to Feldman et al. (2002) and Cockroft (2011), underemployment is an antecedent of careerism, and they have explained this phenomenon as a state of frustration. The employee feels that he/she is not able to fully use his/her skills, becomes pessimistic about his/her work conditions, and increasingly starts developing the belief that the success in work has nothing to do with the objective performance but it is all about nonperformance activities such as networking, self-presentation strategies, and so on. Building on Feldman et al’s (2002) study, Cockroft (2011) conducted another study to explore the nature of the relationship

1 Since the present article aims to study the effects of underemployment and careerism on creativity and organizational trust from one side, and the moderating role of openness to experience, agreeableness, and organizational collectivism on these relationships form the other side, several theories and models have been used to formulate the theoretical framework of the present study. Firstly, Beck’s (1999) Risk Society Theory (RST) was used to explain how the present socio-economic developments created a new era that is pushing forward a more transactional psychological contract, where guaranteed employment will be replaced by short-term arrangements and positions. The conditions may result in more underemployed employees, which in turn lead to distrust between employees and employers, in a more individualistic environment. Therefore, Beck’s (1999) theory was used to justify the impact of underemployment on organizational trust and the moderating role of organizational collectivism in this relationship. Secondly, Amabile’s (1983) Componential Theory of Creativity (CTC) was utilized to give grounds for the moderating role of organizational collectivism as a contextual variable and openness to experience as a personal variable on the effects of underemployment and careerism on creativity. This is based on CTC’s claims that any creative process should be initiated through internal motives, and generally, the main sources of these inner motives are the environmental and personal variables that guide employees. Lastly, Meyer, Allen, and Smith’s (1993) Model of Organizational Commitment (MOC) is used. Based on the MOC, the dissatisfied employees -who are underemployed and careerism oriented- may be creative in terms of finding new ways of solving problems in case they face any challenges because they are overqualified for the job that they are doing. Thus, based on the previous theories and models, in addition to some other studies, the theoretical framework of the present study was formulated.
between underemployment and careerism. Cockcroft (2011) found that skills, job mismatch, and pay dimensions of underemployment were significantly correlated with careerism; whereas he found other two dimensions of underemployment which are involuntary part-time work and involuntary temporary work not to be significantly correlated with the construct. The researcher explained the findings of his study as follows: employees who experienced lack of skill exploitation or who perceived inconsistency between their educational level and payment, or a mismatch between their educational level and the job which they are doing, generally displayed a strong careerism orientation. Besides, it may also be possible that employees who display careerist inclinations and believe that climbing the career ladder is not solely based on merit may be more likely to perceive their employment status as inadequate. Therefore, the following hypothesis is formulated:

H1: Underemployment will be positively related to careerism.

2.2. The Impacts of Underemployment on Creativity and Organizational Trust

Feldman et al. (2002) have suggested that underemployment may lead to negative job attitudes and job behaviors. According to them, laid-off and re-employed workers both desire and feel it is their right to have better jobs than those they occupy at this point in their careers. In turn, this desire for, and feeling of the prerogative to, better occupations and professions may straightforwardly lead to more negative work attitudes. As it can be noticed, Feldman (1996) has mentioned about job attitudes and job behaviors in general without specifying any. Some examples of important job attitudes and behaviors in the workplace are creativity and trust. In a study, Lin, Law, and Zhou (2017) attempted to explore the positive contributions of underemployment on creativity and organizational citizenship behavior. Lin et al. (2017) have found that underemployment could be a positive element in the workplace, and an underemployed employee could be a creative person if the organization fulfills some conditions.

The relationship between underemployment and organizational trust was a part of Beck’s (1999) The Risk Society Theory. According to him, the socio-economic development of the world could be divided into three stages: the pre-modern societies, the early-simple modern societies, and the reflexive modernity. The last stage of these social developments started later in the 20th century. Beck (1999), asserts that, in this stage, individuals generally, consider themselves as the center of the eco-social activities. The author suggests that reflexive modernity expresses two important ideas: firstly, for the individuals, it is a stage that made them reconsider their relationship with and loyalty to the institutions which they are tied to; secondly, for the society, it is a period of the negative reflexivity of the modern society, which reflects its hideous face. According to the researcher, everything is becoming harmful and a source of hazard for the individual and his/her environment.

Consequently, and based on the earlier studies, it is hypothesized that:

H2: Underemployment will have a positive contribution to creativity.

H3: Underemployment will have a positive contribution to organizational trust.

2.3. The Impacts of Careerism on Creativity and Organizational Trust

A contradictory relationship exists relating to the nature of careerism and its outcomes. Generally, researchers have put forward negative assumptions about the outcomes of careerism (Feldman and Weitz 1991); however, there are other perspectives which convey that careerism may bring about some positive outcomes. The previous claim could be supported by Greenhaus, Callanan, and DiRenzo’s (2008) study which revealed that careerism-oriented employees had been commonly characterized as being highly adaptive and flexible. The positive side of careerism stands on Rousseau’s (1990) point of view. She argued that careerism is a concept which has so much overlapped with two concepts, protean career, and boundaryless career. Protean career reflects the person who is self-directed and internally driven by his/her convictions. Boundaryless career, on the other hand, reflects the person who sees himself/herself and his/her career as being independent of organizational boundaries. The individual may work in different organizations to do different jobs since he/she has acquired many skills and experiences (Adams et al., 2012; Arthur and Rousseau, 1996; Briscoe, Hall, and DeMuth, 2006). Therefore, it may be assumed that individuals with such a nature may be expected to display creative activity at work.

Not only the relationship between careerism and creativity seems misty, but the relationship between careerism and trust also involves the same ambiguity. The only study which has been found in this context is that of Crawshaw and Brodbeck (2011). In this study, the researchers aimed to explore the antecedents of careerist orientations to work. They hypothesized that employee perceptions of trust in management are negatively related to their careerist orientations to work. In this study, Crawshaw and Brodbeck (2011) explained the negative relationship between careerism and trust in such a way that employees’ mistrustful attitudes towards management may lead to the perception that their career development opportunities are allocated inequitably.
The other way round may also be possible, and it may be proposed that employees with careerist intentions would be likely to develop distrust at work.

So, based on the previous studies it will be assumed that:

H4: Careerism will have a positive contribution to creativity.

H5: Careerism will have a negative contribution to organizational trust.

2.4. Moderating Effects of Organizational Collectivism, Openness to Experience, and Agreeableness

In the following paragraphs, the discussion will be upon the literature related to the moderating roles of organizational collectivism, openness to experience, and agreeableness on the main variables of the study:

2.4.1. The Moderating Effects of Organizational Collectivism and Openness to Experience on the Impacts of Underemployment and Careerism on Creativity

In this study, it is assumed that underemployment and careerism will display positive relationships with creativity. When employees feel underemployed and develop careerist tendencies, supportive contextual characteristics such as cooperation at work, and their personality characteristics such as innovativeness may increase the positive effects of these factors on creativity.

Based on Amabile’s (1983) componential theory of creativity, researchers have emphasized the fact that the personal and contextual characteristics contribute jointly to creativity (Oldham and Cummings, 1996). The studies revealed that for an employee to be creative in his/her performance, he/she has to be intrinsically motivated, which means, he/she feels excited and interested in engaging in his/her work activities willingly, and for the sake of the work itself. For instance, the personality traits of an employee could be a great source for enhancing and applying his/her creative skills and abilities (Oldham and Cummings, 1996).

Some researchers confirmed the significance of personality traits in terms of their relationship and predictability to creativity, yet mixed results have been found regarding these relationships; the status that has led some scholars to admit the fact that, personality traits are domain-general, which means the effects of a personality trait might change based on the conditions. In a meta-analytical study, researchers have found that three personality traits, namely, openness to experience, extraversion, and neuroticism were positively related to creativity, whereas, agreeableness and conscientiousness were found to be negatively related (Feist, 1998; Batey and Furnham, 2006). Therefore, an employee who is careerism-oriented might be very creative if he/she displays openness to experience as a type of personality.

However, the original initiator of an employee’s intrinsic motivation comes from the organizational context or the work environment. The notion that the supportive social context could be a real incentive for a creative environment in the workplace has been referred to in several previous studies (Amabile, Conti, Coon, Lazenby, and Herron, 1996; Oldham and Cummings, 1996; Zhou and George, 2001). The elements of the organizational context are organizational and supervisory encouragement, workgroup support, freedom, sufficient resources, challenging work, workload pressure, and organizational impediments (Amabile et al., 1996).

Based on the above studies and assumptions, it will be hypothesized that:

H6: Organizational collectivism will strengthen the positive relationship between underemployment and creativity.

H7: Openness to experience will strengthen the positive relationship between careerism and creativity.

2.4.2. The Moderating Effects of Organizational Collectivism and Agreeableness on the Impacts of Underemployment and Careerism on Organizational Trust

In this study, it is assumed that underemployment and careerism will display negative relationships with organizational trust. When employees experience underemployment and careerism; solidarity at work and an amenable personality may decrease the negative effects of these factors on organizational trust.

According to Beck (1999), underemployment has been considered to be among the five elements that characterize the world risk society; these five interrelated elements are globalization, individualization, gender revolution, underemployment, and global risks (e.g. ecological crisis and the crash of global financial markets). For Chan (2012), these elements operate within an integrated format. As it was discussed previously, one of the natural results of the reflexive modernity era and the interactive effects of the
five factors that generate the risk society is the distrust that will be a common attitude among people and their institutions. Therefore, and based on the preceding explanation, an employee who is underemployed, most probably experiences distrust in his/her workplace, and the distrust will be strengthened if the environment which he/she is working within is individualistic-oriented. So, in a reverse sense, it could be assumed that the distrust attitude will be weakened if the same employee works in a collectivist-oriented environment.

The moderating role of agreeableness on the relationship between careerism and trust, on the other hand, could be explained by the conditional effects of personality characteristics. The trust between a careerism-oriented employee and his/her organization and supervisors will be negative; however, if this particular employee has an agreeable type of personality, this negative relationship might be weakened. This is because an employee who is characterized as agreeable is generally described to be forgiving and trusting in nature (Caliendo, Fossen, and Kritikos, 2014).

One of the theories which explain how trust is formed is the personal innate predisposition view. In this approach, trust depends largely on the trustor’s innate propensity to trust. Trust is therefore conceived as a stable predisposition that does not change over time and is closely related to personality traits (Uslaner, 2002). The studies which targeted the relationship between FFM (Five-Factor Model) of personality traits and trust revealed mixed results, which certainly merit a closer look before passing judgment (Freitag and Bauer, 2016). For instance, in a study, trust was found to have a significant relationship with agreeableness only (Mondak and Halperin, 2008). In another study, all personality traits were significantly related to trust (Dinesen, et al., 2014). In other studies, personality traits were found to have a significant relationship with some dimensions of organizational trust only. For example, Freitag and Bauer (2016) have found that conscientiousness and openness are significantly related to trust for co-workers and strangers; whereas agreeableness was more related to trust in strangers only.

Therefore, the following hypotheses are formulated:

H8: Organizational collectivism will weaken the negative relationship between underemployment and organizational trust.

H9: Agreeableness will weaken the negative relationship between careerism and organizational trust.

Based on the previous studies and literature, the model of this study is formulated as illustrated in Figure 1.

**Figure 1: The Conceptual Research Model**

3. DATA AND METHODOLOGY

DOI: 10.17261/Pressacademia.2019.1159
3.1. Participants and Procedure

In the present study, it was aimed to explore the constructs of underemployment and careerism among employees working in private organizations. The study was conducted in the province of Istanbul/Turkey, among a convenient sample of 156 participants. They occupied positions as technicians, officers, experts, middle-level managers, and upper-level managers in the private sector. The sample of the study consists of 112 males (71.8 %) and 44 females (28.2 %). The age range was between 18 and 72. The majority of the participants were university graduates (76 respondents forming 48.7 % of the sample). More than half of the participants (87 respondents forming 55.8 % of the sample) worked for less than five years in the present workplace.

The respondents were approached by both in a face to face fashion and via delivering e-mails and Google Forms (an online version of the questionnaire). The time to complete the questionnaire was approximately 15 minutes. The participants were given information that the responses will be kept confidentially.

3.2. Instruments

The data was collected through several scales. The first scale was a (7) seven-item questionnaire, used to gather the demographic data. In measures, 2 to 7, the responses were expressed on a 1 to 6 scale ranging from (1) strongly disagree to (6) strongly agree. Higher scores indicated a higher level of the measured construct.

The second instrument was an (8) eight-item scale, used to measure careerism, the perception of an employee about how to move up the career ladder. The scale consists of items drawn from two separate careerism measuring scales; the five-item scale developed by Rousseau (2000) (α = 0.77), and the five-item scale developed by Chay and Aryee (1999) (α = 0.68), which in itself was a shortened version of an earlier scale developed by Feldman and Weitz (1991) that included 23 items.

The third one was a (13) thirteen-item scale used to measure underemployment. The measure was developed by Bolino and Feldman (2000) (α = 0.90) to assess skill utilization and underemployment. The items tapped into the extent to which individuals’ work was not challenging, did not provide learning opportunities, and did not fully utilize their education, experience, training, skills, and abilities (Bolino and Feldman, 2000).

The fourth scale was utilized to measure organizational trust, a (12) twelve-item subscale. The scale was developed by Nyhan and Marlowe (1997) (α = 0.89). The scale is mainly built upon Luhmann’s (1979) Systems Theory. Based on his view, trust is considered as a multi-dimensional construct, containing two dimensions: personal and systems trust, or trust in supervisors and trust in the organization. Therefore, Nyhan and Marlowe (1997) have constructed their OTI with twelve items; eight items measuring trust in supervisors and four items measuring trust in the organization.

The fifth instrument was a (7) seven-item scale, used to measure organizational collectivism. The scale was developed by Robert and Wasti (2002) (α = 0.81) to explore the extent to which employees perceived the organizational culture as focused on group priority.

The sixth measure was a (13) thirteen-item scale utilized to collect data about creativity. The scale was developed by Zhou and George (2003) (α = 0.94). It was constructed based on the creativity conceptualization of Amabile (1998) to reveal the extent to which individuals are capable of novel thinking.

The seventh and last tool was used to measure openness to experience and agreeableness. The two of the five factors of the Ten-Item Personality Inventory (TIPI), namely, Openness to Experience (α = 0.45) and Agreeableness (α = 0.40) were used in this study. TIPI was developed by Gosling, Rentfrow, and Swann (2003). The scale assesses personality using the Big Five Model (Five-Factor Model). It contains ten items, each pair of items measuring one of the five factors which are: Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Openness to Experience. In the present study, all items of openness to experience and agreeableness are worded in a positive direction.

4. RESULTS

4.1. The Validity and Reliability of the Measures

The internal consistency analyses and factor analyses were performed for all the scales that were used in this study, using Cronbach’s alpha coefficient and principal components analysis technique. Throughout the process, the following common criteria were taken into consideration: 1- Coefficients of Cronbach alpha close to .60 (if the number of the items is less than 10) and above were considered as adequate for internal consistency, 2- an item that had a factor loading of less than 0.40 was eradicated, 3-
case an item was loaded on two or more factors with a .10 or less difference, that item was deleted, 4- also, if only one item was loaded on a factor, that item was deleted (Loewenthal, 2001).

The results of the rotated component matrix revealed that the careerism scale has two factors which are: attitudinal careerism and behavioral careerism. The total variance explained by these factors is 52.44 % (KMO=0.73; Bartlett’s Test of Sphericity $X^2$:265.51; df: 28; p<0.001). Also, underemployment was found to reveal two dimensions: skill utilization and learning opportunities. The total variance explained by these factors is 65.15 % (KMO=0.84; Bartlett’s Test of Sphericity $X^2$:822.09; df: 45; p<0.001). Personality, as expected, displayed two dimensions: openness to experience and agreeableness. The total variance explained by these factors is 78.22 % (KMO=0.60; Bartlett’s Test of Sphericity $X^2$:136.37; df: 6; p<0.001). Organizational collectivism, on the other hand, appeared as a unidimensional variable. The total variance explained by this factor is 66.29 % (KMO=0.87; Bartlett’s Test of Sphericity $X^2$:761.59; df: 21; p<0.001). Organizational trust yielded two dimensions: trust in supervisors and trust in the organization. The total variance explained by these factors is 69.42 % (KMO=0.88; Bartlett’s Test of Sphericity $X^2$:1456.04; df: 66; p<0.001). Similarly, creativity was found to have two dimensions: creativity orientation and creativity implementation. The total variance explained by these factors is 67.47 % (KMO=0.93; Bartlett’s Test of Sphericity $X^2$:1419.35; df: 78; p<0.001). The Cronbach’s alpha coefficients for the variables are presented in Table (1) below.

### Table 1: Internal Consistency Coefficients of the Measures

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudinal Careerism</td>
<td>.69</td>
</tr>
<tr>
<td>Behavioral Careerism</td>
<td>.71</td>
</tr>
<tr>
<td>Skill Utilization</td>
<td>.87</td>
</tr>
<tr>
<td>Learning Opportunities</td>
<td>.86</td>
</tr>
<tr>
<td>Openness to Experience</td>
<td>.78</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>.58</td>
</tr>
<tr>
<td>Organizational Collectivism</td>
<td>.91</td>
</tr>
<tr>
<td>Trust in Supervisors</td>
<td>.92</td>
</tr>
<tr>
<td>Trust in the Organization</td>
<td>.88</td>
</tr>
<tr>
<td>Creativity Orientation</td>
<td>.89</td>
</tr>
<tr>
<td>Creativity Implementation</td>
<td>.87</td>
</tr>
</tbody>
</table>

#### 4.2. Means, Standard Deviations, and Correlations among the Variables

In Table (2), the means, standard deviations, and correlations among the variables have been reported. The relationships between the variables of the study were investigated by using Pearson product-moment correlation coefficients. Initial analyses were conducted to make certain that there is no violation of the assumptions of normality, linearity, and homoscedasticity.

As it can be noticed in the table below, the sub-dimensions of underemployment and organizational trust are significantly related. Skill utilization and trust in supervisors ($r = -.263, p<.001$), skill utilization and trust in the organization ($r = -.291, p<.001$), learning opportunities and trust in supervisors ($r = -.213, p<.001$), and learning opportunities and trust in the organization ($r = -.186, p<.005$) are negatively related and the correlation coefficients ranged from low to moderate. In terms of the relationship between underemployment and creativity, it was seen that there was a low negative correlation between learning opportunities and creativity orientation ($r = -.158, p<.005$). No significant relationship was found between careerism and organizational trust. As to the careerism and creativity relationship, a low positive correlation between behavioral careerism and creativity implementation ($r = .165, p<.005$) was found.

#### 4.3. Hypothesis Testing

As seen in Table 2 above, all the sub-dimensions of underemployment and careerism are significantly correlated. There are positive and moderate correlations between skill utilization and attitudinal careerism ($r = .290, p<.01$), learning opportunities and attitudinal careerism ($r = .238, p<0.01$), skill utilization and behavioral careerism ($r = .275, p<0.01$), and learning opportunities and behavioral careerism ($r = .253, p<0.01$). The positive correlations between underemployment and careerism reveal that Hypothesis 1 (“Underemployment will be positively related to careerism”) is fully supported.
For testing hypotheses 2, 3, 4, and 5, multiple regression analyses were conducted. Regarding Hypothesis 2 ("Underemployment will have a positive contribution to creativity."), it was found that both creativity orientation ($R^2=.051$, $F=4.083$, $p<.05$) and creativity implementation ($R^2=.027$, $F=4.295$, $p<.05$) were predicted significantly by the two underemployment dimensions. Although the two dimensions of underemployment significantly contributed to creativity dimensions, one was positive whereas the other was negative. Skill utilization was positivity related to creativity implementation ($\beta=.227$; $p=.009$) and creativity orientation ($\beta=.241$; $p=.005$). However, the learning opportunities dimension contributed negatively to creativity implementation ($\beta=-.180$; $p<.05$) and creativity orientation ($\beta=-.256$; $p<.001$). Therefore, Hypothesis 2 is partially supported.

The test for Hypothesis 3 ("Underemployment will have a negative contribution to organizational trust.") revealed that skill utilization significantly and negatively contributed to the two dimensions of trust in supervisors ($R^2=.069$, $F=11.467$, $p<.05$) (Beta=-.263; $p<.001$) and trust in the organization ($R^2=.085$, $F=14.215$, $p<.05$) (Beta=-.291; $p=.000$). However, no significant contribution was obtained for learning opportunities. Thus, Hypothesis 3 is partially supported.

Table 2: Means, Standard Deviations and Correlations between the Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Creativity orientation</td>
<td>4.9</td>
<td>.845</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Creativity implementation</td>
<td>4.6</td>
<td>.838</td>
<td>.741</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Trust in supervisors</td>
<td>4.5</td>
<td>1.054</td>
<td>.232</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Trust in the organization</td>
<td>4.2</td>
<td>1.229</td>
<td>.203</td>
<td>.200</td>
<td>.531</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Organizational collectivism</td>
<td>3.9</td>
<td>1.145</td>
<td>.270</td>
<td>.248</td>
<td>.473</td>
<td>.665</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Skill utilization</td>
<td>3.6</td>
<td>1.161</td>
<td>.136</td>
<td>.154</td>
<td>.263</td>
<td>.291</td>
<td>.165</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Learning opportunities</td>
<td>2.5</td>
<td>1.181</td>
<td>-.158</td>
<td>-.087</td>
<td>-.213</td>
<td>-.186</td>
<td>-.198</td>
<td>-.409</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Attitudinal careerism</td>
<td>2.8</td>
<td>1.048</td>
<td>.013</td>
<td>-.024</td>
<td>-.075</td>
<td>-.147</td>
<td>-.126</td>
<td>.290</td>
<td>.238</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Behavioral careerism</td>
<td>3.2</td>
<td>1.128</td>
<td>.093</td>
<td>.165</td>
<td>-.051</td>
<td>-.026</td>
<td>-.013</td>
<td>.275</td>
<td>.253</td>
<td>.433</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Openness to experience</td>
<td>4.6</td>
<td>1.002</td>
<td>.505</td>
<td>.578</td>
<td>.013</td>
<td>.170</td>
<td>.226</td>
<td>.220</td>
<td>-.003</td>
<td>.000</td>
<td>.227</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Agreeableness</td>
<td>4.7</td>
<td>0.997</td>
<td>.394</td>
<td>.265</td>
<td>.158</td>
<td>.179</td>
<td>.193</td>
<td>-.019</td>
<td>-.215</td>
<td>-.119</td>
<td>.034</td>
<td>.298</td>
<td></td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

For Hypothesis 4 ("Careerism will have a positive contribution to creativity."), the results showed that only the behavioral careerism dimension of careerism made a significant contribution ($R^2=.027$, $F=4.295$, $p<.05$). Behavioral careerism (Beta=.165; $p<.05$) significantly predicted creativity implementation. Therefore, since attitudinal careerism made no significant contribution and behavioral careerism did not predict creativity orientation, Hypothesis 4 is partially supported.

The results for Hypothesis 5 ("Careerism will have a negative contribution to organizational trust.") indicated that attitudinal careerism and behavioral careerism were not significantly related with the two dimensions of trust. So, Hypothesis 5 is not supported.

For testing hypotheses 6, 7, 8, and 9, hierarchical multiple regression analyses were conducted. As a first step, and to keep away from potential high multicollinearity with the interaction term, the variables were centered (Aiken & West, 1991). The independent variable and the moderating variable were calculated by subtracting the mean values from the respondents’ scores. The interaction term was computed by multiplying standardized scores of variables.

The findings indicated that Hypothesis 6 ("Organizational collectivism will strengthen the positive relationship between underemployment and creativity."), Hypothesis 7 ("Openness to experience will strengthen the positive relationship between careerism and creativity."), and Hypothesis 8 ("Organizational collectivism will weaken the negative relationship between
underemployment and organizational trust”) were not supported. However, partial support was obtained for Hypothesis 9 (“Agreeableness will weaken the negative relationship between careerism and organizational trust.”). As seen in Table 3, the model was significant for the interaction of behavioral careerism and agreeableness (Beta = -.159; t = -1.998; p<0.05), and the explanatory power at step 3 had increased (R² = .053).

Table 3: The Moderating Role of Agreeableness on the Relationship between Behavioral Careerism and Trust in Supervisors

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>Beta</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>R² change</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-.053</td>
<td>-.051</td>
<td>.003</td>
<td>-.004</td>
<td>.003</td>
<td>.396</td>
<td>t</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.629</td>
<td>p</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral Careerism</td>
<td>-.059</td>
<td>-.056</td>
<td>.028</td>
<td>.015</td>
<td>.025</td>
<td>2.209</td>
<td>t</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>.168</td>
<td>.160</td>
<td></td>
<td></td>
<td></td>
<td>-.703</td>
<td>t</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.003</td>
<td>p</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral Careerism</td>
<td>-.040</td>
<td>-.038</td>
<td>.053</td>
<td>.034</td>
<td>.025</td>
<td>2.832</td>
<td>t</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>.161</td>
<td>.153</td>
<td></td>
<td></td>
<td></td>
<td>-.472</td>
<td>t</td>
</tr>
<tr>
<td>Behavioral Careerism*</td>
<td>-.171</td>
<td>-.159</td>
<td></td>
<td></td>
<td></td>
<td>1.934</td>
<td>p</td>
</tr>
<tr>
<td>Agreeableness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.988</td>
<td>p</td>
</tr>
</tbody>
</table>

Dependent variable: Trust in Supervisors

Since the interaction was significant, two-way interaction effects for standardized variables were plotted as it can be seen in Figure 2, and the Probing Procedure suggested by Aiken and West (1991) was conducted to make a final decision regarding the confirmation of the result presented in Table 3.

As it can be seen in the below figure, agreeableness weakens the negative relationship between behavioral careerism and trust in supervisors. That is, behavioral careerism leads to a lower decrease in trust in supervisors when agreeableness is high.

Figure 2: The Interaction of Behavioral Careerism and Agreeableness in terms of Their Effect on Trust in Supervisors
5. CONCLUSION AND DISCUSSION

As it was stated earlier, this study aimed to look into the positive side of two seemingly negative variables, which are underemployment and careerism. It sought to explore the impacts of these variables on creativity and organizational trust. The study has put all the assumed relationships within the personality and environmental context. Therefore, the study argued that some personality traits (e.g. openness to experience and agreeableness) and the type of culture in the workplace (collectivism) could moderate the relationships among the mentioned variables. In the coming paragraphs, the results of the study will be discussed in light of the previous studies.

In the present study, the two dimensions of underemployment which are skill utilization and learning opportunities were found to have a positive relationship with the two dimensions of careerism (attitudinal and behavioral). Thus, Hypothesis 1 has been supported. The findings are in line with the previous studies as it has been mentioned earlier. An employee who is not able to fully utilize his/her skills, experiences a sense of psychological emptiness and self-contempt or loss of self-esteem. Such a person will start thinking about finding a job where he/she can be able to achieve a sort of self-assertion. The same assumption can be stated about an employee who does not have the opportunities to learn and improve himself/herself in the organization that he/she is working for. He/she would be likely to lose psychological attachment to it because of the feeling that the organization is not fulfilling the employee’s psychological need for self-enhancement and development, which makes the person to gradually develop careerist attitudes. However, the question that arises is that, do all employees who experience some or all types of underemployment develop careerism orientation? At least, the studies which have been found have not yielded consistent results (Cockroft, 2011). There are very few studies which attempted to unlock and lighten the relationship between these two variables. There seems to be more need for conceptual and empirical studies that would produce clear information about these constructs.

The second hypothesis was about the positive contribution of underemployment to creativity. The results have revealed that all the relationships between underemployment and creativity dimensions were significant. However, not all of them were positive as it was expected. Skill utilization was found to be positively related with the two dimensions of creativity (creativity orientation and creativity implementation); whereas learning opportunities were found to be negatively related to the two earlier mentioned creativity dimensions. Regarding the positive relationship of skill utilization with creativity, the finding is in line with the results of a study conducted by Lin, Law, and Zhou (2017). Lin et al. (2017) attempted to explore the positive contributions of underemployment to creativity and organizational citizenship behavior. Lin et al. (2017) have found that underemployment could be a positive
element in the workplace, and the underemployed employee could be a creative person if the organization fulfills some conditions. According to them, objective underemployment affects subjective underemployment, which in turn affects employees’ images about their jobs. Therefore, the organizational environment and employees’ personality characteristics help them to develop a positive image in their eyes and others’ eyes about their jobs. When employees perceive objective underemployment positively, they automatically move to a new stage called task crafting, the key element of which is creativity. For the underemployed individuals, task crafting becomes a means of ensuring a better fit with their preferences and competencies and asserting a positive self-image which leads them to be creative in their domains. Consequently, the positive relationship between skill utilization and the two dimensions of creativity could be explained based on Lin et al.’s (2017) view which has been mentioned in the previous lines. Besides, it is possible that employees may use their already existing potentials to demonstrate creativity. However, those who have experienced underemployment in terms of learning opportunities were found to be less likely to be creative. The improbability of acquiring new masteries seems to impede creativity. Accordingly, and based on Zhou and George’s (2001) work, most probably these employees might be reacting passively to their underemployment conditions through neglect (withdrawal behaviors such as applying fewer efforts) or loyalty (accepting the negative conditions without trying to change anything).

The third hypothesis asserted that underemployment will have a negative contribution to organizational trust. The results of the present study revealed that skill utilization significantly and negatively contributed to the two dimensions of organizational trust. However, the contribution of learning opportunities to the two dimensions of trust was not significant. The employees who experience underemployment in terms of skill utilization might remain in the same organization due to continuous commitment, however, this may happen at the expense of distrust between the employees and their supervisors in particular and the organization in general. On the other hand, the insignificant relationship between the learning opportunities dimension of underemployment and the two dimensions of organizational trust, leads us to question the nature of learning opportunities, whether it is more related to job satisfaction or it is about underemployment as Feldman (2000) has suggested in his work. This claim might be put forward because it seems that the employee who does not have opportunities to get further training to improve himself/herself, most probably feels dissatisfied rather than feeling underemployed. Therefore, such employees may feel dissatisfied about the job and the organization that they work for, without developing a problem of trust.

The positive contribution of careerism to creativity was the fourth hypothesis of the present study. The findings showed that the hypothesis was partially supported. It was found that behavioral careerism had a positive contribution to creativity implementation. This hypothesis was formulated based on the theory that careerism has two dimensions, one being positive and the other being negative. The positive side of careerism stands on Rousseau’s (1990) point of view. She argued that careerism is a concept which has so much overlapped with two concepts, which are: first, protean career, which reflects the person who is self-directed and internally driven by his convictions; and second, boundary less career, which reflects the person who sees himself and his career as being independent of organizational boundaries. The self-sufficient individual may work in different organizations to do different jobs since he/she has acquired many skills and experiences (Adams, et al., 2012; Arthur and Rousseau, 1996; Briscoe, et al., 2006). This dimension of careerism which is called behavioral careerism may lead employees to develop new approaches and provide innovative solutions to problems.

The fifth hypothesis of this study proposed that careerism will have a negative contribution to organizational trust. The results showed that there is no significant contribution of any dimension of careerism to organizational trust dimensions. Researchers point out that organizational trust is a reciprocal relationship between two parties. This reciprocal relationship is the crucial element in any psychological contract, and the trust is placed at the core of the psychological contract breach (Robinson and Morrison, 2000). Based on Sullivan and Baruch (2009), however, it may be stated that, in the new era, a tendency of a more transactional psychological contract rather than a relational one is observed. That is, the relationship between the employee and the employer is based on legal rights and reciprocal benefits rather than on the mutual trust only. These changes in employment relationships have pushed employees to develop new attitudes and coping strategies (Adams et al., 2012). The acceptance of exchange-based interactions as a norm may lead to careerist intentions that are irrelevant in terms of trustful attitudes. The findings of this research and the contradicting results of Crawshaw and Brodbeck’s (2011) study seem to call for more detailed studies concerning the nature of the relationship between careerism and organizational trust.
For hypotheses 6, 7, and 8 no significant results were obtained for the moderating roles of organizational collectivism and openness to experience variables.

For the ninth hypothesis, however, partial support was obtained. It was expected that agreeableness will weaken the negative relationship between careerism and organizational trust. The hypothesis was partially supported since the results have shown that agreeableness moderates the relationship between behavioral careerism and trust in supervisors only. Although the relationship between behavioral careerism and trust in supervisors was found to be negative but insignificant, the moderating effect of agreeableness on this relationship turned out to be significant. Previous research provides support for this result. Many studies have confirmed the positive relationship between agreeableness and trust (Dinesen, Nørgaard, and Klemmensen, 2014; Freitag and Bauer, 2016; Hiraishi, Yamagata, Shikishima, and Ando, 2008; Mondak and Halperin, 2008; Oskarsson et al., 2012; Weinschenk and Dawes, 2019). Besides, an employee who is behaviorally careerism-oriented has positive psychological and behavioral characteristics (e.g., self-confidence, tolerating uncertainty, enthusiasm, and determination). Therefore, it may be assumed that when an employee demonstrates careerism in the positive sense and has an agreeable type of personality, he/she most probably will have trust in supervisors and they will respond similarly. The moderating effect of agreeableness was only observed for trust in supervisors but not for trust in the organization. A study conducted by Tan and Tan (2000) revealed that proximal variables such as the ability, benevolence, and integrity which were embodied by a supervisor and as perceived by his or her employees have a positive effect on employees’ trust in supervisors. However, global variables such as perceived organizational support and justice were associated with trust in the organization rather than trust in supervisors. Thus, it may be concluded that, in general, trust in supervisor is predicted by individual variables.

6. LIMITATIONS OF THE STUDY

Some limitations have to be mentioned in the present study. These are mainly related to the methodology of the research. The first point to be stated is the utilization of self-report questionnaires as data collection tools. The disadvantages of using such tools are well-known among researchers. Generally, the use of self-report questionnaires may raise the possibility of common method variance. For instance, a respondent may fall in social desirability bias, which is a socio-psychological state that leads a person to respond in a socially acceptable way. This may happen especially if the answer could affect his/her future career in the organization (e.g., such as revealing that he/she is careerism-oriented or expressing the intention to leave the organization sooner or later). Besides, he/she may fall in response bias which is a psychological state that directs the person to respond in a certain way regardless of the question.

Secondly, another problem related to the method section may be the clarity of the items which is influenced by cultural differences, translation, or the rephrasing of the items. Some of the questionnaires were translated into Turkish Language and were tested for their reliability and validity in the Turkish setting by the authors of the test (e.g., organizational collectivism) whereas others were translated by other researchers (e.g., creativity, organizational trust), or by the author of this study (e.g., underemployment and careerism). Since the measurement scales were not developed in the Turkish context, the translated instruments might have affected the comprehensibility of the items for the respondents via cultural differences or linguistically ambiguous content.

Thirdly, the limitations of methodology concern the sampling method and the sampling size. The convenience sampling method has been utilized in the present study which means that the results cannot be generalized to the entire population. Although the sample size consisting of 156 participants is acceptable, some differences in terms of the results obtained in various studies may be attributable to larger sample sizes used in them.

Finally, an issue related to the nature of the sample exists. The participants of this study were from different work sectors (e.g., service, industry, etc.) which might be a cause affecting some results of the study. Since some variables of the study are domain-general oriented, such as creativity, the manifestation of the construct may vary among different work fields. The exposure of creativity in a business field may not be the same as it is in a service field. Therefore, the heterogeneous nature of the sample may have influenced the findings.

7. SUGGESTIONS FOR FUTURE RESEARCH
First of all, what can be concluded from the theoretical background of the conceptualization of careerism is that there is a clear disagreement between Rousseau (1990) and Feldman and Weitz (1991) in terms of the conceptualization of careerism. A closer look at the researchers’ conceptualizations makes a reader feel that each one is describing careerism differently. Rousseau’s (1990) conceptualization of careerism seems to fit an employee who works in an organization to which he/she is not attached psychologically and has the ability and the will to leave it. Accordingly, the employee tends to make his/her current job as a stepping stone to another more satisfying job. On the other hand, Feldman and Weitz’s (1991) conceptualization seems to imply that the employee is not satisfied with the job he/she is doing, however, is not able to leave the job. That is why the employee may start using non-performance based means in the pursuit of career growth. Therefore, the psychological state of the employee in Rousseau’s (1990) conceptualization is positive and enterprising in contrast to that of Feldman and Weitz’s (1991) which is negative and passive. These two views of careerism may affect the course of any study in quite a different way. Therefore, it is recommended for future research to study these two conceptualizations deeply to clarify the nature of the construct.

Second, in the present study, only openness to experience and agreeableness as personality traits have been set forth as variables to moderate the relationship between careerism and creativity; and careerism and organizational trust. Since other traits were not tested, it is strongly suggested for future research to study the moderation effects of different personality traits.

Third, only individual variables (openness to experience and agreeableness) were used for investigating the moderating effects on the relationship between careerism and creativity; and careerism and organizational trust. However, and based on Amabile’s (1983) Componential Theory of Creativity, researchers have emphasized the fact that personal and contextual characteristics contribute jointly to creativity (Oldham and Cummings, 1996). Therefore, it is recommended for future research to study the effects of contextual variables such as organizational culture, leadership styles, communication network, and the like as well.

Fourth, as it was mentioned earlier in the limitations section, the participants of this study were from different work sectors (e.g., service, industry, etc.), which seems to be a potential cause for influencing the findings of the study. As domain-general oriented constructs such as creativity may be expressed differently in distinct work areas, it is suggested to explore the relationships of the variables of the current research in specific work domains for the generalizability of the results. Besides, a larger sample size would further increase the generalizability of the study findings.

Lastly, in the discussion section, a note related to Amabile’s (1983) Creativity Theory was emphasized. The Componential Theory of Creativity has been developed in an era which was characterized according to Sullivan and Baruch (2009) as the period of traditional career model. This model, in general, maintains an exchangeable loyalty between the employer and the employee, a type of psychological contract. However, the present study represented an attempt of studying creativity and its relationship with careerism and underemployment, in the novel era of career system which is based on a transactional contract. The new contract is a result of fundamental changes in terms of the work environment and personal career attitudes. These changes prompt us to question the compatibility of the theory with the current situation and to ask if there is a need to re-conceptualize the theory to adapt the present change. Therefore, it is recommended for future research to test Amabile’s (1983) Creativity Theory in this new personal and contextual environment.

8. THEORETICAL AND PRACTICAL CONTRIBUTIONS OF THE STUDY

The current study could be beneficial in several aspects; which will be summarized in the following points:

1. The study offers a comprehensive understanding of the issues of underemployment and careerism from an organizational behavior perspective as distinct from an economic point of view. This approach may help researchers and practitioners to search for different ways to clarify and treat underemployment and careerism.

2. The study highlights that focusing only on the negative sides of underemployment and careerism concepts may be an incomplete approach. The present study revealed that some dimensions of underemployment and careerism contributed positively to creativity. Besides, it was seen that some dimensions of these constructs did not display significant relationships with organizational trust. Thus, the current research presents cues for exploring the beneficial outcomes of underemployment and careerism.

3. The study also contributes theoretically and practically in terms of learning how personality traits affect employee trust. The finding that agreeableness has a moderating role in the relationship between behavioral careerism and trust in supervisors indicates that an agreeable employee displaying careerist orientations may put forward a trusting attitude toward the supervisor. Therefore, in hiring selections agreeable employees may be preferred when careerist behaviors are dominant.
REFERENCES


DOI: 10.17261/Pressacademia.2019.1159
POVERTY ALLEVIATION THROUGH SELF-SUSTAINING NEW ENTREPRENEURS PROGRAM: A CASE STUDY IN BANGLADESH

DOI: 10.17261/Pressacademia.2019.1160
RJBM- V.6-ISS.4-2019(7)-p.306-314

MFMR Amir Khashru1, Chieh-Yu Lin2
1Chang Jung Christians University, PhD program in Business and Operations Management, Tainan, Taiwan
   amirkhashru1@gmail.com , ORCID: 0000-0002-9003-4161
2Chang Jung Christian University, Department of International Business, Tainan, Taiwan.
   jylin@mail.cjcu.edu.tw , ORCID: 0000-0003-3393-9674

Date Received: November 4, 2019 Date Accepted: December 20, 2019

ABSTRACT

Purpose- One of the significant challenges facing many countries in the world is poverty. Mass poverty and unemployment can be eliminated through entrepreneur development. This study focuses on introducing how the new entrepreneurs (NE) program can help poverty alleviation in Bangladesh.

Methodology- The case study was used to capture the NE program process and context. The data collection was done by in-depth interviews with respondents who are business owners of different small business.

Findings- The result of this study showed that the NP program has significant effect on poverty reduction in Bangladesh. The NP program is the process that provides trainees with knowledge, skills, and financial support to create a professional businessman for poverty and unemployment reduction.

Conclusion- Entrepreneurship is central to the economic growth and development of any nation. The NE program is the resourcefulness of traditional entrepreneurship whose mission is to change the society. The NE program is a sustainable solution for reducing poverty. Adequate attention must be given to the growth of new entrepreneurs.

Keywords: Entrepreneur, poverty alleviation, NE program, Bangladesh.

JEL Codes: M13, N35, P31

1. INTRODUCTION

More than billions of people around the world live in the poverty (Singla 2014) and poverty is a major obstacle to the success of social and economic development in many countries (Andrew & Andrew 1994). The social, economic, demographic, cultural and other significant contributing factors for poverty reduction have implications on the economic development and policy interventions (World Bank 2014). The percentage of people living in extreme poverty globally fell to a new low of 10 percent in 2015 — the latest number available — down from 11 percent in 2013, reflecting steady but slowing progress. The number of people living on less than $1.90 a day fell during this period by 68 million to 736 million (World Bank 2018).

There are many countries facing poverty problem. Although the government has taken some policies to alleviate poverty, but until now the problem of poverty has not been fully solved (Singer 2006). Poverty in Bangladesh is becoming widespread and sever. In spite of Bangladesh’s vast human resources, the country is known for its low Gross Domestic Product (GDP), low per capita income, high unemployment rate and low industrial utilization capacity (International Labour Organization (ILO), 2013). The poverty rate in Bangladesh fell from 24.3 percent in 2016 to 21.8 percent in 2018, according to the latest data released by the Bangladesh Bureau of Statistics (BBS, 2019). However, an effective way to boost poverty reduction is through entrepreneurship.
Entrepreneurship is an effective tool for economic development and poverty alleviation in the impoverished and lower-income regions of the world (Mead & Liedholm 2010). (Ludovick 2013) mentioned in his study that entrepreneurship reduce poverty significantly. Entrepreneurship represents an alternative and potentially effective path to poverty reduction and economic development (Anokhin, Grichnik, & Hisrich, 2008; and Oghojafor, Olayemi, Okonji, & Olayiwola, 2011). Entrepreneurship contributes to poverty alleviation when it creates employment through the start-up of new entrepreneurs or the expansion of existing ones. Entrepreneurs can increase social wealth by creating new markets, new industries, new technologies, and new jobs. Entrepreneurs help to increase the living standards for the population (Hoang & Gimeno 2010). Many studies have tried to answer questions about the identification and setting up of business opportunities (Shane & Venkataraman 2000). Entrepreneurship is an effective tool (Yunus 2017) which is a close connection with the alleviation of poverty.

New entrepreneurs program is the potential means to improve unemployed individuals by building an understanding of how they can act as entrepreneurs sustainably. NE program which has conceived by Nobel Peace Winner (2006) Professor Muhammad Yunus. To break the cycle of poverty, Grameen social business fund company (GSBFC) provides all kinds of assistance for building a successful NE program in different parts of Bangladesh. This paper describes the procedures and sustainability indicators tools of the NE program.

Many researchers, practitioners, and business societies want to know about the NE program. Even though NE program still a relatively new concept in Bangladesh, but each year many unemployed peoples who join the NE program for creating employment through the business. The primary objective of this study is to explore the poverty alleviation through self-sustaining new entrepreneurs program in Bangladesh.

This paper is structured as follows. In the second section, we discuss the development of the NE program and the reasons why GSBFC engages in NE program. The third section introduces the operation of the NE program and how does it work through the GSBFC in Bangladesh. The fourth section introduces some cases of the NE program, and the fifth section proposes the key success factors of the NE program. Finally, we conclude with some recommendations for the business societies.

2. THE DEVELOPMENT OF THE NE PROGRAM

Entrepreneurship can be seen as a pathway to reducing poverty and conflicts in developing countries (Bruton, Ketchen & Ireland 2013). Reducing unemployment is the most important priority of developed and developing country economies. Entrepreneurs create jobs and increasing the supply of consumables products reducing the unemployment rate (Azhar, Javaid, Rehman & Hyder 2010). NE program, which is known to create many businesses in the local community in Bangladesh recently. Grameen Social business fund company (GSBFC) is responsible for conducting the NE program to address the unemployment problem in Bangladesh.

The long-term purpose of the NE program is to create positive social and economic impacts and unemployed people are supposed to become entrepreneurs, which in turn creates employment opportunities for themselves as well as for others. Fundamentally, the NE program is a network of unemployed people who contribute their time, expertise, and money to create employment. This support includes providing new entrepreneurs (NE) accesses to advanced financial tools and business networks. This network includes incubation, acceleration, business strategy, financial services, and market.

The new entrepreneurs and the GSBFC both are the business partners. GSBFC invests their investment money into the new entrepreneurs' business and become a managing partner or the manager until back the full investment money to the GSBFC. During this time, new entrepreneurs would take a consolidated monthly salary from his/her business. GSBFC, monitors its investment money only. The objectives of GSBFC are not only to create a job for new entrepreneurs but also to transform a job seeker into a giver and thus create an entrepreneur.

The selling of the shares to the new entrepreneurs, the rule is that the GSBFC will take the original investment money with an additional fixed sum of 20% on the original investment money. After paying back the original investment money with a 20% share transfer fee then, GSBFC hand over the full shares/ownership to the new entrepreneurs. This additional amount is called the "share transfer fee". The investment money remains very active during the entire process, making sure that the new entrepreneurs are well prepared for running his business and GSBFC provides all the connections and advice to succeed in new entrepreneurs' businesses. GSBFC is doing a social business and new entrepreneurs business is a profit-making business. Because the GSBFC employed his/her unemployment for creating a small business.
One revolutionary initiative of Professor Yunus was to establish Grameen Bank (GB) to rescue the poor people from the lenders in Bangladesh. Grameen Bank has since grown into a worldwide movement that has helped over 300 million poor families improve their lives through entrepreneurship. The entrepreneurship model of GB provides an alternative way for reducing poverty (Yunus, Moingeon & Lehmann 2010) and such a directive is helping the future generations to get rid of their unemployment problems. NE programs as a support system, a safety net for the new entrepreneurs.

The children of the borrowers got support from Grameen bank in the form of education loans to continue their studies and pursue their goals. To ensure their livelihood Professor Yunus came up with the NE program. He tried to deviate their minds from the traditional path of hunting for jobs and tried to make them self-sufficient by making them entrepreneurs. By motivating their entrepreneurial spirit, he tried to make them believe that they are not job seekers but job givers (Khashru 2016) and he came up with a revolutionary idea to solve the unemployment problem. In 2001, Grameen Bank launched the 'Nobin program' and calling the young people who choose that path 'entrepreneurs'. He introduced the social business concept, which emphasizes a combined and organized effort of poverty alleviation through a self-sustaining NE program. It encourages new entrepreneurs to develop, organize and manage a business venture with making a profit.

To help remedy the unemployment and other social problems, Professor Muhammad Yunus created Grameen Social business fund companies (GSBFC). Those are Grameen Telecom Trust (GTT), Grameen Kalyan (GK), Grameen Shakti Shamajik Byabosha (GSSB) and Grameen Trust (GT) for running the NE Program in Bangladesh. In 2013, Yunus Centre, Dhaka, Bangladesh launched the NE Program through the social business design lab which is playing an important role in solving the unemployment problem both locally and globally.

GSBFC focuses on the unemployment children of the Grameen Bank borrower. However, it is a universal application for all young unemployed or underemployed people including the aged or retired people in both developed and developing countries. It can be applied wherever unemployment appears; for example, in crowded cities or thinly populated village, in refugee camps or immigrant communities, and low-income countries or very rich countries (Yunus, 2017).

3. OPERATION OF THE NE PROGRAM

Entrepreneurship training are very significant for starting a small business (Elert, Andersson & Wennberg 2015; Souitaris, Zerbinati & Al-Laham 2007), training leads to a more realistic view of what it takes to be an entrepreneur (Oosterbeek, Van & Ijsselstein 2010). The NE program maintains selection criteria, training, financial operation, logistics support, monitoring, evaluation, and business sustainability. For the operations of the NE program, the selection criteria and training process is essential, as unemployed people tend to be unaware of their capabilities. As a part of those processes, the field staff of GSBFC organizes an orientation camp in the village. Each of those camps can accommodate 15 to 30 candidates. The candidates can be both boys and girls. Afterward, an experienced camp leader carries out the identification and confidence-building process. During this camp, participants will gain a deeper understanding of the rules and procedures of the NE program and will have the opportunity to ask questions to get a clearer picture of what the program entails. At the camp, selected projects of new entrepreneurs are discussed some questionnaires. These camps usually end with a shortlist of ‘potential’ entrepreneurs. The following illustrations figure: 1 shows the operation of the NE program.
The selected candidate invite to Dhaka to pitch their business plans and ideas at the Business design labs. Each candidate makes a five-minute presentation with financial details in the presence of high-level officials of the GSBFC and ask lots of comments and questions after their pitch. If the board is satisfied, then the business plan gets the approval for investment from GSBFC.

After the approval for equity money, an agreement will be signed between the GSBFC and the new entrepreneurs. There are few clauses included in the agreement to ensure that the new entrepreneurs gradually become a professional and independent businessperson, as follows:

1. I will not look for a job, I will rather give jobs,
2. I will become financially independent through entrepreneurship,
3. I will not commit dishonesty,
4. I will work hard with commitment to expand my business,
5. I will send my children to school,
6. I will become health conscious and will educate my family members about hygiene issues,
7. I will work to minimize unemployment in the area,
8. I will not commit fraud to anyone and will pay a proper salary to my employees,
9. I will not do anything that harms the environment,
10. I will keep a proper record of all financial transactions,
11. I will pay back the investment and make the business mine as soon as possible,
12. I will help others to become an entrepreneur by sharing my experiences and helping them as much as my capabilities,
13. I will contribute to the socio-economic development of my community,

The next step, GSBFC collecting the financial information daily through the mobile phone via SMS. All the information is accumulated at the central server, which are auto-generates reports for daily, monthly or as desired to GSBFC. The new entrepreneur can also view his business performance information by logging on to the system. If there is a notable difference in the financial and sales figures, the representative of GSBFC to meet the entrepreneur immediately to discuss the issues and creates a solution.
Finally, GSBFC supports the new entrepreneurs for sustaining the business which is related to the help in professionalism, payback the equity money, business extension, product stock level, new adventures for marketing, quality products, employment opportunity, and social initiators.

4. SOME CASES OF THE NE PROGRAM

This research was a focus on NE program innovation, particularly in the established small business of new entrepreneurs, which led to an in-depth study of many cases. According to Patton (1990) & Yin (2009), a case study is an in-depth investigation of individual groups, institution or phenomena. The researcher uses it because it provided a detailed examination of his study and it was the most appropriate method of collecting data concerning fostering entrepreneurship as a solution to poverty reduction in developing the economy. (Mattar 1994) mentioned that structured interviews set out from standardized questions, whereas in semi-structured interviews, despite the existence of a script with the main topics to be addressed, other questions not contained in the script but deemed pertinent can be asked. Our interviews with the new entrepreneurs are involved in their professional attitude.

In particular, we describe the NE program approach to cultural learning and building sustainable business communities. First, we describe the research setting and method, as our case study uses the qualitative research method that captures the new entrepreneurs’ activities of importance to the acculturation process and context. Second, we provide some background information about new entrepreneurs. In conclusion, we outline specific implications and future research directions. This research was to confront conventional literature on NE program innovation with the Grameen Bank experiences implemented by the GSBFC. To test whether the NE program is innovation and to find out if the NE program resembled conventional business model innovation.

This study was carried out in Tangail and Dhaka districts. Tangail is located 100 Kilometer north of Dhaka, the capital city of Bangladesh. There are two case study design was adopted in this study. The study targeted the new entrepreneurs business who are actively involved in the NE program. The field survey was conducted at two branches of the GSBFC, named Sheldon (Tangail) and Jannatul (Dhaka). The following two cases provide the business professional success perspective to the NE program. We focused on the case of Sheldon and Jannatul, a new entrepreneur who has been leading an initiative aimed at increasing the standard of their life through the NE program.

4.1. Case One

Sheldon was 19 years old. He was able to study till class eight. He could not continue his studies due to financial problems. His father died when he was ten years old. His mother was a member of Grameen Bank. He has four brothers and sisters with lives his mother. His mother encourages him to contact with the GSBFC for his business investment money. His mother makes the bamboo handicraft item. One day he contacts the GSBF and submits his business proposal for equity money. He takes the training from the field station of GSBF. His business plan was selected for presenting on the design lab in Dhaka. He got USD 625 for the investment money of his business, and he invested more USD 375 from his mother. Sheldon started his business with a total of USD 1000. Now his business capital has increased USD 2000. He makes various bamboo baskets, fruit and flower baskets, hand fan. He is now a professional and successful businessperson. Many traders buy his product directly. The demand for his products has increased accordingly.

In the meantime, he has given back his business equity money to the investor. He created two jobs in his business. After meeting all costs including employees and other expenses, earns the profit USD 100 per month. He provided financial information to the funding company daily through mobile SMS. Sheldon has been a pioneer in this area. He can prepare the financial plan, calculate the daily income expenditure, determine the price of the product, and sell products to the customers by himself. He can write his daily expenditure in the accounts book. He understood how poverty could be overcome by doing the business.

4.2. Case Two

Jannatul who is an inspirational entrepreneur. Her mother was a respected borrower member of Grameen Bank. After finished the education, she tried to find a job. She took the tailor training and bought an old machine for cloth sewing. After a long struggle, she is a motivational entrepreneur in her society today.

One day her mother suggested to her for submitting a business plan to the GSBFC. Jannatul contacts with the field office of GSBFC and submitted her business plan. She joined the training camp of GSBFC and selected her business plan for the design lab. Her
business name was "Irina Fashion Tailors and Boutique House". The proposed business capital was USD 3600 which she invested USD 1800 from herself and USD 1800 from the GSBFC. After getting the capital money, she starts her business.

After getting the investment money, Jannatul starts her business and receives many orders for making the clothes from the customer. She prepares the daily accounts of her business and provides the financial information to the GSBFC through mobile SMS at the end of the day. Within a few days, her business grows up, and she returned her investment money with share transfer fees to the GSBF within three years. Now Janatul improved her economic condition. Janatul employed two unemployment peoples in her business.

Based on two cases study, we identified many success factors of new entrepreneurs have a significant relationship with the NE program success factors in Bangladesh.

5. KEY SUCCESS FACTORS OF THE NE PROGRAM

The NE program has been making vital contributions to economic development by providing investment money to new entrepreneurs business. We observed there are some barriers to the NE program in Bangladesh such as lack of access to non-Grameen Bank unemployed peoples, payback the investment money, lack of social environment are also seen. These adversely can affect their contribution to more employment creation and poverty reduction. GSBFC, created much employment through the NE program in Bangladesh, shows the statistics:

<table>
<thead>
<tr>
<th>Table: 1, Statistics of NE Program from 2013 and up to 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total number of NE projects Presented: 38,588</td>
</tr>
<tr>
<td>2. Total number of NE projects approved: 38,253</td>
</tr>
<tr>
<td>3. Total number of new entrepreneurs funded: 35,047</td>
</tr>
<tr>
<td>4. New entrepreneurs employed of their business: 15,270</td>
</tr>
<tr>
<td>5. Total employment generation (4+5): 50,317</td>
</tr>
</tbody>
</table>

This data shows the total number of employment created through the NE program. At the same time, new entrepreneurs created many jobs for unemployment people in their business. In Bangladesh, the impact of small enterprises on specific socio-economic variables such as children's schooling, household nutrition, health, education is traceable (Chowdhury 2007). However, the new entrepreneurs play an important role in the improvement in education, nutrition, and the health condition of their family members. GSBFC properly addressed these aspects, where poor people become entrepreneurs for reducing poverty through the NE program. As a result, unemployment people will be able to stand on their own feet and the NE program will be developed around the world.

Entrepreneurs’ business contributes significantly to unemployment and poverty reduction by providing much employment (Dhaliwal, 2016). They make employment growth of the nation by creating new jobs in the short and long-term (Kritikos 2014). It is our understanding that the primary measures of the success of the NE program are the sustainable impact that new entrepreneurs created their employment through the business and created many jobs for others. New entrepreneurs pay back their investment money to the GSBFC properly. However, our observation indicated that the NE program also benefits entrepreneurs in numerous ways.

Moreover, based on our study, certain success factors of the NE program have been identified which come through the NE program daily operations have been discussed below:

Family Background - (Hisrich & Brush 1987) argued that family background is important to entrepreneurs. In this case, most of the members of Grameen Bank stated the reason for joining the Grameen Bank’s micro-credit program to be to improve their life through poverty alleviation and increase their income for a better life through income-generating activities. For running their small business, they take the loan from GB. The children of Grameen Bank borrowers take the business consultancy from their parents for their own business. Sheldon and Jannatul take the business consultancy from their mother accordingly.
Business strategy - A business strategy is a set of competitive moves and actions that a business uses to attract customers, compete successfully, strengthening performance, achieve organizational and goals outlines how business should be carried out to reach the desired ends (Neuman 2003). According to Namiki (1988) it is very difficult for small businesses to lead in the market where numbers of suppliers already exist. The focus should be on its existence in every way it should remain in the market. According to Joynt & Welch (1985), it is very hard to manage a growing business because whenever new small business grows it requires more investment and more professional. The expenses of business ultimately increase and it possible that the short-run profit of an organization decreases. Most organizations do not understand the phenomena this circle and go to a low level or stay at a small level. According to Hallberg (2000) in small businesses, the management team is the main factor. According to him, the entrepreneur's trust in the market also plays a vital role in small level business. NE program trains to new entrepreneurs' business strategies. They collect the sales order from their buyers and supply them as per their requirements. Also, if they face any problem with an excess stock of goods, then GSBFC provides them business advice. In our case study, we found, Sheldon and Jannatul followed the business strategy for increasing their sales.

Financial support - (Naudé 2011) had argued that the inability of entrepreneurs to access external and internal financing from banks and other financial institutions contribute to the high failure rates of business start-ups. Most unemployed poor peoples in Bangladesh do not own land, which is another factor of production and cannot access collateral against the loans. Most banks and financial institutions consider youth business start-ups as high-risk ventures, and therefore, decline to invest that venture. Being a developing country and having poor infrastructure, Bangladesh’s economy has been operating through an inefficient financial market through which it is almost impossible for the poor to get loans from financial institutions, which require sufficient collateral.

The NE program has innovated a mechanism under which business equity money is providing to the second generation of Grameen Bank borrowers without any collateral. Sheldon and Jannatul presented their business plan on the design lab, which has organized by the funding company. GSBFC provides the business investment money of their business without any collateral. The findings on access to finance influence on the success of NE program start-ups revealed the existence of a positive relationship between GSBFC and the success of them.

Sales and Marketing - A surveillance is conducted by GSBF to verify whether the business is running smoothly of Sheldon and Jannatul. If the customers know that this business is operating by the new entrepreneurs then the customers try to buy the product from the new entrepreneurs business. Some indications of new entrepreneurs’ good relationship are:

- Loyal customers buy the product or goods in credit from new entrepreneurs.
- New entrepreneurs’ behaviour and honesty are very satisfactory. They can attract new customers.
- Old customers are willing to come to buy more products or services because of trust.

Sheldon and Jannatul used the GSBFC logo to promote their services to customers, and they got many customers. They always improve their service by taking into consideration all the feedback from customers. People come to them because of the uniqueness of their products. They are very creative in giving their services to the customers. All new entrepreneurs have learned from the GSBFC that the most important aspect of a business is not to generate profit but to attract and retain customers.

Budgeting and Daily Cash Statements - Financial literacy topics such as record keeping, budgeting, personal finance, and savings were viewed to be more important to lower-income individuals. Record keeping is a fundamental skill a businessperson must possess (Gray, Sebstad, Cohen & Stack 2009). Budgeting, on the other hand, refers to the expenditure planning and cash flow analysis (Uddin, Chowdhury & Zakir 2009) which is very important to the success of the business operation and processes (Bragg & Burton 2006). However, (Torres & Nichole 2008) found that small business owners are not concerned about budgeting; their concern is more of the cash flow. Sheldon and Jannatul maintain the budget and daily cash statement. They take the training from the NE program on how to prepare the daily cash budget and how to minimize the daily personal expenditures. After accounting for the daily cash budget, they understand about the profit. Sheldon and Jannatul believe that the experience acquired through the NE program has given him the necessary ability and knowledge to maintain financial training.

Legal Compliance - Potential entrepreneurs with weak legal knowledge are usually unable to run their business properly and should need legal assistance to avoid penalties (Levie & Autio 2011). GSBFC provides the training for Sheldon and Jannatul about the legal transparency of their business.

Good Relations with Suppliers - The relationship between buyer and seller should not be a discrete event and need to see this relationship as an ongoing process (Cannon & Perreault, 1999; Dwyer, Schurr & Oh, 1987). Sheldon and Jannatul creates a good
relationship with suppliers. They maintain the business deal with the suppliers. Suppliers guarantee the best price and quality to retailers to maintain trust among them.

The NE program's success story in the alleviation of poverty in Bangladesh has resulted in widespread attempts of its replication in many other countries.

6. CONCLUSIONS

The study concludes that the NE program can contribute to the important role in poverty reduction and social-economic development in Bangladesh. We identified new entrepreneurs' business-related seven success factors, which are related to the NE program in Bangladesh. The most important finding of this case study is that the business skills of NE have a direct relationship with the development of the NE program in Bangladesh. New entrepreneurs become more enthusiastic to initiate their business after taking the training from the NE program. These significant relationships indicate that if the GSBFC can enhance this skill among the more unemployed peoples, it would lead towards the development of the NE program around the world. As a result, unemployed peoples will be able to stand on their own feet and reducing poverty.

This study considered poverty alleviation through the self-sustaining of the NE program. We believe strongly there will be a growing interest in the NE program for two main reasons. First, the corporate business peoples, NGOs or non-profit organizations can sustainably practice the NE program. This practice will be leading many unemployed peoples to create entrepreneurs for reducing their poverty. Secondly, in our conventional practice, NE programs are not engaged in a contest. The objective of GSBFC to reduce poverty through the NE program. The findings in this article have emerged from the field and the specific context for shaping current practice in GSBFC.

REFERENCES


World Bank (2014). Preventing diarrhea through better water, sanitation and hygiene: exposures and impacts in low- and middle-income countries.

World Bank (2018). Decline of global extreme poverty continues but has slowed.


ABSTRACT

Purpose - The major reason of performing this study is to examine volatility of the Bitcoin prices. As known, Bitcoin became more popular when its price movements changed radically. It has been increasing for years since the date of first issuance in 2010 and reached highest level in its history by testing 19,345 USD. Based on this price movement, risk and returns are taken together for making investment in Bitcoin since huge decreasing observed in respond to the these increases.

Methodology - In this study, Bitcoin prices are analyzed monthly basis through the time series analysis. Data related to closing prices of Bitcoin are obtained from investing.com web site. We established analysis based on sample consist of Bitcoin prices for the period between 2016 and 2019. Augmented Dickey Fuller (ADF) and Phillips Perron (PP) unit root test is applied to find out whether series are stationary or not.

Findings- According to test results, the series of Bitcoin prices are not stationary yet. Although different fluctuating degree can be seen by years, generally it can be stated that Bitcoin prices are still volatile.

Conclusion - Based on findings, Bitcoin prices may still be considered as volatile instrument. Therefore, investors should be careful when they want to include this investment tool to the portfolio since it represents risky instrument properties.

Keywords: Cryptocurrencies, Bitcoin, unit root test, time series.
JEL Codes: C00, C32

1. INTRODUCTION

Cryptocurrency may be considered one of the greatest inventions of the last century. It is also possible to define the cryptocurrency as a financial revolution, which has many advantages over the classical money concept issued by the governments. Cryptocurrencies are online digital payment tools that replace traditional paper money that is subject to physical circulation. The first example of cryptocurrencies is Bitcoin, which was introduced in 2008 by Satashi Nakamoto. Nakamoto described cryptocurrencies as peer to peer version electronic cash (Nakamoto, 2008: 2).

The origin of the cryptocurrency concept online digital records and these records can be duplicated easily and don't bring costs and therefore it can be used many times in financial transactions (Chiu and Koeppi, 2019: 1). Compared to credit cards with a cash payment system, it will be seen that the cash payment system provides more anonymity (Narayanan et.al, 2016:14). Because once the credit card is issued, the bank will be able to follow the personal expenditures more easily. However, this is not possible with cash payments. Basic characteristics of the Bitcoin can be stated as follows (Lee, 2015:37):

- It is based on system that works on decentralized peer-to-peer network. It means this system cannot be controlled by a single person, group or even government.
- It is also completely distributed that ensures every computer can connect to each other.
- The system is global and very fast. Thanks to this feature, it allows financial integration and the speed of the financial transactions are higher.
- It has reliability and secure system features. In this system there is no settlement risk. It is suitable for cost savings.
In the second part of the study, the previous studies included in the literature about Bitcoin are provided. In part 3, the application of the study is performed and in this section, whether the Bitcoin price series is stationary is measured by unit root tests. In the last part of the study, findings related to test results are analyzed and interpreted.

2. LITERATURE REVIEW

Adrian et al. (2015), they carried out an econometric analysis of the presence of bubbles claimed to exist in the Bitcoin market. They examined the short-term bubbles seen during the 2010-2014 period. In the second part of the 2011 - 2013 period, 3 large bubbles lasting between 66 and 106 are identified. They reported that the last bubble is the largest and resulted in the collapse of the Mt Gox Index.

Katsiampa (2017), investigated the optimal conditional heteroskedasticity model which is best suited to Bitcoin price data. The best model was found to be the AR-CGARCH model emphasizing the importance of including both a short- and long-term component of conditional variance.

Corbet et al. (2018), investigated the price bubbles seen in the cryptocurrencies of Bitcoin and Ethereum by using an econometric method. Unlike the previous studies in the literature, the main drivers of price in both currencies have been examined. They produced significant rates in terms of economically and computationally and tried to determine the date of bubbles through these rates. According to the results of the analysis, it was observed that a standard deviation of one unit in the transactions caused a 30% increase in returns on the third day following the shock. On the sixth day, however, he found that there was a price movement in the opposite direction and that all earnings were therefore lost. As a result of the bi-directional relationship between return and transaction activities, it was found that the deviation in returns had more effect on transaction activity.

Ozyesil (2019), examined the interactions between Bitcoin and Exchange Rates. He conducted VAR model to find out Bitcoin is becoming an alternative investment tool for the exchange rates. According to the results of analysis, there is no significant relationship between Bitcoin and USD and therefore it is concluded that Bitcoin and Foreign Exchange Rates have not become substitution for each other yet.

Mensi et al. (2019), investigated the effects of structural breaks on Bitcoin and Ethereum price returns. In their studies, they have determined the structural changes and their long-term effects by using generalized autoregressive conditional heteroskedasticity models such as GARCH, FIGARCH HYGARCH. They also found out that, by considering long memory and switching states the persistence level of both returns and volatility decreases.

Katsiampa et al. (2019), by using BEKK model with three pairs of variables, they examined conditional volatility dynamics and conditional correlation relationships between Bitcoin-Ether, Bitcoin-Litecoin and Ether-Litecoin pairs of criterion currencies. Although the price volatility of the cryptocurrency is determined to be based on their own past shocks, they also observed bidirectional shock effects between Bitcoin and both Ether and Litecoin and the unidirectional spillovers effect from Ether to Litecoin. In addition, the unidirectional volatility spillover effect is observed between all three cryptocurrencies.

Geuder et al. (2019), analyzed the bubble behaviors in Bitcoin prices during the period 2016 – 2018 by using The Phillips et al. (2015) PSY methodology. According to the results of the analysis, they found that the price bubble behavior was a common and repeated result of Bitcoin prices. In addition to this, they found that after 6 December 2017, the effect of bubble behavior on Bitcoin prices decreased.

3. DATA AND METHODOLOGY

With this study, volatility degree of the Bitcoin prices are calculated. Analysis is based on a sample includes Bitcoin prices monthly basis that covers the 10.03.2016 – 13.12.2019 period.

The data are obtained from the investing.com. In the selection of the analysis period, we tried to determine the broadest time range that fluctuating is beginning. Therefore, period that covers from 10.03.2016 to 13.12.2019 is chosen. In the final version of the sample, there are 1374 daily data. The data used in the analysis is shown in Graph 1 as follow:
Stationarity of the series are examined by the Augmented Dickey Fuller (ADF) and Phillips Perron (PP) tests. ADF is selected because of being most widely preferred approach for unit root test. In addition, PP is chosen because it considers that series may include trend and therefore it provides more stable results than ADF.

Descriptive Statistics of the Sample are provided in Table 1 as follows:

<table>
<thead>
<tr>
<th></th>
<th>BITCOIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>5.056,77</td>
</tr>
<tr>
<td>Median</td>
<td>4.335,10</td>
</tr>
<tr>
<td>Maximum</td>
<td>19.345,50</td>
</tr>
<tr>
<td>Minimum</td>
<td>408,20</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>3.905,47</td>
</tr>
<tr>
<td>Skewness</td>
<td>0,606</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>- 0,183</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>86,07</td>
</tr>
<tr>
<td>Probability</td>
<td>-</td>
</tr>
<tr>
<td>Sum</td>
<td>6.942,946,40</td>
</tr>
<tr>
<td>Observations</td>
<td>1373</td>
</tr>
</tbody>
</table>

**4. TEST RESULTS AND DISCUSSIONS**

In order to get robust results, stationary degree of the series should be examined. Stationary level of the series are determined by unit root tests. If the series are stationary, the regression model that will be established on this series will not cause spurious regression problem. Because when a series become stationary, it will move around it average so that outlier numbers (observations) can be eliminated. In this study, unit root test is conducted via the ADF and Phillips (PP) approaches.

Established hypotheses of these tests are shown as follow:

- $H_0$: Series are not stationary.
- $H_1$: Series are stationary.
To find out whether the series are stationary or not, probability value of the ADF and PP tests should be taken into consideration. If the probability value is lower than %5 than it is accepted the series are stationary. If the series are not stationary and becomes stationary after calculating their first differences they are called as I(1).

We performed ADF and PP unit root tests and results are shown as follow:

### Table 2. Unit Root Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Origin Level</th>
<th>First Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Probability Value of the ADF Test</td>
<td>Probability Value of the PP Test</td>
</tr>
<tr>
<td>LnBIT</td>
<td>0.65</td>
<td>0.57</td>
</tr>
</tbody>
</table>

Note: The optimum lag length is determined according to Akaike Criterion. Optimum bandwidth in the PP test is determined based on Newey-West Method. * refers to stationarity at %10 significance level.

According to test results, it can be inferred that Bitcoin prices for the 10.03.2016 – 12.12.2019 are not stationary based on probability values. They become stationary once their 1st difference are taken. Therefore, it suitable to define Bitcoin price series as I(1). Following illustration indicated remarkable differences between original level values and first differences.

#### Figure 1: Histogram Charts of Original level Values and 1st Differences Values

As Figure 1 shows, based on the original level values, Bitcoin does not tend to indicate normal distribution properties while after calculating first differences, it became to represent normal distribution properties.

### 5. CONCLUSIONS AND RECOMMENDATIONS

The concept of cryptocurrency is one of the most popular topics in the financial universe thanks to its radical difference from the traditional money concept and its revolutionary innovations. Especially Bitcoin hat is emerged in 2008, has attracted the attention of many investors due to its price performance. Bitcoin prices have seen historical record levels in the last 10 years and reached an all-time high of $ 19,345 on 16.12.2017. Later on, many cryptocurrencies were issued thanks to the advantages of the cryptocurrency concept and the price performance of Bitcoin. Many countries even went on to issue their own cryptocurrency.

In this study, we discussed whether Bitcoin can still be considered risky as an investment tool. We analyzed whether a time series of Bitcoin prices is stationary. For this purpose, we used ADF and PP unit root tests and interpreted the results. For analysis, we used Excel 2016 and Eviews 9 program.

According to the analysis results, we found that Bitcoin prices are not stable in both unit root tests. We observed that bitcoin prices became stationary only after the first differences are calculated. Based on this finding, it is possible to interpret that Bitcoin, as an investment instrument, still follows a volatile course. It will be more beneficial for investors to evaluate Bitcoin with its risk and its returns together to generate higher capital gains. Since it is possible to get stationarity in Bitcoin prices after calculating 1st differences, investors certainly should pay attention volatility of Bitcoin prices in order not to face with spurious regression problem. Because series are based on first differences do not represent original values that’s why it may
provide misleading information for the investors. Particularly, when needed to establish regression analysis, cointegration analysis should be performed to find out relationship of Bitcoin prices with another variable.

REFERENCES
ABSTRACT
Purpose - Georgian drug policy in last decades can be characterized as a strong prohibitive policy. Application of restrictive sanctions are accompanied by imprisonment or monetary fines. Punishment policy is an economic incentive which aims to reduce the level of drug use and the harm caused by it.
In this paper, we examine how the drug market responds to restrictive policies. We analyze government supported incentives for 20 years and their impact on drug distribution. Our analysis shows that such a policy does not lead to the reduction in consumption. Banning certain types of drugs causes the demand to respond by switching to alternative substances. Thus in this article, we examine how the drug market responds to prohibitive policies and explain why there is no effect on the level of drug demand during observed period.
Methodology - The article reviews the current situation on the Georgian drug market in light of the economic forces operating there. The work mainly uses review approach. It combines various research findings that have been done over the last 20 years. Changes in drug demand and supply are presented as economic models.
Findings- Research findings show that drug circulation, like any other goods and services, is managed by the principles of economics and the market. In addition to the usual supply and demand that determines the price and quantity of drugs on the black market, it also responds instantly to incentives, including prohibitions and sanctions. Comparative analyses of the secondary data show decreased effectiveness of the Ministry of Internal Affairs while the incidence and prevalence of intravenous users are increasing. The decreased pressure from the law enforcements may explain the increased demand on heroin and suboxin, as well as on hallucinogens and new psychoactive substances in contemporary days.
Conclusion- Drug policy in Georgia, which is based on prohibitive approach is ineffective. The volume of drugs available on the market is determined by the increasing demand in recent years. Steps to reduce supply are forcing suppliers and consumers to look for efficient and safe ways to meet their needs.
Keywords: Illicit drugs, prohibition, drug policy, decriminalization, substances
JEL Codes: J16, M50, M54

1. INTRODUCTION
Government drug policy in general can be described in two ways - the application of prohibitive sanctions against drug market implying imprisonment and monetary fines to drug users and suppliers and so-called humane approach that includes prevention, treatment and other methods, including decriminalization and liberalization policies. Regardless of the fundamental difference, both drug policies have one common goal - to reduce the harm caused by drug use. Accordingly, any decision to pursue a particular policy should be based on a comparison of the estimated costs and benefits (damage) that may arise as a result of the implementation of these policies. In this article we discuss the impact of prohibitive policies on changes in drug use.
Circulation of illicit drugs as well as any goods are managed by the principles of economics and the market. Besides of usual demand and supply forces, which define the price and amount of distributed drugs on the black market, market immediately reacts upon stimulus, including prohibitions and sanctions.

If we take a look at the trends of drug use in Georgia, the following dynamics can be observed: from the beginning of 90th opium, so called “black”, was predominated on black market. The “black” was widely widespread in the countries of former Soviet Union, especially in those regions, where the wild poppy grew. From the end of 90th to 2003-2004 years the portion of heroine was gradually increasing. These were the years of prosperity for the drugs market, because the handmade drugs were substituted by heroine manufactured with more sophisticated technology and distributed under the unofficial support by the law enforcement representatives.

In 2003, when the authority of rose revolution reformed law enforcement system and the ways through which Georgian drug users got heroine were locked. Considering that demand for drugs is sufficiently inelastic with respect to outward factors changing, which means that demand on drugs insignificantly changes in the conditions of price increasing or/and restriction of police pursuing, drug users started consuming homemade opioids got from confectionery poppy seeds.

Shortly after, the authority prohibited this product, it was totally removed from trading chain and during 2004-2008 demand on drugs was changed again - homemade drugs were substituted by injection drugs made from subutex pills (Report 2012) containing buprenorphine illegally imported from different countries of Europe (Burchuladze, 2011). These years are characterized by anti-drug campaign. In 2006 zero tolerance was declared towards drug users and massive inspections were begun in the streets on the bases of reasonable doubt (Vardishvili 2013). According to another research, in 2008, 45000 people were detained as a result of this campaign, the proceeding was started over 30000 people concerning to drug usage (Otiashvili at all 2011).

2. DEMAND SHIFTING AND SUBSTITUTES

Such drastic deterioration of situation on the Georgian drug market put forward the significance of substitutes. The users started consuming homemade injecting drugs. In 2008-2009 handmade stimulators were used, which were made from cough medicines containing ephedrine, which could be bought in the country pharmacies without a prescription. (Otiashvili, 2008). Slangy name of such drug was “Vint” in Georgia, which is characterized by long-lasting effect. In this period, also well forgotten old handmade drug “Jeff” was spread out, which also used ephedrine and the drug was made by the way of chemical reaction with potassium permanganate. Unlike Whitt, Jeff is a short-acting stimulant. Medicines containing Ephedrine have been banned since 2011 (Alavidze et al., 2015), potassium permanganate was removed from the trading chains (Parliament of Georgia, 22/05/2012). However, during the same period, the codeine-containing drug called “crocodile” was added to the range of easily accessible handmade injection spectrum (Sikharulidze, 2012).

In 2014 pharmacy drug addiction was significantly restricted as a result of tightening of prescription procedures. As a result supply of drugs on Georgian black market was extremely reduced, though drugs were still on demand. The demand on drugs could only be satisfied by “crocodile” (Alavidze et al., 2016), which was a very devastating drug for human body, besides that, consuming “crocodile” was related to the serious neurological disorders and atrophy of human organs (that’s where the name “crocodile” comes from) the overdosing risk caused by it was very high (Sikk, 2007).

Figure #1 reflects the results of various studies conducted in 2009-2017. This figure clearly shows the changes that the subutex black market has undergone. The increased activity of the law enforcement system initially led to a decrease in the availability of this illegal substance on the market. In economic terms, these steps were directed to restrict supply of drugs on the market. Although, market demand remained unchanged and “Vint” and “Jeff” replaced Subutex. In 2012, some chemicals and medicines containing ephedrine were banned - these steps were still directed to reduce supply. But again, the demand for medicines has not decreased, and since 2012 even more dangerous drug – “crocodile” has come into circulation. The only drug substance that remained unchanged for many years was heroin with its high consumption rate, a large share of which was in western Georgia, including Batumi in which neighbourhood of Turkey probably has been playing an important role. (Curatio, International Foundation; Bemoni, Public Union, 2013).
In a study published in 2015, we pointed out and predicted that drug restriction policies in the market would not affect drug demand reduction and that drug users could adapt to new conditions by finding new drugs based on market restrictions. We noted that the tightening of the pharmacy prescription after 2014 will create new stimulus for the illegal drug market. A gradual decrease in pharmacy drug addiction and the reduction of crocodile consumption would begin, the cause of latter would be premature death of consumers and, probably, the use of heroin would remain unaffected. (Khurtsia & Tsertsvadze, 2015)

Subsequent years have shown that the market has been completely reacted according to the laws of economics, and as seen in Figure # 1 by 2017, heroin still holds the leading position among the most commonly used intravenous drugs, although the most commonly used drug is buprenorphine. In contrast, the use of ephedrine ("Jeff", "Whitt") and dezomorphine ("Crocodile") containing drugs were decreased due to increased availability of heroin and subutex.

The same trend, in particular the policy of supply reduction, is also observed in the market of non-injection drugs. The following figure # 2 shows how the demand for pharmacy drug addicts (depressants) changed in 2009-2012, when supply of narcotic analgesics and hallucinogens was restricted. Since 2012, depressants have been on the leading positions in non-injection drug use, though tightening pharmacy prescription rules have led to declining consumption trend (from 74.8% in 2012 to 69% in 2015). However, since 2015, we have witnessed the emergence of new psychoactive substances. It is noteworthy that if the share of injecting drug users had previously been low in non-injecting drug use, by 2015 a large proportion of injecting drug users have used non-injectable drugs (82.2%). At the same time, the share of new psychoactive drugs, which are consumed through smoking (synthetic marijuana, bio, spas), has doubled.

It is critical to note that the spread of new psychoactive substances was facilitated by the Internet and online payment systems. The use of new technologies in the drug market reaches a large scale. According to articles published in local media, the supplier and the consumer are connected to each other using information technologies and agree on price and place of purchase of drugs. Payments are usually made through international remittances. Such a scheme ensures the security and inaccessibility of the supplier from the law enforcement structures.
Figure 2: Non-injectable Drug Use

Source: (Curatio, International Foundation; Bemoni, Public Union, 2009); (Curatio, International Foundation; Bemoni, Public Union, 2013); (Curatio, International Foundation; Bemoni, Public Union, 2015); (Curatio, International Foundation; Bemoni, Public Union, 2017)

3. SECONDARY DATA ANALYSES

Despite government restrictions on the drug market, the number of drug users in Georgia is gradually increasing. Studies conducted to evaluate the pool of problem injecting drug users in 2009-2017 revealed a significant increase. In 2009, using the multiplier method and consensus with field experts, the number of problematic injecting drug users in Georgia was estimated at 40,000, with a prevalence of 1.5% (Sirbiladze, 2010). In 2012, different method was used for the assessment, and the number of users increased to 45,000 (prevalence 1.65%) (Sirbiladze, 2013). Despite the increase in indicators, experts have refrained from validating this trend as different methodologies have been used (Alavidze et al., 2015).

In the following 2014 and 2016, the Bemoni Society and the International Foundation Curatio carried out an assessment of the population of injecting consumers using two measurement methods — they estimated the scale of the network and measured the multiplier coefficients and calculated measurement indicators. Both studies were followed by expert consensus and the number of injecting drug users was defined (BPU & CIF, 2015, 2017). The results of all four studies are summarized in Table # 1 below.

Table 1: Number and Prevalence of Injecting Drug Users in 2009-2016

<table>
<thead>
<tr>
<th>Years</th>
<th>Injecting drug users</th>
<th>Prevalence among injecting drug users</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>40,000</td>
<td>1.50%</td>
</tr>
<tr>
<td>2012</td>
<td>45,000</td>
<td>1.65%</td>
</tr>
<tr>
<td>2014</td>
<td>49700</td>
<td>2.02%</td>
</tr>
<tr>
<td>2016</td>
<td>52500</td>
<td>2.24%</td>
</tr>
</tbody>
</table>

On the other hand Ministry of Internal Affairs annually publishes its report about recorded criminal cases. Statistical analyses retrieved from the MIA shows a decline in drug crime during the period of 2014-17 (see table #2 below). Data published on the MIA’s website reflects cases registered and opened under Articles 260-274 of the Criminal Code. It is noteworthy that in 2017, compared to 2014, the number of drug offenses decreased by 34.87%. In 2017, 1998 cases of illegal production, purchase, storage, shipment, transfer and / or use of drugs were detected (article 273 of the Criminal Code). This indicates...
that by the effort of the law enforcements only 4% of those drug users were identified, the number of which was revealed in the study of Bemoni Society and the International Foundation Curatio (BPU & CIF, 2016, 2017).

Comparative analyses of the statistical data of the MIA and Curatio and Bemoni study (it should be mentioned that prior to 2017, both injecting and non-injecting drug use was illegal according to article 273 of the Criminal Code), shows the number of crimes reported in accordance with Article 273, and thus the effectiveness of the Ministry of Internal Affairs is decreasing while the incidence and prevalence of intravenous users are increasing. As these two should correlate with each other this finding demonstrates the following options: either the efficiency of the Ministry of Internal Affairs has decreased, and this institution is not able to maintain effective control over drug use, or high-profile cases in recent years (the case of Bekas Tskarishvili, decisions of the Constitutional Court) have affected the current drug policy and the oppression of drug use is no longer among priorities of contemporary public policy in Georgia.

On the one hand, the number of registered crimes for smuggling and purchasing of psychotropic substances has not been reaching even 100 cases per year, on the other hand the use of new psychotropic substances started in 2015 increased by 7% in 2017, this directly indicates how the role of the Ministry of Internal Affairs is ineffective during this period. The decreased pressure from the law enforcements may explain the increased demand on heroin and subotoxin, as well as on hallucinogens and new psychoactive substances in contemporary days.

The reviewed data indicates that drug circulation in Georgia is governed by the basic principles of a market economy. Drug policy directed toward destimulation of supply is ineffective. The number of drugs available in the market is determined by the demand and new psychoactive substances in contemporary days.

The incidence and prevalence of intravenous drug use was illegal according to article 273 of the Criminal Code, the use of new psychoactive substances started in 2015 increased by 7% in 2017, which indicates how the role of the Ministry of Internal Affairs is ineffective during this period. The decreased pressure from the law enforcements may explain the increased demand on heroin and subotoxin, as well as on hallucinogens and new psychoactive substances in contemporary days.

Table 2: Registered Drug Offenders in Georgia (2014-2017)

<table>
<thead>
<tr>
<th>Articles of CC</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>Crime changes in 2017 in comparison with 2014 as a base</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug Crime 260-274</td>
<td>7312</td>
<td>5126</td>
<td>5196</td>
<td>4762</td>
<td>-2550</td>
</tr>
<tr>
<td>Drug smuggling 262</td>
<td>323</td>
<td>272</td>
<td>248</td>
<td>200</td>
<td>-123</td>
</tr>
<tr>
<td>Purchase, storage or sale of drugs 260</td>
<td>273</td>
<td>2112</td>
<td>2473</td>
<td>2327</td>
<td>-410</td>
</tr>
<tr>
<td>Psychotropic drugs smuggling 263</td>
<td>27</td>
<td>32</td>
<td>27</td>
<td>20</td>
<td>-7</td>
</tr>
<tr>
<td>Purchase, sale, storage of psychotropic means 261</td>
<td>88</td>
<td>85</td>
<td>96</td>
<td>79</td>
<td>-9</td>
</tr>
<tr>
<td>Illegal sowing of plants containing drugs 265</td>
<td>153</td>
<td>155</td>
<td>178</td>
<td>128</td>
<td>-25</td>
</tr>
<tr>
<td>Substance use 273</td>
<td>3978</td>
<td>2462</td>
<td>2165</td>
<td>1998</td>
<td>-1980</td>
</tr>
<tr>
<td>All the others 264, 266-272, 274</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>4</td>
</tr>
</tbody>
</table>


4. FINDINGS

As indicated above, study analyses show that drug circulation, like any other goods and services, is managed by the principles of economics and the market. In addition to the usual supply and demand that determines the price and quantity of drugs on the black market, it also responds instantly to incentives, including prohibitions and sanctions. Comparative analyses of the secondary data shows decreased effectiveness of the Ministry of Internal Affairs while the incidence and prevalence of intravenous users are increasing. The decreased pressure from the law enforcements may explain the increased demand on heroin and subotoxin, as well as on hallucinogens and new psychoactive substances in contemporary days.
It should be noted that according to another research findings (Bergen-Zico et al., 2017), the costs required to implement a punitive policy did not lead to behavioral changes in the career of drug addicts, thus confirming the ineffectiveness of such policies. One of the main objectives of this study was to determine whether punitive measures would prevent drug addicts from stopping the use of illegal substances. The results showed that the majority of respondents resumed drug use three months after the judgment, and they all returned to drugs 11 months later. This finding is an important indicator of how crucial the study is to evaluate policy effectiveness.

5. CONCLUSION

From this review we can conclude that drug policy directed toward destimulation of supply is ineffective. The number of drugs available in the market is determined by the existing demand on drugs. Steps to reduce supply are forcing suppliers and consumers to look for efficient and safe ways to meet their requirements and as a result demand is shifted to other substances thus substituting current demand with new (or old) ones.

Therefore, before the government starts any preventative policy, policymakers should analyse other factors which might have even more influential features than punishment and the risk of being imprisoned. So the question still remains - what determines consumption, what causes the inelastic nature of drug use, and whether the drug policy based on decriminalization and liberalization is an effective alternative to reduce the harm?

REFERENCES


Khurtsia, L., & Tsertsavadze, V. (2015). Drugs, Silk Road, Bitcoins. World Academy of Science, Engineering and Technology, International Science Index, Economics and Management Engineering (pp. 9 [7], 1529). Istanbul: WASET.


