

A Survey of Risk-Taking Behavior of the Police Officers

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Abstract—Civil wars and conflicts in Turkey's nearby geography, internal security threats posed by terrorism and public order offenses cause police officers work under severe levels of risk. Police officers' working under constant risk and being exposed to danger should be studied in terms of the processes of decision making, risk-taking and risk aversion. Police behavior in decision making context plays a crucial role especially when danger becomes chronic. Police officers need to establish a balance between human rights and state security while working. Increased risk-taking may result in unwarranted limitation of fundamental rights and liberties while excessive risk aversion causes weakness in security. The security services offered by public order police covers a world which is used by the whole society. Thus, workplace of a public order police covers other people's social life. This makes police vulnerable to offenses and dangers that may target him. In this study, the state of police officers working at Public Security Branch Office and various Police Stations in Zonguldak city center is investigated in terms of their risk taking behaviors.

Keywords—Police, Risk-Taking Behavior, Risk Aversion, Personality Traits

I. INTRODUCTION

Civil wars and conflicts in Turkey's nearby geography, internal security threats posed by terrorism and public order offenses cause police officers work under severe levels of risk.

Police officers' working under constant risk and being exposed to danger should be studied in terms of the processes of decision making, risk-taking and risk aversion. Police behavior in decision making context plays a crucial role especially when danger becomes chronic.

Police officers need to establish a balance between human rights and state security while working. Increased risk-taking may result in unwarranted limitation of fundamental rights and liberties while excessive risk aversion causes weakness in security.

The security services offered by public order police covers a world which is used by the whole society. Thus, workplace of a public order police covers other people's social life. This makes police vulnerable to offenses and dangers that may target him.

This study is derived from doctoral dissertation. In this study, the state of police officers working at Public Security Branch Office and various Police Stations in Zonguldak city center is investigated in terms of their risk taking behaviors.

Section I contains the introduction of this study, Section II contain the related work of risk taking. Section III contain the some measures of results and discussion of the study. Section IV concludes research work with future directions.

II. RELATED WORK

There are various definitions in literature used to refer to risk. Sjöber [1] defines it as the probability of occurrence of a situation increasing the present negative results. In other words, risk is defined as losses and the possibility of not reaching at the pre-determined results at a certain time [2],[3].

Risk tendency is defined as the risk aversion or risk-taking of decision makers. It is also conceptualized by psychological tendency, cognitive status and past experience [4]. There are two main points of risk tendency; prospect theory and consideration of different individual factors. Kahneman and Tversky [5] mention that the prospect theory is about the choices between the alternatives with their probabilities of risk and their known results. The other point is the consideration of different individual factors that can influence the risk. That is, it can be said that it is linked to the factors such as personality traits on risk-taking.

According to Fagley and Miller [6], it was found that individuals vary in their choices regarding risk situation. Furthermore, it is stated that the individuals who work under constant risk tend to prefer risk aversion to safer

options. Larrick [7] implies that risk motivation varies among individuals. Different motivations in literature of decision-making is discussed as "risk style" [8].

Over the past fifteen years, a number of surveys have been conducted to investigate the risk taking behavior considering certain emotions, decision making under uncertainty, and the relationship between personality characteristics [9],[10],[11],[12],[13].

Although risk-taking mostly obtained a value in finance studies, psychological effects on individuals and organizational structure cannot be ignored [14.] While the tendency to take risks in the classical decision theory was situational [5], and in recent studies risk-taking was considered as a part of personality [15]. Risk aversion and risk-taking situations are different among people. Risk detection levels of an individual vary among the situations and the people [16].

A study on the differences of risk perception among people [17], revealed that uncertainty of risk is the source of volunteering, check competitiveness, being familiar with the preferred types and benefits.

There are many studies on recreation and risk-taking behavior. According to some studies, there is an organic link between personality traits and risk-taking behavior [18],[19],[20],[21],[22],[23].

In addition to the Big Five Personality Traits (Openness, Extraversion, Conscientiousness, Neuroticism, and Agreeableness), anxiety, aggressiveness, impulsivity, emotional instability, power and searching reputation, attention to employee attitudes and behaviors in society are important personality traits in excessive risk-taking.

In another study [24], a positive relation between risk-taking and extraversion and openness was found, while neuroticism, agreeableness and conscientiousness are noted to provide a negative relationship. Similarly, Kowert and Hermann [25] have stated that risk has a positive correlation with openness, and a negative correlation with conscientiousness and agreeableness.

The relationship between risk and personality are divided into two major sections [26]. First and foremost, individuals take risks that are compatible with their characters. Secondly, personality is stable during adulthood [27] and risk-taking or avoidance are robust intellectual decisions. That is, risk-taking and risk aversion are positively correlated with the characteristics of a stable personality.

It is stated that the main cause of risk aversion is fear [28]. Studies conducted on people with neurological disease reveal that these patients take high risk in many cases rather than healthy individuals [29].

People are under a very severe pressure in the social environment, and they are pinched between invisible walls.

Previously lived experiences of people, strict hierarchy, legendary stories in business and social life, suggestions from experienced people, and elements such as restless atmosphere and humiliation in the occupational and professional environments can create social pressure on individuals while taking risks. Common characteristics of college students during competition was identified as alcohol consumption in a comprehensive study [30]. According to this study, coherent people consume less alcohol than incoherent ones in the parties. Similarly, concerned and introversive people consume less alcohol, and they prefer risk aversion, here at, they are excluded from their social groups as well [31], [32]. At this end, it can be stated that social pressure affects risk-taking in terms of individual norms and expected results.

The decisions taken under social pressure are less accurate, receive less support and need longer decision making periods [33]. In addition, the possibility of negative sanctions, such as social isolation and alienation affects the individual's ability and capacity to take risks in a negative manner [34],[35]. In cases where risk is taken as the starting point of uncertainty, risk-taking behavior can be defined as people deciding against the state [4]. Risk taking decisions are related to risk attitudes. Thus, according to risk attitudes, the person is able to decide the direction of risk-taking or risk aversion [36]. He mentions that social, cultural and personal differences affect the behavior of individuals in risk taking. These differences are essential for risk tendency or risk aversion.

There is a strong correlation between personality and risk tendency [37]. Using Domain Specific Risk Taking Scale (DOSPERT), it can be identified that there is a difference among risk perception, risk dimensions and personality [38],[39],[40],[41],[42],[43],[44]. All of these studies focus on specific risk behavior and perception of people. Predisposition to risk-taking action is influenced by several factors: cognitive framing [45], age [46],[46] and ethnicity [47],[48].

Common points have been identified in some studies of what risky behavior is [49],[50]. Traffic, sexuality, drug use and extreme sports have been stated as the four subscales of risk-taking behavior according to some studies [51],[52],[53]. Apart from these four groups, knife handling, involving in a fight, aggression, suicidal thoughts and attempts [54], theft and joining the youth gangs [55] suggest the existence of such risk-taking behavior.

While risk assessment is discussed as a descriptive/normative gap, individual differences are generally ignored in the literature [56],[57]. Therefore, personality differences must be well studied.

Various studies show whether the risk-taking behavior has differed in terms of gender [58],[59],[60],[61],[62], [63],[64]. According to the results of these studies, men in various fields prefer to take a bigger risk than women do.

When age and gender are considered, it is possible to say that risk-taking tendency of adolescent girls is much more

aversive compared to boys in their peer group [65]. Arikan et al. [66] studied intercultural situations in risk-taking behavior and examined three different countries. They found that the value of risk-taking is higher in men.

Considering vehicle use and traffic accidents, several studies conclude that men take more risks [67], show overreaction to very simple events [68], drink-driving [69], or under tobacco and psychotropic substances [64].

According to a study on adolescences; some risky behaviors such as committing a crime, using alcohol and drug, driving fast, early sexual activity, unhealthy living and rebellion were observed [70].

Substance abuse, violent actions such as fighting and sexual experiences in men, and suicide attempts in women are the most frequently observed behaviors in He's [71] study.

According to a study demonstrating the relationship between risk-taking behavior and substance usage [72], different types of narcotics usage have been found to affect the risk-taking behavior.

Despite the risk-taking behavior in gender studies indicating different results between men and women, some of researchers express that there isn't any significant difference between male and female in terms of risk trends and risk aversion [73]. However, risk perception differences between women and men were found in four main aspects. The first aspect focuses on the psychological and biological factors. Olsen and Cox [74] express that women assume more responsibility, and therefore, take risks at lower levels. The second approach is about cultural and social situation. In some societies, women remain subordinate to a dominant patriarchy which forces them to show a slow and sure deliberation [74],[75]. Third, the reason why men take higher levels of risk than women do is that they have a greater accumulation or higher salaries compared to women [76]. The fourth and the last aspect is that women cannot adapt themselves to financial and economic knowledge as men can easily do [77].

People take risks differently due to their educational levels. Ceyhan [78] suggests that there is a significant relationship between individual behavior, attitudes and education level. For example, compared to people with secondary school graduation, college graduates were found to take more risks [73]. According to a study, high school and secondary school graduates' risk tendency is higher than that of people in other educational status [79].

The relationship between risk-taking and age is important, as well. In particular, there are many studies investigating the risk-taking behavior of adolescents [80],[81],[82]. Although some researchers [83] claim that there is difference in risk-taking levels among adolescents, it is also noteworthy that age of adolescents do not affect the risk-taking behaviors [81],[84],[85]. According to a study,

the median age of the participants is important to detect the relationship between age and risk-taking [73]. Young children and girls take less risks than older ones and boys [86].

In a study among college students, a positive relationship is found between age and alcohol, drug use, unprotected sex experience and driving fast [87]. Another study about mountaineering reveals that there is a positive correlation between age and risk taking tendency [88].

A survey on risk-taking and risk preferences examined the effect of peer groups [83]. Adolescents tend to take more risks in comparison to adults. A person in the peer group takes much more risks rather than he does when he is alone.

Risk taking of adolescents and young adults in peer groups is expressed as a major determinant of risky behavior. Subculture of a group and the exemplary role model for people may affect the risk taking behavior. Therefore risk-taking behavior is a process of learning [70], and being a role model, friendship, peer group pressure, the mother and father are the external factors that may trigger this process. Many studies in the same line reveal a positive correlation between risk-taking behavior and peer pressure [70],[84],[85].

Due to its nature, policing can be defined as a risky job. In the core business of the armed task done, fighting against crime and criminality, being in contact with people with criminal history are some of the features that can be considered to identify the risks inherent in policing.

According to a study, police personality traits are listed as being bold, authoritative, critical, angry [86], skeptical, traditional and isolated [87],[88],[89]. Among these features, authoritarianism is stated as the most important personality trait for police officers [90].

The intersection of skepticism and authority causes the most dangerous element for policing [91]. Contrary to him, Twersky-Glasner [92] claims that people in the police force try to hide their feelings, and they are more utilitarian than they actually are. Though some researchers claim that police officers have the similar personality traits, they were reported to vary to some extent. The differences in these personality traits are related to the privilege of being successful in police work [93],[94],[95]

Muir [96] has grouped the personality traits of police force in four main parts. The *professionals* use the force in some cases, but avoid force when talking. They are also open to new ideas. The *reciprocators* are willing to help, but they tend to use force when they face a problem. The *enforcers* use their powers without hesitation, struggle stage of the law to achieve their goals and never deter from using it. The *avoiders* hesitate to use force. Also, this type of police officers lacks empathy for citizens. A likely consequence

for such officers is to do as little as possible when at work [97].

According to a study conducted at the Police Academy of the Netherlands, there is no difference between male and female risk-taking behaviors, but there is a gender-based difference in the risk perception of police officers [98].

According to a survey conducted at Norwegian Police Department [99], it can be stressed that there is no difference between police officers and civilians (control group) in terms of the big five personality traits which are mentioned above.

Regrettable occupational experiences may cause post-traumatic stress disorder and the need for psychiatric therapy among police officers. Due to these experiences that jeopardize their life, police officers show risk aversive behavior [100].

Levin and Brown [101] examined the status of the police search of recreation. Inmates in prison were chosen as a control group in their study. Interestingly, the outcome of this study was that policemen seek for a higher level of recreation.

Carlson and Lester [102] made comparison between police officers that work in rural and urban areas. Contrary to the police officers working in urban zones, law enforcers in rural areas seem to have higher rates of sensation seeking. Police officers participating in car chasing and driving fast stated that they are prone to sensation seeking [103].

Goma-i-Freixanet and Wismeijer [104] compared Spanish Guardian Police with the control group. According to the study, sensation seeking is higher for Spanish Guardian Police. In terms of boredom susceptibility, they showed lower performance than the control group due to avoiding risky behavior. In terms of personality traits, Eysenck Personality Questionnaire (EPQ) is applied, and when compared to the control group, Spanish police have lower level of neurotic and psychopathic features.

It can be said that risk-taking behavior is not only sensation-seeking. There are a number of studies dealing with risk-taking in terms of personality traits: California Personality Inventory/CPI, Cattell's 16 Personality Factors, Eysenck's Personality Questionnaire, Minnesota Multiphasic Personality Inventory are the basic surveys [92].

A study in which Cattell's 16 Personality Factors were used shed light on four basic variables [105]. Being introversive, warm, tangible and intangible thinking, pragmatic and sensitive are the four reported different personality traits.

In another study in which Minnesota Multiphasic Personality Inventory was used, conducted between 1981 and 1985 [106], police candidates were compared in terms

of social norms. The results of this study revealed that police candidates have low level of anxiety and high level of self-confidence. The selection process of police candidates were examined in another study in which Eysenck's Personality Questionnaire was applied [107]. Police candidates who were admitted to Police Academy were mostly extrovert and had low anxiety compared to those who were rejected. Eber [108] obtained psychometric data from 15,000 police candidates around the country. Using the Clinical Analysis Questionnaire, Eber aimed to identify a different style of police personality that could explain excessive force or aggressive behavior in rational, stable and professional officers. However, Eber found these candidates to be self-disciplined, very tough-minded, and slightly independent.

Lorr and Strack [109] used cluster analysis to prove the existence of a particular personality profile among police candidates. In this study, two basic personality profiles are revealed. The majority group was characterized by a high level of self-control, independence, extroversion, and emotional stability, as Eber had previously described as "good cops" [108]. However, one out of every four candidates was placed in the "bad cop" category. This indicates the presence of a certain personality profile among persons in the police force [104], [109].

Garbarino et al. [110] It aimed to examine the different personality profiles among personnel working in the Italian Police Special Forces (SF). All members of the "Reparto Mobile" unit were tested by means of a Two-Step cluster analysis.

In a study of the behavior of law enforcement officers, 215 police officers working in Mexico where crime rate is very high, were interviewed. In Nezahualc6yotl settlement, there are the increased criminality, violence and the weakened ability of police to maintain public order. According to the result of this study, officers' perception of the circumstances in Nezahualc6yotl is filtered through social cognitive mechanisms such as pride, loyalty, courage, service, and cooperation that influence their actions and notions [111].

A study on Polish police officers provided important results regarding personality traits and risk-taking behavior. Using Zuckerman's Alternative Five Factor Model [112], the study aimed to identify the personality factors of Polish Officers preparing for the peace mission in Kosovo. It was found that policemen scored significantly higher on Impulsive Sensation Seeking than the control group [112]. In another study, which was conducted in Poland Police Department, anti-terrorism police unit and public security police unit were compared in terms of the risk of the cases they worked on and their personality characteristics. Rather than the public security police, those working in anti-terrorism unit were reported to have a higher level of sensation seeking, but a lower level of neuroticism [113].

Researchers aimed to compare the employees of two different occupational groups in terms of risk tendency and locus of control in another study. For this purpose, 168 policemen and 263 teachers were included in the study. There was a significant difference between policemen and teachers in terms of risk-taking behavior [114].

III. METHODOLOGY

512 police officers, working in Zonguldak city center, Kozlu and Kilimli districts which are adjacent to the city center, were included in this study. Finally, the number of sample is 323 volunteers who agreed to participate in the study.

Risk-taking scale and demographic factors questionnaire were applied to these police officers working in public security unit and police station unit.

Risk-Taking Scale: DOSPERT (Domain Specific Risk Taking) Scale was applied to define the risk behavior of participants. DOSPERT scale has five subscales (ethical risk, financial risk, health / safety, recreation and social risk), and it is used for evaluating the behavioral intentions using Likert scale between 1 to 7 [115]. Risk behavior, risk

perception and risk benefit are expected to be measured via this scale [38],[115][116].

DOSPERS scale was developed by Weber, Blais and Betz in 2002. This scale is a template that determines how individuals decide in risky situations and risk levels. The scale was shortened by Weber and Blaise in 2006. The Cronbach's Alpha value in their research is .83.

In this study; Weber and Blaise's DOSPERT scale was used. The scale can ensure appropriate measurement of the policing profession and cultural incompatibility of some questions, but some changes in questions have been made in compliance with the dimensions of scale. New Cronbach's alpha value were measured as .776.

IV. RESULTS AND DISCUSSION

As seen in table 1, 93.5% of participants are men. 44.3% of the police officers work in the Public Security Department, while the others work in the Police Station Units. The senior police officer with the highest rank has been working for 24 years, and the average policing experience is 7.2 ± 5.2 years.

Table 1: Demographic findings of the participants

Gender	n	%	Judicial or administrative investigation history	n	%
Male	302	93,5	Yes	117	36,2
Female	21	6,5	No	206	63,8
Working unit			Interest in firearms		
Public Security Department	143	44,3	Interested	126	39
Police Station Department	180	55,7	Not-interested	171	53
Marital status			Hesitant	26	8
Married	228	70,6	Desired unit		
Single	95	29,4	Satisfied in their unit	142	44,0
Dependent Person (children etc.)			Smuggling and Organized Crime	58	18,0
Yes	182	56,3	Counter Terrorism or Intellegence	72	22,3
No	141	43,7	Traffic Department	11	3,3
Education			Armchair units	40	12,4
High School	26	8	Sports and exercise level		
College	171	52,9	Everyday	40	12,3
University	125	38,7	Once a week	78	24,1
Graduate	1	0,3	Once a month	19	5,9
Additional income			Rarely	87	26,9
Yes	98	30,3	Never	99	30,7
No	225	69,7	Attacked history		
Evaluation of Financial Status			Attacked	158	48,9
Very Bad	65	20,1	Not-Attacked	165	51,1
Bad	80	24,8	Promotion expectation		
Moderate	67	20,7	Request to be promoted	113	35,0
Good	79	24,5	Non-request to be promoted	156	48,3
Very Good	32	9,9	Unstable	54	16,7
Total	323	100,0	Total	323	100,0

The youngest officer participated in this survey is 21, and the oldest is 48 years old. The average age is 29.3 ± 5.5 . Married participants are the 70.6% of the participants, while 56.3% of all participants have dependents such as children, old mother or father.

A vast majority, i.e., 92%, of public order is a graduate of college and have higher education level. 69.7% of them do not have any additional income support. Nearly half of the policemen (45.5%) refers to their financial status as bad or very bad. About one of every three who participated in the study (36.2%) stated that they experienced judicial or administrative investigation because of police working. Almost half of the public order police (53%) stated that they are not interested in firearms. 12.4% of the sample

expressed that they do sports every day. On the other hand, the rest of them mentioned that they are not successful in terms of doing sport. 44% of the police officers reported that they were satisfied with their current units, whereas 40.3% of the offices are willing to work in Smuggling and Organized Crime, Counter-Terrorism or Intelligence Units, defined as "charismatic departments". The most unwanted unit is traffic department (3.4%). One of every two individuals in the sample (48.9%) has been exposed to physical or armed attacks at least once during the working life. Almost half of the public order police (48.3%) stated that they did not want to apply for or never thought to enter the exam for promotion.

Table 2: Chi-Square Analysis on some variables

	Public Security Department		Police Station Unit				Married		Single			
	n	%	n	%	p	X ²	n	%	n	%	p	X ²
Current Unit	42	29,4	100	55,6	0,000	23,195	123	53,9	19	20	0,000	50,096
Anti-Smuggling and Organized Crime Unit	32	22,4	26	14,4			24	10,5	34	35,8		
Counter-Terrorism or Intelligence Units	42	29,4	30	16,7			46	20,2	26	27,4		
Traffic Unit	7	4,9	4	2,2			4	1,8	7	7,4		
Armchair Units	20	14	20	11,1			31	13,6	9	9,5		
Total	143	100	180	100			228	100	95	100		

Chi square analysis is used to determine the relationship between variables of conformity, independence or homogeneity.

In this study, there is a significant relationship between police working at Public Order Police and Police Stations in terms of the units they want to work (Table 2). Almost half of officers (55.6%) working at Police Stations stated that they were satisfied with their current positions. On the

contrary, the Public Order Police Officers reported that were seeking opportunities to work for more operational and technical units, such as Anti-Smuggling and Organized Crime, Counter-Terrorism and Intelligence.

There is a statistically significant relationship between marital status and desired unit for policemen carrying out public safety services (p=0,000).

Although more than half of the married police officers (53.9%) are satisfied with their own units, 63.2% of the single police officers are willing to work for Anti-Smuggling and Organized Crime, Counter-Terrorism or Intelligence Units.

Table 3: Chi-Square analysis between investigation history and working units.

Variables	Investigations Story (+)		Investigations Story (-)		p	X ²
	n	%	n	%		
Public Security Department	37	31,6	106	51,5	0,001	11,896
Police Station Department	80	68,4	100	48,5		
Total	117	100,0	206	100,0		
request to be promoted	22	18,8	91	44,2	0,000	53,895
non-request to be promoted	88	75,2	68	33		
unstable	7	6	47	22,8		
Total	117	100,0	156	100,0		
1-5 years	12	10,3	149	72,3	0,000	129,277
6-10 years	39	33,3	36	17,5		
11-15 years	42	35,9	19	9,2		
+16 years	24	20,5	2	1		
Total	117	100,0	206	100,0		

There is a statistically significant relationship between police officers working in the Public Security Directorate and Police Stations in terms of their history of investigation (p=0,001). Thus, the investigation history of the police officers who work in police stations is about more than two times compared to their peers who do not (Table 3).

Chi-square analysis has shown that almost half of the police officers (44.2%) who do not have any investigation history desire to be promoted in their professional careers. On the other hand, police officers with investigation history avoid to achieve promotion.

Table 6: Comparison the subsclaes of DOSPERT and some variables (t test)

		Risk Taking	Recreational	Social	Finance	Health / Security	Ethic
Unit	t	6,133	7,076	5,400	-4,436	10,035	,925
	p	,000	,000	,000	,000	,000	,373
Marital Status	t	-2,045	-4,171	-3,551	3,576	-5,587	1,948
	p	,042	,000	,000	,000	,000	,053
Investigations History	t	-2,125	-3,222	-,378	2,846	-5,374	1,777

There is a significant relationship between the investigation history of police officers and their tenures. The rate of investigation in the first 5 years of professional police officers is 10.3%. After 6 years, an increase is observed in investigation stories.

A significant relationship was found between their promotion request and where they work (p <0.05). 40.6% of police officers working in Public Security Department are eager for promotion, while almost half of their counterparts (55%) in police stations have no desire or expectation to be promoted (p=0.026, X²=7.319). When unit that police officers work and assault/attack history are considered, it can be said that there is a significant relationship between the two groups. 63.9 percent of police officers experiencing assault or attack work in police station (p=0.000, X²=8.422).

Table 4: Values of DOSPERT and its sub-scales.

	Mean	Median	St. Dev.	St. Er.	Variance
Risk-Taking Behavior	4.02	3.96	.061	.034	.378
Recreational	3.76	3.50	.751	.041	.564
Social	3.38	3.33	1.09	.060	1.201
Finance	4.67	4.83	.948	.052	.900
Health/Security	3.68	4.00	1.38	.076	1.912
Ethic	3.58	3.66	.893	.049	.799

Considering the direction of risk-taking, it is observed that the police officers avoid taking risks (Table 4).

Table 5: Correlation between subscales of DOSPERT

Variables	Correlation Coefficient				
	1	2	3	4	5
1 Social	-				
2 Recreational	.503(**)	-			
3 Finance	.248(**)	-.058	-		
4 Health/Security	.716(**)	.527(**)	.209(**)	-	
5 Ethic	.148(**)	.178(**)	.520(**)	.146(**)	-

* p<0.05
** p<0.01

As seen in Table 5, there is a strong positive and negative correlation between the dimensions of risk-taking behaviors.

	p	,034	,001	,706	,005	,000	,077
Attacked History	t	-1,183	-2,205	,818	3,259	-4,271	2,604
	p	,238	,028	,414	,001	,000	,010
Promotion request	t	2,635	1,511	,825	,060	3,866	-1,005
	p	,009	,132	,410	,952	,000	,316

Table 6 reveals significant differences between the police officers working at police stations and public order department in terms of the subscales of DOSPERT; recreation ($p=.000$), social risk ($p=.000$), financial risk ($p=.000$) and health/safety ($p=.000$). According to this information, a police officer working in public order department seems to take more risk than his counterparts in the police stations do. On the other hand, there is not any significant difference between the two groups considering the ethic dimension.

Compared to the marital status of police officers and risk-taking subscales, there is a significant difference in terms of recreation ($p=.000$), social risk ($p=.000$), financial risk ($p=.000$) and health/safety ($p=.000$). With reference to these results, it is concluded that single police officers take more risk. Similarly, history of judicial or administrative investigation affects the behavior of the officers. Even though they go through a serious investigation, the officers continue to take risk at high level.

One of the remarkable results of the current research is that police officers that had experienced physical assault or assassination attempt, still continue to take risks in their decisions in terms of health/safety ($p=.000$), recreation ($p=.028$) and financial risks ($p=.001$). After such risky events, - it is acknowledged that police officers have higher tendency of risky behaviors related to frequency of assaults.

Promotion is an essential catalyst for the dimension of health/safety ($p=.000$). The police officers who seek promotion are seen to jeopardize their lives more than the others.

The spatial environment of security services offered by the public order police is defined by the physical world used by the whole society. Thus, the workplace of a public order police covers other people's social life. This makes police vulnerable to offenses and dangers that may target him.

Fighting between individuals and youth gangs, domestic violence, terrorism and smuggling compose very dangerous physical risk factors in which public order police officers could easily get hurt in cases they intervene. Moreover, patrols can become the primary targets of terrorist attacks. It is important to note that almost half of police officers who participated in the current study had suffered various physical offenses or armed attacks.

Police officers confront judicial and/or administrative investigations at very high levels. Social control theory refers to the behaviors controlled by external elements. Therefore, behavior is discussed in terms of some factors such as family, friends, school life, and work environment. In this context, it can be said that behavior is influenced by these people and their social environments.

There are visible (the Police Disciplinary Regulation) and invisible control tools (sub-culture in Police Departments) in Police Corps. Therefore, adherence to discipline and conventions of sub-culture are perceivable walls in the organization. One of every three police officers involved in the study faced judicial or administrative investigation.

When a risky decision is taken, it is affected by social factors [117]. Parents, spouses, children or close friends divert people to make rational decisions. Social responsibilities such as existence of family and children keep policemen away from events causing judicial or administrative investigations. Accordingly single police officers take more risks than the other counterparts ($p=0.077$).

One of the important results of the study is based on the difference between assault and investigation in terms of the officers' department. Police officers must respond in all cases reported. Although the duties and responsibilities are similar to public order department, constables working in police stations become the subjects of assault/physical attack and/or various investigation. There might be two reasons to explain this. First, the number of personnel in Police Stations is less than the total number of staff personnel of the Public Security Department. Therefore, officers in police stations seem to be outnumbered which could probably lead them to demonstrate a weak performance in law enforcement services and criminal cases. Secondly, police station is the fundamental element of all types of criminal investigations. Therefore, constables working in police stations could be assessed as unpracticed and insufficient in patrol services.

In the present study, a significant relation between marital status and financial status was well observed ($X^2:61.693$; $p: 0.000$). Single police officers assess themselves as financially good and very well (56.8%). As seen in the comparison between the sub-dimensions of risk-taking scale and marital status, single police officers take financial risk more than the married ones. In this context,

the lack of family factors (spouses and children) for single police officers may explain this behavior. Regarding risk taking level of policemen, single ones desire to work in operational branches such as anti-terrorism and anti-smuggling and organized crime departments. Married police officers have a lower risk-taking level, and they state that they are satisfied with their own unit. They prefer regular and lower risks in their life.

When compared in terms of desired department that they would like to work, half of the officers working in police stations are satisfied with their departments. Police officers working in special bureaus such as detectives and patrol services in Public Security Department have a high paced work life. They are in search of more tough and risky missions. There is a significant difference between units that they work and risk-taking levels. Police officers working in Public Security Department take higher risks than the others. It is evaluated that they take more risk not to lose their positions. This can be explained via Murray's *Manifest Needs Theory*. Power and prestige are associated with a sense of accomplishment [118]. Therefore, police officers can act with a sense of defending their positions related to prestige and power. According to *Alderfer's ERG (Existence-Relatedness-Growth) Theory*, individuals similarly desire to gain dignity and prestige through their achievement [119]. Therefore, almost half of the employees in the Public Security Department is eager to work in more prestigious and charismatic branches such as Department of Intelligence, Anti-terrorism and Anti-Smuggling-Organized Crime.

A history of judicial or administrative investigation is one of the factors that disrupt people's work motivation. A behavior can be formed by reinforcement according to *Differential Reinforcement Theory* developed by Burgess and Akers. Thus, desired behaviors can be shaped by reward and punishment [70],[120].

In the present study, a police, confronting serious investigations, take more risks at dimensions of recreation ($p:0.001$), financial risk ($p:0.005$) and health/safety ($p:0.000$). In this context, it is not possible to explain their behavior - by reward and punishment relations in *differential reinforcement theory*. Even though an investigation history is a negative factor for motivation, these police officers continue to take more risks while fulfilling their professional responsibilities. Thus, it can be said that "investigation is not a deterrent factor" or "police officers feel themselves justified". Police officers with an investigation history (75.2 percent) do not expect any rank promotions; therefore, this increases the ratio of their risk taking level, and they cannot show any changes in their attitudes and behaviors.

Yücebilgiç [121] has examined the relationship between security and sensation seeking. In this survey, people who seek excitement are found to use protective equipment less than the others, and they continue to take more risks. On the contrary to his research, Hodgins et al. [100] claim that

police officers with assault or punishment experiences in their profession avert risk. The results of this research are similar to our study's conclusions. Police officers, who were attacked on their duty, continue to take high levels of risk. Despite the previous fatal offenses against themselves, officers are familiar with the dangerous nature of this profession, and they gain experience with every case they work on.

Promotion and reward are important factors to increase the motivation of police officers. According to the *Prospect Theory*, individuals can have the expectations for the intrinsic and extrinsic rewards after the success is achieved [122]. There is a positive relation between the perception of obtaining benefit and the sub-dimensions of risk-taking [123],[124]. Similarly, it can be said that people desire to protect their benefits in *Decision Making Theory* [125],[126]. According to the *Theory of Reasoned Action*, attitudes constitute intentions, and intentions constitute behaviors. The basic factor affecting attitudes is the relationship between the benefits and costs. If people obtain benefit after a specific behavior, they can develop positive attitudes to this behavior [127]. In this study, it can be concluded that the choice of police officers for a specific behavior is related to the *Decision Making Theory* and the *Theory of Reasoned Action*. They jeopardize their lives in most cases to gain rank promotion and positive performance assessment from their managers.

İçli [70] mentioned risky behavior as a process of learning. There are two ways: learning directly (trial and error method) and learning from role models. *The Trial-and-error model* increases the rate of mistakes and leads to weakness for understanding risky behavior. Learning from role models, on the other hand, is based on peer groups and parents [128]. According to the *Differential Association Theory* and *Reference Group*, modelling affects attitudes, intentions and behavior. Individuals monitor the specific behavior in this group, and they attribute a significant importance to it [129],[130]. Similarly, according to recent studies, there is a positive correlation between the pressure of peer group and risk taking [84],[85],[70]. In the present study, there is a negative relation among tenure and health/safety and financial risks. Therefore, newly employed police officers show highly risky behaviors due to the fact that they are under the influence of a reference group. To overcome this important problem, it is a good idea that the newly graduated police officers could be employed and posted with senior officers to control their behaviors.

V. CONCLUSION

Security is one of the primary elements in the development of society. It is seriously damaged by the lack of stability and confidence. Therefore, the role of the police is important to ensure security in the community.

Police has to establish a balance between human rights and state security when working. Increased risk-taking may

result in unwarranted limitation on principle rights and freedoms while excessive risk aversion causes weakness in security.

Civil wars and conflicts in close geographical environment of Turkey, internal security threats posed by terrorism, and public order offenses cause police officers to work under severe levels of risk.

Police officers, working under constant risk and being exposed to danger, should be studied in terms of decision making, risk-taking and risk aversion. Police behavior in decision making process is especially important when danger becomes chronic.

Police officers working in public security usually interfere with hot-pursuit and instant criminal cases. Fighting between groups, domestic violence, attacks of youth gangs or terrorist organizations, alcohol and drug addicts are some mortal dangers for policemen. Thus, the decision taken in risky situations keeps them alive.

According to the present study, police officers, encountering severe attacks to their lives, do not change their attitudes, intentions and behaviors in the same condition. Similarly, newly graduated policemen show highly risky behaviors when making decisions. Therefore, senior officers can offer significant gains in terms of the master-apprentice relationship in police organizations. In the light of this study and the obtained data, in order to maintain security, it is undeniable that selecting the police officers for suitable tasks is a crucial process.

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