

# EXAMINING THE POLICE OFFICERS’ PHYSICAL AND PERSONAL CHARACTERISTICS BASED ON UNITS

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## Abstract

The personality conceptualized as developed personal characteristics and behavior patterns that are to adapt environment and public. Like all occupations, it is important to take into account the duty requirements and personal characteristics while employing personnel to units in the police. In this study, the physical and personal characteristics determined as independent variables and branches of police as a dependent variable. Logistic regression model was applied to reveal the relationships between the variables. The results of study is revealed significantly meaningful relationships between the branches and six personality factors. Among the personal and physical abilities; the emotional stability characteristic causes a negative effect on staffing of branches while extroversion and clarity factors create a positive effect.

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**Keywords:** Employment, personal characteristic, branches, Turkish National Police

## Introduction

The perception of the human resources management underlines an approach that accepts the importance of the personnel perceptions, values and thoughts. This approach states that the employment method is important both for the organizations and personnel. Correspondingly, the number of studies have been increasingly conducted in this field.

Accomplishments of any organizations considerably depend on conducting an effective employment methods by using scientific criteria. The organizational characteristics differ from each other since the duty

requirements have effected the work performance. The characteristics is important not only for work performance but also for the adaptation of the personnel.

The characteristics of police and work performance examined in previous studies (Barrick and Mount, 1991; Salgado, 1998; Black, 2000; Detrick and Chibnall, 2006; Gultekin, 2009; Forero, Gallardo-Pujol, Maydeu-Olivares and Andrés-Pueyo, 2009; Yigit and Deniz, 2012) but no study is found on divisions. This article will contribute to this field of police and determine the characteristics which may increase adaptation of officers. In this article, first the personality concept was discussed, then the method of the research was provided, and the assessment of findings was presented.

### **Personality Concept, Importance and Measurement**

The concept of personality has various definitions. In a broad definition, personality defines as stable characteristics and behavior patterns that developed to ensure personal coherence with the environment and public (Ozkalp, 1983: 133). The appearance, abilities, beliefs, emotional reactions and values of the individual fall into the concept of personality. Personality obtains with the accord of interior and exterior environment of the individuals. The personality features are expressed as structured and consistent relation method which is distinctive from other individuals (Cuceloglu, 1997: 404). The personalities of the individuals develop with the integration of experiences, physical and mental activities of the individual (Guney, 2006:185).

On the other hand, the difference between the mental and physical abilities of the individuals is the reflection of individual's world of behaviors and thought (Ozturk; 1996: 50). Yigit and Deniz defined personality as a set of relationships between individual and his/her environment that distinct from the others. Personality includes "special" and "differential" behaviors that individuals often do, which represents the typical behavior of individuals (Yigit and Deniz 2012: 70).

Personality is an essential issue for human resource management since it considers the importance of values, perceptions and other personal features of workers (Guney, 2006:189). In addition personality is used in several management processes while hiring, attending, promoting, and so on. Especially, using personelity features while choosing personnel for various duties in the organizations are beneficial to have better work-person-organization fit (Stanton and Matthews, 1995).

Studies revealed that the occupational success of the individuals is increased when his/her behaviors and occupational necessities are met. Taking account the personality features in management improves the relationships between the workers and organizations. In other words, the

duty requirements and personal features are unique for organizations and for individuals. The fit between these requirements and features realize the organizational and personal success. Therefore the occupational personality tests are became more common to select personnel (Robertson and Kinder, 1993; Kreitner and Kinicki, 2001).

Various occupational personality tests were developed to measure specific personal features for the occupations. Those tests are measure duty required personality features instead of the general personal features. Even though it is accepted that the personality tests have an important role in the general behavioral patterns of the individuals, it is important to develop specific occupational personality tests (Dakin, Nikalant and Jensen, 1994).

The five-factor model of personality is widely used to examine the occupational personality. The five- factor model of personality suggests five basic dimensions of personality consists of the dimensions of extraversion, responsibility, adaptability, emotional stability and clarity to experience. The five-factor model of personality made important contributions in the last 20 years on personality measurement. Hundreds of research were conducted on this model and adapted to different cultures and occupations in terms of standardization, reliability and validity (Solmus, 2013: 2).

The five-factor model of personality is also used to examine relationship between personal characteristics specific to the policing and work success. The challenging issue is to determine what personal characteristics is needed to achive work success. While some of the personality features are frequently used in the police literature such as commitment, honesty and intelligence; some studies conducted to analys personal characteristics of succesful officers to develop police personality test for the police selection. The first study in this field conducted by Hogan, was found that the police officers with self-confidence and commitment are more required personality feature. (Sanders, 2007). Hogue et al. (1994) conducted a study to examin the personality features of officers in police centers. The study findings reflected that the police managers put emphasis on honesty, good character, and emotional balance (Hogue et al., 1994).

The personality features are good indicator of the occupational performance. Officers with the appropriate personality traits to job are more likely to be goal-oriented, committed to work, and tend to work better. On the other hand, those who are careless and irresponsible have difficulties at work to be successful (Barrick and Mount, 1998). Barrick and Mount concluded that extroversion feature is an important issue for those working in the management and marketing sector. Sociability, talkativeness and energetic people are associated with extraversion feature and those features increase performance in such occupations (Ordun, 2004).

In their research on the police officers, Detrick and Chibnall (2006) have found that extraversion, emotional stability and responsibility properties effect officers' job performance. On the other hand, Erdogan (2009) in his study on the effects of police basic personality traits on the performance found a positive relation between the police performance and clarity, compatibility and responsibility features; and a negative correlation between the police performance and emotional instability feature. He conclude that the basic personality trait that affect police officers performance is openness and compatibility.

### **Physical Abilities and Importance**

Physical abilities are important for police agencies like any institutions working at emergency services such as the armed forces, fire services and etc. Security services also have a structure that incorporates with complex and difficult duty requirements. Police face with the challenges and risks from the nature of the occupation while providing security services. To cope with these risks and to overcome intense workload, police require to exert high effort. Therefore, the officers must be in a physically and mentally healthy and vigorous (Anderson, Plecas and Segger, 2001: 8; Kayihan and Ersoz, 2010: 99).

Life expectancy is an important variable to understand the physical challenges of policing. In the United States, a study conducted to compare life expectancy between the citizen and the police revealed that the average life-expectancy of citizen is 72 years, while 59.5 years for police officers (Strandberg, 2004:1). A similar study conducted in the TNP identified that the average life expectancy of police is 17 years less than citizens (Yenielsen, 2013).

Physical abilities are one of the most important features that determine the performance of individuals. Unless the physical feature meet individual's occupation, the desired performance level is unlikely to be reached. In order to perform a high level of physical abilities besides the physical structure strength, power, flexibility, speed and endurance should be met (Acikada and Ergen, 1990).

### **Method of the Research**

The main purpose of this study is to determine the personal characteristics and physical abilities which compliance with required properties of police units and the degree of importance of these characteristics. The cross sectional research method was used in this study. The data were obtained by the survey method.

The population of this study consists of the personnel who works in the TNP. The sample size of the study is determined to represent

approximately 253.000 officers that/who work for the TNP by accepting a 95% confidence interval that reflects a significance level of 0.05. The sample size for this study was calculated to be approximately 9600.

In order to conduct the survey, a questionnaire form is prepared. The survey was applied via Pol-Net (police network) to the personnel for 20 days. To satisfy the data sufficiency regarding the purpose of the study, more than the calculated officers (12.416) were participated the survey.

## **Variables**

The study is performed for determining the personality features which an officer needs to have in units. The independent and dependent variables of the research is given below.

### **Dependent Variable**

*The Unit of Personnel:* Police units is divided into branches in terms of tasks, technical knowledge, and the legislation. In the definition of branches is emphasized that the areas should have special abilities, technical skills and the legislation knowledge.

It was asked participant to state their units in the survey. Participant from 44 different units have joined to the survey. In this study, using state of the units clustered; independent variables were explained.

### **Independent Variables**

In this study, in terms of personality traits McCrea and Costa's (1985) five-factor model of personality and physical abilities were determined as independent variables. The five basic personality traits consist of emotional stability, extraversion, compatibility, clarity and accountability were used.

*Emotional Stability:* Dimension of emotional balance includes such properties that self-confidence, patience, and strength to deal with obstacles dealing with obstacles. On the other hand, emotional imbalance, generally refers to sensitiveness and anxiety (Iyem and Erol, 2013; 140).

*Extroversion:* Extraversion dimension includes behaviors such as sociability, assertiveness, self-expression, sensation seeking, desire to win awards (Solmus, 2013; 2). Having features such as being formal, seriousness, and loneliness are defined as introversion (Iyem and Erol, 2013, 140).

*Coherence dimension:* Coherence dimension includes features such as being polite, conflict avoidance, friendliness, and calmness, on the other hand, hostility refers to be distrust, independent, combative structure.

*Clarity dimension:* Clarity dimension encompasses features such as analytical thinking, attentive, and pioneering.

*Responsibility dimension:* Responsibility dimension involves being regular, planned and dedicated while, irresponsibility includes features such as irregular, unplanned and unconsecrated.

*Physical abilities:* In this study, as the physical abilities, height, strength, power, flexibility, speed, endurance and quickness are used.

### **Hypotheses of the Research**

The hypotheses tested in this study are given below:

- *Determining of fit levels between factors, founded from factor analysis, ( $\alpha_0 = \alpha_1 = \alpha_2 = \alpha_3 = \alpha_4 = \alpha_5 = \alpha_6 = 0$ ), and current statuses of units.*
  1. Clarity factor is not a required characteristic for personnel to work in branches of police.
  2. Responsibility factor is not a required characteristic for personnel to work in branches of police.
  3. Coherence factor is not a required characteristic for personnel to work in branches of police.
  4. Extroversion factor is not a required characteristic for personnel to work in branches of police.
  5. Emotional stability factor is not a required characteristic for personnel to work in branches of police.
  6. Physical sufficiency factor is not a required characteristic for personnel to work in branches of police.

### **Findings**

In this part, the findings of the statistical analysis of the survey are provided in tables. Validity and reliability of the survey are measured by factor analysis. Also the level of risk of all factors used in the study are analyzed with Binary Logistic Regression model to develop a model.

### **Validity and Reliability of the Study**

The validity of the survey is measured by structure validity. The internal reliability coefficient of the survey is found as 95%. This indicates a high level of internal reliability of this research.

The comparison method of multiple means is conducted to found whether or not the questions asked in the questionnaire are homogeneous and the design of the scale is suitable model for the study (Ozdamar, 2011). To test the reliability of the questions and the likert scale, the internal reliability coefficient was examined based on questions. The internal reliability coefficients were stayed approximately stable even though any question eliminated (Ozdamar, 2011). This reveals that the \* value indicate that the questions in the survey is related with each other and they have a

homogenous structure. In addition, we refuse our hypothesis indicating that the questions of the survey is not homogenous since it is smaller than the first type error value ( $\alpha=0,05$ ).

Table 1. The reliability analysis

Hotelling Test Statistic	T <sup>2</sup>	F Statistic	Test Degrees Freedom-1	of Degrees Freedom-2	of Determinants of Value
24140,264		728,748	33	8402	,000

Study regarding if the variance of scale halves shows similarity with the total variances were conducted with similarity of the colleration coefficients (Ozdamar, 2011). In the table above, the results revealed a similarity between the variances of scale halves and total variances and the validity in structural aspect is obtained.

### Findings of the Factor Analysis

The variables are require to be interrelated with each other in order to perform factor analysis. Having the determinative value stated in table below (\*) smaller than the first type error means that the hypothesis will be refused. This means that factors which are not related with other factors and interrelated with related variables can be obtained and the data is interrelated.

This shows that 34 variables used in this study explain 67,226% with 6 factors. According to the result obtained from the table below, 6 factors were obtained which are not related with each other. This is also equivalent to the total of the physical abilities variable we have added and determination of the personality features used in this study. The varimax method is used to determine factors that variables belongs to. The variables which found high correlation with each other are collected under the same factors.

Table 2. Explanation Percentage of Total Change of Factors with 6 Factors

Factors	Covariant Matrix Value		
	Total	Variance %	Cumulative %
1. Factor	14,091	41,443	41,443
2. Factor	2,909	8,557	50,000
3. Factor	2,233	6,569	56,569
4. Factor	1,416	4,164	60,733
5. Factor	1,190	3,499	64,232
6. Factor	1,018	2,993	67,226

Before relating the scores obtained as a result of factor analysis with the units being branched in the current status; their applicability statuses of logistic regression analysis when they are taken into the model separately.

According to the result; responsibility and coherence are the variables which can be used in the logistic regression model.

**Table 3.** Logistic regression suitability tests

<b>Hosmer and Lemeshow Test</b>					
<b>Factors</b>	<b>Chi-Square Test</b>	<b>Degrees of Freedom</b>	<b>of</b>	<b>Determinants Value</b>	<b>of</b>
Clarity	32,081	8		,000	
<b>Responsibility</b>	<b>14,320</b>	<b>8</b>		<b>,074</b>	
Physical Ability	38,760	8		,000	
<b>Compatibility</b>	<b>6,663</b>	<b>8</b>		<b>,573</b>	
Extroversion	19,261	8		,014	
Emotional Stability	25,365	8		,001	

It was found that clarity, physical sufficiency, extroversion and emotional stability features increase coherence. The clarity and emotional stability features were found positive, while the physical sufficiency and extroversion features were found negative impact on the single model relationships test between these variables and dependent variable.

Another important concept in the single model analysis is the risk coefficients. According to risk coefficients, personnel with clarity feature are 1,4 times and personnel with emotional stability feature is 1,019 times more employed in the branches of police department. Physical sufficiency feature and extroversion feature indicate that the personnel are respectively 0,889 and 0,723 times less likely to be employed in the branches.

**Table 4.** Logistic regression analysis results

<b>Variables</b>	<b>Coefficient</b>	<b>Standard Error</b>	<b>Wald Statistic</b>	<b>Degrees of Freedom</b>	<b>Determinants Value</b>	<b>Risk of Coefficients</b>	<b>Risk Coefficients 95% Confidence Interval</b>	<b>Sub Value</b>	<b>Top Vale</b>
Clarity	,337	,033	101,45	1	<b>,000</b>	1,400	<b>1,311</b>	<b>1,495</b>	
Fixed Value	-1,586	,030	2758,52	1	,000	,205			
Responsibility	,005	,030	,03	1	,863	1,005	,948	1,065	
Fixed Value	-1,552	,029	2814,81	1	,000	,212			
Physical Ability	-,060	,029	4,280	1	<b>,039</b>	,942	<b>,889</b>	<b>,997</b>	
Fixed Value	-1,554	,029	2812,54	1	,000	,211			
Compatibility	,024	,029	,67	1	,411	1,024	,967	1,085	
Fixed Value	-1,552	,029	2814,72	1	,000	,212			
Extroversion	-,272	,027	104,99	1	<b>,000</b>	,762	<b>,723</b>	<b>,802</b>	
Fixed Value	-1,575	,030	2794,60	1	,000	,207			
Emotional Stability	,079	,031	6,64	1	<b>,010</b>	1,082	<b>1,019</b>	<b>1,149</b>	
Fixed Value	-1,554	,029	2811,75	1	,000	,211			

The suitability test of logistic regression model to be applied for determining the relation between the dependent variation and factors are given in table below. The hypothesis is refused since significance value

obtained with logistic regression suitability model is 0,273 that is higher than the value of 0,05. This means that the logistic regression model can be applied.

**Table 5. Hosmer and Lemeshow Test**

Factors	Chi-Square Test	Degrees of Freedom	Determinants of Value
Entire model	9,881	8	,273

Of all variables used in extend of the research clarity, extroversion, and emotional stability features were found statistically significant. The clarity and emotional stability features effect positively and extroversion feature effect negatively the relationships between variables and dependent variable.

**Table 6. Logistic Regression Analysis Results**

Variables	Coefficient	Standard Error	Wald Statistic	Degrees of Freedom	Determinants of Value	Risk Coefficients	Risk Coefficients 95% Confidence Interval	
							Sub Value	Top Value
							<b>Clarity</b>	,336
Responsibility	,006	,032	,038	1	,846	1,006	,946	1,071
Physical Ability	-,040	,029	1,875	1	,171	,961	,907	1,017
Compatibility	,031	,030	1,057	1	,304	1,032	,972	1,095
<b>Extroversion</b>	-,279	,028	102,456	1	,000	<b>,757</b>	,717	,799
<b>Emotional Stability</b>	,091	,031	8,900	1	,003	<b>1,096</b>	1,032	1,163
Fixed Value	-1,614	,031	2748,031	1	,000	,199		

The risk coefficient according to analysis that the personnel with extroversion feature being employment rate in branches has 0,757 times less risky. Clarity feature and emotional stability feature indicate that the personnel employed in branches are respectively 1,399 and 1,096 times less risky.

In the clustering analysis, it is determined that the units which are applied into the hierarchic clustering method are to be collected in 3 clusters in following tables. As the structural statuses of the clusters were examined by the structure of units, the 1<sup>st</sup> cluster represents the technical units (biological and chemistry examination (criminal), terror technical tracking, etc.), 2<sup>nd</sup> cluster represents the supportive units (license works, logistics, social services, etc.) and 3<sup>rd</sup> cluster represents the operational units (riot police, security, illegal trafficking, anti-terror, traffic, etc.).

### Emotional Stability Feature

The scale prepared to measure the emotional stability variable according to duty requirements of the units was answered by the 91,1% of the personnel. In order to measure the emotional stability feature, four questions were asked. The statistics regarding the emotional stability is provided in the table below.

**Table 7.1.** Clustering Analysis of the Emotional Stability Variable based on Units

<b>1.Cluster No Units</b>	<b>Distance to Cluster Center</b>	<b>2.Cluster Units</b>	<b>Distance to Cluster Center</b>	<b>3.Cluster Units</b>	<b>Distance to Cluster Center</b>
1 Police Station	0,045	Supply and maintenance	0,114	Biological Investigations	0,167
2 Traffic Patrol	0,065	License Procedures	0,149	Terrorist Tracking Techniques	0,206
3 Other....	0,092	Education	0,154	Chemical Investigation	0,336
4 Public Security Services	0,098	Statistic	0,162		
5 Police Guest-house	0,101	Logistic	0,177		
5 Public Order	0,111	Private Security	0,177		
7 Crime Scene Investigation	0,114	Social Services	0,181		
3 Anti-Terrorism Team	0,117	Protection	0,262		
9 Security	0,118	Documents and Archive	0,271		
10 Smuggling and Organized Crime	0,132	Construction and Property	0,298		
11 Call Center	0,137	Protection of Critical Area	0,305		
12 Special Operations	0,143	Information Technology	0,311		
13 Personal	0,152	Law Office	0,331		
14 Witness Protection	0,153	Aviation	0,381		
15 Community Policing	0,183	Recording Section	0,392		
16 Intelligence	0,194				
17 Smuggling Tracking Techniques	0,202				
18 Foreigners	0,207				
19 Narcotics	0,209				
20 Terror Investigation	0,231				
21 Passport	0,242				
22 Riot Police	0,278				
23 Bomb Squad	0,281				

The average of the variables reflecting the emotional stability features was determined as 11,31; the median value was determined as 12; and the standard deviation value reflecting the change between the values of emotional stability was determined as 1,447. In addition, the minimum value obtained from the emotional stability for the personnel who work in units was determined as four and the maximum value was determined as 12. Flattening value was determined as -2,540 and the skewness value was determined as 6,885 for providing information regarding the distribution of values reflected unique to the units. The distribution of the data is left oriented and the data reflecting the mod value of the distribution shows flattened.

Clustering analysis on emotional stability feature was performed to determine the differences among units. In table 7.2, the central averages of the variables used in clusters obtained as a result of clustering analysis was presented.

**Table 7.2.** The Average Center of the Cluster of the Emotional Stability Variable

The Average Center of the Cluster	Clusters		
	1	2	3
Controlling Emotions	2,81	2,66	2,75
Psychological Endurance / Patience	2,88	2,59	2,75
self-possession	2,82	2,63	2,17
Empathy	2,75	2,57	2,60

From the table 7.2, the emotional stability feature is more likely to required in the operational units then in the technical units and then in the administrative and supportive units. In addition, the self-possession feature is preferable in the supportive and administrative units more than the technical units.

### **Extroversion**

About 89% of participant to the study responded to the extroversion feature. In order to measure the extroversion feature, five questions which would prioritise the features of the units were asked. The definite statistics regarding the extroversion is given as a table below.

Regarding the extroversion feature needed for the personnel who work in units; the average of the variables reflecting the extroversion features was determined as 13,71; the median value was determined as 15; and the standard deviation value reflecting the change between the values of extroversion was determined as 2,035. In addition, the minimum value obtained from the extroversion which is required in units was determined as five and the maximum value was determined as 15. Flattening value was determined as 3,336 and the skewness value was determined as -1,842 . The

distribution of the data is left oriented and in order to make definite assignments regarding a distribution conformity test was conducted.

**Table 8.1.** Clustering Analysis of the Extroversion Variable based on Units

No	1.Cluster Units	Distance to Units Cluster Center	2.Cluster Units	Distance to Units Cluster Center	3.Cluster Units	Distance to Cluste: Center
1	Smuggling Organized Crime	0,077	Bomb Squad	0,166	Documents Archive	0,148
2	Public Security Services	0,081	Information Technology	0,272	Protection	0,152
3	Personal	0,087	Biological Investigation	0,344	License Procedures	0,195
4	Police Guest-house	0,091	Chemical Investigation	0,445	Riot Police	0,212
5	Private Security	0,1			Recording Section	0,232
6	Call Center	0,102			Aviation	0,26
7	Community Policing	0,103			Protection Critical Areas	0,267
8	Logistic	0,108			Passport	0,29
9	Public Order	0,113				
10	Narcotics	0,12				
11	Other....	0,125				
12	Statistic	0,127				
13	Anti-Terrorism Team	0,145				
14	Police Station	0,178				
15	Traffic Patrol	0,182				
16	Social Services	0,183				
17	Education	0,189				
18	Security	0,192				
19	Smuggling Tracking Techniques	0,196				
20	Intelligence	0,205				
21	Witness Protection	0,207				
22	Foreigners	0,209				
23	Crime Scene Investigation	0,225				
24	Law Office	0,231				
25	Supply and maintenance	0,237				
26	Construction and Property	0,242				
27	Terrorist Tracking Techniques	0,277				
28	Terror Investigation	0,317				
29	Private Security	0,375				

**Table 8.2.** The Average Center of the Cluster of the Extroversion Variable

The Average Center of the Cluster	Clusters		
	1	2	3
Persuasion	2,70	2,61	2,78
Communication and Public Speaking Skills	2,25	2,70	2,83
Ability to Manage and Motivate the Community	2,80	2,43	2,76
Verbal Attention	2,82	2,71	2,82
Initiative and Courage	2,82	2,47	2,77

## Clarity

In order to measure the requirements of the clarity feature for units, ten questions were asked and approximately 90 percent of the participants responded. The statistics of the clarity feature was provided as a table below.

**Table 9.1.** Clustering Analysis of the Clarity Variable based on Units

No	1.Cluster Units	Distance to Cluster Center	2.Cluster Units	Distanc e to Cluster Center	3.Cluster Units	Distanc e to Cluster Center
1	Other....	0,09	Riot Police	0,174	Public Order	0,133
2	Police Guest-house	0,096	Aviation	0,338	Crime Scene Investigation	0,143
3	Foreigners	0,109	Protection	0,371	Logistic	0,164
4	Private Security	0,145	Protection of Critical Areas	0,452	Narcotics	0,165
5	Supply and maintenance	0,147			Smuggling and Organized Crime	0,193
6	Police Station	0,219			Anti-Terrorism Team	0,21
7	Traffic Patrol	0,224			Chemical Investigation	0,288
8	Public Security Services	0,229			Security	0,293
9	Statistic	0,254			Community Policing	0,317
10	Personal	0,285			Intelligence	0,322
11	Documents and Archive	0,318			Smuggling Tracking Techniques	0,352
12	Call Center	0,318			Special Operations	0,364
13	Law Office	0,323			Witness Protection	0,367
14	Passport	0,341			Information Technology	0,39
15	Terrorist Tracking Techniques	0,352			Construction and Property	0,397
16	License Procedures	0,353			Bomb Squad	0,449
17	Recording Section	0,391			Terror Investigation	0,507
18	Education	0,428			Biological Investigations	0,519
19	Social Services	0,477				

Regarding the clarity feature the average value of the variables reflecting the clarity features was determined as 26,29; the median value was determined as 28; and the standard deviation value reflecting the change between the values of clarity was determined as 4,096. In addition, the

minimum value of the clarity which is required by units was determined as ten and the maximum value was determined as 30. Flattening value was determined as 1,834 and the skewness value was determined as -1,352. The distribution of the data is left oriented and the flattened reflects.

**Table 9.2.** The Average Center of the Cluster of the Clarity Variable

The Average Center of the Cluster	Clusters		
	1	2	3
Quick decision-making	2,58	2,23	2,77
Learning / understanding ability	2,76	2,51	2,84
Making and implementation plan	2,36	2,25	2,44
Innovative / generating original ideas / imaginative	2,88	2,87	2,94
Developing Project	2,83	2,62	2,88
Comparative Ability / broad thinking skills	2,57	2,14	2,79
Being curious / research desire	2,78	2,77	2,91
Ability to think analytically (to establish the relationship between events / analyze / analysis / conclusion to)	2,62	2,32	2,81
Short term memory	2,91	2,82	2,93
Long term memory	2,51	2,13	2,70

As the average values taken according to the clusters of the table 9.2 of the variables constituting the clarity feature were compared. The order was found as  $3 > 1 > 2$  from the table. The clarity feature is predominantly needed in the operational units and technical units and then in administrative units and lastly the supportive units.

### **Coherence**

In order to measure the coherence feature five questions were asked. 89,3% of the personnel responded the questions on the coherence feature. Regarding the coherence feature required for units; the average of the variables reflecting the coherence features was determined as 13,71; the median value was determined as 15; and the standard deviation value reflecting the change between the values of coherence was determined as 1,980. In addition, the minimum value obtained from the coherence which is required in units was determined as five, and the maximum value was determined as 15. Flattening value was determined as 3,692 and the skewness value was determined as -1,921 . The distribution of the data is left oriented and the flattened reflects the features of normal distribution.

### **Responsibility**

90,5% of the personnel responded five questions in order to measure the responsibility feature for the units. Regarding the responsibility feature; the average of the variables reflecting the responsibility features was determined as 14,32; the median value was determined as 15; and the

standard deviation value reflecting the change between the values of responsibility was determined as 1,577. In addition, the minimum value obtained from the responsibility feature which is required in units was determined as five and the maximum value was determined as 15. Flattening value was determined as 11,481 and the skewness value was determined as -3,133 . The distribution of the data is left oriented and the flattened reflects the features of pointed distribution.

### **Physical Abilities**

In order to identify the importance of the physical abilities for the units, five questions were asked. 76,4% of the personnel responded those questions. Regarding the desired physical abilities to work in units; the average of the variables reflecting the physical abilities was determined as 10,79; the median value was determined as 11; and the standard deviation value reflecting the change between the values of physical abilities was determined as 2,892. In addition, the minimum value obtained from the clarity which is required in units was determined as five and the maximum value was determined as 15. Flattening value was determined as -0,701 and the skewness value was determined as 0,025. The distribution of the variable displays a symmetrical distribution.

The results of this study corresponds with the study of Detrick and Chibnall (2006), while only the result on clarity variable correlates with the Barrick and Mount's (1991) study. In their meta-analysis on police success and personality traits, Barrick and Mount (1991) revealed that the clarity variable do not related with success.

Moreover, the findings of this study are consistent with the study of Gültekin (2009; 219) on the relationship between police performance and the personality traits. In his study, a positive and a low level significant correlation was found between the performance of the police and the clarity, compatibility, and responsibility features. On the other hand, a negative and a low level significant relationship was found for emotional instability.

### **Conclusion**

All employees have unique personality traits. Their personality traits affect not only their social life but also their working live. In order to increasing the work performance, the workers' personalities are important as much as job ability. Therefore, in the process of personnel selection and employment, taking the personal characteristics into consideration also will contribute to the improvement of police departments.

Security services are social necessity for the public. These social needs are provided by different units such as traffic, narcotics, anti-terrorism, cyber police etc.. Various service areas of police units cause different

working conditions and task requirements. Therefore, officers working in different units should have various characteristics. In this study, The personal characteristics were examined to determine those desired personal characteristics for police tasks and units. Furthermore, identifying preferred personal characteristics for police units is expected to help managers in the decision making process of employment.

The five-factor personality traits, that is considered to reflect the unit requirements, and physical ability survey are used. Several statistical analyses are conducted to analyze the relationships between six personnel characteristics and the branches of police, dependent variable. Among the personality traits of individuals clarity, emotional stability, and extraversion are found significantly related to the job requirements of police units. The risk coefficient of the independent variables, clarity feature (1.399) and emotional stability feature (1.096) were found in a positive direction. In contrast, extroversion feature (1.321) was found negative direction.

On the other hand, the responsibility, compatibility, and physical ability features are found less related to staffing of branches of police. Using these results would contribute a better employment policy for police departments.

The emotional stability feature, even though, realizes a statistically significant, it creates slightly different coherence level between the units that are special branches and non-branches. The reason of this situation can be associated with the nature of the police work that requires in some extend emotional stability (psychological strength). The emotional stability feature is identified as less important for branches of police, while it is found higher for the units not branched. Correspondingly, for the technical units, the extroversion feature is found less important. The competence and communication skills that are considered as important skills for police units (GEAR, 2010) are observed higher (more expected) for the units that are not branched. Likewise, since the clarity factor is higher for operational and technical units compared to other units, it proves the hypotheses of this study.

From the findings, the following model was obtained for the Turkish National Police. Model gives the coefficient of personality characteristics that are required by units:

$$\{Y = -1,614 + 0,336 * \text{Clarity} + 0,006 * \text{Responsibility} - 0,040 * \text{Physical Competence} + 0,031 * \text{Coherence} - 0,279 * \text{Extroversion} + 0,91 * \text{Emotional Stability}\}$$

Applying the coefficient of the model;  $P(Y) = 1 / (1 + e^{(-Y)})$  to the formula;

- if (P) is larger than (0,5), the characteristics of the personnel would be suitable to work in the branches of police,

- if (P) is smaller than (0.5), the characteristics of the personnel would not be suitable to work in the branches of police results are found for the Turkish National Police.

Consequently, from the findings of this study; it is considered as an important issue to use the risk coefficients and to accept the developed model as a reference in order to employ branches. In addition, using scientific data is an important factor to increase efficiency in the development of person-job fit. Also developing a professional inventory of personality traits that reflects the requirements of the police units is considered as a useful instrument to have more consistent and valid results in the following studies.

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