

ISSN:2528-9705

# Örgütsel Davranış Araştırmaları Dergisi

## Journal of Organizational Behavior Research

<http://odad.org>

Cilt / Vol. :3

Sayı / Issue :1

Yıl / Year :2018

Kapak Fotoğrafi / Cover Photo by Andian Lutfi





**ÖRGÜTSEL DAVRANIŞ ARAŞTIRMALARI DERGİSİ**  
**THE JOURNAL OF ORGANIZATIONAL BEHAVIOR RESEARCH**

**Cilt / Volume: 3 Sayı / Issue: 1 Yıl / Year: 2018**

**Kurucu ve İmtiyaz Sahibi / Founder & Owner**

Doç. Dr. Kubilay ÖZYER

**Editörler / Editors**

Doç. Dr. Kubilay ÖZYER

Dr. Öğr. Üyesi Müslüme AKYÜZ

**ISSN: 2528-9705**

**Yazışma Adresi / Mail Address**

Doç. Dr. Kubilay ÖZYER

Örgütsel Davranış Araştırmaları Dergisi  
Gaziosmanpaşa Üniversitesi Taşlıçiftlik Yerleşkesi  
İktisadi ve İdari Bilimler Fakültesi İşletme Bölümü

60150 TOKAT

Tel: +90 356 252 16 16 – 2363

Fax: +90 356 252 16 73

E-Posta/E-Mail: [info@odad.org](mailto:info@odad.org)

Kapak fotoğrafı için Sayın Andian LUTFI'ye teşekkürler...

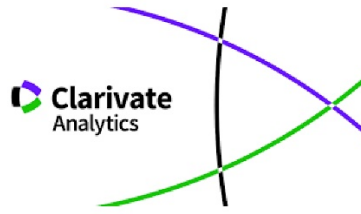
Special Thanks to Mr. Andian LUTFI for cover photo...



ÖRGÜTSEL DAVRANIŞ  
Araştırmaları Dergisi

## İNDEKS BİLGİLERİ / INDEX INFORMATION

*Örgütsel Davranış Araştırmaları Dergisi aşağıda yer alan indekslerde taranmaktadır.  
Journal of Organizational Behavior Studies is cited in the indexes below.*



*International Institute of Organized Research*

Akademik Araştırmalar İndeksi  
**Acarindex.com**



INDEX COPERNICUS  
INTERNATIONAL



ÖRGÜTSEL DAVRANIŞ  
ARAŞTIRMALARI DERGİSİ  
(ODAD)

JOURNAL OF ORGANIZATIONAL  
BEHAVIOR RESEARCHES  
(JOOBR)

Örgütsel Davranış Araştırmaları Dergisi yılda iki kez yayınlanan hakemli, bilimsel ve uluslararası bir dergidir. Örgütsel davranış, insan kaynakları ve çalışma hayatına ilişkin makalelere yer verilen dergimizin temel amacı, bu alanlarda akademik gelişim ve paylaşım katkı sağlamaktır. Dergimizde “Türkçe” ve “İngilizce” olmak üzere iki dilde makale yayınlanmaktadır. Dergiye yayınlanmak üzere gönderilen yazılar, belirtilen yazım kurallarına uygun olarak hazırlanmalıdır. Dergiye yayınlanmak üzere gönderilen yazılar, daha önce yayınlanmamış ve yayınlanmak üzere gönderilmemiş olmalıdır. Dergide yayınlanan yazılarda belirtilen görüşler, yazarlara ait olup Örgütsel Davranış Araştırmaları Dergisi’nin görüşlerini yansıtmaz. Örgütsel Davranış Araştırmaları Dergisi’nde yayınlanmış yazıların tüm yayın hakları saklı olup, dergimizin adı belirtilmeden hiçbir alıntı yapılamaz.

The Journal of Organizational Behavior Researches (JOOBR) is an academic, peer-reviewed, scientific and international journal which is being published bianually. JOOBR, with it’s articles essentially aims to contribute to academic development and sharing in the fields of organizational behavior, human resources and business envorinment. In JOOBR, Articles are being published both in Turkish and English Languages. Articles which will be sent to JOOBR for publishing, should be preprepared according to guideline of JOOBR. Articles which will be sent to JOOBR for publishing, must be not published before or not sent to other journals. The views presented in the JOOBR represent opinions of the respective authors. The views presented do not necessarily reflect the opinion of the JOOBR. Copyrights for all articles published in JOOBR reserved. For quotation, JOOBR must be cited



*Bilim Kurulu*

*Members of the Science Board*

*Prof. Dr. Willy Arafah*

*Trisakti University, Indonesia*

*Prof. Dr. Kabir Haruna Danja*

*Federal College of Education Zaira, Nigeria*

*Prof. Dr. Ayu Ekasari*

*Trisakti University, Indonesia*

*Prof. Dr. Nurullah Genc*

*T.C. Central Bank, Turkey*

*Prof. Dr. Asep Hermawan*

*Trisakti University, Indonesia*

*Prof. Dr. Nasir Karim*

*Cecos University, Pakistan*

*Prof. Dr. Syafri Mandai*

*Trisakti University, Indonesia*

*Prof. Dr. Amer Al Roubaei*

*Ahlia University, Bahrain*

*Prof. Dr. Farzand Ali Jan*

*Cecos University, Pakistan*

*Prof. Dr. Rosman Bin Md Yusoff*

*Tun Hussien Onn University, Malaysia*

*Prof. Dr. Husna Leila Yusran*

*Trisakti University, Indonesia*

*Assoc. Prof. Dr. Usman Ghani*

*Institute of Management Sciences, Pakistan*

*Assoc. Prof. Dr. Kubilay Özyer*

*Gaziosmanpasa University, Turkey*

*Assoc. Prof. Dr. Hasan Gül*

*Ondokuz Mayıs University, Turkey*

*Assoc. Prof. Dr. Hasan Tagraf*

*Cumhuriyet University, Turkey*

*Assoc. Prof. Dr. Elmira Ibrayeva*

*Kazakhstan American Univ., Kazakhstan*

*Assist. Prof. Dr. Kamran Azam*

*International Riphah University, Pakistan*

*Assist. Prof. Dr. M. Said Döven*

*Osmangazi University, Turkey*

*Assist. Prof. Dr. Engin Kanbur*

*Kastamonu University, Turkey*

*Assist. Prof. Dr. Muhammad Kibuuka*

*Kampala International University, Uganda*

*Assist. Prof. Dr. Attaullah Shah*

*Institute of Management Sciences, Pakistan*

*Assist. Prof. Dr. Muhammad Siddique*

*Institute of Management Sciences, Pakistan*



<i>İçindekiler</i> <i>Table of Contents</i>	<i>Sayfa No.</i> <i>Page Num.</i>
<b>1. Cam Tavan Algıları Örgütsel Bağlılığı Etkiler Mi? Öğretmenler Üzerine Bir Araştırma</b>	
Does Glass Ceiling Perceptions Affect Organizational Commitment? A Study On Teachers Ufuk ORHAN & Umran ALTAY	1-15
<b>2. Öz-Liderliğin Bireysel Farklılıklar Bağlamında İncelenmesi</b>	
Examining Self-Leadership In The Context Of Individual Differences Emrah ÖZSOY & Ömer Alperen ONAY & Duygu ALTUN & Sümeyye PEHLİVAN	16-32
<b>3. Örgütsel Sessizlik Bilgi Paylaşımı İlişkisinde Sosyal Sermayenin Rolü</b>	
The Role Of Social Capital In The Relationship Between Organizational Silence And Knowledge Sharing Ercan TURGUT & Memduh BEGENİRBAŞ	33-45
<b>4. Pozitif-Negatif Duyguların, Otomatik Düşüncelerin Ve Bazı Kişisel Değişkenlerin Okul Yöneticilerinin Yenilik Yönetimi Yeterlik İnanç Düzeyleri Üzerindeki Etkisi</b>	
The Effect Of Positive-Negative Affect, Automatic Thoughts And Other Personal Variables Upon The Innovation Management Self-Efficacy Belief Levels Of School Administrators Serkan MÜRTEZAOĞLU & Fulya YÜKSEL-ŞAHİN	46-68
<b>5. Örgütsel Adalet: Akademisyenler Üzerinde Metaforik Bir Araştırma</b>	
Organizational Justice: A Metaphoric Research On Academicians Tülay Özer & Kubilay Özyer	69-86
<b>6. Duygusal Emek, Tükenmişlik, İşten Ayrılma Niyeti Ve İş Performansı Arasındaki İlişkiler</b>	
The Relationship Between Emotional Labor, Burnout, Turnover Intention And Job Performance Ferda ALPER AY & Nilifer TÜRKDOĞAN	87-103
<b>7. Sosyal Medya, Akıllı Telefon Ve Örgütlerin Gelecekteki İnsan Kaynağı Profili: Z Kuşağı</b>	
Social Media, Smart Phone And Future Human Resources Profile Of Organizations: Z Generation Fikret SÖZBİLİR	104-123
<b>8. Legal Basis Of The Christian Issue Of Russian Policy In The Caucasus In The Second Half Of Xix And Early Xx Centuries</b>	124-134

Legal Basis Of The Christian Issue Of Russian Policy In The Caucasus In The Second Half Of Xix And Early Xx Centuries <b>Lyubov H. SATUSHIEVA &amp; Alim Z. BOGATYREV &amp; Ruslan M. ZHIROV &amp; Azamat A. ZHUGOV &amp; Marina T. TEKUEVA</b>	
<b>9. A Research On The Correlation Between Perceived Corporate Image And Organizational Identification</b>	
A Research On The Correlation Between Perceived Corporate Image And Organizational Identification <b>Sabahat BAYRAK KÖK &amp; Mehtap SARIKAYA &amp; Hatice ÇOBAN &amp; Esve MERT</b>	<b>135-153</b>
<b>10. The Effect Of Political Connections On Auditor Choice And Related Party Transactions</b>	
The Effect Of Political Connections On Auditor Choice And Related Party Transactions <b>Saeed BAZRAFESHAN &amp; Hamze HESARI</b>	<b>154-168</b>
<b>11. Effects Of Narcissism On Organizational Dissent</b>	
Effects Of Narcissism On Organizational Dissent <b>Engin KANBUR</b>	<b>169-181</b>
<b>12. Solidarity As A Constituent Of Social Capital: Role Of Human Rights Organizations In Exercizing The Rights Of Young Parents</b>	
Solidarity As A Constituent Of Social Capital: Role Of Human Rights Organizations In Exercizing The Rights Of Young Parents <b>Olga N. BEZRUKOVA &amp; Vladimir N. LUKIN &amp; Alexander V. MATVEEV &amp; Tamara V. MUSIENKO</b>	<b>182-196</b>
<b>13. Statistical Analysis Of Vehicle Driver Behaviors</b>	
Statistical Analysis Of Vehicle Driver Behaviors <b>Sinan Saraçlı &amp; Cengiz Gazeloğlu</b>	<b>197-204</b>
<b>14. Legal Modernization Of The Life Of Muslims Of The North Caucasus In The Context Of The Development Of The Russian State In The First Half Of The Nineteenth Century</b>	
Legal Modernization Of The Life Of Muslims Of The North Caucasus In The Context Of The Development Of The Russian State In The First Half Of The Nineteenth Century <b>Lyubov H. SATUSHIEVA &amp; Ruzanna N. MAREMKULOVA &amp; Aslan R. ISAKOV &amp; Lyana R. KOKOVA &amp; Marina T. TEKUEVA</b>	<b>205-219</b>
<b>15. Organizational Resource &amp; Personal Resource Influencing Job Satisfaction: A Mediating Role Of Burnout</b>	
Organizational Resource & Personal Resource Influencing Job Satisfaction: A Mediating Role Of Burnout <b>Hina Shahid &amp; Sara Aslam</b>	<b>220-233</b>
<b>16. How Do People Cope With Stress? An Assessment Using Partial Least Squares</b>	
How Do People Cope With Stress? An Assessment Using Partial Least Squares <b>Lydia ARBAIZA, Jorge GUILLEN</b>	<b>234-246</b>
<b>17. Effect Of Innovation In Relationship Between Inter-Organizational Learning And Performance Of Construction Industry</b>	<b>247-267</b>

Effect Of Innovation In Relationship Between Inter-Organizational Learning And Performance Of Construction Industry Tariq RAFIQUE, Najeeb A. KHAN, Haji RAHMAN, Aamir ABBAS, Tahir SAEED	
<b>18. How Far Umm Al-Qura University Practices The Strategies Of A Learning Organization Specified In The ‘Senge’ Model: From The Perspective Of Teaching Staff</b>	
How Far Umm Al-Qura University Practices The Strategies Of A Learning Organization Specified In The ‘Senge’ Model: From The Perspective Of Teaching Staff Elham N. AL RAJHI	268-292
<b>19. EFFECTIVENESS OF PSYCHOMETRIC TESTING IN RECRUITMENT PROCESS</b>	
EFFECTIVENESS OF PSYCHOMETRIC TESTING IN RECRUITMENT PROCESS Mehreen MEMON, Farhan AHMED, Muhammad Asif QURESHI, Noor Ahmed BROHI	293-306
<b>20. SOCIAL ASPECTS OF CHANGE OF ECONOMIC BEHAVIOUR OF THE RUSSIAN YOUTH</b>	
SOCIAL ASPECTS OF CHANGE OF ECONOMIC BEHAVIOUR OF THE RUSSIAN YOUTH Gyuldzhan Kamilevna AZAMATOVA, Andemirkan Khachimovich SHIDOV, Albina Olegovna VINDIZHEVA, Azamat Haseynovich LYUEV	307-316
<b>21. REVIEW THE RESPONSIBILITIES OF INTERNATIONAL SHIPPING COMPANIES FOR THE INTERNATIONAL CARRIAGE OF GOODS BY SEA</b>	
REVIEW THE RESPONSIBILITIES OF INTERNATIONAL SHIPPING COMPANIES FOR THE INTERNATIONAL CARRIAGE OF GOODS BY SEA Tamerlan S. TSOLOEV, Alim Z. BOGATYREV, Aslan R. ISAKOV, Inara R. NAHUSHEVA	317-329
<b>22. REVIEW THE LEGAL VACUUM OF BUSINESS LAW IN BANKRUPTCY OF MERCHANTS AND IMPACT ON THE DEMANDS OF BANK</b>	
REVIEW THE LEGAL VACUUM OF BUSINESS LAW IN BANKRUPTCY OF MERCHANTS AND IMPACT ON THE DEMANDS OF BANK Inna B. KARAMURZOVA, Leyla I. KALABEKOVA, Zalina B. HAVZHOKOVA <sup>1</sup> , Diana A. KOKOVA	330-342



## STATISTICAL ANALYSIS OF VEHICLE DRIVER BEHAVIORS

Sinan SARAÇLI<sup>1</sup>, Cengiz GAZELOĞLU<sup>2\*</sup>

<sup>1</sup>Department of Statistics, Afyon Kocatepe University, Turkey,

<sup>2</sup> Department of Statistics, Suleyman Demirel University, Turkey,

\*Corresponding author E\_mail: cengizgazeloglu@sdu.edu.tr

### ABSTRACT:

*Purpose of this study is to examine the drivers' attitudes and behaviors in traffic via statistical techniques. With this purpose, the reactions of the motor vehicle drivers in traffic, and how they describe themselves and how they feel while they are driving is examined.*

*To measure the driver's attitudes and behaviors in traffic, a Likert scale type questionnaire, which had been used in Çınar's (2007) study, ranging from 1 'strongly disagree' to 5 'strongly agree' is applied on a face-to-face basis. Drivers attitudes and behaviors and the behavior types whether they do or they exposure, on their feelings and determinations of themselves as a driver is examined via CHAID and Multiple Correspondence Analysis. SPSS Software is used to perform the statistical analysis.*

*Some of the important results of the analysis are that the drivers who feel themselves as aggressive while driving are those who describe themselves as congenital, describe their car as a good friend and as an education level they have a graduate degree and the common behavior they exposure and do is swearing while they are driving.*

**Keywords:** *Vehicle Drivers, Driver Behaviors, Statistical Analysis, CHAID Analysis, Multiple Correspondence Analysis.*

### INTRODUCTION

It can be seen that like in all areas of life aggressive behaviors is increasing rapidly and becoming ordinary reaction (Johnson, 1997; Joint, 1995; Mizell, 1997; Sharkin, 2004; Willis, 1998). Some people perceives much functional to solve some of their daily problems that they met via aggressive behaviors instead of rationalist ways. Therefore, some drivers show an aggressive tendency as a reaction towards the frustrations in the traffic. Some of the studies show that these kinds of aggressive behaviors of the drivers causes traffic accidents, injuries and deaths (Deffenbacher et al, 2003; Galovski and Blanchard, 2004; Hemenway and Solnick 1993; Houston, Harris and Norman, 2003; Çınar, 2007).

There are many causes of accidents. This includes dangerous driving, technical faults, weather, road signage and design of the roads. However, the improvements in term of automobile technology in term of safety have achieved certain level. Road signage and road designs have also being improved, where various black spots have been identified and studies have been carried out to mitigate the causes of the road accidents. However, it was found that the accident rates still keep increasing year by year. Most studies have proven that drivers are responsible for the main cause of accident. Most drivers tend to have the attitude of overestimating their own

ability and the capability of their vehicles to react within the sufficient time to avoid crashes (Jusoh, 2013).

## 2. MATERIAL AND METHOD

The participants of this study are composed of 500 drivers at Afyonkarahisar Providence between the dates 01 April - 30 June 2016. To measure the driver's attitudes and behaviors in traffic, a Likert scale type questionnaire, which had been used in Çınar's (2007) study, ranging from 1 'strongly disagree' to 5 'strongly agree' is applied on a face-to-face basis. The questionnaire was composed of 57 questions. Seven of them were related with demographic characteristics and 50 of them were related with their behaviors that they do or exposed to. Because of some unfilled and wrong filled questionnaires, the statistical analyses are applied over 440 questionnaires. SPSS Software is used to perform the statistical analysis.

As a statistical analysis of the data set, first of all a well known Multiple Correspondence Analysis, which shows the relations among the levels of the categorical variables is applied. Then to put forward the effective factors on the dependent variable, CHAID (Chi Squared Automatic Interaction Detection) analysis is used.

Multiple Correspondence Analysis (MCA) is a method, used to describe, explore, summarize and visualize information contained within a data table of N individuals described by Q categorical variables. This method is often used to analyze questionnaire data. It can be seen as an analogue of principal components analysis (PCA) for categorical variables (rather than quantitative variables) or even as an extension of correspondence analysis (CA) to the case of more than two categorical variables. (Blasius and Greenacre, 2014).

Compared to other analysis techniques CHAID analysis has an advantage (better, superior) in terms of presenting both categorical and ongoing (continuous) variables in this study. CHAID proceeds in steps. First the best partition is found. Then the predictors are compared and the best one chosen. The data are subdivided according to this chosen predictor. Each of these subgroups are re-analyzed independently, to produce further subdivisions for analysis. The type of each predictor determines the permissible groupings of its categories, so as to build the contingency table with the highest significance level according to the chi-squared test (Kass, 1980). Because the goal of classification trees is to predict or explain responses on a categorical dependent variable, the technique has much in common with the techniques used in the more traditional methods of Discriminant Analysis, Cluster Analysis, Nonparametric Statistics, and Nonlinear Estimation. The flexibility of classification trees makes them a very attractive analysis option, but this is not to say that their use is recommended to the exclusion of more traditional methods. Indeed, when the typically more stringent theoretical and distributional assumptions of more traditional methods are met, the traditional methods may be preferable. However, as an exploratory technique, or as a technique of last resort when traditional methods fail, classification trees are, in the opinion of many researchers, unsurpassed (Hoare, 2004).

## 3. FINDINGS

Frequencies for the demographic features of the drivers are given in Table1. As it can be seen from Table 1., while 40,9% of the drivers are between 18-25 ages, as education level 65% of them have graduate degree.



While driving 2,3% describe themselves as insecure driver, 8,4% describe as beginner, 54,5% describe as Self sufficient driver, 23,9% describe as professional and 8% describe themselves as Congenital driver.

**Table 1. Descriptive statistics and frequencies of the drivers.**

Variable	Level	Number	Percent
Age	18-25	180	40,9%
	26-32	118	26,8%
	33-39	70	15,9%
	40-47	41	9,3%
	47+	31	7,0%
Education Level	Primary	20	4,5%
	Secondary	19	4,3%
	High	115	26,1%
	Graduate	286	65%
Describing Himselfes	Insecure	10	2,3%
	Beginner	37	8,4%
	Self Sufficient	240	54,5%
	Professional	105	23,9%
	Congenital Driver	35	8%
	Other	13	3%
Feeling Himselfes	Impatient	30	6,8%
	Habitant	168	38,2%
	Strong	29	6,6%
	Aggressive	12	2,7% <sup>o</sup>
	Stressful	52	11,8%
	Self Sufficient	136	30,9%
	Integrated with the vehicle	13	3%
Describing Vehicle	Functional	108	24,5%
	Good Friend	54	12,3%
	Safe	102	23,2%
	Confidence Builder	38	8,6%
	Problematical	8	1,8%
	One of my Part	123	28%
	Other	7	1,6%
Belief to Vehicle	Never	5	1,1%
	Very Infrequently	6	1,4%
	Sometimes	72	16,4%
	Very Frequently	156	35,5%
	Always	201	45,7%
Loving Vehicle	Hate	4	0,9%
	Don't Love	15	3,4%
	I don't know	52	11,8%
	Love	113	25,7%
	Dote	256	52,8%

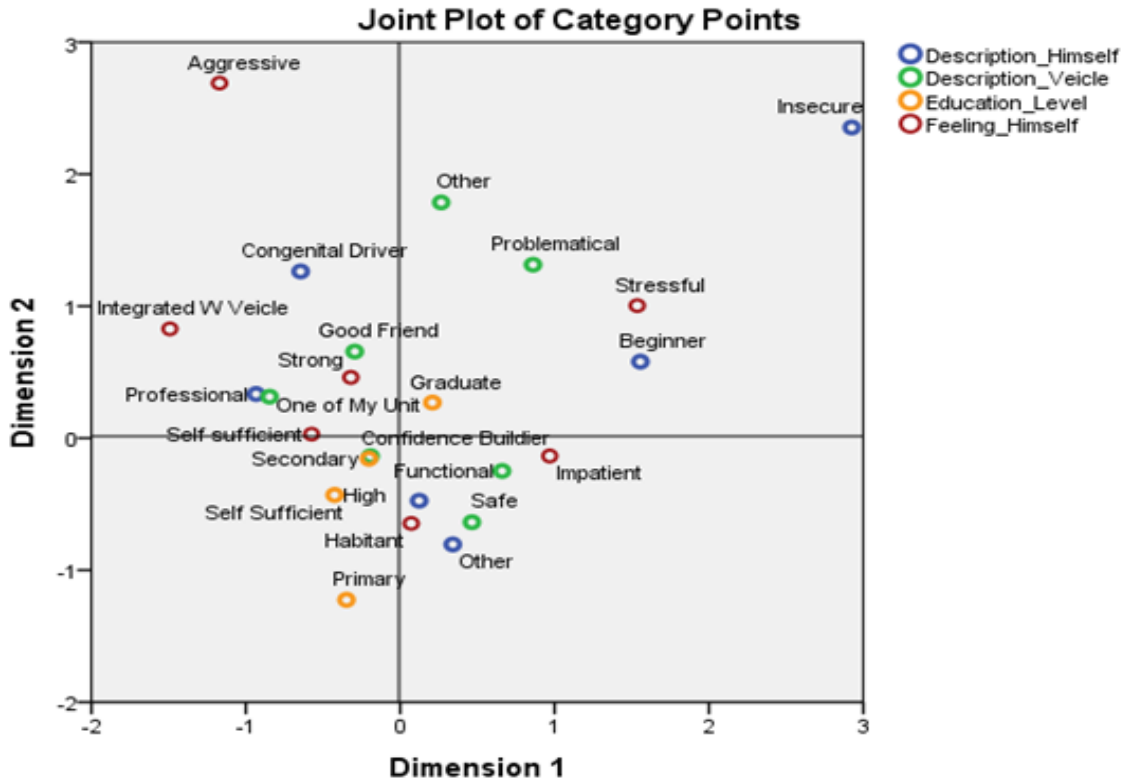
On the other hand, while driving, 6,8% of these drivers feel themselves as impatient, 38,2% Feel Habitant, 6,6% feel strong, 2,7% feel aggressive, 11,8% feel Stressful, 30,9% feel self sufficient and 3% feel themselves as Integrated with their vehicle.



According to describing their vehicle, most of them love their car as %28 of them describe their vehicle as one their part, %24,5 describes as functional, and %23,2 describes their car as Safe. As it can be seen from Table 1., most of these drivers believe in their vehicles (45,7% of them reply this question as always and 35,5% as very frequently) and similar to describing their vehicles, most of them love their cars (number of lovers and dots is 369 over 417).

The results of Multiple Correspondence Analysis for these drivers about how they describe themselves, how they feel while driving, how they describe their vehicles and the education levels of them is given in Figure 1.

Figure 1. Results of Multiple Correspondence Analysis



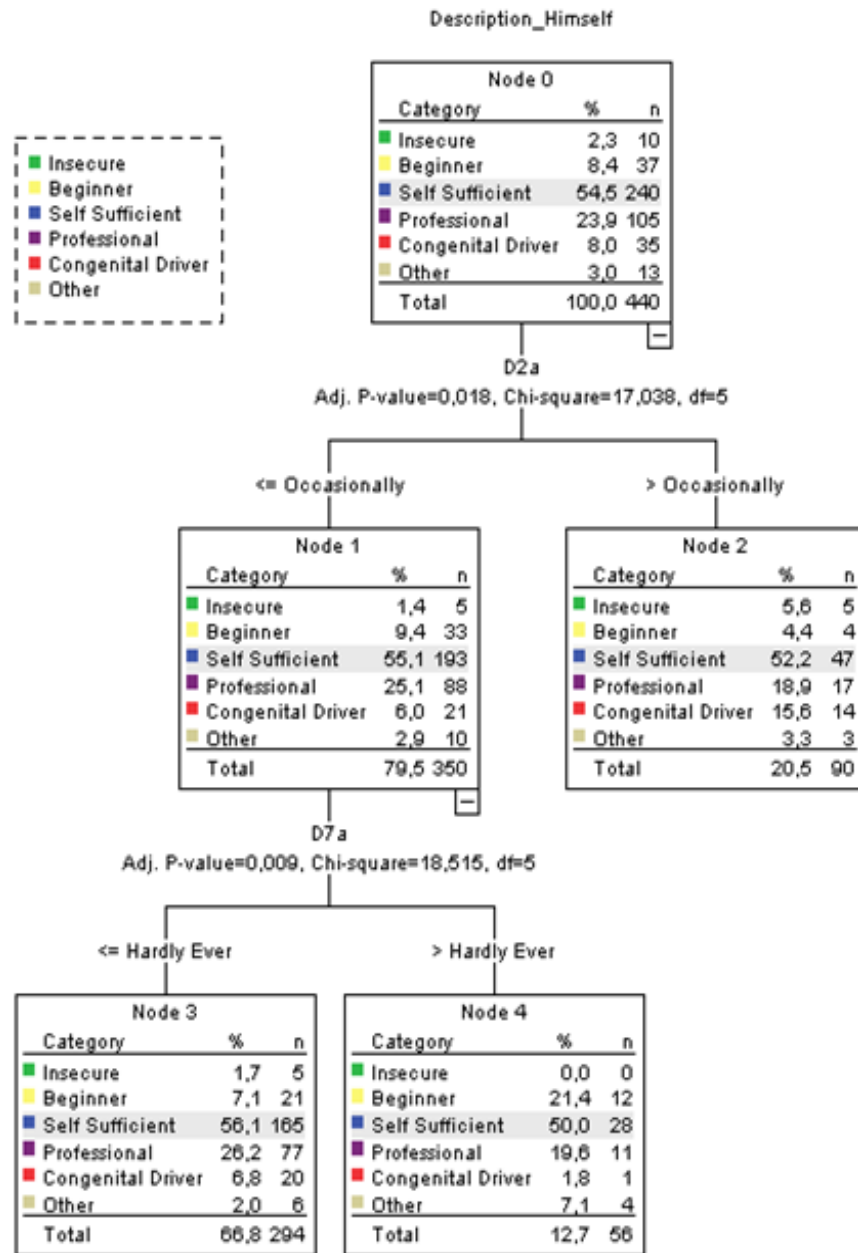
As it can be seen from Figure 1. drivers who describe themselves as insecure an beginner are generally describe their cars as problematic and feel themselves as stressful, as education level most of them have graduate degree.

Most of the drivers who describe themselves as professional driver are graduated from secondary school and they feel themselves as strong and self-sufficient and integrated with their vehicles and they describe their vehicles, as it is one of their unit.

One of the conspicuous points in Figure 1 is that the drivers who feel themselves as aggressive are those who describe themselves as congenital, describe their car as a good friend and as an education level, they have a graduate degree.

Related with describing themselves, CHAID Analysis results for the drivers that they exposure is given in Figure 2.

Figure 2. CHAID Analysis results for the drivers that they exposure

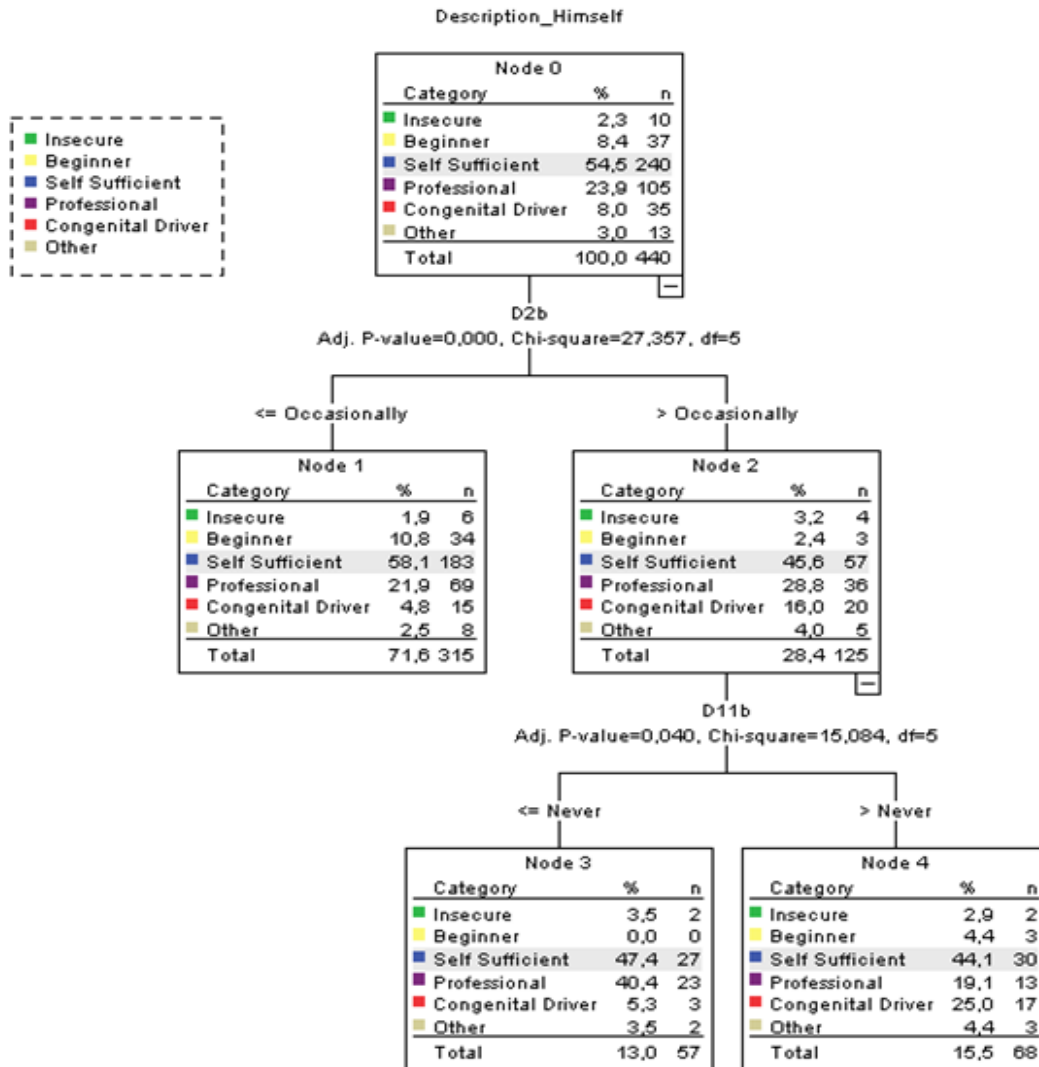


(D2a : Swearing, D7a: Following the other vehicle)

Figure 2. shows that in point of being exposure, the most effective factor on describing themselves for these drivers is swearing (D2a). Most of the drivers who had been swearing less or equal occasionally describe themselves as self-sufficient driver (55.1%). The effective factor on these drivers is found as following the other vehicle (D7a).

CHAID Analysis results for the drivers that they do related with describing themselves, is given in Figure 3.

Figure 3. CHAID Analysis results for the drivers that they do



(D2b: Swearing, D11b: Blocking the switching (like overtaking) of the other vehicle)

Figure 3. shows that in point of behaviors of the drivers towards others, the most effective factor on describing themselves is swearing (D2a).

The percentage of the drivers who swear less or equal occasionally is greater than they expose as 58,1% and they again describe themselves as self-sufficient driver.

On the other hand, blocking the switching (like overtaking) of the other vehicle (D11b) found statistically effective factor on the drivers who swear more than occasionally and within these drivers, describing themselves as professional driver (40,4%) are the drivers who never blocks manure of the other drivers.

#### 4. CONCLUSION

The results of the analysis show that while most of the drivers participated in this study describe themselves as self-sufficient, most of them also feel as habitant.

On the other hand, the drivers who describe themselves usually self sufficient are exposed to be swearing by the other drivers while they are driving incautiously. Similar with this result, they also swear to other drivers in such cases. Like being exposing to same action as a reflex, it can be understood as a common behavior type of all drivers. The difference where after swearing that they expose and they do while driving is while they are exposed of being fallowed for other drivers (maybe to be warned for the mistake) they show much aggressive behavior like blocking the switching (like overtaking) of the other vehicle.

Of course education is one of the most important factor for the drivers to understand and empathize other drivers, being much careful while taking the wheel and obeying the traffic rules is as important as it. It's a known fact that Physiological factors related with the drivers mood effects the drivers attention and empathizing however a mistake on the road can be concluded with irremediable results that effect the whole life of human beings.

Finally, the recommendation to all vehicle drivers; please make an empathy, behave in a respectful manner to other drivers and keep calm for your and others future.

## References

- Blasius J., Greenacre M., (2014), Visualization and Verbalization of Data, CRC Press.
- Çınar, P., (2007) Trafik Ortamındaki Sürücü Saldırganlığının Sosyal Psikolojik Değişkenler Açısından İncelenmesi, Yüksek Lisans Tezi, Ankara Üniversitesi, Sosyal Bilimler Enstitüsü, Ankara (<http://acikarsiv.ankara.edu.tr/browse/3641/>)
- Deffenbacher, J. L., Petrilli, R. T., Lynch, R. S., Oetting, E. R. and Swaim, R. C. (2003). The driver's angry thoughts questionnaire: a measure of angry cognitions when driving, *Cognitive Therapy and Research*, 27(4), 383-402.
- Galovski, T. E. and Blanchard, E. B. (2004). Road rage: a domain for psychological intervention? *Aggression and Violent Behavior*, 9, 105-127.
- Hemenway, D. and Solnick, S. (1993). Fuzzy dice, dream cars and indecent gestures: correlates of driving behaviour? *Accident Analysis and Prevention*, 25, 161-170.
- Hoare, R. (2004) Using CHAID for classification problems, New Zealand Statistical Association conference, Wellington.
- Houston, J. M., Harris, P. B. ve Norman, M. (2003). The aggressive driving behavior scale: developing a self-report measure of unsafe driving practices, *North American Journal of Psychology*, 5(2), 269-278.
- Johnson, K. (1997). Frustration drives road rage. *Traffic Safety*, July/August, 9-13.
- Joint, M. (1995). Road rage, London: Automobile Association.



Jusoh N.B. (2013) Driver Attitude Towards Road Safety, Master of Science dissertation, Universiti Teknologi Malaysia.

Kass, G.V., (1980) An Exploratory Technique for Investigating Large Quantities of Categorical Data, *Applied Statistics*, 29 (2). 119-127.

Mizell, F. (1997). Aggressive driving. <http://www.aaafits.org/Text/research/agdrtext.htm>

Sharkin, B. S. (2004). Road rage: risk factors, assessment and intervention strategies, *Journal of Counselling and Development*, 82, 191-198.

Willis, D. K. (1998). Aggressive driving: three studies. <http://www.aaafits.org/Text/research/agdrtext.htm>

