

## Public schools' characteristics and teacher turnover in Oman

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### **Abstract**

Teachers are the backbone of the educational systems and their turnover may threaten the whole educational system in any country. In Oman, teacher turnover is a neglected area of study and this article may help in shedding some light on teacher turnover phenomenon in Oman. The purpose of this study is to investigate the influence of school characteristics (e.g., school size, gender, time-shift, education type, and school location) on the turnover intentions of teachers in public schools in Oman. Survey questionnaires were used to collect data from 214 public schools in Oman. 142 schools from all educational regions in Oman were participated in this study. Data analyses tools for this study were descriptive statistics such as mean and standard deviation, in addition to independents t-test and analysis of variance. The study revealed that teacher intentions to transfer to other schools are influenced by almost all the studied school characteristics. Policy makers and human resource recruiters in Ministry of Education should be aware of teachers' preferences for certain schools to avoid teachers' shortage in non-preferred schools. Further studies about the influence of school time-shift and teachers' intentions to quit or transfer are needed to affirm the results in this study. This is the first study about the influence of school characteristics on teacher turnover in public schools in Oman. Thus, the value of this study stems from the uniqueness of this study which may serve as an eye opening indicator about teacher turnover in Oman.

**Keywords:** Teacher; turnover intentions; school characteristics; organizational-level; school size; school gender; time-shift; education system

## Public schools' characteristics and teacher turnover in Oman

### 1. Introduction

School characteristics are the structural characteristics of a school that are hard to manipulate (Kim & Placier, 2004). Several studies of teacher turnover indicated that some school characteristics such as location in a big urban city, large class sizes, and some student characteristics such as socioeconomic status, ethnicity, poverty, and misbehavior is somehow related to teacher turnover (Kukla-Acevedo, 2009). Horng (2009) in his study, *Teacher tradeoffs: Disentangling teachers' preferences for working conditions and student demographics* investigated the relationships between teachers' working conditions, students' demographic characteristics, and teacher turnover. He found out that teachers are avoiding minority, low income, and low performing students not on purpose. He stated that

*By avoiding unattractive working conditions, teachers may inadvertently—rather than purposefully—be avoiding low-income students, low-performing students, and students of color* (Horng, 2009, p. 693).

Teachers' decisions to stay or leave a school are influenced by certain working conditions they dislike such as low salaries, large class sizes, low administrative support, and bad school facilities; long commute time to school, not-involving in school-wide decisions, and poor resources for students (Horng, 2009). What teachers like is having clean and safe facilities, very good administrative support, and small class sizes (Horng, 2009). In other words, supportive work climate is required to retain teachers in their teaching positions (Henkin & Holliman, 2009; Horng, 2009).

The turnover of public and private sector employees is an emerging topic in Oman. Our search indicated the existence of three empirical studies about employee turnover in Oman, namely, Al Sawafi (2012), Swailes and Al Fahdi (2011), and Alhatmi (2009). Al Sawafi (2012) study was initially designed to investigate factors causing public employee turnover in Oman, but he changed his study and directed it to be about the understanding and theorizing turnover phenomenon in Oman. This change comes through because his data revealed that employee turnover is seen as a healthy phenomenon in Oman (Al Sawafi, 2012). Swailes and Al Fahdi (2011) interviewed public employees to understand the factors causing the movement of employees from the public to the private sector in Oman. Although, they found out that the quit rate was very low, they concluded that the main causes of turnover were dissatisfaction with the management style, the reward practices, and promotion opportunities.

Alhatmi (2009) studied the factors causing job turnover of Information Technology (IT) workers at Sohar University. His study concentrated on the relationship between factors such as job satisfaction, organizational commitment, and supervisory commitment on IT workers' turnover intentions. From these three studies, two major points can be concluded. First, there is a complete lack of studies about teacher turnover in Oman. Second, the existing studies did not investigate the influence of the organization characteristics on employee turnover. Thus, the current study is adding to the body of knowledge in these two areas. This study aims to investigate the influence of school characteristics such as school size, gender, time-shift, education type, and school location in the city or village on turnover intentions of teachers in public schools in Oman.

### 2. Literature Review

In this paper, the influence of five school characteristics on teachers' turnover intentions is investigated. These are: (1) school size based on students' enrollment, (2) school gender based on teachers' gender, (3) school time-shift, (4) school education type, and (5) school location in a city or village. These characteristics are discussed in the following sections.

## 2.1 School size

The relationship between school size and teacher turnover is not consistent in the literature, some indicated a significant relationship (e.g., Youngs, 2013; Falch & Størm, 2005; and Ingersoll, 2003), while others indicated no significant relationship (e.g., Mancuso, Roberts, & White, 2010; Smith & Ingersoll, 2004).

Youngs (2013) studied the factors causing turnover among 284 teachers at Denver Catholic Schools. She found out that school size is the strongest predictor of teacher turnover. Falch and Størm (2005) also indicated that school size as measured by students' enrollment is an important factor in the teachers' quit decision in Norway. Ingersoll (2003) studied school characteristics and teachers' working conditions as predictors of teacher shortage problem in all 50 states in USA. He found out that several school characteristics such as school size and location influence teachers turnover in USA.

Mancuso et al. (2010) did a study on 248 teachers from Near East South Asia (NESA) international schools to identify the correlates of teacher turnover. They found out that school size based on student population was not a significant predictor of teacher turnover in in NESA international schools. Similarly, Smith and Ingersoll (2004) found out that "public school teachers who started their careers in small schools were more likely to switch schools at the end of the year than those who started in large schools" (p. 693), but no significant difference in teacher turnover based on school size.

On the basis of the above argument, hypothesis 1 is stated as follows:

**Hypothesis 1:** There is no significant effect of the school size on turnover intentions of teachers in public schools in Oman.

## 2.2 School gender

In many countries around the world schools are differentiated into gender-specific schools. Schools having only male students or female students exist in many countries due to religious or cultural traditions (e.g., Catholic, Islamic, and Hindu)(UNESCO, 2007). Although research findings about the advantages of single-sex schooling are under debate, some studies indicated that girls are doing better in these schools than in coeducational schools where boys and girls are taught together (Sax, 2009).

Oman is an Islamic and Arab country where schools are segregated by gender, except in two situations: (1) young students in grades 1-4, and (2) in some rural and remote schools, where the number of students is very low and cannot be separated. In Oman 14.6% of primary schools, 47.9% of preparatory schools, and 7.1% of secondary schools are coeducational (Rassekh, 2003).

Schools in Oman are not differentiated based on gender only. They are also differentiated based on the education system they apply (Ministry of Education, 2004; 2008a). Table 1 presents a rough classification of school types in Oman based on students' gender and the school education system.

Since there are a lot of school types with different education systems and students' gender, schools in this study are classified based on teachers' gender. This is because all basic, post-basic, and general education schools are taught either by male, females, or a mixture of male and female teachers. It is worth noting that teachers in mix schools located in remote setting have a separate teaching hall for each gender, while all teachers for cycle 1 and cycle 1 continuing to cycle 2 schools are females).

Studies relating teacher turnover to school gender are either scarce or do not exist. Several attempts were made to search for this relationship in many academic databases and Google Scholar, and the results were null. The only study mentioned teacher turnover is Lee and Lockheed's (1990) study of single-sex schools in Nigeria. They stated that single-sex schools for girls in Nigeria face many challenges in establishing quality education since these schools have high teacher turnover and shortages of well-trained female teachers (Lee & Lockheed, 1990).

On this basis, hypothesis 2 is stated as follows:

**Hypothesis 2:** There is no significant effect of the school gender on turnover intentions of teachers in public schools in Oman.

**Table 1**

*Types of schools in Oman*

Education Systems/Type of School	Grades	Students' gender
<b>Basic education system</b>		
Cycle 1 Schools	Grades 1 to 4	Males and females
Cycle 1 continuing to Cycle 2 schools	Grades 1 to 4 for Cycle 1, and Grades 5-10, or 12 for Cycle 2	Males and females Females only
Cycle 2 School for male students	Grades 5-10, or 12	Males only
Cycle 2 School for female students	Grades 5-10, or 12	Females only
<b>Post-basic education system</b>		
Post-basic School for male students	Grades 11-12	Males only
Post-basic School for female students	Grades 11-12	Females only
<b>General education system</b>		
Elementary school for male students	Grades 1-6	Males only
Elementary school for female students	Grades 1-6	Females only
Preparatory school for male students	Grades 7-9 or 12	Males only
Preparatory school for female students	Grades 7-9 or 12	Females only
Secondary school for male students	Grades 10-12	Males only
Secondary school for female students	Grades 10-12	Females only

### 2.3 School time-shift

Double-shift schools or shift system is known in several countries around the world (e.g., USA, South Korea, Hong Kong, Singapore, Malaysia, India, Senegal, Ghana, Zambia, Brazil, Greece, Mexico, Italy, etc.). The shift system is referred to schools functions several times a day (Diwan, 2002). The most common type of shift system is double-shift (Bray, 1990). In double-shift schools, two different sets of students are taught in the same school at different times of the day, usually morning and afternoon (Mulkeen, 2010). The shift system provides a good solution for poor countries having low resources to solve the crowdedness problem due to shortage of school buildings; it also provide a cost-effective solution for rich countries to use their resources more efficiently (Orkodashvili, 2009; Bray, 2008).

Studies about the influence of school time-shift on teacher turnover are very scarce. Katjaita (2011) did a small scale qualitative study to explore the perceptions of headmasters about double-shift schooling in Namibia. The findings of this study indicated that teachers prefer morning shift. If they teach at afternoon shift they would feel like second class citizens and want to be transferred to the morning shift (Katjaita, 2011). Other studies also indicated that afternoon shifts are less desirable for teachers and learners due to the poor resources associated with afternoon shifts (Bray, 2008).

In Oman, Ministry of Education (MOE) practices double-shift schooling in many regions in the country. Morning-shift schools start from 7.30am to 12.00pm, while afternoon-shift schools start from 12.30pm to 5.00pm. Although the number of double-shift schools is decreasing in Oman, they will continue to exist for several years. Based on the first report of Human Development in the Sultanate of Oman, 27% of Omani public schools in 1999-2000 were double-shift schools (Ministry of National Economy, 2003); while based on the 2007-2008 Summary of Educational Statistics, 10% of Omani public schools were double-shift schools in 2007-2008 (Ministry of Education, 2009).

Since there is a lack of studies on the influence of school time-shift on teachers' intentions to stay or transfer, and since teachers does not prefer afternoon shifts, it is hypothesized that teacher turnover intentions is higher at afternoon schools. Thus, hypothesis 3 is stated as follows:

**Hypothesis 3:** There is no significant effect of the school time-shift on turnover intentions of teachers in public schools in Oman.

#### *2.4 School education-type*

Public schools in Oman apply one of the two educational systems in Oman (i.e., basic or general education) or a mixture of both. Basic education system was introduced in the government Fifth Six Year Plan (1996-2000) to provide quality education for introducing Omani citizens to the 21 century (Ministry of Education, 2008a). Basic education system was introduced in the academic year 1998-1999 as a 10-year school system that operates concurrently with the general education until the latter phase out (Ministry of Education, 2001). Based on the Summary of Educational Statistics' report for the academic year 2007-2008, 62.8% of schools in Oman are basic education schools, while 37.2% are general education schools (Ministry of Education, 2009).

No studies were found about the influence of these two types of educational systems on teachers' intentions to quit or transfer. Since basic education is more recent and hence is more supported than general education that is fading away, we hypothesized that teachers prefer basic education schools more than general education schools. Thus, teacher intentions to leave general education schools are suspected to be higher than in basic education schools. On this basis, hypothesis 4 is stated as follows:

**Hypothesis 4:** There is no significant effect of the education-type on turnover intentions of teachers in public schools in Oman.

#### *2.5 School location in a city or village*

In the literature, school location is mostly measured using a common classification of schools that differentiate school location into one of four areas: (1) urban, (2) suburban, (3) rural, and (4) remote. Urban areas are large and high-density populated, heterogeneous areas (Wilson & Donnermeyer, 2006), while remote areas tend to be small, low-populated areas that have poorer connectivity, and lack of roads, public transportation, and healthcare (Mitra, Dangwal, & Thadani, 2008). Urban schools are more favorable to teachers because of location and short commute distance to home (Boyd, Lankford, Loeb, & Wyckoff, 2005), while rural and remote areas are not favorable to teachers due to the geographical, cultural, and professional isolation (Liu, 2009).

Classification of schools based on their locations in urban, suburban, rural, and remote areas is not practiced in Oman. Occasionally, Omani officials used terms such as urban/rural and city/village to indicate a location, but these terms are vague with no specific definition associated with them (Ministry of National Economy, 2003). We contacted several officials at Ministry of Defense, Ministry of National Economics, and Census office, but no formal classification of urban/rural and city/village classifications were given, since several indicators (i.e., population, roads, number of houses, presence of health center, etc.) are followed for any sort of classification (personal communication, 2010). The classification of schools into city and village as used in this study is provided by GIS Map Department at Ministry of National Economics (dissolved lately), and School Map Division at Ministry of Education.

As for the influence of school location in city or village on teacher turnover intentions, a search in the academic databases and Google Scholar provided little evidence about this relationship. For example, Bagley and Hillyard (2011) studied village schools in England and indicated that schools location in rural communities in addition to other factors such as the inability to recruit and hire teachers lead to schools closure. This may indicate that teachers do not prefer teaching in villages. This is further supported by Sargent and Hannum's study. Sargent and Hannum (2005) stated that "teachers in rural villages may face a lack of access to transportation, cultural resources, or educational facilities. Recreation and opportunities for enrichment and personal advancement are often limited, compared to those available in towns and cities" (p. 178). Based on this evidences, it is hypothesized that teacher turnover intentions are higher in village schools. Thus, hypothesis 5 is stated as follows:

**Hypothesis 5:** There is no significant effect of the school location on turnover intentions of teachers in public schools in Oman.

### 2.6 Turnover intentions

Turnover intentions are the best predictor of the actual turnover behavior, with high correlation ( $r = .49$ ) between the two (Bowen, 1982; Mobley, 1982). If organizations did not make any effort to manage their employees' turnover, then this turnover will trigger additional turnover directly or indirectly (Staw, 1980). What makes organizational losses worse is that turnover encourages employees who were not looking for alternative jobs to begin searching (Mobley, 1982).

## 3. Research method

In this section we describe the methods used to collect the data and the instrumentation used to measure the study variables.

### 3.1 Setting and sample

This study is a quantitative, correlational study at the organizational-level to test the influence of the school characteristics on teachers' turnover intentions. For robust data analysis, 214 public schools in Sultanate of Oman were selected following Hair, Black, Babin, and Anderson (2010). A stratified random sampling was used to get a representative sample since public schools are located in different educational regions and some differences between them may exist. Following Cohen, Manion and Morrison (2007), each stratum was defined and selected to get a representative sample. In this study, school location in one of eleven educational regions (Muscat, Batinah North, Batinah South, Dakhliyah, Sharqiah South, Sharqiah North, Dhahirah, Al Buraimi, Musandam, Al Wusta, and Dhofar) was the first stratum, while school size (based on students' enrollment) was the second stratum (Ministry of Education, 2008b). Since the schools in Oman vary in size, the researchers choose to limit the differences between schools by insuring that at least one of five teachers in any school will have the chance to participate in the study. The 20% of teachers were selected by the schools' principals. The group size, in this study, range from 3 to 23 teachers.

### 3.2 Measurements and data collection

The data needed for this paper is part from larger pool of data collected in 2011 to test the impact of teacher turnover on organizational climate, organizational morale, turnover costs, and turnover intentions. Schools characteristics were obtained using principals' questionnaires, while teachers' turnover intentions to quit and transfer were obtained using teachers' questionnaires.

The independent variables (school size, school gender, school time-shift, school education-type, and school location in a city or a village) are observed variables that were dummy coded, while intentions to quit and intentions to transfer are latent variables that are measured using 5-points Likert scales, ranging from 1 (strongly disagree) to 5 (strongly agree). Brief information about the measurements of the independent and dependent variables is provided in the following sections.

#### 3.2.1 School characteristics

School characteristics, such as school size, gender, education type, time-shift were part of the demographic information section in principal's questionnaires. Location of a school in city and village is a known measure of school location in Oman, but it is a vague term. The researcher contacted several officials at Ministry of Defense, Ministry of National Economics, Census office, and Ministry of Education, but no formal classification of city and village was given. Schools' location in city and village were obtained by submitting a table of all the sampled schools classified according to their educational region and State to the officials in the GIS Maps

Department in the Ministry of National Economics (former) and the School Map Division in the Ministry of Education. Both departments returned separate tables of the sampled schools in less than one month. In the new tables, all the sampled schools were classified based on their location into city and village locations.

### 3.2.2 School size

In Oman, schools are divided into four categories based on the number of students: (1) very small schools having less than 100 students, (2) small schools having 100-500 students, (3) medium schools having 500-1000 students, and (4) large schools having more than 1000 students.

### 3.2.3 School gender

In this study, schools were classified based on teachers' gender into: (1) schools taught by female teachers such as cycle 1 schools, cycle 2 female school, post-basic education school for female students, and female general education schools; (2) schools taught by male teachers such as cycle 2 male school, post-basic education school for male students, and male general education schools; (3) schools taught by a mixture of male and female teaching staff such as schools located at far and remote regions. Based on teachers' gender, three types of schools are included in the study, schools having female teachers only, schools having male teachers only, and schools having a mixture of male and female teachers.

### 3.2.4 School time-shift

In this study, schools were classified based on the time-shift into: (1) morning-shift schools and (2) afternoon-shift schools.

### 3.2.5 School education-type

In this study, schools were classified based on the educational system they are applying into: (1) Schools applying basic education system, (2) schools applying general education system, and (3) schools applying a mix of the two educational systems.

### 3.2.6 School location

In this study, schools are either located in a city or a village locations.

### 3.2.7 Turnover intentions.

In this study turnover intentions are investigated in term of intentions to quit and intentions to transfer. Intentions to quit construct is measured using three items adopted from Ovadje (2009), while intentions to transfer construct is measured using four items modified by the researchers. The reliability of turnover intentions scales (intentions to quit and intentions to transfer) were calculated using Cronbach's alpha at SPSS software. The reliability of intentions to quit scale is .82, while for intentions to transfer is .97.

## 3.3 Data analysis

The individual responses obtained for teachers' turnover intentions were aggregated into school-level responses using within-group interrater agreement ( $rwg_{(j)}$ ), following James, Demaree and Wolf (1984). Data showed strong agreement which justify data aggregation to a higher level (Cohen, Doveh & Nahum-Shani, 2009; Brown & Hauenstein, 2005). All schools were aggregated except two schools because the number of respondents was less than 5. Thus, they were deleted. Four more schools were considered multivariate outliers and deleted, following Byrne (2010). Only 136 schools were left for data analysis.

ANOVA was used to test the study hypotheses. ANOVA is commonly used technique to compare the means of more than two groups (McDonald, 2009). In addition Tukey post-hoc comparisons were applied to check which school group differs from the others. According to Jaccard, Becker, and Wood (1984) and Dunnett (1980)

Tukey-Kramer method is recommended to be used for testing homogeneity of variance in unequal groups.

#### 4. Results

The results of the study are presented in four sections: (1) descriptive statistics of teachers and schools, (2) distribution of the schools based on their characteristics, (3) levels of distribution of turnover intentions in the Omani schools, and (4) and hypotheses testing. These sections are explained in the following sections.

##### 4.1 Descriptive statistics

The study participants were 1,319 teachers working in 136 public schools in Oman. The descriptive statistics of teachers and schools are provided in the following sections.

*Descriptive statistics of teachers.* 65% of respondents were females, with an average age of 32 years. 79% of all the respondents were married, 87% were Omanis, and 93% of them were holding bachelor degree. The majority of respondents taught for 5 years in their current school (SD=3.733) and 9 years in the profession (SD=6.352).

*Descriptive statistics of schools.* 44% of the schools participated in this study were small in size (100 to 500 students). 56% of the sampled schools have a mixture of male and female students, and 54% of all the schools have female teaching staff.

##### 4.2 Distribution of schools based on school characteristics

Schools in Oman are different based on their size, gender, time-shift, educational-type, and location. The distribution of the Omani schools based on these characteristics is explained in the following sections.

###### 4.2.1 Distribution of schools based on the school size

Table 2 presents the distribution of the sampled schools based on the school size. The results in Table 2 indicated that the majority of the schools were small (42.6%), 41.9% of the schools were medium, 11.8% were very small, and only 3.7% of the schools were large in size.

**Table 2**

*Distribution of schools based on their sizes*

Scale	School size	Frequency	Percent
School size	Very small ( $\geq 99$ students)	61	11.8
	Small (100-499 students)	58	42.6
	Medium (500-999 students)	57	41.9
	Large ( $\leq 1000$ students)	5	3.7

###### 4.2.2 Distribution of schools based on the school gender

Table 3 presents the distribution of the sampled schools based on the school gender. The results in Table 3 indicated that the majority of the schools were having female teachers (54.4%), 33.1% of the schools have male teachers, and only 12.5% of the schools have a mixture of male and female teachers.

**Table 3**

*Distribution of schools based on teachers' gender*

Scale	School gender	Frequency	Percent
School gender	Schools having female teachers	74	54.4
	Schools having male teachers	45	33.1
	Schools having a mix of male and female teachers	17	12.5

#### 4.2.3 Distribution of schools based on the school time-shift

Table 4 presents the distribution of the sampled schools based on the school time-shift. The results in Table 4 indicated that the majority of the schools were morning-shift schools (81.6%), 9.6% of the schools were afternoon-shift schools, and 8.8% of the schools did not report their time-shift.

**Table 4**

*Distribution of schools based on the schools time-shift*

Scale	School time-shift	Frequency	Percent
School time-shift	Morning-shift schools	111	81.6
	Afternoon-shift schools	13	9.6
	Missing	12	8.8

#### 4.2.4 Distribution of schools based on the school education-type

Table 5 presents the distribution of the sampled schools based on the school education-type. The results in Table 5 indicated that the majority of the schools were basic education schools (54.4%), 26.5% of the schools have a mixture of basic and general education systems, 17.6% of the schools were applying general education system, and 1.5% of the schools did not report the education system they apply.

**Table 5**

*Distribution of schools based on the school education-type*

Scale	School education-type	Frequency	Percent
School education-type	Basic education schools	74	54.4
	General education schools	24	17.6
	Mixture of basic and general education systems	36	26.5
	Missing	2	1.5

#### 4.2.5 Distribution of schools based on the school location

Table 6 presents the distribution of the sampled schools based on their location in a city or a village. The results in Table 6 indicated that the majority of the schools were located in villages (50.0%), 30.1% of the schools were located in the cities, and the location of 19.9% of the schools are not known because the information was not provided from the data source.

**Table 6**

*Distribution of schools based on their locations*

Scale	School education-type	Frequency	Percent
School location	Schools located in the cities	41	30.1
	Schools located in the villages	68	50.0
	Missing	27	19.9

### 4.3 Levels of turnover intentions of teachers in the Omani schools

Turnover intentions, in this study, are of two types, intentions to quit, and intentions to transfer. The distribution of the levels of intentions to quit, and intentions to transfer is explained in the following sections.

#### 4.3.1 Distribution of intentions to quit (ItoQ) levels

The overall mean of ItoQ is 2.483 (SD=.450). Based on the scale, levels of ItoQ are divided into three levels, namely low, moderate and high. Table 4.8, presents the distribution of levels of ItoQ scale. The results in Table 7 indicated that the majority of schools have moderate levels of ItoQ (59.6%), 39.7% of the schools have low levels of ItoQ, while only 0.7 % have high levels of ItoQ.

**Table 7***Mean, SD, and distribution of ItoQ levels.*

Scale	Levels of distribution	Frequency	%	Mean	SD
Intentions to quit	Low (1.000 – 2.333)	54	39.7	2.483	.450
	Moderate (2.334 – 3.667)	81	59.6		
	High (3.668 – 5.000)	1	0.7		

#### 4.3.2 Distribution of intentions to transfer (ItoT) levels

The overall mean of ItoT is 2.487 (2.467, SD=.658). Based on the scale, levels of ItoT are divided into three levels, namely low, moderate and high. Table 8, presents the distribution of levels of ItoT scale. The results in Table 8 indicated that the majority of schools have moderate levels of ItoT (52.2%), 42.6% of the schools have low levels of ItoT, while only 5.1 % have high levels of ItoT.

**Table 8***Mean, SD, and distribution of ItoT levels.*

Scale	Levels of distribution	Frequency	%	Mean	SD
Intentions to quit	Low (1.000 – 2.333)	58	42.6	2.487	.658
	Moderate (2.334 – 3.667)	71	52.2		
	High (3.668 – 5.000)	7	5.1		

#### 4.4 Hypotheses testing

In this study, five hypotheses are tested to test the influence of school characteristics on teacher turnover in Oman. The results of the hypotheses testing are provided in the following sections.

##### 4.4.1 The relationship between school size and turnover intentions (Hypothesis 1)

Schools in Oman are categorized based on the size into 4 types; (1) very small schools having 1 to 99 students, (2) small schools having 100 to 499 students, (3) medium schools having 500 to 999 students, and (4) large schools having more than 1000 students. To test for the influence of school size on intentions to quit and intentions to transfer, one-way ANOVA was applied. The results are presented in Table 9.

**Table 9***The influence of school size on Teachers' turnover intentions*

Scale		Sum of squares	df	Mean square	F	Sig.
Intentions to quit	Between Groups	.618	3	.206	1.016	.388
	Within Groups	26.772	132	.302		
	Total	27.390	135			
Intentions to transfer	Between Groups	6.847	3	2.282	5.832	.001
	Within Groups	51.659	132	.391		
	Total	58.507	135			

The results in Table 9 indicated that only intentions to transfer are influenced by school size ( $p < .05$ ). Intentions to transfer differ significantly across school sizes,  $F(3,132)=5.83$ ,  $p=.001$ ). To check which school size differs from the others, Tukey post-hoc comparisons was applied. The results are presented in Table 10.

The results in Table 10 indicated that the four groups are significantly different from each other at .05 level of significance. The results also indicated that teachers at very small schools (Mean=2.80) have significantly higher intentions to transfer than teachers at: (1) medium schools (Mean=2.29,  $p=.024$ ) and (2) large schools (Mean=1.91,  $p=.031$ ). Tukey post-hoc comparisons also indicated that teachers at small schools (Mean=2.64)

have significantly higher intentions to transfer than teachers at medium schools (Mean=2.29,  $p=.016$ ).

**Table 10**

*Tukey post-hoc comparisons for the influence of school size on intentions to transfer*

(I) School size	(J) School size	Mean Differences (I-J)	Std. Error	Sig.	95% CI		N	Mean	SD.
					Lower Bound	Upper Bound			
VS	S	.158	.177	.807	-.301	.618	16	2.801	.624
	M	.510*	.177	.024	.495	.971			
	L	.892*	.321	.031	.582	1.726			
S	VS	-.158	.177	.807	-.618	.301	58	2.643	.705
	M	.352*	.117	.016	.048	.655			
	L	.734	.292	.062	-.025	1.493			
M	VS	-.510*	.177	.024	-.971	1.050	57	2.291	.555
	S	-.352*	.117	.016	-.655	-.048			
	L	.382	.292	.559	-.377	1.141			
L	VS	-.892*	.321	.031	-1.726	-.058	5	1.909	.263
	S	-.734	.292	.062	-1.493	.025			
	M	-.382	.292	.559	-1.142	.377			

Note. VS: very small, S: small, M: medium, L: large. \*: The mean difference is significant at the 0.05 level

In conclusion, intentions to transfer is higher in very small schools (mean= 2.80), followed by small schools (mean= 2.64) and medium schools (mean= 2.30). The lowest intentions to transfer is in large schools (mean = 1.91). Therefore, hypothesis 1b (school size-intentions to transfer relationship) is supported, while hypothesis 1a (school size-intentions to quit relationship) did not.

#### 4.4.2 The relationship between school gender and turnover intentions (Hypothesis 2)

To test for the influence of school gender on intentions to quit and intentions to transfer, one-way ANOVA was applied. The results are presented in Table 11.

**Table 11**

*The influence of school gender on Teachers' turnover intentions*

Scale		Sum of squares	df	Mean square	F	Sig.
Intentions to quit	Between Groups	.080	3	.040	.196	.822
	Within Groups	27.310	133	.205		
	Total	27.390	135			
Intentions to transfer	Between Groups	3.354	3	1.677	4.044	.020
	Within Groups	55.153	133	.415		
	Total	58.507	135			

The results in Table 11 indicated that only intentions to transfer are influenced by the school gender ( $p<.05$ ). Intentions to transfer differ significantly across school gender,  $F(2,133)=4.04$ ,  $p=.020$ . To check which school gender differs from the others, Tukey post-hoc comparisons was applied. The results are presented in Table 12.

The results in Table 12 indicated that the three groups are significantly different from each other at .05 level of significance. The results indicated that teachers at schools having a mixture of male and female teachers—named as MX— (Mean=2.78) have significantly higher intentions to transfer than schools having female teachers (Mean=2.35,  $p=.037$ ). In conclusion, intentions to transfer are higher at schools having a mixture of male and female teachers (mean=2.78), followed by schools having male teachers (mean= 2.60) and the lowest intentions to transfer are in schools having female teachers (mean = 2.35). Therefore, hypothesis 2b (school gender-intentions to transfer relationship) is supported, while hypothesis 2a (school gender-intentions to quit relationship) did not.

**Table 12***Tukey post-hoc comparisons for the influence of school gender on intentions to transfer*

(I) School gender	(J) School gender	Mean Differences (I-J)	Std. Error	Sig.	95% CI		N	Mean	SD.
					Lower Bound	Upper Bound			
M	F	.242	.122	.118	-.046	.531	45	2.595	.636
	MX	-.188	.183	.561	-.623	.246			
F	M	-.242	.122	.118	-.531	.046	74	2.353	.647
	MX	-.431*	.173	.037	-.841	-.020			
MX	M	.188	.183	.561	-.246	.623	17	2.783	.651
	F	.431*	.173	.037	.020	.841			

Note. M: Male schools, F: Female schools, MX: Mix gender schools, \*: The mean difference is significant at the 0.05 level.

#### 4.4.3 The relationship between school time-shift and turnover intentions (Hypothesis 3)

To test for the influence of school time-shift on teachers' turnover intentions, independent T-test was carried out. The results are presented in Table 13. The results in Table 13 indicated that school time-shift is not significantly different in both predictors ( $p > .05$ ). In other words, school time-shift does not influence intentions to quit and intentions to transfer. Therefore, hypothesis 3a (school time-shift-intentions to quit relationship) and hypothesis 3b (school time-shift-intentions to transfer relationship) are not supported.

**Table 13***Independent t-test for testing the influence of school time-shift on turnover intentions*

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t.	df	Sig. (2-tailed)	Mean Difference	Std. error Difference	95% CI of the Difference	
									Lower Bound	Upper Bound
Intentions to quit	EVA	.307	.580	-.359	122	.720	-.049	.136	-.318	.220
Intentions to transfer	EVA	.163	.687	-.145	122	.885	-.027	.189	-.401	.347

Note. EVA: Equal Variance Assumed.

#### 4.4.4 The relationship between school education-type and turnover intentions (Hypothesis 4)

To test for the influence of education-type on intentions to quit and intentions to transfer, one way ANOVA was applied. The results are presented in Table 14.

**Table 14***The influence of school education-type on Teachers' turnover intentions*

Scale		Sum of squares	df	Mean square	F	Sig.
Intentions to quit	Between Groups	.420	2	.210	1.029	.360
	Within Groups	26.700	131	.204		
	Total	27.120	133			
Intentions to transfer	Between Groups	3.446	2	1.723	4.308	.015
	Within Groups	52.392	131	.400		
	Total	55.838	133			

The results in Table 14 indicated that only intentions to transfer are influenced by school education-type ( $p < .05$ ). Intentions to transfer differ significantly across school education-types,  $F(2,131)=4.31$ ,  $p=.015$ . To check which school education-type differs from the others, Tukey post-hoc comparisons was applied. The results are presented in Table 15.

**Table 15***Tukey post-hoc comparisons for the influence of school education-type on intentions to transfer*

(I) School education-type	(J) education-type	Mean Differences (I-J)	Std. Error	Sig.	95% CI		N	Mean	SD.
					Lower Bound	Upper Bound			
BE	GE	-.174	.149	.473	-.526	.178	74	2.341	.618
	MX	-.374*	.129	.012	-.679	-.070			
GE	BE	.174	.149	.473	-.178	.526	24	2.515	.617
	MX	-.200	.167	.454	-.596	.195			
MX	BE	.374*	.129	.012	.070	.679	36	2.715	.671
	GE	.200	.167	.454	-.195	.596			

Note. BE: Basic Education, GE: General Education, MX: Mix Education Type schools, \*: The mean difference is significant at the 0.05 level.

The results in Table 15 indicated that the three groups are significantly different from each other at .05 level of significance. The results also indicated that schools applying a mixture of basic and general education systems (Mean=2.72) have significantly higher intentions to transfer than schools applying basic education (Mean=2.34,  $p=.012$ ). In conclusion, intentions to transfer are higher at schools having both educational systems (mean = 2.72), followed by general education's schools (mean=2.52) and the lowest intentions to transfer is in basic education schools (mean= 2.34).

#### 4.4.5 The relationship between school location and turnover intentions (Hypothesis 5)

To test the influence of school location in a city or a village on teachers' intentions to quit and intentions to transfer, independent t-test was carried out. The results are presented in Table 16.

**Table 16***Independent t-test for testing the influence of school location on turnover intentions*

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t.	df	Sig. (2-tailed)	Mean Difference	Std. error Difference	95% CI of the Difference	
									Lower Bound	Upper Bound
Intentions to quit	EVA	2.683	.104	-.163	107	.871	-.014	.086	-.185	.157
Intentions to transfer	EVA	.462	.498	-2.25	107	.026	-.297	.132	-.559	-.036

Note. EVA: Equal Variance Assumed.

The results in Table 16 indicated that school location influences teachers' intentions to transfer ( $p<.05$ ) but not intentions to quit ( $p>.05$ ). To check which group has higher intentions to transfer than the others, group statistics were obtained.

**Table 17***Group statistics for school location*

Scale	School location	N.	Mean	SD	Std. Error
Intentions to transfer	City	41	2.305	.640	.100
	Village	68	2.602	.683	.083

The results in Table 17 indicated that intentions to transfer of teachers at village schools (mean=2.60) are higher than the intentions of transfer of teachers working in the city (mean = 2.31).

## 5. Discussion

*School size.* There are four school sizes in Oman, namely, (1) very small size ( $\geq 99$  students), (2) small size (100-499 students), (3) medium size (500-999 students), and (4) large size ( $\leq 1000$  students). The study findings indicated that there is a significant relationship between school size and teachers' intentions to transfer, but not intentions to quit. Teachers' intentions to transfer are high in very small schools and low in large schools. This finding is consistent with Youngs's (2013) study on 284 teachers at Denver Catholic Schools. She found that 73% of teachers stayed  $\geq 6$  years in very large schools (having three classes per grade) in comparison to only 48% of teachers in very small schools (having one class of each grade with 15 or fewer students per class). It is worth noting that Youngs's classification of school sizes is similar to the one used in Oman, since very small schools (1-99 students) have one class per grade with less than 15 students, and very large schools (more than 1000 students) have three class or more per grade with up to 35 students per class.

*School gender.* Based on teachers' gender, schools can be differentiated into: (1) schools having female teachers, (2) schools having male teachers, and (3) schools having a mixture of male and female teachers. The study findings indicated that there is a significant relationship between school gender and teachers' intentions to transfer but not intentions to quit. Intentions to transfer are high in schools having a mixture of male and female teachers, and low in schools having female-teachers. Previous studies about gender segregation indicated that social forces such as religion and family expectations make Muslims do not feel comfortable to work with the opposite gender (Andaleeb and Wolford, 2004). Since Oman is an Islamic and Arabic country, this may explain why Omani teachers prefer to work in gender-specific schools rather than mix-gender schools.

*School time-shift.* Schools in Oman are either morning-shift schools or afternoon-shift schools. The results indicated that school time-shift does not influence teachers' intentions to transfer or quit. This finding is not consistent with Katjaita's (2011) study that teachers' prefer morning-shift rather than afternoon-shift. Low number of afternoon-shift schools in the sample could be the reason behind this result. Only 9.6% of the sampled schools are afternoon-shift schools, while 81.6% were morning-shift schools.

*School education-type.* Based on the education system applied in the schools, schools can be classified into: (1) basic education schools, (2) general education schools, and (3) schools having a mixture of basic and general education systems together. The study findings indicated that there is a significant relationship between school education-type and teachers' intentions to transfer, but not intentions to quit. Intentions to transfer are high in schools applying a mixture of basic and general education systems, and low in schools applying basic education system. It is logical for teachers to prefer basic education schools since these schools are more stable, while general education schools are fading away (Ministry of Education, 2001). Teachers teaching in basic education are receiving an allowance for basic education. This allowance could be the reason why teachers do not want to transfer out of basic education schools.

*School location in a city or a village.* Schools located in large cities are called city schools, while schools located elsewhere are called village schools. The study findings indicated that there is a significant relationship between school location in a city or a village and teachers' intentions to transfer, but not intentions to quit. Intentions to transfer are high in schools located in villages and low in schools located in cities. This result is consistent with Bagley and Hillyard (2011) study who found out that teachers' do not prefer village schools because of the low resources available for students in these schools. In this study, it is not known why teachers in Oman have high intentions to transfer from village schools.

## 6. Conclusion

The purpose of this study is to investigate the influence of certain school characteristics such as, school size, gender, time-shift, education type, and school location on the turnover intentions of teachers in public schools in Oman. This study has several important findings. First, teachers' intentions to transfer are influenced by school

size, school gender, the education type in the school, and the school location in a city or village, but not by school time-shift. Second, teachers' intentions to quit are not influenced by any of the studied school characteristics.

From these findings we can conclude that: (1) teachers' intentions to transfer are highest in very small schools (1-99 students), located at villages, having mixture of teaching staff (males and females), and applying a mixture of education systems (General and Basic), which means that teachers in Oman prefer large, single-gender schools, located in cities, and applying basic education system; (2) teachers' intentions to quit behave differently from teachers' intentions to transfer.

### *6.1 Implications*

This study added to the body of knowledge in areas related to teacher turnover in Oman, and the influence of school characteristics on the teachers' decision to quit or transfer to another school. In this study, teachers' intentions to transfer were influenced by several school characteristics, such as school size, school gender, school education-type, and school location, while intentions to quit were influenced by none of these school characteristics. This finding has several implications for educational policy makers, human resource recruiters in the Ministry of Education in Oman, and the researchers interested in teacher turnover topic. Policy makers and human resource recruiters in the Ministry of Education should be aware of new teachers' preferences for certain schools (i.e., large, single-gender schools, located in cities, and applying basic education system) to avoid teachers' shortage in non-preferred schools. The study finding indicates a difference between teachers' intentions to transfer and intentions to quit in the factors influencing them. Thus, researchers interested in teacher turnover topic should be aware of the organizational behavior (quit and transfer) of teachers in Oman.

### *6.2 Limitations*

This study has several limitations. First, the sampled schools were public schools in Oman, thus, the study is limited to public schools in Oman, and generalization on private schools is not recommended since there may be some differences between them. Second, large sample size is a prerequisite for robust results (Hair et al., 2010). In this study, the data from 138 schools were analyzed. Although, the sample size was not a problem in this study due to the low numbers of variables and items, caution should be considered in the generalization of the study results because of the low sample size. Third, this study is conducted in Omani schools, and caution should be considered when generalizing the study results to schools in other Arab and Gulf State countries because there are some differences between these countries. Fourth, Afternoon-shift schools are low represented in this study, thus, caution should be taken when comparing the study results regarding school time-shift with other studies.

### *6.3 Recommendations for future research*

For the sake of future research, we have several recommendations for researchers interested in this topic. First, we recommend a replication of this study in another setting in Oman such as nurses or police force to support the study findings regarding the influence of organization characteristics on employees' intentions to transfer or quit. Second, a replication of this study with larger sample size is recommended to provide further support for the study findings. Third, the influence of other organization characteristics (e.g., organization structure, age, and reputation) on employees' turnover intentions should be investigated. Fourth, factors influencing teachers' intentions to quit need more attention since all the tested school characteristics influenced teachers' intentions to transfer but not quit. Fifth, in depth study is required to understand why teachers' intentions to transfer are high in schools with certain schools characteristics (i.e., very small in size, located in villages, have mixture of male and female teachers, and have mixture of basic and general education systems).

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