"Psychological ownership: an empirical study on its antecedents and impacts upon organizational behaviors"

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SECTION 2. Management in firms and organizations

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Psychological ownership: an empirical study on its antecedents and impacts upon organizational behaviors

Abstract

Psychological ownership or the feeling of ownership is the main theme of this research. First of all the study reviews the literature to identify motives and experiences that form the antecedents of psychological ownership, then it examines whether organizational climate, job satisfaction and demographic factors have an impact on ownership and in return to what extent psychological ownership influence organizational citizenship behaviors and organizational commitment. Our respondents are constituted by the administrative and academic staff of a state university which currently employs 1061 persons. The questionnaires had been sent to all the personnel and among the returned questionnaires 709 of them have been considered complete for statistical analysis. The findings suggest that job satisfaction and a participative organizational climate may strengthen the feelings of ownership held by employees towards their organization. It also suggests that the longer employees work in an organization, the stronger ownership they feel towards it. Another finding is that psychological ownership may increase organizational citizenship behaviors and organizational commitment supposing that there is a participative and autonomy supporting work environment in which employees have a considerable chance of self-development and long term employment.

Introduction

People develop possessive feelings (mine and ours) towards tangible and intangible objects. Psychological ownership means a cognitive and emotive attachment between the individual and the object, which in turn influences our self-perception and conduct. Just like the case with attitudes, psychological ownership has cognitive, emotional and behavioral elements and can exist on individual level or group level (Druscat vand Pescosolido, 2002; Pierce, Kostova and Dirks, 2001). Pierce, Kostova and Dirks (2001) dissociate the concept of psychological ownership from the concepts such as organizational commitment, job satisfaction, organizational identification, psychological empowerment and organizational participation. While psychological ownership answers the question "How far do I feel that this organization belongs to me", organizational commitment searches for the answer for "Should I stay in this organization and why", identification with the organization answers to "Who am I", internalization to "What do I believe" and job satisfaction answers to "What kind of judgments do I have about my job" (Pierce, O'Dristol, and Coghlan, 2004). As the items owned would be perceived more positively than those not owned (Beggan, 1992) these scholars claim that the feeling of ownership can be the triggering factor, the key or even the reason for the attitudes listed above towards the job and organization (Van Dyne and Pierce, 2004).

The studies briefly mentioned above aim at revealing the organizational experiences and the basic motives triggering psychological ownership. However, testing validity of these motives and experiences for a sample composed of the people who work for a state university in Turkey would be helpful for testing universality of this theory. The findings of this study that aims at testing the basic assumptions of psychological ownership theory not only verify those basic assumptions but also support the thesis that suggest increasing organizational commitment and citizenship behaviors as a result. Moreover, the findings prove that this interaction is not only true for the private sector but also for the public sector.

1. Theoretical framework

Even in the absence of any legal, economic or physical attachment, people experience this feeling in all parts of their lives (Dittmar, 1992; Furby, 1980). There are some opinions that support the idea that psychological ownership relates the individual to the society and the environment in terms of sociology and psychology. Many scholars of sociology – including Karl Marx – accept that possession (and ownership) is not an individual but social phenomenon and it shapes the person to person and person to society interactions (especially in capitalist societies).

1.1. Conceptual analysis of psychological ownership. In legal terms possession gives the individual three basic rights: the right to receive a share from the physical or financial value of the object owned,

the right of disposal (influence-control) and the right to receive information. However, Etzioni (1991), Pierce, Kostova and Dirks (2001; 2003) and Pierce, O'Dristol and Coghlan (2004) suggest that ownership has two dimensions, namely objective (formal, legal, real) and subjective (attitudes). For example, Pierce and Rodgets (2004; 590) state that while analyzing the impact of employee ownership plans on organizational performance these two different ownerships should be evaluated separately. The objective-subjective distinction might be meaningful within a framework considering the individual and the objects surrounding him, however it should not be overlooked that the activities that occur in the form of labor, knowledge and skills are not easily evaluated within the objective-subjective distinction. The individual reforms his existence with his own work. Supporting Litwinski (1942), Pierce and Rodgers (2004) objective ownership (such as one's house, car or jewellery) becomes a part of the individual's personality; therefore the distinction of objective-subjective becomes meaningless and indefinable. Previous studies revealed that autonomy and effective participation in organizations has greater impact on psychological ownership (perception and feeling of ownership) than legal possession tools such as employee partnership and share holding (Pendleton, Wilson and Wright, 1998).

As a shared cognitive model, psychological ownership covers beliefs constructed and shared socially and can exist on individual or group level (Druscat and Pescosolido, 2002). All possessings of the individual have no meaning for merely that individual person when isolated from the community because the person himself is a member of the community. The relationship between the person and the items he produces with effort and owns is formed through this membership. The person identifies his existence within the medium where other persons exist and his attitudes towards the items he owns in fact grow out of the interactions with the others (authority, solidarity, exchange, rivalry and so on) (Torrance, 1977: 175-177). Even an object of private property (a business, land, etc.) becomes socially meaningful when it is a part of interaction between people. Ownership institutionalizes the relationship of a society with a certain object (for example, makes an object a tool of exchange or gift giving, helps it to be excluded from the domain of others and be private).

Psychological ownership is related with the interaction between the person and the object and the question whether this interaction is denser in the part of the person or the object. When the person identifies the objects the idea is "to own"; when the object identifies the person the idea is "to belong to". Sometimes an object is not only a tool for the person's use but something that defines and conditions the person. For example, objects such as a country, city, team, and organization are so huge in terms of size, effect, dynamism and so on that rather than belonging to the person they own the person. These objects do not depend on the person; they are items that an individual cannot own by himself, but the person can only have an individual or communal feeling of ownership towards those objects. With these objects a large number of individuals have a common relationship and in this respect it is possible to mention a significant common ownership. Psychological ownership can also be a feeling shared by the members of a working group or an organization. This feeling of possession (I as the subject) and being possessed (I as the object) shared by individuals create some basic and essential similarities that increase solidarity, trust, common interests and evaluations, collaborationist behavior, shared norms and responsibility – concepts that are more or less related with collective possession.

Usually, for choosing the objects to be the target of possession not only the individual preferences but also the culture is an important factor (Pierce, Kostova and Dirks, 2003). The feeling of possession towards the organization, that is "the common values", by the members of the organization and the relationship of similarity and partnership stemming from this feeling can cause the individuals expect each other to act with solidarity and thus may serve formation of "organizational commitment". These expectations become normative rules and limits in time. Thus psychological ownership helps to develop moral values and reciprocal rights and liabilities, and behaviors of "organizational citizenship" may appear. Possession of reciprocal rights and liabilities is a requirement of membership to a group. As possession increases in addition to the functional behavior (resulting from normative obligation) dysfunctional behaviors (voluntary efforts) are supposed to increase. Together with losing membership to group or feeling of possession the person is obliged to relinguish all rights and responsibilities of possession.

1.2. Motives and experiences triggering psychological ownership. Why do people develop a feeling of psychological ownership? What lies beneath this psychological condition? What sort of individual motives are satisfied through such a feeling? Pierce, Kostova and Dirks (2001: 300) have suggested moving from the ideas of the early twentieth century researchers including Heidegger, Steiner, Weil, Dreyfus, Isaacs and Mead and later research-

ers including Furby, Dittmar and Porteus that there are three basic motives constituting the basis for psychological ownership:

♦ attaining the desired results or efficacy and effectance (efficacy and effectance);
♦ attaining self-identity and self-expression; and
♦ the will to have a place to dwell.

Three basic experiences growing in relation to and completing the above mentioned motives and amplifying psychological ownership are the facilities of control, self-investment and procuring information. These issues have been summarized in the few paragraphs below.

Bauman (2001: 215) argue that modern sprit is characterized with the motivation to control and change things surrounding him. Power, control and influence are related to the instrumental function of ownership. The meanings given to things are determined to a large extent by what we can do with them. Hence, the basic motive inspiring ownership is the efficacy provided by our belongings and the affectance of control thus attained. Ownership – and the socially recognized individual rights it entails – helps the individual to change his/her environment and satisfy his/her inner power/success needs. Achieving positive results for self-controlled behaviors results in pleasure and satisfaction for the individual. The control over physical environment is realized through the control over the objects that serve as instruments for accomplishing the change. Social control is achieved through the power of limiting and organizing access and use of the mentioned by others. Owning things considered attractive and symbolically valuable by the other members in the group is an important way of exercising control over the group. There is a causal relationship between control and ownership; as research demonstrates that controlling the target increases the feeling of ownership in time (Pierce, Kostova and Dirks, 2001: 301). Moreover, it is possible to refrain from them when objects are not shaped in accordance with the own designing capacity of the individual and when they are put aside even if they are extremely attractive. Sometimes one might take a photograph of an object (e.g., a landscape) and believe that moment belongs to him/her and perceive that moment as eternal. Objects only exist as our and for us under our own arbitrariness and authority. With ownership people feel free from external determiners to a large extent concerning their choices about the things they possess. Thus individuals experience not only efficacy and effectance but a sense of freedom as well. The objects become closer to us as our faculty of control strengthens however they become remote when our faculty of control is weakened (Furby, 1978).

Ownership makes important contributions to the realization of a symbolic interaction between individual identity and social environment. Identity is the most important interface that establishes the connection between individual and society. Ownerships -– that is the things possessed – help people to identify themselves and express themselves to others as they are extensions of one's self. The things we possess and our interaction with them contains symbolic meanings. According to symbolic interaction, an important theory in sociology and social psychology, objects are – like symbols – carry meanings given to them by the society. Individuals internalize the social meanings of their possessions and thus add meaning to and expand their personalities. Ownerships help us objectively to state who we are, what we do and what we can do, that is our social roles. The objects we possess and exhibit carry traces of our values, character, attitude, education, social attachment, and achievement. At times the physical or emotional attachment and association with an object, place or person might cause a feeling of ownership to arise. This attachment and acquaintance takes place thanks to our in-depth knowledge about the objects.

Knowing takes the individual closer to the object and causes it to integrate with his/her self. The relationship between the self and the object gets intense through becoming intimate and knowing and the sense of possession is crystallized. Here, time is observed to be an important variable. A person that works in an organization for a longer period-given that the person has more information about and closer relations with the organization – develops a sense of ownersip toward the organization and the related things. The more information and the better knowledge an individual has about an object the deeper the relationship between the self and the object (Pierce, Kostova and Dirks, 2001: 301). Theories of the self state that a person invests on the targets for protecting and developing the positive images within his/her self-consciousness and personality embraces all the psychological items identified as "mine" by the person. The philosophical distinction between the subject and the object (onthological-epitemological) becomes meaningless or vague considering our experiences and living space. For instance, children use "mine" instead of "me" in the earlier stages of their linguistic development (Hay, 2006: 41). Other psychologists of development such as Beaglehole, Dittmar and Furby, notify that for children ownership and control are important factors in the distinction of "self" and "other" (Pierce and Rodgers, 2004: 598). Our self-meaning, the meanings given to our possessions by ourselves and their social meanings merge and

necessitate us to revise, keep and transform the attitudes and definitions concerning ourselves. Ownerships facilitate establishing the relationship between the past and the future and keeping an understanding of the self. This is why we want to have objects that remind us the places we have been to, important moments of our life and memoirs. There is a strong connection between "me" and "mine". Karl Marx says that a person maintains his own self as an exclusive possessor and differentiates himself from others, thus keeping others out of the social territory occupied by his own self (Torrance, 1977: 164-165). While the individual acts as the bearer and representative of objects through ownership and possession, the object possessed has a role that categorizes the individual. Torrance, emphasizes that observers cannot make a full distinction between the individual and his possessions and perceive the personal qualities and the qualities of the possessed as a whole (gestalt) (Torrance, 1977: 164-165). We perceive not only others but ourselves in such a fashion, as well. We take our understanding of others as a model and use it for interpreting our relationship with things that are related to us. Obviously, we might establish a simple distinction between ourselves and the things about ourselves (the things we possess). However, Marxism moving from this Gestalt perspective asserts that the basis of the organizational social environment (superstructure) and the roots of the similarities and differences among people (groups and dissociation) lie in the relation between people and objects, that is; possession. Ownership is the most important attribute of the social processes in the emergence of individual and collective identities. As a result, people want to define, and express themselves and sustain their existence through ownership. The things acquired through our personal labour or mental efforts although physically remote or apart from us carry parts of us; such as our words, abilities, capabilities, thoughts and feelings. Naturally, we have a stronger feeling of ownership toward things that we have thought extensively of, worked harder for, and waited longer. Thus, organisations might enhance feelings of ownership through providing information, participation and autonomy on organizational fields including work, job, project, team and the like.

Ownership and the related psychological conditions may be accounted for through the motive of possessing a territory or space and having a home in which to dwell. This feeling manifested as "I should have a place of my own" stems from the need of the individual to be in a familiar, controllable and secure place. People cannot fulfill and expresss themselves in places they do not belong to, they are not familiar with or they do not possess, in full. Heideg-

ger says "the places we inhabit or the things we are used to are no longer objects for us, they become part of us"(Pierce, Kostova ve Dirks, 2001: 300). The motive of having a place is valid not only for territory but also for other objects. People may devote their labour, money and time to something (self-investment). For instance, when we produce something through labour (ideas, products, etc.) we can think that "what we have produced using our own labour belongs to us and is a part of us". Although extreme examples may result negatively, it can be said that similar thoughts exist in all individuals. Organisations are places full of objects (work, products, clients, projects, teams, etc.) According to Weil (1952: 33) soul finds comfort among the objects it possesses, the soul once surrounded by belongings protects itself from the feelings of loneliness and getting lost. Bauman metaphorically remarks the political and sociological meanings of the house negatively: Home is a place which is isolated from the unkown, which shows the limits of sovereignty, a defendable space, a transparent and semiotically legible territory (especially indeterminable) and lastly a place free from risk. "This imagined house gains its meaning from the conflict between risk and control, danger and safety, war and peace, spontaneity and perpetuity and part and whole" (Bauman, 2001: 180).

Pierce, Rubenfeld and Morgan (1991) have acquired findings which suggest employee ownership plans have positive social, psychological and behavioral results when the employees are supported to feel themselves as the owners. Moreover, Pierce, O'Dristol and Coghlan (2004: 508) assert that ownership, as a personal attitude, is important in determining which organizational issues are worth labor and attention, that it shapes the relations of the individual with the organization, that it effects the decisions of the employees in supporting or hindering organizational change along with several currently unknown effects. Pierce and Rodgers (2004: 596), emphasize that the feelings of responsibility, caring the nurturance, stewardship, perception of individual risks, self-sacrifice, resistance against change, enthusiasm toward change, motivation and citizenship develop through ownership. Van Dyne and Pierce (2004) have found a strong correlation between psychological ownership and organizational citizenship, work attitudes (attachment and satisfaction) and behaviors (organizational citizenship and performance). Vande walle, Van Dyne and Kostova (1995) have shown that the relationship between psychological ownership and dysfunctional behaviors is stronger than dysfunctional behaviors and organizational commitment and job satisfaction. According to Wagner, Parker, and Christiansen

(2003) psychological ownership is a shared cognitive model within the organization surfaces as convictions and behaviors of ownership. Wagner et al. (2003) have found that there is a positive relationship between psychological ownership and attitudes of the employees toward organization, financial performance of the work group and the organization, education and development possibilities, self-determination climate and being recognized by seniors. These qualities also illustrate the important elements of psychological ownership embodied in efficacy and effectance, self-identity and self-expression and lastly having a place which influence the organizational climate extensively.

1.3. Hypotheses of the study. The hypotheses and the criteria used in this study that aims at testing the positive effects of psychological ownership accepted by previous studies on the Turkish society in general terms and a state university in specific terms are as follows:

H1: There is a statistically directly proportional correlation between the participative organizational climate level and the organizational ownership level.
H2: There is a statistically directly proportional correlation between the feeling of organizational commitment and the feeling of possession.
H3: There is a statistically directly proportional correlation between job satisfaction and the feeling of possession.
H4: There is a statistically directly proportional correlation between organizational citizenship behaviors and the feeling of ownership in the individuals towards the organization.

2. Method

2.1. Universe and sampling. Dumlupinar University, which is a state university, was chosen as the universe of the study and the questionnaires were distributed to all its employees. The employees who participated in the questionnaires are technical and administrative staff, lecturers, research assistants and faculty members. The questionnaires were handed out to all the members of the universe composed of 1061 persons, according to the year 2006 data of the Staffing Office, and at the end of a certain period of time 735 questionnaires were returned. The ratio of the returned sheets was calculated as 69%. The sheets were examined and 709 of them were determined to be completed correctly and they were taken to be analyzed.

Table 1 gives the demographical features of the subjects who participate in the questionnaires.

Table 1. Demographical features of the test subjects

Gender distribution		
Gender	Frequency	Percent
Female	204	28,8
Male	505	71,2
Total	709	100,0
Education level		
Education level	Frequency	Percent
High school	113	15,9
Bachelor's Degree	284	40,1
Master's Degree	187	26,4
Ph.D.	125	17,6
Total	709	100,0
Position distribution		
Position	Frequency	Percent
Administrative Staff	292	41,1
Research assistant/lecturer	306	43,2
Faculty member	111	15,7
Total	709	100,0
Age distribution		
Age	Frequency	Percent
18-25	102	14,4
26-40	296	41,8
41-55	237	33,4
55 +	74	10,4
Total	709	100,0
Time of occupation		
Time of occupation	Frequency	Percent
1-5 years	339	47,8
6-10 years	142	20,0
11-15 years	180	25,4
16 + years	48	6,8
Total	709	100,0

According to the data in the Table 1, 71.2 % of the samples were male and 28.8% of them were female employees. In terms of age, 41.8% of the samples were between the ages of 26-40; 33.4% were between the ages of 41-55; 14.4% of them were between the ages of 18-25 and finally 10.4% of them were older than 55. When the distribution of the samples as for education level is considered it seems that 85% of them have Bachelor's and Master's degrees. This high level of education is due to the fact that the establishment choosen is a university. In terms of distribution of the samples as for their positions the research assistants/lecturers (43.2%) and the administrative staff (41.1%) constitute the largest groups. The relatively small number of the faculty members results from both the limited number of faculty members employed in the university (a total of 258 persons) and indifference of the present members about the questionnaires.

2.2. Tools of data collection. Other than the demographic variables, the questionnaires are composed of five data collecting tools made of the following criteria: organizational climate, psychological ownership, job satisfaction, organizational citizenship and organizational commitment. In order to test reliability of the questionnaires prepared for the study, it was applied on 50 samples during preparatory work. The reliability of the data from Lickert type questionnaires developed with 68 variables was tested and at the end of the analysis the Cronbach Alpha coefficients of each factor group below were calculated. Because these values were very close to 1.00, the questionnaires were deemed to be reliable and thus decided to be employed in the study.

Organizational climate variables. Wagner et al (2003) take participative management, recognition and in service training as a basis as the factors defining participative organizational climate. This scale was first developed with 10 articles but after the preparatory application it was reshaped with some expressive changes to fit the sample and was decreased to 9 articles. The internal consistency of the sub-variables mentioned was measured as (Cronbach Alpha) 0,927.

Job satisfaction variables. A job satisfaction scale composed of 8 articles was used in the study. The internal consistency of the sub-variables mentioned was measured as (Cronbach Alpha) 0,809.

Psychological ownership variables. For this variables, the 7-point Lickert scale with 7 questions developed by Pierce, Van Dayne and Cummings (1992) and later tested by Van Dayne and Pierce (2004) was taken originally and used as 5-point Lickert scale with 5 questions. The internal consistency of the sub-variables mentioned was measured as (Cronbach Alpha) 0,905.

Organizational citizenship variables. The scale developed by Vandelwalle et al. (1995) with 23 questions about functional and dysfunctional behaviors was taken and adding 7 questions designed for specific situation of the samples that constitue the universe of this study an organizational citizenship scale made of 30 questions was formed. The internal consistency of the sub-variables mentioned was measured as (Cronbach Alpha) 0,933.

Organizational commitment variables. As the scale for organizational commitment Porter's scale made of 15 articles (Porter, Steers, Mowday and Boulian, 1974) was used. The internal consistency of the sub-variables mentioned was measured as (Cronbach Alpha) 0,886.

3. Findings

The averages of the tables concerning the criteria used in this study are given in Table 2.

Table 2. Table averages concerning research data and standard deviation

Criteria	$\overline{X}$	S.d.
Job satisfaction	3,9756	0,7786
Organizational citizenship	3,7994	0,6051
Psychological ownership	3,5841	0,9827
Organizational commitment	3,5355	0,7124
Organizational climate	3,3545	0,9401

($\overline{X}$ = 1.00 - 2.36 Do not agree; $\overline{X}$ = 2.37 - 3.66 Partially agree; $\overline{X}$ = 3.67 - 5.00 agree[1])

When the table is observed the highest average is seen in "job satisfaction" variables (3,9756), followed by organizational citizenship, psychological ownership and organizational climate. The variables concerning "job satisfaction" and "organizational citizenship" criteria are mostly agreed yet variables concerning other scales are partially agreed.

Table 3 shows the correlation analysis results between the scales used in the study.

Table 3. The correlation matrix of the views concerning the research data

	Job satisfaction	Organizational citizenship	Psychological ownership	Organizational commitment	Organizational climate
Job satisfaction	1,000	,634*	,609*	,648*	,543*
Organizational citizenship		1,000	,565*	,632*	,446*
Psychological ownership			1,000	,708*	,526*
Organizational commitment				1,000	,596*
Organizational climate					1,000

Note: Correlation is significant for α = 0.01 significance level.

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[1] These intervals used for interpreting the averages of the Table were calculated dividing the width of series between the lowest value 1 and the highest value 5 (that is 4) by the number of levels (by 3) which were determined by the researchers in accordance with the answers "Do not Agree", "Partially Agree", "Agree".

When the Pearson correlation coefficients in the table are observed, it is seen that there is a positive correlation among the variables that statistically have 99% reliability levels. This result suggests that together with the increase in the test subjects' level of agreement with the given opinions the level of their agreement with the other opinions also increase. According to the data present in the table, the highest correlation among the variables was between psychological ownership and organizational commitment. This finding shows that the psychological ownership toward the organization is

enhanced as the organizational commitment of the individuals increases. The correlations between job satisfaction and organizational commitment and job satisfaction and organizational citizenship are also significant.

The five criteria on the survey sheet were determined to be variables and they were exposed to "Multi-Variable Variance Analysis" (MANOVA). Within the framework of this analysis Hotellings Test was applied and the values reached were listed in Table 4.

Table 4. Summary of the variance analysis that shows the differences between the demographic features as for the criteria

Variables	Average				F	p
Gender	Female		Male			
Organizational climate	3,290		3,381		1,358	0,244
Job satisfaction	3,943		3,989		0,515	0,473
Psychological ownership	3,399		3,659		10,280	0,001
Organizational citizenship	3,773		3,810		0,550	0,459
Organizational commitment	3,458		3,567		3,415	0,065
Hotellings Test					2,633	0,023
Age	18-25	26-40	41-55	55 +		
Organizational climate	3,273	3,277	3,419	3,571	2,624	0,050
Job satisfaction	3,796	3,937	4,084	4,033	3,766	0,011
Psychological ownership	3,293	3,500	3,754	3,780	7,250	0,000
Organizational citizenship	3,632	3,745	3,903	3,914	6,754	0,000
Organizational commitment	3,286	3,501	3,637	3,692	7,385	0,000
Hotellings Test					2,539	0,001
Service period	1-5 Years	6-10 Years	11-15 Years	15 + Years		
Organizational climate	3,331	3,232	3,502	3,329	2,368	0,070
Job satisfaction	3,897	3,885	4,168	4,074	5,831	0,001
Psychological ownership	3,389	3,603	3,906	3,696	11,615	0,000
Organizational citizenship	3,749	3,749	3,915	3,873	3,566	0,014
Organizational commitment	3,434	3,522	3,721	3,596	6,645	0,000
Hotellings Test					3,182	0,000
Position	Administrative	Research asst./lecturer	Faculty member			
Organizational climate	3,162	3,513	3,422		11,037	0,000
Job satisfaction	3,753	4,120	4,161		21,502	0,000
Psychological ownership	3,478	3,646	3,694		3,010	0,050
Organizational citizenship	3,653	3,893	3,927		15,325	0,000
Organizational commitment	3,412	3,634	3,589		7,728	0,000
Hotellings Test					6,065	0,000
Level of education	High school	Bachelors' Degree	Masters' Degree	Ph. D.		
Organizational climate	3,355	3,273	3,424	3,436	1,372	0,250
Job satisfaction	3,846	3,874	4,108	4,126	6,163	0,000
Psychological ownership	3,647	3,497	3,630	3,655	1,246	0,292
Organizational citizenship	3,682	3,722	3,897	3,936	6,871	0,000
Organizational commitment	3,520	3,460	3,638	3,569	2,476	0,060
Hotellings Test					2,602	0,001

When the results of the Table that shows the summary of variance analysis which demonstrates the differences between the demographic features as for the criteria are examined the following results are reached:

♦ The only variables that is statistically different in terms of F values significance level as for the gender variable is the "psychological ownership". In terms of organizational ownership the higher average was belonging to the males (3,659). The level of organizational ownership was appearently higher with the male employees compared to the females.

♦ When the criteria of the analysis are examined as for the age groups one by one, it is observed that the difference that appears results from the four criteria other than the variables of organizational climate: the fact that the older the test subjects are the higher the levels of psychological ownership, job satisfaction, organizational citizenship and organizational commitment become, is clearly demonstrated by the data of the table.

♦ Similar with the case of age groups, the difference in terms of service period results from the four criteria other than the variables of organizational climate: a trend of increase – despite some partial fluctuations – is observed in levels of psychological ownership, job satisfaction, organizational citizenship and organizational commitment as the service periods of the test subjects get longer.

♦ The difference that appears as for the positions of the test subjects is observed to stem from the four criteria other than the variables of psychological ownership. It is significant that the administrative staff have the lowest averages for all the criteria. While the faculty members own the highest averages for job satisfaction and organizational climate criteria, the research assistants and lecturers have the highest averages for the criteria of organizational climate and organizational commitment.

♦ It is observed that the difference in terms of education levels stems from the criteria of job satisfaction and organizational citizenship. It is obvious in the table that as the educational level of the test subjects increases their job satisfaction and organizational citizenship levels also increase.

The results of the multiple regression analysis which was made for determining the causality relation between "psychological ownership" and other criteria that are thought to affect psychological ownership in view of the research are given in Table 5.

Table 5. Results of the multiple regression analysis conducted to determine the factors that have causality relationship with psychological ownership variables

Factors	β Coefficient	t value	P
Job satisfaction	0,558	13,124	0,000
Organizational climate	0,289	8,270	0,000
Service period	0,110	3,891	0,000
Gender	0,169	2,740	0,006

Note: $R^2 = 0,446$; Adjusted $R^2 = 0,442$; F = 141,421; df = 4; p = 0,000.

When the correlation coefficients in the table are observed it is obvious that there is a statistically significant relation between psychological ownership variables and other factors mentioned in the table. The relation is considered to be positive since the β coefficients of the factors are positive. As the F value in the table is valid at 0,000 significance level the model is valid as a whole and the mentioned 4 factors account for 44.2% of the changes in the "psychological ownership" variables. There were not any statistically significant relations determined between psychological ownership variables and age (β = 0.021; t = 0,522; df = 7; p = 0,602 > 0,01), position (β = -0.014, t = -0,237; df = 7; p = 0,812 > 0,01) and education (β = -0.043; t = -0,964; df = 7; p = 0,335 > 0,01) thus the tables concerning the mentioned factors were omitted.

The t-values of the factors were given in Table 4 ranking from the highest to the lowest. Among these the changes in "job satisfaction" variables accounts for the changes in "psychological ownership" variables in a better way compared to other factors. It is followed by "organizational climate" and "service period", respectively. "Gender" is the last factor. This finding is statistically supported since the t values are valid at 0,000 and 0,006 significance levels.

The following findings were achieved as a result of the multiple regression analysis conducted to determine the causality relationship between "psychological ownership" and the probably effected "organizational citizenship" and "organizational commitment" variables:

♦ The result of the multiple regression analysis conducted to determine the causality relationship between "psychological ownership" and "organizational citizenship" is given in Table 6.

Table 6. Results of the multiple regression analysis conducted to determine the causality relationship between psychological ownership and organizational citizenship

Factor	β Coefficient	t value	p
Organizational citizenship	0,348	18,206	0,000

Note: R2 = 0,319; Adjusted R2 = 0,318; F = 331,467; df = 1; p = 0,000.

When the correlation coefficients in the table are observed it is obvious that there is a statistically significant correlation between psychological ownership and organizational citizenship. The relation is considered to be positive since the β coefficients of the factors are positive. As the F value in the table is valid at 0,000 significance level the model is valid and the changes in psychological ownership variables account for 31.8% of the changes in the "organizational citizenship" variables.

The result of the multiple regression analysis conducted to determine the causality relationship between "psychological ownership" and "organizational commitment" is given in Table 7.

Table 7. Results of the multiple regression analysis conducted to determine the causality relationship between psychological ownership and organizational commitment

Factor	β coefficient	t-value	p
Organizational commitment	0,513	26,662	0,000

Note: R2 = 0,501; Adjusted R2 = 0,501; F = 710,861; df = 1; p = 0,000.

When the correlation coefficients in the table are observed it is obvious that there is a statistically significant correlation between psychological ownership and organizational commitment. The correlation is considered to be positive since the β coefficients of the factors are positive. As the F value in the table is valid at 0,000 significance level the model is valid and the changes in psychological ownership variables account for 50,1% of the changes in the "organizational commitment" variables.

4. Discussion

The starting point of the participatory and autonomous organizational climate and supporting collective incentive plans (e.g., profit/gain sharing and employee ownership) developed by corporate actors such as enterprises and organizations for motivating their employees and reducing external control is adapting the individual interests of the employees to the collective interests of the enterprise. Thus, the employee will not consider himself as an agent rewarded for contributing to the interests of the enterprise but as a principal identified with the enterprise. In short, these applications enabling employees to internalize organizational norms, values and aims are efforts that aim at forming new selves through boosting the ownership feelings of the employees. Ownership and developing ownerships, which play an important role in the formation of the individual self, lie in the background of these identity transformation efforts.

Although the feeling of ownership is universal, different cultures might have different notions of ownership. While under certain social conditions efficacy and effectance or individual successes are foregrounded, the motive of having a place or family and community might be foregrounded at others. Similarly, at collective cultures collective ownerships might be promoted while individual ownerships may lead to anxiety.

Pierce, Kostova and Dirks (2003) have emphasized that personal factors such as service period, statutes and roles, gender, age, personality, etc. might affect the feeling of ownership. While Machiavellist and efficacious persons using power and control are inclined to objects that give power and control, extrovert persons using their social relations are inclined to objects that strengthen their social relations; introvert people or people with a strong perception of self-identity might be inclined to objects that facilitate realizing their inner targets making use of their self-investment. While males try to reach objects providing efficacy and control using physical activity, females are inclined to symbolic objects that may facilitate their self-expression. Considering the importance of ownership and ownership behaviors in self-realization and self-expression, it might be asserted that individual values and cultural values influence the targets and methods of ownership behaviors. People can prefer different values considering whether materialist or post-materialist values are important in the society and the object of value may change. For instance, while material targets are chosen in Hofstede's (1991) male-dominated societies, idealist targets may be chosen in female-dominated societies. Comparative cultural studies have verified that different cultures have different approaches toward and meanings for job and work. These differences may have diverse effects on the roots of the motives leading to psychological ownership or experiences leading to psychological ownership. Several hypotheses and proposals may be developed on this issue, however, it is obvious that there is a limited number of research in the field.

In this study, findings which suggest that individual differences such as service period and gender increase psychological ownership were obtained; however, supporting evidence on the effects of age and position were not adequately achieved. Moreover, factors such as culture and personality were not included in the scope of the study.

It has been observed that organizational climate increases ownership feelings and job satisfaction has a positive relationship with psychological ownership supporting former research findings. Although it is considered that job satisfaction increases psychological ownership as for the direction of the relationship making a certain judgment might not be convenient.

Lastly, it has been observed that former research findings claiming psychological ownership positively effects organizational citizenship and organizational commitment were supported.

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