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*Research Article*

# Teachers' Perceived Work Autonomy in Iranian Public Schools

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**Abstract**

The purpose of this study is to investigate the concept of teachers' work autonomy of a sample of Iranian teachers and examine the level of this perceived autonomy based on some demographic variables. The design was a quantitative–descriptive survey, whose population was all teachers in Sanandaj, a city in Iran. The sample was taken based on cluster sampling according to Krejcie Morgan table. The data collection tool, the Teachers' Appropriate Work Autonomy Questionnaire, was adapted from Friedman (1999) which assesses the extent to which teachers' routine activities should be performed autonomously by the teachers themselves. In order to test the content validity of the teachers' work autonomy questionnaire, a confirmatory factor analysis was run. To test the hypotheses, one-sample t-test, independent sample t-test, and one-way analysis of variance (ANOVA) tests were run. Findings showed that teachers rated their levels of work autonomy lower than the mean level of the relevant scales. Teachers had rated their autonomy below the mean in establishing school identity and praxis, parental involvement, staff development, and extracurricular subjects. Furthermore, their self-assessment for the degree of autonomy in teaching and achievement evaluation was close to the mean, while for curriculum change and development, it was above the mean. Regarding demographic variables, there were significant differences between the degree of teachers' work autonomy in academic degrees, teaching level, and academic degree. However, there was no significant difference between the mean scores of teachers' self-assessments regarding their level of work autonomy in terms of gender and teaching experience.



## 1. Introduction

Organizational theorists argue that organizational efficiency can be improved by increasing employees' professional autonomy, such as decision-making power and greater freedom of thought and action (Lutans, 1992). This argument is based on studies that have shown that organizations in which decision-making is limited to high-level organizational levels are less effective than organizations that act with decentralization in decision-making (Friedman, 1999). Thus, in recent years, organizations have taken steps

to increase the professional autonomy of their employees through organizational decentralization processes (Huber and Glick, 1995).

Teachers in their workplace want good working conditions, such as higher salaries and quality school facilities (Horang, 2009), a safer environment and more resources for students (Stockard & Lehman, 2004), appropriate class sizes (Guarino, 2006), parental involvement in education, and community support (Ingresol, 2001). However, autonomy is more demanded by the teachers than other components related to working conditions (Strong & Yoshida, 2014).

In recent years, education authorities in many western countries have strengthened local schools and educators by empowering them to make decisions on important educational and administrative issues. The goal of this process is to delegate authority to empower teachers and create a strong atmosphere within schools. The teacher empowerment movement has intensified the need to strengthen teachers' autonomy in most areas of school performance (Melnizer, 1990). Naturally, such an atmosphere of teacher empowerment provides a fruitful environment for reviewing and re-examining ideas such as work autonomy and a perceived sense of individual and professional autonomy of teachers. Understanding teacher autonomy as a process of teacher empowerment rather than a barrier between teachers and school administrators is a new insight that requires new conceptualization and the construction and application of different scales to assess teacher professional autonomy.

Autonomy refers to experience, will, psychological freedom, and a certain level of external pressure to perform an action (DeCharms, 1968). Hoyle and John (1995) define teacher autonomy as follows: “A positive form of independence that provides the teacher with the freedom to build a personal education and requires a balance between personality, internship, experiences, and the needs of the specific educational context” (p. 92). A sense of autonomy causes a person to choose his or her behavior and match it with his or her values and interests.

In the present study, teacher autonomy is conceptualized as a source or production of teacher power. In this sense, autonomy is not only a shield against the pressures on the teacher but also a means of encouraging and strengthening the power of teachers individually or professionally.

Despite the difficulties in reaching a consensus on a precise definition of teacher autonomy (Rudolph, 2006), research has identified several components of this structure (Strong & Yoshida, 2014). The first

factor is the scope of action of teacher autonomy. LaCoe (2006) categorizes the areas in which teachers may act autonomously into the following six aspects: curriculum, pedagogy, assessment, professional development, student discipline, and classroom environment.

## 2. Literature Review

In recent years, the concept of work autonomy has gained significant attention in educational research, emphasizing its significance in developing teachers' job satisfaction, motivation, and overall effectiveness, particularly in diverse educational settings such as Iranian public schools. Previous research showed that teachers need to develop professional abilities and skills in order to increase their overall performance in the school environment. Teacher activities have two educational and organizational aspects: The educational aspect is related to the teacher's performance in the classroom environment. The organizational aspect also includes school activities in addition to teacher decisions (Connell, 1985). Teachers are generally interested in participating in decision-making to help advance school goals. They are also concerned with improving their professional knowledge and abilities at school.

Regarding the autonomy of teachers in professional practice, the following issues have been raised: First, they are engaged in pedagogy with individual classroom functions and management and planning for the whole school (Ingersol, 1994). Second, they need autonomy in decision-making that allows them to select and determine important issues in their tasks. Teachers believe that they have the best competence in classroom practices and therefore, should have a remarkable ability to make decisions (Elmore, 1987). Third, Bronti (2001) argues that autonomy means freedom from demands or pressure from other teachers or school principals. Such a concept deals with the freedom to determine the teacher's work processes, such as the freedom to present the curriculum. Fourth, autonomy is related to control, in the sense of freedom of action to do work. Autonomous control means that the teacher is responsible for classroom responsibilities (Sentovich, 2006). However, fundamental changes in education are likely to reduce these types of freedoms. Teachers must now adhere to procedures and limits of accountability imposed by education that did not previously exist. As Deci and Ryan (2002) have argued, freedom must now take place within certain barriers.

Pearson and Hall (1993) critically examined teachers' perceptions of work autonomy, stating that work autonomy is teachers' perception of control over work and its environment, and may be a mismatch with

the reality of the situation. Probably the most common model of autonomy used is the "work autonomy" model of McBeath (2012), according to which employees maintain control over their activities and theoretical knowledge. In contrast, Pitt's (2010) model of "professional autonomy is understood less as a release from the influences and authorities that have marked our becoming and more as grounded within a complex relation to the influence and authority of individuals, ideas, and ideals we reject or claim as our own. (p. 1). Gabriel et al.'s (2011) model of "engaged autonomy" implies that autonomy is not equal to isolation because in this model, teachers are encouraged to innovate and develop independently; at the same time, collaborations are maintained, and experiences are valued. According to some experts, the model of "responsible independence" emphasizes the importance of the main requirements, while also facilitating the workplace autonomy (Hoyle & John, 1995). Others argue that this model places the primary responsibility on school principals, as it describes a management strategy of achieving compliance by internalizing norms and oversight (Menter et al., 1995). Next, the continuum of increasing control leads to the pattern of "regulated autonomy" (Dahl, 1982), which is a term used to describe a situation in which teacher autonomy exists in a limited area and perhaps even teachers are ignored. Similarly, we can refer to the model of "occupational autonomy" of Barry (2012) in which how to teach is responsibility of the teacher, but the aims and goals are already predetermined. Friedman (1999) also provides a model that divides teacher autonomy into the following five categories:

1. No autonomy. Teachers are not authorized to take initiative and are not given discretion in introducing changes in teaching methods and curriculum or in any other elements of school life.
2. Scant autonomy. Teachers are allowed scant freedom of choice within the clear boundaries of existing programs, norms, and regulations as defined by school administrators.
3. Moderate autonomy. Teachers are permitted, or even encouraged, to initiate new ideas and programs but are required to go through stringent authorization procedures prior to execution.
4. High autonomy. Teachers are granted the liberty to innovate and implement new curriculum and methods, within the boundaries of general, previously agreed upon principles and norms.
5. Complete autonomy. Teachers are granted complete freedom to initiate and implement new ideas, programs, or curriculum within commonly accepted moral and legal principles. (p.63)

According to the theory of Self-Determination (Deci & Ryan, 2002), an autonomous supportive atmosphere leads to desirable progress. From the scientific perspective, this theory states that satisfaction

increases when the basic spiritual needs for autonomy, competition, and communication in a social environment are met.

To further explore the concept of teacher autonomy, it is necessary to examine the concept of teacher activities at the level of main and ordinary decision-making and decision-making for the educational content and also making decisions for the organization: Key decisions affect key aspects of a teacher's work, such as creating policies and innovating and changing the principles rules for the profession within the organization, but normal decisions are needed to create ways to enforce the rules. Content decision-making includes educational issues such as students' problems and needs, dealing with parents and community members, curriculum, and effective teaching methods. Organizational decision-making also includes issues related to the budget, school work methods and regulations, and student registration policy.

Going through the literature, teacher autonomy is one of the topics that has long been of interest to researchers and administrators of educational institutions. Tamir (1986) has stated that the growing tendency for teachers to become more autonomous in curriculum development is a response to the frustrations of curriculum reform in the 1960s. Porter (1989) stated that more teachers' autonomy is the key to better education, which is achieved by the teacher's serious involvement in setting standards for student achievement. Fax (1985) considers personal autonomy and a psychological sense of community as predictors of teachers' adaptation to technological change within schools. In addition, teachers with a sense of autonomy have been reported to be more inclined to change and support change (Common, 1983).

Little (1995) states that basically successful teachers have always had work autonomy, in part because of a sense of personal responsibility and role modeling that may be rooted in the consistent, fateful, and consistent identity that Wood and Jeffrey (2004) claim are based on two broad sets of values namely, humanism and professionalism. Humanism emphasizes "person-centeredness and warm, caring relationships," while in professionalism, "teachers display strong emotions in their work that emphasize a general commitment to teaching" (p. 223).

It has been reported that teacher autonomy affects teachers' perceptions of professional status and teacher satisfaction (Bogler, 2001). Stockard and Lehman (2004) found that teachers who had a sense of control and influence over their work environment in their first year of teaching reported it to be an important factor in job satisfaction. Ma and McMillian (1999) reported that school principals who provided

freedom for their teachers to make fundamental decisions about the whole school found greater teacher satisfaction. Teacher autonomy is also one of the important factors in the workplace that is associated with teaching self-efficacy (Hugh, 2002) and positive teacher attitudes and performance (Blase & Kirby, 2009). Furthermore, autonomy seems to be related to teacher retention in the profession and school (Horang, 2009). One of the most common issues raised by teachers that leads to their stay in school is working with a principal who controls and supports teachers at the same time (Ingersol, 2001). School autonomy is seen to be at a higher level than individual teacher autonomy; Therefore, the study of the relations between teachers and school principals, as the representatives of the whole school system is worth researching.

Teacher professionalism is located on a long continuum (Berry, 2012) and its definition is subjective. However, it is defensible if we use autonomy as one of the characteristics of the definition of professionalism (MacBeath, 2012). One of the main areas of paradox within the theory of teacher professionalism is the paradox between teacher autonomy and the tasks assigned by the government to teachers as professionals (Englund, 2002). In addition, the effect of diminished autonomy has been cited as one of the factors involved in teachers' non-professionalism (Evans, 2011). In contrast, Hargreaves and Goodson (2003) reject the central role of autonomy by suggesting that "Occupational heteronomy" is much more appropriate for teacher professionalism in this postmodern age than self-protective autonomy (p. 21). Along with discussing the importance of autonomy for the development of teacher professionalism, ensuring the autonomy and empowerment of teachers have been emphasized as an appropriate starting point for solving current school problems (Short, 1994). Teacher autonomy plays a key role in teacher motivation (Losus, 2000), and job satisfaction (Hoyle & John, 1995). This is somewhat inconsistent with government initiatives to raise standards, as it has, in fact, rendered teaching ineffective and reduces the burden of responsibility for bureaucratic tasks and time spent on valuable activities (Parker, 2015). Ingersoll (1997) suggests that one more advantage of developing teacher autonomy is its potential impact on improving standards. Machin & Vernoit (2011) found that there is a positive relationship between student achievement and teacher autonomy in the curriculum and assessment.

In one study, Paradise, Lotovac and Casillas (2015) surveyed Canadian teachers. They reported that autonomy is essential for teacher commitment and satisfaction. However, teacher autonomy is constantly declining in the era of reform and global policy sharing. Participating teachers understood the impact of educational reform on their working lives in terms of autonomy and self-confidence. Their findings show

that the relationship between teachers' perceptions of professional autonomy and self-confidence is complicated. Self-confidence was strongly dependent on the degree of perceived autonomy and reducing autonomy significantly reduced self-confidence and ultimately would lead to the isolation of teachers.

## 3. Methodology

### 3.1. Design

The present study has adopted a positivist and quantitative epistemological orientation. Therefore, a descriptive-survey research design was taken to do the study. The main purpose of this study is to understand the concept of teachers' work autonomy and to secondly to standardize the work autonomy assessment scale filled out by a sample of Iranian teachers achieved by answering the following questions:

1. How do Iranian teachers evaluate their levels of work autonomy?
2. Is there a significant difference between the perceived work autonomy level of teachers with different demographic variables?

### 3.2. Participants

All working teachers (5862) in Sanandaj schools in the academic year of 2019-20 formed the research community. The sample size was 361 people determined based on Krejcie Morgan (1970) table. However, due to the fact that the slight increase in sample size was not a significant waste of time and cost, in order to improve the results and reduce the percentage of sample error, 413 questionnaires were distributed among teachers by cluster random sampling. To perform sampling, first, a cumulative list of clusters, i.e., education areas of Sanandaj city was prepared, then random sampling was done from all public and secondary education courses from all public schools and all teachers working in those selected schools participated as the sample.

### 3.3. Instruments

The importance of the issue of teacher autonomy in research and in practice has led to a demand for appropriate psychometric tools to measure teacher autonomy (Wilson, 1993). In order to answer the questions of the study through the use of e a valid instrument, the "Appropriate Teacher Work-Autonomy" questionnaire adapted from Friedman (1999) was used. This questionnaire is based on the exact concept of teacher autonomy and includes the meaning of initiating new ideas and activities that involve the teacher in the main policy and functions of the school. This questionnaire has 32 items in six subscales (establishing school identity and praxis, Teaching and achievement evaluation, parental involvement, staff development,

extracurricular subjects, Curriculum change and development) and evaluates the amount of routine teacher activities that should be done autonomously by the teachers themselves. The items are set on a five-point Likert scale and express degrees of work autonomy from non-autonomy to complete autonomy.

### 3.4. Data Analysis

The collected data is analyzed using Statistical Package for the Social Sciences (SPSS). To test the hypotheses, one-sample t-test, independent sample t-test, and one-way analysis of variance (ANOVA) tests were run.

#### 3.4.1. Psychometrics indexes of the questionnaire

##### 3.4.1.1. Reliability

The degree of internal consistency of the items of the "Appropriate Teacher Work-Autonomy" Questionnaire was tested using Cronbach's alpha coefficient, the results of which are shown in Table 1. As can be seen, the alpha values between the components of the questionnaire ranged from 0.86 to 0.94. Since all coefficients are above the acceptable level of 0.70, the internal consistency of the items within the components of the questionnaire is confirmed.

**Table 1.** Reliability test of the Appropriate Teacher Work-Autonomy Questionnaire

| Components | Number of items | Item number | Alpha coefficient |
|---|---|---|---|
| Establishing school identity and praxis | 7 | 1-2-3-4-5-6-7 | 0.86 |
| Teaching and achievement evaluation | 7 | 8-9-10-11-12-13-14 | 0.93 |
| Parental involvement | 3 | 15-16-17 | 0.89 |
| Staff development | 4 | 18-19-20-21 | 0.91 |
| Extracurricular subjects | 4 | 22-23-24-25 | 0.88 |
| Curriculum change and development | 6 | 26-27-28-29-30-31 | 0.94 |

##### 3.4.1.2. Validity

A Confirmatory factor analysis was used to test the content validity of the "Appropriate Teacher Work-Autonomy Questionnaire". In fact, this part of the study sought to examine the degree of compliance between the empirical construct of Appropriate Teacher Work-Autonomy and the theoretical construct of teacher autonomy.

The most important goal of confirmatory factor analysis is to determine the power of a predefined operating model with a set of observed data. In other words, confirmatory factor analysis seeks to determine whether the number of factors and loads of variables measured on these factors are consistent with what was expected based on theory and theoretical models. In this method, the relevant variables and indicators are selected based on the initial theory, and then a factor analysis is used to see whether these variables and

indicators are loaded on the predicted factors as expected or if their composition is changed and loaded on other factors.

**Table 2.** Confirmatory factor analysis of Appropriate Teachers Work Autonomy Scale

| Factor | Items | Factor load | T statistics |
|---|---|---|---|
| Establishing school identity and praxis | School's pedagogical and social idiosyncrasy. | 0.50 | 9.45 |
| | Student classroom composition (heterogeneous or homogeneous classes) policy. | 0.60 | 11.12 |
| | Class schedule policy. | 0.66 | 12.18 |
| | Criteria for student admission. | 0.74 | 13.60 |
| | School norms, code, and regulations. | 0.73 | 14.30 |
| | School's curricular goals and determine their order of preference. | 0.78 | 14.38 |
| | Interactions with external policy-making agencies (Board of Education, Municipalities, etc.). | 0.74 | 13.59 |
| Teaching and achievement evaluation | Classroom work procedures. | 0.60 | 10.28 |
| | Norms and rules for student behavior. | 0.63 | 10.58 |
| | Means and procedures of evaluating student achievement. | 0.62 | 10.58 |
| | Student achievement assessment criteria. | 0.63 | 10.54 |
| | Physical classroom environment. | 0.63 | 10.54 |
| | Modes of achievement monitoring (grades, verbal assessments, etc.). | 0.59 | 10.03 |
| | Student behavior patterns and establish a punishment code. | 0.52 | 9.10 |
| Parental involvement | Parental collaboration modes. | 0.82 | 12.86 |
| | Meetings with parents to discuss instruction issues, reporting on achievements and so forth. | 0.72 | 12.04 |
| | Cultural activities with parents. | 0.73 | 12.20 |
| Staff development | Subjects for the in-service training in general, broad fields of interest. | 0.83 | 17.65 |
| | Specific social and cultural topics for their in-service training. | 0.91 | 19.53 |
| | Topics for their in-service training programs based on predetermined school requirements. | 0.89 | 19.10 |
| | Topics for their in-service training from existing, known programs. | 0.81 | 17.03 |
| | Site and time for their in-service training. | 0.83 | 12.49 |
| Extracurricular subjects | Specific topics of enrichment activities for their students from existing programs. | 0.81 | 12.33 |
| | Areas of general cultural activities from a program offered by the principal. | 0.82 | 12.47 |
| | Topics for the school's extracurricular activities. | | |
| | Specific social-cultural activities for their students from existing, known programs. | 0.76 | 11.86 |
| Curriculum change and development | Topics for classroom instruction out of an authorized curriculum. | 0.51 | 10.15 |
| | Teaching methods based on the needs of their students. | 0.78 | 10.23 |
| | A curriculum based on their students' needs. | 0.79 | 10.29 |
| | Unique teaching methods based on student needs. | 0.80 | 16.94 |
| | Experiment with new instruction methods and aids. | 0.71 | 9.74 |
| | Experiment with the new curriculum | 0.70 | 9.55 |

The primary analysis showed that the adequacy of the sample size with KMO statistics was equal to 0.929 so that this value was higher than the acceptable value of 0.7, consequently, the research data could be reduced to several underlying and latent factors. Furthermore, considering the value of the Chi-square statistic in the Bartlett sphericity test (5.76) and the level of significance obtained (P <0.001), it was concluded that there is a high correlation between items within each of the underlying factors, and there is no correlation between the items of one factor and the items of other factors. In general, based on the results of the KMO test and Bartlett sphericity, the adequacy of the sample size for factor analysis was confirmed. Table 2 shows the factor loads and t values corresponding to each of the items expressing teachers' perceived work autonomy.

As shown in Table 2, the values of t corresponding to the factor loadings of all items are higher than 1.96. Therefore, it is found that at the 95% confidence level, all items expressing teachers' work autonomy are well placed on this construct and can provide a good description of the teacher work autonomy variable. A summary of statistics and indicators related to confirmatory factor analysis on the Appropriate Teacher Work-Autonomy Questionnaire is given in Table 3.

**Table 3.** Summary of confirmatory Factor Analysis of ATWA questionnaire

| Components | Factor loading | T-statistic | Fitness indicators | |
|---|---|---|---|---|
| | | | statistic | Index value |
| Establishing school identity and praxis | 0.79 | 10.80 | $X^2$/df | 2.90 |
| Teaching and achievement evaluation | 0.79 | 9.71 | RMSEA | 0.068 |
| Parental involvement | 0.79 | 9.84 | GFI | 0.92 |
| Staff development | 0.72 | 11.37 | CFI | 0.90 |
| Extracurricular subjects | 0.85 | 9.87 | NFI | 0.90 |
| Curriculum change and development | 0.64 | 8.50 | RMR | 0.390 |

As can be seen in Table 3, the ratio of Chi-square to the degree of freedom was 2.90. If the ratio of the Chi-square to the degree of freedom is between 1 and 3, it indicates that the model fits. Therefore, it is clear that the research questionnaire has good validity in terms of this index. The second indicator under study is RMSEA, which is less affected by sample size and is therefore highly taken into consideration. Although there is no single cut-off point for the desired value of this index, it is said that a value less than 0.1 will indicate its proper fit. The value of the RMSEA index was 0.068, which indicates a good fit of the observed model. The value of the three indicators of GFI, NFI, and CFI ranges from zero to one. If the obtained value is equal to or greater than 0.9, it will indicate a suitable fit for the experimental model. As

can be seen in the table, all of these indicators are equal to or greater than 0.9 which shows a proper fit of the model reporting the construct validity of the teachers' work autonomy questionnaire. The last indicator to be studied is the RMR, which ranges from zero to one. In general, the closer the value of this index is to zero, the more appropriate the model fits. Although not everyone agrees on this indicator, the RMR should usually be less than 0.05. The value of this index was seen to be 0.039, concluding that the data collection tool in terms of this index also has good validity. Overall, since all indicators of goodness of fit indicate the suitability of the model, it can be said that the content validity of the research questionnaire for implementation in Iranian educational settings is confirmed.

## 4. Results and Discussion

Before examining the research questions, the preconditions related to the use of parametric tests were examined. Regarding the normality of data distribution, the skewness and kurtosis values of the distribution of variables are cited whose results are shown in Table 4.

**Table 4.** Skewness and kurtosis of data distribution

| Variable | Skewness | | Kurtosis | |
|---|---|---|---|---|
| | Statistic | Standard Deviation | Statistic | Index Value |
| Establishing school identity and praxis | 0.691 | 0.120 | 0.021 | 0.240 |
| Teaching and achievement evaluation | 0.142 | 0.120 | 0.178 | 0.240 |
| Parental involvement | 0.314 | 0.120 | -0.361 | 0.240 |
| Staff development | 1.146 | 0.120 | 0.690 | 0.240 |
| Extracurricular subjects | 0.342 | 0.120 | -0.130 | 0.240 |
| Curriculum change and development | -0.106 | 0.120 | -0.386 | 0.240 |

The results in Table 4 show that the values of Skewness and Kurtosis regarding the dimensions of teachers' Appropriate Work Autonomy variable are in the range of -2 to +2. Therefore, it was found that the data are normally distributed and parametric tests can be used to examine the research questions. To analyze the obtained data, due to the normality of data, one-sample t-test, independent sample t-test, and one-way analysis of variance (ANOVA)were run.

### 4.1. Research Question 1

**How do Iranian teachers evaluate their levels of work autonomy?**

The degree of teachers' work autonomy by components and in total has been examined using one-sample t-test, the results of which are presented in Table 5. (Where N=413).

**Table 5.** Comparison of teachers' work autonomy with standard mean

| Variable | Observed mean | SD | Standard Mean | T- statistic | DF | Sig. |
|---|---|---|---|---|---|---|
| Establishing school identity and praxis | 2.26 | 0.830 | 3 | -17.973 | 412 | 0.0001 |
| Teaching and achievement evaluation | 2.93 | 0.721 | 3 | -1.938 | 412 | 0.053 |
| parental involvement | 2.85 | 0.948 | 3 | -3.102 | 412 | 0.002 |
| staff development | 1.89 | 0.978 | 3 | -23.031 | 412 | 0.0001 |
| extracurricular subjects | 2.69 | 0.924 | 3 | -6.605 | 412 | 0.0001 |
| Curriculum change and development | 3.14 | 0.889 | 3 | 3.233 | 412 | 0.001 |
| Work Autonomy (Total) | 2.65 | 0.614 | 3 | -11.516 | 412 | 0.0001 |

The distributed questionnaire was a five-point Likert scale and the standard mean was determined to be 3 for all components. In Table 5, it can be seen that the observed mean for the variable of teachers' work autonomy in total is 2.65 and its value is -11.516. Since t is significant at 0.01 level of significance and because the standard mean was lower than the standard mean, so the teachers, in general, rated their level of work autonomy below the mean.

In relation to the component of establishing school identity and praxis, the observed mean is 2.26 and its value is -11.973. Since the value of t is significant at the level of 0.01 and also because the observed mean was lower than the standard mean, teachers rated their level of work autonomy in terms of establishing school identity and praxis below the mean.

Regarding the second component of "Teaching and achievement evaluation," the observed mean was 2.93. The t value is seen to be -1.938 and the significance level was 0.053. Since the value of t is not significant at 0.05 level, there is no significant difference between the observed mean and the standard mean. These results are indicating that teachers have assessed their levels of work autonomy as moderate in terms of decision-making ability in the "teaching and achievement evaluation" component.

The observed mean is 2.85 and its value is 3.102 for parental involvement. Since the value of t is significant at the level of 0.01 and also because the observed mean was less than the standard mean; therefore, teachers rated their level of work autonomy as below the mean regarding parental involvement.

Regarding the component of staff development, the observed mean is 1.89 with a t value of -23.031. Since the value of t is significant at 0.01 and also because the observed mean is less than the standard mean, therefore, teachers have rated their work autonomies below the mean in terms of staff development.

Concerning the extracurricular subjects component, the observed mean is 2.69 and its related t-value is seen to be -6.605. Since the value of t is significant at the level of 0.01, and also because the observed

mean is less than the standard mean, it can be said that teachers have rated their level of work autonomies in extracurricular subjects below the mean.

In relation to the component of curriculum change and development, the observed mean is 3.14 and its related value is 3.233. As is seen in Table 5, the t-value is significant at the level of 0.01 and the observed mean is less than the standard mean. It can be stated that teachers have rated their levels of work autonomy above the mean in terms of curriculum change and development.

### 4.2. Research Question 2

**Is there a significant difference between perceived work autonomy teachers with different demographic variables?**

In order to answer this research question, the levels of teachers' perceived work autonomy were compared in terms of some demographic variables, including gender, teaching level, academic degree, and teaching experience determined by the participating teachers themselves. Therefore, each of these factors was converted to a different question as seen below:

#### 4.2.1. Is there any significant difference between male and female teachers' perceived work autonomy?

In order to compare the level of work autonomy of teachers by gender, a t-test was run to compare the two independent groups. According to the results of Table 6, the mean for work autonomy of female teachers is 2.67 while for male teachers it is seen to be 2.62. The amount of t is observed as 0.896. Since the value of t was not significant at the level of 0.05, so it is clear that there was no significant difference between the mean scores of perceived job autonomy of male and female teachers.

**Table 6.** T-test to compare level of teachers perceived work autonomy by gender (N=413)

| Variable | Gender | Number | Mean | SD | T-statistic | DF | Sig. |
|---|---|---|---|---|---|---|---|
| Work Autonomy | Female | 229 | 2.67 | 0.600 | 0.896 | 411 | 0.371 |
| | Male | 184 | 2.62 | 0.632 | | | |

#### 4.2.2. Is there any significant difference between teachers perceived work autonomy in different teaching levels?

In order to answer this research question, a one-way analysis of variance (ANOVA) test was run.

**Table 7.** Analysis of variance for teachers perceived work autonomy by teaching level (N=413)

| Source of variance | Sum of squares | DF | Man square | F | Sig. |
|---|---|---|---|---|---|
| Between groups variances | 9.991 | 3 | 3.330 | 9.343 | 0.0001 |
| Within groups variances | 145.782 | 409 | 0.356 | | |
| Total | 155.773 | 412 | | | |

Due to the significance of observed F in the ANOVA test, the LSD post hoc test was used to locate pairwise statistical differences between groups' perspectives. Table 8 shows the results of the LSD post hoc test on the pairwise comparison of teachers' perspectives.

**Table 8.** LSD post hoc test comparing work autonomy of teachers by teaching level

| Group 1 | Group 2 | Mean difference | Sig. |
|---|---|---|---|
| Primary school | Junior high school | 0.364 | 0.000 |
| Primary school | High school | 0.370 | 0.000 |
| Primary school | Technical school | 0.254 | 0.001 |
| Junior high school | High school | 0.006 | 0.942 |
| Junior high school | Technical school | -0.109 | 0.207 |
| High school | Technical school | -0.115 | 0.168 |

As is seen in Table 8, primary school teachers have significantly evaluated their level of work autonomy higher than teachers at junior high schools, high schools, and technical schools. However, no significant difference was observed between the mean of work autonomy of junior high school, high school and technical school teachers.

Is there a significant difference between the level of teachers' work autonomy in terms of academic degrees?

### 4.2.3. Is there any significant difference between teachers' work autonomy in terms of academic degrees?

In order to compare the level of perceived work autonomy of teachers based on their academic degree, a one-way analysis of variance was run. The results in Table 9 indicate that the value of F statistic is equal to 3.074 which is significant at the level of 0.01. Therefore, it can be said that there is a significant difference between the average level of perceived work autonomy of teachers in terms of their academic degrees.

**Table 9.** AVOVA test for perceived work autonomy of teachers by academic degree (N=413)

| Source of variance | Sum of squares | DF | Man square | F | Sig. |
|---|---|---|---|---|---|
| Between groups variance | 3.443 | 3 | 1.148 | | |
| Within groups variance | 152.330 | 408 | 0.373 | 3.074 | 0.028 |
| Total | 15.773 | 411 | | | |

Due to the significance of F-statistic in one-way analysis of variance, the LSD post hoc test was used. Table 10 summarizes the results of the LSD post hoc test on the pairwise comparison of teachers' perspectives.

**Table 10.** Post hoc test for work autonomy of teachers by academic degree

| Group 1 | Group 2 | Mean Difference | Sig. |
|---|---|---|---|
| Diploma | Associate | 0.376 | 0.122 |
| Diploma | BA | 0.529 | 0.024 |
| Diploma | MA | 0.584 | 0.017 |
| Associate | BA | 0.153 | 0.070 |
| Associate | MA | 0.208 | 0.052 |
| BA | MA | 0.055 | 0.0511 |

Based on the results presented in Table 10, teachers with bachelor's and master's degrees have more negative views compared to teachers with diplomas. That is, they rated their work autonomy at a lower level.

### 4.2.4. Is there any significant difference between the level of teachers' perceived work autonomy in terms of years of teaching experience?

In order to compare the level of teachers' perceived work autonomy regarding years of teaching experience, a one-way ANOVA test was run, the results of which are shown in Table 11.

The results shown in Table 11 indicate that, the value of F statistic is 0.540, which is not significant at 0.05; therefore, it can be said that there is no significant difference between the mean scores of teachers' perceived work autonomy in terms of their years of teaching experience.

**Table 11**: ANOVA test for teachers work autonomy by years of teaching experience

| Source of variance | Sum of squares | DF | Mean square | F | Sig. |
|---|---|---|---|---|---|
| Between groups variance | 0.809 | 4 | 0.202 | | |
| Within groups variance | 124.260 | 332 | 0.374 | 0.540 | 0.706 |
| Total | 125.069 | 336 | | | |

The main purpose of this study was firstly to understand the concept of teachers' work autonomy and secondly to standardize the work autonomy assessment scale completed by a sample of the Iranian teachers. The study was run by two main questions: the first question posed was how teachers assessed their level of work autonomy. The obtained results, generally indicated that teachers rated their level of work autonomy below the mean of the scale. Most teachers openly expressed their low levels of work autonomy while completing the questionnaire. The reason for this negative view can be attributed to the existence of a centralized educational and administrative system in the country. Teachers need professional treatment

from others, but at present the current state of teachers' self-esteem is low and social perceptions negatively affect teachers' evaluations too. As Deci and Ryan (2002) argue, freedom must now take place within defined boundaries and teachers must now be loyal to the procedures and limits of accountability imposed by educational system that did not exist before.

Teachers participating in the study rated their level of work autonomy in the area of "establishing school identity and praxis" as below the mean. In order to better understand the concept of teacher autonomy, teacher activities should be examined both at the educational (teacher ability in the classroom environment) and at the organizational levels. Having authority to decide about different school activities has benefits for the teacher from among which, we can refer to empowering teachers, achieving a positive attitude towards work, bringing an interest in work, taking a sense of professionalism in work, increasing self-esteem, and feeling a greater sense of ability to perform tasks. All these qualities prepare teachers for leadership in school. Furthermore, participation in school decision-making will improve interpersonal relationships as well as school communication, which in turn provides an atmosphere that leads to the success of school plans and programs. Increasing teachers' work autonomy in this dimension depends on their autonomy in deciding on school activities. Autonomy means that the teacher feels having control and independence in making decisions. This state cannot be achieved by the teacher alone but requires the full support of authorities, school principals, teachers, and students' parents.

Teachers participating in the research have assessed their level of work autonomy in Teaching and achievement evaluation as moderate. Porter's (1989) research has shown that higher teacher autonomy is achieved through their serious involvement in setting standards for student achievement. According to Elmore (1987), teachers believed that they had the best competence in classroom procedures and therefore should have complete autonomy to make decisions. In fact, it is the teachers who, in managing the classroom and in direct contact with the students, decide how to run their classroom, what to teach, how to teach, and what results to achieve. If their authority in their work is limited and their professionalism is questioned, one can certainly not expect high quality of teacher work. This part of the findings of the present study is consistent with the results of Pearson and Momaw (2005). They concluded that increasing autonomy in teaching leads to increased empowerment and professionalism. According to Luca (2006), all teachers perceive control over their classrooms as the highest level of autonomy.

Teachers participating in the present study rated their level of work autonomy in deciding about parental involvement below the mean. There are obstacles in the way of strengthening and expanding parent-teacher associations. The first obstacle is the centralized and step-by-step educational system, which is governed by restrictive bureaucratic guidelines. However, in recent years, steps have been taken towards decentralization through the delegation of authority to education organizations and regions, and the issue of centralized school management has been raised and partly accepted as an approach by education administrators; But there is a long way to go to reach the desired point. Currently, parent-teacher associations are obedient to decisions made by the principal as the representative of the administrative system. The administrative system tends to be centralized and hierarchical, and institutions such as the parents-teachers Association, the Teachers' Council, and the Student Council are emptied of content and have no authority.

The teachers in the sample of the research assessed their level of work autonomy below the mean for staff development. Staff training helps them learn what they need for their work and thus achieve the desired level of performance. Educational systems and human resource development strategies have changed. Staff development is not a specific process limited to a particular period of time, rather it must be continuous. To become a professional, teachers need to come to classes with sufficient up-to-date information. In recent years, there has been a new approach to improving the teaching profession in Western societies. This method, which leads to their sustainable development and growth through a flexible and cost-effective process, is called "self-development". This process can be formal or informal, during or outside working hours. The key is people's taking responsibility for identifying and directing their content, place, time, and how to grow and improve. Self-development requires people who take the main responsibility for planning and implementing their experiences (Shirbagi et al., 2016). The implementation of such new programs in the field of teacher training and professional development requires a high level of teacher autonomy.

Teachers participating in the study rated their level of work autonomy below the mean in terms of decision-making on extracurricular subjects. Application of different personal tastes in doing extracurricular subjects, teachers paying too much attention to teaching textbooks and being unaware of the relationship between students learning and their living environment, and students' unwillingness to participate in such activities are among the obstacles to the successful implementation of these activities in schools. How to perform extracurricular subjects varies according to the purpose and content of the programs. Because the

structure of Iran's education system is centralized, most extracurricular activities are communicated to schools by the Ministry of Education, and the role of teachers in the activities is not seen significantly. The only presence of the teacher is felt in some projects like “the dignity project” which is implemented in the classroom.

Teachers have assessed their level of work autonomy in “curriculum change and development” as above the mean. Teachers seem to have very little influence on curriculum development, but the results of teachers' responses show the opposite. Several factors can be attributed to this problem: First, it is possible that teachers do not feel any need to change textbooks because they have a positive view of the content of the textbooks and are satisfied with them. Furthermore, the claim of high autonomy in curriculum development may be related to a particular teaching level, especially the primary school. Finally, it may be due to measurement error and related questions from this component that was part of the last section of the questionnaire items that the sample teachers of the study may not have had enough time to answer.

Regarding the second research question related to the relationship between teachers' work autonomy and demographic variables, the results showed that there was no significant difference between male and female teachers' views on their level of work autonomy. However, there was a significant difference between teachers' work autonomy in terms of their levels of teaching. The results of Moomaw’s (2005) research in this section were consistent with the present study. He found that there was a significant difference between teachers' ranking levels in their understanding of autonomy. The biggest difference between primary and secondary school teachers was in assessing their understanding of autonomy.

There was no significant difference between the level of teachers' work autonomy in terms of their years of teaching experience. Going through the literature, there is conflicting evidence about the effect of teachers' years of teaching experience on work autonomy. The findings of Pearson and Hall (1993) are consistent with this part of the findings of the current study. They found no relationship between the two variables of years of teaching experience and level of work autonomy. But the reported evidence by Chiang and Ma (2012) contradicts it. Stockard and Lehman (2004) also found that teachers who had a sense of control and influence over their work environment in the early years of teaching perceived it as an important factor in the development of their professional activities. The truth more or less is that in a centralized prescribed curriculum, in-service education determines a growing percentage of professionalism. There

seems to be an important distinction between inexperienced and experienced teachers. In a study (Whitey, 2006), teachers with more than 20 years of work experience reported a decrease in their work autonomy. The results of Forrester (2000) however, showed how experienced teachers, unlike less experienced ones had gained their autonomy.

## 5. Conclusions

In conclusion, the study on teachers' perceived work autonomy in Iranian public schools reveals significant understandings into the educational journey within the professional experiences and obstacles occurred to the educators. The results underlined the significance of the nurturing environment that strengths teacher autonomy, as it is thoroughly connected to the motivation, job satisfaction, and overall efficacy in the classroom. Based on the factors that improve teachers' sense of autonomy, policymakers and school administrators can establish a more promoting educational environment that assists students and teachers. The results of this study have useful practical implications:

First, it highlights the role of school principals as people who can moderate teacher autonomy. As a confirmation of this issue, the results of Berri (2012) are a reference. Assessing the threatening role of school principal's vis-a-vis teachers in transmitting government policies, he showed that by playing this role, principals effectively restrict teachers' professional autonomy. Thus, McBeeth (2012) suggests that trusted and courageous principals need to reinforce and promote the kind of organizational culture in which teachers' professional autonomy may be realized.

Second, it seems that many of the educational reform programs implemented in schools are not in line with the professional perspectives of teachers and can affect their sense of autonomy and, consequently, their level of job satisfaction. Reducing job satisfaction is important because, as reported by Grenville-Cleave & Boniwell (2012), teachers with low work engagement or low motivation are costly for two reasons: First, because of their lack of work and absences, and second, because of the impact they are likely to have on other teachers as weak work models.

Third, proponents of teacher autonomy in new ways of professional development seem to emphasize that school principals and authorities of education offices cannot take full responsibility for staff development. But they must help to create the conditions in which the personal and professional development of

teachers takes place. Therefore, such a model should increase the capacity, willingness, and autonomy of teachers toward self-knowledge, more control over events and responsibility for them.

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