Mehmet Turhan[1]
Anadolu University
Eskişehir, Turkey
Hasan Basri Memduhoglu[2]
Siirt University
Siirt, Turkey

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TEACHER TURNOVER: A CONTINUAL PROBLEM IN TURKEY[3]

Abstract: This study aims to determine the reasons for teacher turnover in the Van province, Turkey, and correspondingly, to propose solutions according to teacher views. The research is based on Q Methodology, which is used to reveal organizations' typographies and to determine the issues on which the organization's members arrive at a consensus or disagree. It was determined that providing economic stimulus, together with precautions to eliminate safety concerns and transportation problems, increasing social, artistic, and cultural activities and giving extra service/precedence scores, will to some extent help to increase the average length of service for teachers working in Van. In addition, improvements related to teachers' working conditions will help to decrease teacher turnover and related problems. Regulations to decrease teacher turnover are recommended with the aim of encouraging teachers to work in turnover regions instead of keeping them in certain other working regions.

Keywords: Educational administration, Q Methodology, teacher, teacher turnover.

INTRODUCTION

Teacher turnover has remained an uncharted study area in Turkey for years, although it has been referred to in policy papers (Ministry of National Education [MoNE], 2017), reflected in the local and national media (Milliyet, 2014), and pointed out in various studies (Polat, 2015). It can easily be detected from the literature that it is widely accepted as a serious problem with regard to providing quality education, especially in small settlements, despite finding few scientific papers related to teacher turnover or its features peculiar to Turkey. Teaching can be likened to a relay race and teacher mobility is usual, despite in a number of settlements or schools, teachers' terms of office being far from normal. Nevertheless, the mission of education in a society, and the reflections of teacher turnover on education, make teacher turnover a real problem area that needs to be considered and scientifically examined in depth.

For teacher turnover to occur, what percentage of the teachers working in a province is needed to leave their school? There is no clear answer to this question. From this perspective, it can be argued that teacher turnover is only a perceived situation and, therefore, evidence of teacher turnover in a region can only be obtained by comparing it with other education

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[1] mehmetturhan@anadolu.edu.tr
[2] hasanmemduhoglu@gmail.com
[3] The study is based on the first author's master's thesis written under the direction of the second author

regions/provinces/countries. The greater the difference, the higher the perception of turnover will be. The teacher turnover to be discussed in this study can be defined as the departure of many teachers in a province/school from where they work for any reason (health excuse, family unity excuse, military service, and so on) after working for relatively short periods of time. However, it should be noted that turnover does not occur with the departure of a single teacher from a school, but with the sum of individual departures.

Teacher Turnover in Turkey

Turkey is experiencing teacher turnover from rural to urban and from east to west, depending on the overall development of a region. Similarly, it seriously damages the quality of education by causing teacher shortages in the Eastern and South-Eastern Regions as well as rural areas of the Eastern Black Sea Region. On the other hand, many western provinces, and especially urban centers, are facing supernumerary (MoNE, 2017). As a result, attempts are made to address teacher shortages in disadvantaged regions with substitute teachers. On the other hand, in developed countries, it is considered extremely important to have qualified teachers in every class for students, and this has been the subject of numerous studies in recent years (Ingersoll, 2000; UN, 2015).

Ozoglu (2015a) clearly demonstrates that teacher turnover is not experienced at the same level in every region/province. His research shows that while the average teacher turnover rate is 6.4% in Turkey, turnover rates for the Mediterranean, Aegean and Central Anatolia regions are generally lower than 5%, although the South-Eastern and Eastern Anatolia regions have the highest turnover averages. The turnover rate in Van, where this study is conducted, is between 15-20%. Ozoglu states that at least 20 of every 1000 newly-appointed teachers are appointed to the Van Province, while only 5-10 of the 1000 teachers who leave other cities choose to work there. The average tenure of a teacher in a school in Turkey is eleven years. This average seems reasonable in terms of teacher turnover. However, examination based on provinces shows that certain provinces have considerably lower averages. Average teacher tenure is less than three years in five provinces, and three to six years in ten provinces. On the other hand, the average tenure in thirty of the provinces is higher than twelve years. The average tenure in Van, where the research was conducted, is three to six years. The MoNE also confirms this data (MoNE, 2017). Sahin (2011) determines that 34% of teacher candidates thought that they would not or could not work anywhere in the country. Anxiety regarding personal security, insufficient social life opportunities, and being away from family or a culture where they felt they belonged are the most prominent reasons for this. In addition, 24% of those who stated that they were prepared to work anywhere in Turkey accepted this because they thought that they had no other choice.

Before mentioning the reasons for teacher turnover, it would be useful to briefly address appointment and relocation types in Turkey. The MoNE divides eighty-one provinces into three service areas, considering the need for teachers, geographical features, socio-economic development levels, transportation facilities, and service requirements. Van is listed among the third service region where the most disadvantaged provinces are listed, according to the specified variables (MoNE, 2015a). In Turkey, teachers are appointed to their first school by way of central assignment. School lists to be chosen by the teacher candidates are announced by the MoNE in each appointment period, based on the teacher needs of the previously determined schools. Teachers, who choose a certain number of schools they are happy to be placed in according to the ranking of score superiority, can optionally request to be placed at any institution other than their preferences, in the event that they cannot be placed at any of their preferences. However, most teachers do not want to work in provinces in the third service

region and want to be appointed to other service regions. For this reason, most teachers who complete their compulsory service period in the third service region apply to be appointed to another service region. Therefore, an intense need for teachers occurs in the third service area. As a result, the lists of schools that can be preferred for a first appointment are mostly in the third service region. Ozoglu (2015b) finds that 60% of the newly-appointed teachers were appointed to the Southeast and East Anatolia regions. The same study shows that teachers assigned to these regions have the lowest KPSS (Public Personnel Selection Exam) scores, and this finding makes for interesting reading when read with Sahin's study (2011) of teacher candidates. Many teachers prefer not to work in certain regions, but they started to work in the Southeastern Anatolia and Eastern Anatolia regions because they could not be assigned to other regions due to their KPSS scores.

As a result, the third service region, where education and training services are carried out under extremely difficult conditions, is overflowing with inexperienced teachers. Striking examples can emerge where almost all the teachers are candidate teachers, and advisors have to be appointed from different schools. The appointment of many young, dynamic, and idealistic teachers with fresh academic knowledge to these regions can be seen as an advantage, but it should be taken into account that the vast majority of these young teachers are single and have not completed their military service. Teachers who were deemed on leave to do their military service shortly after starting their duty or who were assigned to different provinces due to their marital status also play a part in teacher turnover.

Until 2016, teachers were expected to serve at least three years in a school to which they were assigned (MoNE, 2015). With this compulsory service period, an attempt was made to slow turnover. Despite this, a number of teachers could leave their schools without completing their compulsory service, using their personal rights, such as health excuses or protection of family unity. Even though it is rare, 'fake/contracted marriages' were also seen, using the right to family unity as a reason to be assigned to a different city (Akyarli Guven, 2011). In 2016, the MoNE restarted the practice of contractual teaching to decrease teacher turnover. However, this time, contractual teaching, apart from the previous definitions, was defined as 'temporary teacher status' in which the teachers who started their job for the first time by appointment would work in a school for six (4 + 2) years. During those first four years, contractual teachers did not have the personal rights teachers on the permanent staff had, such as health, educational and family unity excuses (MoNE, 2016). However, this change generated a reaction from teachers, as it was a move to reduce teacher turnover with legal obligations, just like previous regulations (Demirkaya & Unal, 2017).

Turnover studies conducted in different countries clearly show that this phenomenon is not unique to Turkey. Barnett and Hudgens (2014) state that an ordinary student stays at the same school longer than an ordinary teacher in the USA. With a comprehensive literature review, it is possible to access many resources on teacher turnover, starting from the second half of the twentieth century, notably in the United States, Canada, England, Norway, South Africa, Georgia, Hong Kong, South Africa, Australia and many other countries.

The Main Reasons for Teacher Turnover

There are different reasons why a teacher wants to leave the school where he/she works. Working conditions at a school are extremely influential in teachers' decisions to change schools (Wu, 2012). Students' achievement levels, and motivation levels, the quality of communication with the school administrators and parents, the physical infrastructure and socio-economy of the school and the school environment, the school administration's attitudes

to teachers, the physical and cultural proximity of the region where a teacher works to the region where the teacher feels he/she belongs are some of the important variables teachers consider in deciding to leave their schools (Allen, Burgess and Mayo, 2018; Dolton & Newson, 2003). Similarly, as student success and economic income decrease, and the proportion of minorities increases, teachers tend to work in different schools (Feng, 2014). According to Billingsley (1993), teacher turnover has three main sources: (1) external factors (social, economic, and institutional); (2) job-related factors (job competencies, work conditions, and obligations); and (3) personal factors (demographic, familial, and emotional/intellectual).

Turnover rates are higher in small schools and private schools, and better wages, public health policies, and large schools are effective in this (Ingersoll, 1995). Although it has been clarified in various studies that the economic situation of parents also triggers teacher turnover in general, it has been understood that good wages and health insurance policies reduce turnover in these schools. Ingersoll (2000) points to job dissatisfaction (low wages, insufficient support from stakeholders, disciplinary problems, and so on) and family or personal reasons (pregnancy, childcare, family moving, health problems and others). Edgar and Pair (2005) define the reasons for teacher turnover as personal reasons, career change, school administration's decision, job dissatisfaction, or retirement. The turnover problem has been examined by researchers in different countries on almost every continent, and it has been determined as a common point that it operates as a displacement from disadvantaged regions to advantageous regions. However, the reasons may be specific in certain regions. One of the distinguishing reasons for teacher turnover in Turkey seems to be security concerns (Akdogan, 2015; Sozcu, 2015). Edgar and Pair (2005) clarify that a number of teachers do not consider turnover as a problem and actually think that the teaching profession is a bit 'mobile' due to its nature. However, many research studies underline that teacher turnover has negative academic (Cochran-Smith, 2004; Cree, 2007), social (Cemaloglu, 2009; Watson, 2001), and economic (Dillion, 2007) effects on students and schools. For this reason, it is important to reveal the reasons for teacher turnover in education in detail, in terms of reducing undesired results.

METHOD

Within the scope of this study, the Q methodology was used to determine the reasons for teacher turnover and to propose solutions. The Q Methodology is a type of analysis used to measure people's attitudes and perceptions, first developed in the field of psychiatry, but gradually started to be used by social scientists (Demir & Kul, 2011). The Q Methodology can be used to reveal the typographies of organizations, as well as to determine consensus points of the members of an organization on a certain subject (Kocak, 2010). Unlike the R method, the Q Methodology pushes the participant to consider other sentences while classifying a judgment sentence given to him and, in this respect, the method follows a more reliable way when explaining human behavior and opinions on a subject (Addams & Proops, 2000).

The basic approach of the Q Method is that the participants line up the items given to them on a scale from a negative end to a positive end in accordance with their opinions. In practice, participants are expected to place the judgment statements on a Q grid. The participants should rank the items that feel the most appropriate for them to the plus pole (+), and to the minus pole (-) those that they feel the furthest from (Danielson, 2009). In other words, the rate of participation to the items increases as it goes from left to right on the Q grid.
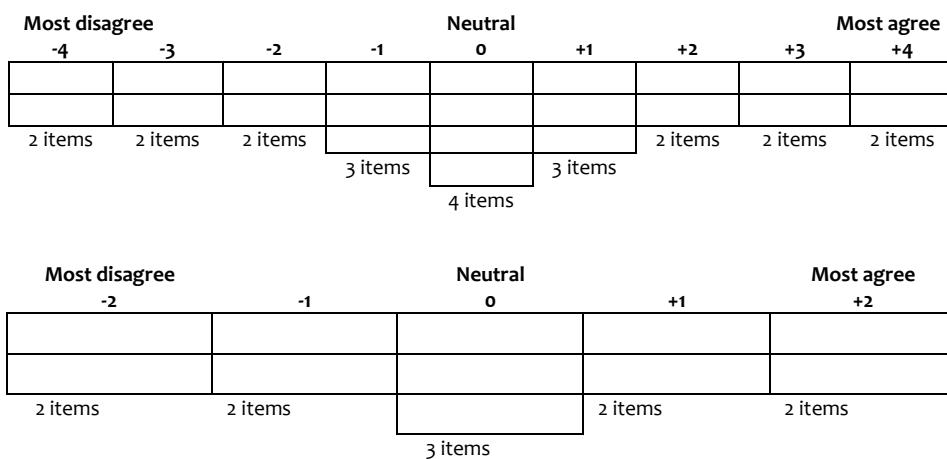
Most disagree				**Neutral**				**Most agree**	
-4	**-3**	**-2**	**-1**	**0**	**+1**	**+2**	**+3**	**+4**
2 items	2 items	2 items				2 items	2 items	2 items
			3 items		3 items			
				4 items				

Most disagree		**Neutral**		**Most agree**
-2	**-1**	**0**	**+1**	**+2**
2 items	2 items		2 items	2 items
		3 items		

Figure 1. Q Grids

The Q grids can be created in two ways: (1) the free-choice format in which the participants can place as many sentences under the number they want; and (2) the forced-choice format, in which the researcher determines how many judgment sentences will be placed under each number (Demir & Kul, 2011). In this study, the participants were asked to make a ranking in accordance with the forced choice method, in order to determine the teachers' views in a purer and crystallized order of importance.

Data Collection Tools

The 'Teacher Turnover Questionnaire', which is also called the Q Set in Q Methodology, was developed by the researchers. Firstly, a draft questionnaire was created by literature review, examining reports about teacher turnover and the statements made by the ministry/provincial directorate of national education. After getting expert views, the questionnaire was finalized with twenty-two items related to the reasons for teacher turnover and eleven items regarding suggestions regarding teacher turnover.

Sampling

Addams and Propp (2000) argue that a large sample size is not needed to obtain valid and reliable results in Q methodology. What matters and needs attention is the diversity of the participants. The prevailing opinion is that the number of different opinions cannot exceed the number of participants in any study. Therefore, a sample that is thought to have extensive knowledge on a subject, and which can develop different perspectives, indicates that validity and reliability of the research is assured (Van Exel & De Graaf, 2005).

The sample of the study consists of seventy-six teachers who work in primary, secondary, and high schools affiliated to the MoNE in thirteen districts of Van, and twenty teachers that had previously worked in Van. In the selection of the participants, considering the maximum diversity principle suggested by the Q Methodology, it was ensured that the participants from the thirteen districts varied in terms of gender, age, seniority, region of belonging, place of birth, and school type. Table 1 shows the demographic variables of the participant teachers:

Table 1.
Demographic Variables

Variable	Category	Frequency (f)	Percentage (%)
Gender	Women	46	48.7
	Men	50	51.3
School Type	Primary	44	44.7
	Secondary	30	30.3
	High School	22	25.0
Region of Belonging	The Mediterranean Region	16	15.8
	The Eastern Anatolia Region	20	22.4
	The Aegean Region	25	27.6
	The South-Eastern Anatolia Region	4	3.9
	The Center Anatolia Region	10	7.9
	The Black Sea Region	10	9.2
	The Marmara Region	11	13.2
Tenure	1-4 years	61	67.1
	5-8 years	20	15.8
	9 years and more	15	17.1
Place of Birth	Van	20	25
	Other provinces	76	75
The Reason for Working in Van	Because I wanted to/ I love there	24	28.9
	Compulsory	63	61.8
	Because some family members live there	9	9.2
The Reason for Wanting to Leave Van (Only those currently working in Van)	I want to leave as soon as possible	29	38.2
	I want to serve a maximum of one more year	13	17.1
	I want to serve for a few more years	22	28.9
	I do not think to leave	12	15.8
Where do you want to work for your next appointment? (Only those currently working in Van)	In a different school in the same district	6	7.9
	In a different school in another district in Van	6	7.9
	In a different school in surrounding provinces	2	2.6
	In a different school in another region	62	81.6
Are you satisfied with your decision to leave the Van province? (Only those from other provinces)	I am glad I did	14	70
	I am not sure	5	25
	I wish I had not	1	5
TOTAL			**100**

When the demographic variables are examined, it can be seen that the ratio of women to men and the school types are close. The fact that most of the participant teachers have one to four years' tenure is an effect of the teacher turnover itself, which is the main basis of this study. In addition, this rate is two-thirds of those who are still working in Van. Another striking result presented in Table 1 is the desire of 38.2% of the participants to leave their school as soon as possible.

70% of the group express that they are satisfied with their decision to leave Van, which again reveals the importance of the study. According to these findings, three out of every four teachers working in Van comes to Van against their wishes. While five participants stated that they were not sure regarding the decision to leave Van, only one participant expressed regret about the decision to leave Van. In summary, this shows that the participants have similar views, even after leaving Van.

Collecting and Analyzing Data

The questionnaire implementation was carried out through face-to-face interviews with participating teachers working in Van. During the data collection phase, each item of the Teacher Turnover Questionnaire was printed on a separate card and given to the teachers. First of all, the teachers were asked to divide the cards given to them into three groups; positive, negative and, neutral. After this, they were asked to read the judgment sentences again and place one item in each box below the number they deemed appropriate, according to their degree of agreement/disagreement. This process was carried out in two steps; the reasons for teacher turnover and suggestions for teacher turnover. Finally, the item numbers were recorded as the participants arranged. The same procedure was carried out online with teachers working outside of Van.

Q analysis is based on factoring the participants after data analysis. The participants, whose opinions were gathered under the same factor, are considered to have similar views, and this affinity is related to the closeness of the templates that emerge with the order of the judgment sentences. In addition, the judgment sentences that the participants deem the most important/the most correct in each factor are revealed in this way (Danielson, 2009). The data was analyzed with the PQ Method program, which was created for the analysis of Q Method studies.

FINDINGS

In the Q Method, the 'SE=(1/√n) x (1,96)' formula (McKeown & Thomas, 2013) was used because significance was sought at the level of '$p < 0.05$' in distributing the participants to statistically significant factors. Therefore, when examining the findings to determine the reasons for teacher turnover, if the correlation between a participant and any factor is .418 or more, this participant's opinion should be evaluated under the relevant factor. The same is true for the evaluation of the findings of suggestions for the teacher turnover section and the criterion value for this section is .59. According to the Q analysis, the participant teachers' views are listed into three factors, both for turnover reasons and suggested solutions.

Factor correlations

Table 2 shows the correlation between the factors. A low correlation indicates that the factors differ from each other, while a high correlation indicates the closeness of the factors.

Table 2. *Factor Correlations*

			1st Factor	2nd Factor	3rd Factor
Reasons for Teacher Turnover	**Van (Group 1)**	1st Factor	1.0000	-0.0330	0.1322
		2nd Factor	-0.0330	1.0000	0.0428
		3rd Factor	0.1322	0.0428	1.0000
		1st Factor	1.0000	0.2490	0.3912

	Other provinces (Group 2)	**2ⁿᵈ Factor**	0.2490	1.0000	-0.0588
		3ʳᵈ Factor	0.3912	-0.0588	1.0000
Solutions Towards Teacher Turnover	**Van (Group 1)**	**1ˢᵗ Factor**	1.0000	0.1083	0.2311
		2ⁿᵈ Factor	0.1083	1.0000	-0.1190
		3ʳᵈ Factor	0.2311	-0.1190	1.0000
	Other provinces (Group 2)	**1ˢᵗ Factor**	1.0000	-0.0155	0.3226
		2ⁿᵈ Factor	-0.0155	1.0000	-0.1134
		3ʳᵈ Factor	0.3226	-0.1134	1.0000

Examining Table 2, it can be seen that the participants form three distinct groups based on their opinions. When the most important items are examined, based on factors, it can be said that the order of importance of certain items can vary greatly in different factors.

Table 3. Q Values Regarding the Reasons for Teacher Turnover

Items	Van (Group 1)			Other provinces (Group 2)		
	1ˢᵗ Factor	2ⁿᵈ Factor	3ʳᵈ Factor	1ˢᵗ Factor	2ⁿᵈ Factor	3ʳᵈ Factor
3. Desire to be close to family/hometown	4	1	4	4	-4	3
4. Living in Van is not among my future plans	3	-2	4	4	3	0
5. Distance to the culture of belonging	-4	4	3	3	2	-2
21. Transportation problems	3	-1	2	-2	1	-3
8. Limited opportunities for social, cultural, and artistic activities	0	-2	3	-4	-4	-4
19. Discomfort caused by being sent to the school under compulsion	0	0	1	3	1	4
1. Intense conflict environment and security concerns	4	3	-2	0	3	-3
18. The motivation to be employed in a new city/school	1	-1	0	0	0	1
10. High cost of living in Van	1	0	-4	-1	0	-1
15. Attitudes of school and local education administrators	1	3	-1	2	1	4
16. Not getting support for educational effort/depreciation of my views	2	0	1	0	-1	2
12. Limited opportunities for postgraduate education	2	-3	-4	-1	0	0
9. Not getting the respect I expect from the environment as a teacher	-4	2	0	0	-2	-1
20. Low student motivation and academic success	-2	0	1	1	2	0
6. Language problem	0	2	-3	-2	-2	-2
7. Inadequate access to healthcare services	-1	4	-3	1	4	1
14. Desire to work in a province where my children can receive a better education	0	1	0	-3	-3	0
22. Not being able to establish close relations with the local citizens	-3	-4	-2	-3	-1	2
2. Intense political environment	-2	-1	-1	-1	4	-4
13. Inadequate physical structure of schools that makes teaching difficult	-1	1	2	1	-1	-1

17. Violent behavior and disciplinary problems of students	-1	-3	-1	2	0	3
11. Parents' indifference	-3	-4	0	-4	-3	1

Item Q values, depending on the factors given in Table 3, were determined according to the factor averages given to each item. It can be understood that the participant teachers in three factors consider the desire to be close to family/hometown among the first two most important items for teacher turnover and, on the other hand, the same item is listed among the least important items in another factor. The order of the item 'indifference of parents' among the reasons for teacher turnover is quite low in four of the factors, while it is considered to be moderately important in the other two factors. While the teachers in group 1 had different ideas about the 'importance of limited opportunities for social, cultural, and artistic activities', the teachers in group 2 ranked this item among the least important items in all three factors. While the order of importance of 'intense political environment' is generally at the bottom, it has been shown as one of the two most important items in a single factor. On the other hand, it is understood that the item 'inadequate physical structure of schools' makes teaching difficult is given moderate importance in all factors.

Table 4. Q Values Regarding Solutions Towards Teacher Turnover

Items	Van (Group 1)			Other provinces (Group 2)		
	1st Factor	2nd Factor	3rd Factor	1st Factor	2nd Factor	3rd Factor
5. Reducing/eliminating conflict and security problems	2	2	2	0	-2	2
4. Taking measures to reduce transportation problems	0	-1	1	0	2	0
2. Organizing planned and periodic social, sports, cultural, and artistic activities for teachers	0	2	0	1	-1	1
8. Making the physical conditions/equipment of the schools more suitable	-1	0	-1	-1	1	2
3. Providing additional economic incentives	2	0	0	2	1	1
9. Providing additional seniority/service points in compulsory service regions	1	-1	1	1	0	0
10. Increasing postgraduate education opportunities	-2	-2	0	-2	2	-2
6. Supporting teachers' efforts towards education, taking their opinions into account	0	1	-2	2	-1	-1
1. Increasing accommodation opportunities for teachers	1	-2	-1	0	0	0
11. Improving access to health services	-2	0	2	-1	0	-1
7. Increasing parental support and cooperation	-1	1	-2	-2	-2	-2

In Table 4, where the item rankings of the eleven suggestions presented to teachers are shown, the most important items are listed based on the item averages with two points and the least important items with minus two points. When Table 4 is examined, it can be seen that the order of importance of reducing/eliminating conflict and security problems is high by teachers in all three of the factors in Group 1, and in Group 2, they have different opinions on this item in each

factor. The item offering higher education opportunities was stated as the least important suggestion in four factors and as the most important suggestion in one factor.

Table 5. Factor-Based Z Score Distributions and Distinctive Items Related to the Reasons for Teacher Turnover

Item	Van (Group 1)			Other provinces (Group 2)		
	1st Factor	2nd Factor	3rd Factor	1st Factor	2nd Factor	3rd Factor
1. Intense conflict environment and security concern	**1.90***	1.03	-0.74	**-0.139***	**1.157***	**-1.391***
21. Transportation problems	**1.17***	-0.66	0.34	0.803	0.564	0.993
4. Living in Van is not among my future plans	**0.82***	-0.80	2.19	**1.918***	1.087	0.584
16. Not getting support for educational efforts/depreciation of my views	**0.62***	-0.45	-0.01	0.260	-0.135	0.010
12. Limited opportunities for postgraduate education	**0.57***	-0.99	-1.23	-1.396	-1.414	**0.707***
18. The motivation to be employed in a new city/school	**0.54***	-0.57	-0.24	0.503	0.425	**1.386***
10. High cost of living in Van	**0.52***	-0.48	-1.20	**0.206***	-1.050	-0.768
15. Attitudes of school and local education administrators	**0.48***	1.45	-0.40	-0.401	-0.013	0.029
6. Language problem	**0.39***	0.94	-1.13	-0.990	-0.457	-0.824
8. Limited opportunities for social, cultural, and artistic activities	**0.23***	-0.77	1.10	0.341	**1.690***	0.758
20. Low student motivation and academic success	**-0.95***	0.01	0.33	0.003	0.348	0.701
2. Intense political environment	**-1.08**	-0.51	-0.66	**-0.590***	**1.326***	**-1.679***
5. Distance to the culture of belonging	**-1.44***	2.13	1.72	**1.244**	**0.705**	**-1.229***
9. Not getting the respect I expect from the environment as a teacher	**-1.62***	0.74	-0.27	-1.573	-1.732	-1.847
7. Inadequate access to healthcare services	-0.78	**1.88***	-1.10	**-1.005**	**-0.359***	**0.805***
3. Desire to be close to the family/hometown	1.75	**0.62***	2.0	2.210	**-1.996***	**0.969***
17. Violent behaviour and disciplinary problems of students	-0.27	**-0.97***	-0.36	-1.099	-1.126	**0.234***
13. Inadequate infrastructure of schools that makes teaching difficult	-0.15	0.01	**0.53***	0.597	**-0.089**	0.953
11. Parents' indifference	-1.22	-1.45	**-0.12***	-0.278	0.069	-0.114
22. Not being able to establish close relations with the local citizens	-1.26	-1.06	**-0.69**	-0.988	**0.461***	-1.386
14. Desire to work in a province where my children can receive a better education	-0.086	0.211	-0.221	0.448	0.846	0.293
19. Discomfort caused by being sent to the school under compulsion	-0.145	-0.300	0.151	-0.074	-0.308	**0.816***

p<.05; (*) p<.01

Table 5 shows the item-based Z scores and their distinctiveness according to the factors. The Z-scores of the items that significantly differentiate one factor from the others are written in bold. When the table is examined, it can be seen that the opinions of teachers in both groups differ significantly, based on factors. It is challenging that the teachers of the first Factor in Group 1 state significantly different opinions in thirteen items at the .01 level and in one item at the .05 level. On the other hand, it can be seen that Group 1 fully agrees on the importance level of the fourteenth, and nineteenth items, while Group 2 agrees on the importance order of the sixth, ninth, eleventh, fourteenth, fifteenth, sixteenth and twenty-first items.

Table 6. Factor-Based Z Score Distributions and Distinctive Items Related to the Solutions Towards Teacher Turnover

	Van (Group 1)			Other provinces (Group 2)		
Items	**1st Factor**	**2nd Factor**	**3rd Factor**	**1st Factor**	**2nd Factor**	**3rd Factor**
3. Providing additional economic incentives	**1.519***	**-0.14***	0.33	**1.521**	0.637	0.866
5. Reducing/eliminating conflict and security problems	1.252	1.064	1.310	**-0.282***	**-1.572***	**1.635***
9. Providing additional seniority/service points in compulsory service regions	**1.049***	**-0.64***	**0.50***	**0.703***	-0.381	-0.339
1. Increasing accommodation opportunities for teachers	**0.550***	**-1.59***	**-0.65***	0.211	0.389	0.022
2. Organizing planned and periodic social, sports, cultural, and artistic activities for teachers	**-0.061**	**1.35***	0.38	0.780	**-0.541***	0.510
4. Taking measures to reduce transportation problems	-0.099	-0.394	**0.732***	0.279	**1.490***	0.206
6. Supporting teachers' efforts towards education, taking their opinions into account	**-0.280***	**0.62***	**-1.28***	**1.173***	-0.661	-0.617
8. Making the physical conditions/equipment of the schools more suitable	**-0.441***	**0.50***	**-1.15***	**-1.035***	0.796	1.158
7. Increasing parental support and cooperation	**-0.672***	**1.02***	**-1.52***	-1.259	-1.435	-0.958
11. Improving access to health services	**-1.325***	**-0.32***	**1.24***	-0.757	**0.213***	-0.775
10. Increasing postgraduate education opportunities	-1.493	-1.475	**0.103***	-1.333	**1.066***	-1.709

p<.05; (*) p<.01

It is clear that the distinctiveness between the factors in Group 1 is greater than in the other groups. On the other hand, all of the factors in Group 1 agreed on the importance of the item 'reducing conflict and security problems'. The fact that the same item was shown in different orders in all three factors in Group 2 clearly reveals the distinctive opinions on this issue. The items that Group 2 showed consensus are 'Increasing parental support and cooperation' and 'Increasing accommodation opportunities for teachers'. It can be concluded that a number of reasons are highly important in more than one group, and certain others highlight only one factor. The findings indicate that teacher turnover in Van is associated with different reasons by different teacher groups.

CONCLUSION, DISCUSSION AND SUGGESTIONS

According to the Q analysis results, the opinions of the participants are categorized into three different factors in each group. Although the most important reasons affecting the turnover differ up to the factors, a number of reasons that stand out, in general, have been identified. The most important reasons for teacher turnover are teachers' desire to be close to their families/hometown, their security concerns, their desire to work in a province with a culture they feel they belong to, and sometimes they simply just do not plan to live in Van in the future. In Turkish culture, the family institution occupies an important place, and it is one of the expected results that teachers want to work in a school close to their family. In addition, there are studies supporting this finding. While Billingsley (1993) examines this situation under personal factors, Ingersoll (2000) mentions the same reason under familial factors. Feng (2014) also indicates that family demands should be listed among important reasons for teacher turnover. This demand should have normally caused turnover in other provinces as well, by creating a similar effect. However, according to Ozoglu (2015), teacher turnover encountered in Van is much higher than that of Turkey in general, and all the other provinces are not experiencing turnover to this extent. For this reason, although it appears as the most important reason, it will be incomplete to evaluate teacher turnover solely for these reasons.

The desire to be close to the culture of belonging stands as another important element of the teacher turnover in Van. Cultural affinity is an important factor in school choice, and it comes to the fore in various studies (Dolton & Newson, 2003). When examining the items that are thought to have the least impact on teacher turnover, it can be seen as contradictory findings in certain factors; teachers' desire to be close to their families on the one hand, and also seeing cultural distance as insignificant. While these teachers do not care about cultural proximity to the region they feel they belong to, they want to be geographically close to their families. According to Cable and Judge (1995), employees who have problems in adapting to the work team or to their environment frequently resort to a change of work or place of duty. For this reason, it would be effective to carry out more efficient studies for teachers newly appointed to Van to easily overcome the adaptation process.

Security concerns appear at the highest level in four of the six factors, medium level in 1, and low level in two of them. When compared with Group 1, it is understood that the teachers in Group 2 think that security concerns have less effect on turnover. In addition, there are studies stating that teacher turnover and crime rates in the school environment are related (Allensworth, Pnisciak, & Mazzeo, 2009; Combee, 2000).

It has been determined that problems of access to health services, as well as the following, have a moderate effect on teacher turnover: low academic achievement and motivation of students; transportation problems; compulsory assignment; insufficient social, artistic, and cultural activities; ill-conditioned infrastructure of schools; not supporting teachers' efforts for education; teachers' educational opportunities; teachers' worries about their children's education; students' violent behavior; disciplinary problems; administrators' attitudes; and the hope to regain motivation with a new start in another school. It can be argued that the measures to be taken to solve these problem areas will hinder teacher turnover to a certain extent.

It is also found that limited opportunities for higher education, the indifference of parents, high cost of living, not being able to establish close relations with the local citizens, not getting the respect they expect from the environment as a teacher, intense political environment, and language problems appear to be the least effective items affecting teacher turnover.

Providing additional economic incentives appears to be the most effective suggestion, while 'Enriching higher education opportunities', would make the least worthy contribution to the solution. Furthermore, there are studies conducted in different countries which show that economic incentives can affect the decision of relocation (Allen, 2005; Feng, 2014). Ingersoll (2003) finds that 49% of teachers who relocated made this decision because of low wages. On the other hand, it may be thought that this is not the case in Turkey, because teacher salaries do not vary from region to region. However, teachers in disadvantageous regions may think receiving the same salary is not just. For such situations, it is known that an additional economic incentive called 'combat pay' was applied in American schools for a certain period to keep teachers at disadvantageous schools (Bruno & Negrete, 1983). While adding cash to teachers' salaries is an option in the implementation of these economic incentives, it can also be applied in the form of a reduction or an amnesty for college loans.

Another prominent solution is to reduce/eliminate conflicts and security problems. Similar to the results regarding the reasons for teacher turnover, teachers working in Van pay more attention to this suggestion than those who leave Van. Eliminating the security concerns experienced by teachers may provide relief at this point and enable teachers to make more long-term plans. Falch & Ronning (2007) also state that unattractive school districts tend to show higher turnover rates.

The item 'organizing cultural, artistic, and social activities for teachers', which is not listed among the reasons for turnover, is one of the most effective suggestions. For this reason, even though it does not appear as an important reason, it is thought that increasing the frequency of such cultural activities that will attract teachers to Van, and will contribute to slowing teacher turnover.

According to the results of the research, giving additional seniority/service points to teachers for the time they work in regions with high turnover may be a factor encouraging them to stay. The MoNE gives higher service scores to teachers who are currently working in compulsory service regions. However, it is understood that these service scores do not have sufficient effect. It is thought that a regulation that will bring a similar increase in the service score, as a teacher's term of office increases, may produce more effective results. The MoNE has recently implemented this suggestion (MoNE, 2020). With this arrangement, it can be said that teachers who want to be a school principal/assistant principal or an inspector in career planning may partially extend their term of office in these provinces. Teachers who want to advance in their professional careers, and who willingly stay in their positions, not because they have to, may create positive results on academic success.

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Biographical notes:

Mehmet Turhan is a research assistant in Educational Administration Program in Anadolu University. He conducts researches on principal preparation programs and leadership and change management.

Hasan Basri Memduhoğlu is a Professor in Educational Administration Program in Siirt University and Dean of Faculty of Education. His studies broadly focus on diversity management, educational leadership, creativity in education and alternative schools.