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Determinants of job acquisition based on the agricultural college students' attitude: A case of study from Shiraz University, Iran

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ABSTRACT

This contribution investigates factors explaining job acquisition using the agricultural college students' perceptions. Research sample was composed of 400 college freshman, sophomore, junior and senior students from the population (N ≈ 1522), surveyed by random sampling approach, after stratifying by ten academic majors. A self-implemented questionnaire collected the quantitative data. We performed principal component analysis (PCA) using SPSS (version 12), which represented that observed or measuring variables are loaded on four latent variables, individual, educational, financial, and social. Moreover, the derived results from K-mean cluster analysis (KCA) manifested three clusters of cases. Cases fallen into the cluster 1, substantially regard personal factors. Cluster 2 comprises students who remarkably take into account financial factors, whereas, students in cluster 3 believe in social and financial factors. Likewise, all job-acquisition-factor were significantly different based on the levels of gender, economic status and residence. In conclusion, we proposed management implications based on the research findings as well as hints to gaps for more job investigations in future.

INTRODUCTION

The Iranian higher education have faced challenges, which are consequence of numerous effects, e.g., the inefficient educational services, imbalanced gender distribution, and impractical and non-market curricula. Although increasing in the enrolled college students creates benefits for higher educational institutions, there is no comprehensive vision on risks that derive form alumni and graduates' unemployment, e.g., loneliness, depression, addiction, frustration, family ruptures, and detriment migrations. In the late 2001, unemployment rate in Iran has been 28 percent and active population would be 61 million people until the 2020, with 29 million predicted job opportunities (Shahbazi and Ali-Beigi, 2006; Zamani and Azizi 2006). Agricultural education

and training in higher education is responsible for preparing students for job world (Esters and Bowen 2005; Croom and Flowers 2001), therefore, fulfilling the students' competencies requires follow-up, which provide them with necessary information and skills in job opportunities (Cartmell and Garton 2000). In this respect, curricula delivered in agricultural education develop eligibilities, knowledge and skills needed for employment in business, industry, and in real-life situations (Miller et al. 2007).

Nevertheless, programs such as supervised agricultural experience (SAE) play a significant role in training the students and learning through experiences, which match with their interests and needs (Dyer and Williams 1997; Gratz 2004). As such, with advent of ever-changing job patterns and organizational experiences in the last few decades (Allen et al. 2008), the links between agricultural higher education and job institutions, e.g., career and technical student organizations (CTSOs) concrete educational and job experiences by benefiting from schools, colleges, faculties administrators, and the community (Thompson et al. 2003).

Literature delivers a large number of inquiries on job choice (Coupland, 2015; Jin et al., 2009; Osipow, 1990; Hannah and Kahn, 1989), job

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exploration (Littman-Ovadia 2008; Zikic and Klehe 2006), job decision-making (Germeijs and Verschueren 2007), job achievement (Valcour and Ladge 2008; Dries et al. 2008; Vos and Soens 2008; Bacharach et al. 2008), job satisfaction (Welbourne et al. 2007; Hofmans et al. 2008), but there is a little witness about the determinants of job acquisition. Therefore, to fulfill the literature gap, this contribution investigates factors that influence job acquisition using college students' perceptions.

Career development theories

Reviewing the job theories and theoretical foundations could help us recognize different dimensions of process by which peoples find a specific job. As a result, we review these theories, which are the following:

Ginzberg, Ginsburg, Axelrad, and Herma

In 1951, Ginzberg, Ginsburg, Axelrad, and Herma conceptualized process of job development that occurs in any one's life (Brown 1997; Churach 2005). They declare that most people do not make only one decision for job choice and therefore a variety of determinants, e.g., academic achievements; emotional factors and individual values affect this process (Wilson, 2004; Churach 2005). Furthermore, people's intention to acquire experience include a developmental six-stage process, beginning with fantasy (as pre-adolescence) through interest, capacity, values, tentative choices and finally to a final, realistic stage, i.e., crystallization (Ibid).

Donald Super's theory

In 1953, Donald Super published a theory of job choice and development, which includes propositions of trait-and-factor (Brown 2002). This theory was conceptualized based on the theoretical foundations delivered by Buhler, Davidson and Anderson, and Ginzberg, Ginsburg, Axelrad and Herma. The substantial contribution of theory in job development consists of a ten-proposition (Carvalho 2005). Super proposes the concept of career as a selection of the initial job, relative to a developmental process in sequence of occupational positions (Kazuyuki and Kuo-Lin 2006), and therefore acknowledges that his theory is a "segmental-comprising", an assortment of theories dealing with various aspects of career development (Neault, 2000).

Holland's career theory

Holland's theory focuses on four hints, as follows (Wu 2000): (1) Most persons fall into the six categorizations: realistic, investigative, social, conventional, enterprising, and artistic, and therefore, there are six types of job atmospheres, realistic, investigative, social, conventional,

enterprising, and artistic, (2) People search for environments and job that would allow them to exercise their skills and abilities to express their attitudes and values, to take on agreeable problems and roles, and to avoid disagreeable ones; and (3) A person's behavior could be explained by the interaction of whose personality pattern and the environment.

Social cognitive career theory

Social Cognitive Career Theory (SCCT) debates on how interplay among the a series of personal, environmental, and behavioral variables develop basic academic and career interests and direct people to jobs, which influence their development of self-efficacy, outcome expectations, interests, and goals (Zikic and Saks 2008; Lent et al. 2008). In evaluating different career options, individuals strive to maximize the congruence between their self-concept and the sex-type, prestige, and type of occupation (Tsaousides and Jome 2008). In fact, career choice are perceived as the goals relevant to intention to engage in a particular action or succession of actions (Zikic and Saks 2008).

Conceptual framework

As people evolve in relation to their life experience and social involvements, they give the meaning to their options and circumstances, and therefore they affect the actions they take (Richardson et al. 2008). For this reason, this study focuses on the main perceived determinants of job acquisition based on the college students' attitude. Job choice is one the most vital stages in development articulated to a part of people's life. A traditional domain-oriented perspective on job development suggests that process of job choice are central, which are created within the context of several social networks, e.g., family, peers, school, community, and world (Ferreira et al. 2007). This is associated with theory of family systems (TFS); people are developed as they are interacted with the environment (Larson 1995; Gobeli 1996; Walsh and Harrigan 2003; Moldo 2008). Tomasik et al. (2008) declare that job choice at the transition from school to work world is conceptualized as the adaptation in the social prestige of job to aspired aspect. Based on the SCCT, education and learning influence the perceived self-competencies, job expectations and preferences, in turn, they affect job choices (Zikic and Saks 2008; Wang et al. 2007). SCCT gives a satisfactory explanation how people select courses, occupations, and fields of work (Esters and Bowen 2005). In this regard, work values, interests (Nagy et al. 2007), needs, and self-concept (Porfeli 2007), together with family (Gaudron and Vautier 2007) play a substantial role in job choice. Brown (2002) enumerates three broad factors that influence job

choice, (1) individuals' self-perception, aptitudes, abilities, interests, resources, and knowledge, (2) the knowledge of the requirements of achievement, advantages and disadvantages, compensation, opportunities, and prospects in different line of work; (3) correctly reasoning on the relations of prenominated two groups of factors. Lai et al. (2006) divide the determining factors of job choice into two groups (1) "intrinsic," e.g., lifestyle preferences, and students' personal values; and (2) "extrinsic," e.g., school experiences and societal influence. Rowland (2004) conclude that the type of educational institution, grade level, and reference to school counselling office are the main factors that influence one's confidence in job decision-making.

Hauer et al. (2008) declare that three factors influence career choice regarding internal medicine (IM), educational experiences in IM, the nature of patient care in IM, and lifestyle. Based on the research performed by Russo and Flahive (2005), pre-experience in speech-language, parents' career, job consultancy, affiliation in sanitary net, and tendency to aid to others have considerable impacts on choice of speech-language pathology. Of demographic characteristics, evidences indicate no impact of gender on job future. For instance, Hajian and Nasiri (2006) have expressed no association of gender with job future in college students. Taylor et al. (2006) conclude that respondents (two genders) perceive compared to male females experience a perceived greater job acquisition difficulty. Shirazi (1997) points out motivational and personal characteristics are the main determinants of job choice of teaching. A research with aim of investigating factors affecting agricultural college students' decision about their future job, Zamani (2002) indicates that factors, e.g., job achievement, income, job social status and job location are the substantive factors on future job. Job choice might be associated with personal characteristics, such as socioeconomic background and humanistic qualities (Lai et al. 2006). Hedjazi (2004) have reported that students' residence has no impact on vocational performance. Well-established association exist between socio-economic conditions, financial need, working status (Salisbury et al. 2009). Abele and Spurk (2008) believe in that self-efficacy and goals influence early phases of an individual's career choice. In conclusion, the purpose of the present study is to determine agricultural college students' attitude towards factors affecting job acquisition. However, the objectives of the study are (1) to determine associations between college students' gender and experience in agricultural activities prior to entering the college, (2) to examine the perceived factors that affect job acquisition; to identify the homogeneity of groups of college students in accordance their perceived job acquisition; and (3)

to identify the impact of gender, economic status, and resilience area on latent factors. Fig. 1 shows conceptual framework of the study.
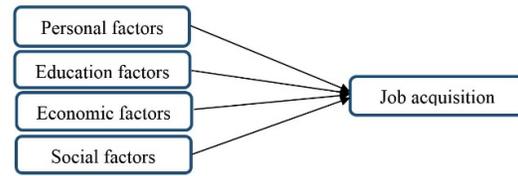

Figure 1. Hypothesized framework of the determining factors of job acquisition

Fig. 2 also represents an analytical framework for the determining factors affect job acquisition
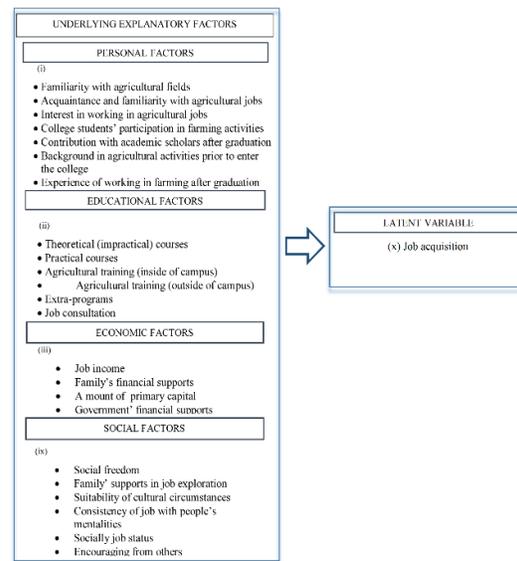

Figure 2. Analytical framework for the determining factors affect job acquisition (latent variable)

MATERIALS AND METHODS

Research population

Participants under study consist of 400 agricultural freshman, junior, sophomore, and senior college students in ten majors of the agricultural extension and education, horticulture, water management engineering, agronomy, soil science, animal science, agricultural machinery, plant protection, food sciences, and agricultural economics (N ≈ 1522). They were selected using stratified random sampling approach and surveyed using a structured questionnaire. Face validity of the date collecting instrument was fulfilled by the correcting suggestions of the experts' panel in the field of agricultural education and psychology. In

response to research objectives, we used statistics approaches, e.g., factor analysis (principal components analysis), cluster analysis (K-mean cluster analysis), t-test student and one-way ANOVA were performed to analyze data in SPSS (version 12).

Profile of participants

Table 1 shows a profile of respondents' characteristics. They include 182 male students (45.5%) and 218 female students (54.5%), participated in the survey. The respondents' marital status encompasses 361 single (90.25%), 33 married (8.25%) and 6 affianced (1.5%). The age of respondents ranges from 18 to 27 years old (Mean = 20.74, SD =1.61). While 194 people (48.5%) fall into a category, which is less than 20 years old, 206 students (51.5%) are more than 20 years old. Associated with respondents' resilience area, the largest proportion belongs to state Capital (194 people, 48.5%).

129 students (32.25%) have finished high school with mathematics sciences diploma, whereas, 271 students (67.75%) have natural diploma. The profile of experience in agricultural activities prior to enter college indicates that 131 respondents (32.75%) have experience in agricultural activities and the remaining 269

Table 1. Profile of surveyed respondents

Characteristics	Frequency	Percent (%)
Gender		
Male	182	45.5
Female	218	54.5
Marital status		
Single	361	90.25
Married	33	8.25
Affianced	6	1.5
Age		
<20	194	48.5
>20	206	51.5
Resilience area		
State Capital	194	48.50
City	163	42
Rural	38	9.5
Diploma		
Mathematics	129	32.25
Natural	271	67.75
Experience in agricultural activities	131	32.75
Yes	269	67.25
No		
Family size		
<5	186	46.5
>5	214	53.5
Job status		
Employed	16	4
Seeking	32	8
Only student	351	88

Reference: research findings
Note: Some of characteristics include missing data

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(67.25%) have no such experience in such activities. Associated with family size, 186 students (46.5%) belong to group less than 5 people, while, 214 students (53.5%) fall into a category more than 5 people. The results associate with job status indicates the majority of respondents are just students (351 people, 8%) and 32 people are seeding the job (8%).

RESULTS AND DISCUSSION

Gender and farming-job experience

We performed Pearson chi-square (Phi correlation coefficient) to examine the association of participants' gender and their experience in farming jobs. The results indicates that female respondents are not significantly acquainted with farming activities, rather male ones are (Chi-square =33.55, df = 1, p <0.001). The rationale behind the results is the increased admission of female people from urban areas in academic institutions, which causes a gender imbalance. Therefore, they enter the college with no agricultural background, and they only demand to attain academic certificate.

Job-acquisition latent variables

We reduced observed variables (statements) to job-acquisition latent components (or factors) using principal component analysis (PCA). PCA an approach in factor analysis (FA). FA is also a powerful multivariate analysis method that perform an orderly simplification of several interrelated measures to reach latent characteristics (Zhao and Yu, 2008; Child, 2006). This approach assumes that observed variables are linear combinations of the underlying hypothetical or unobservable factors (Kim and Mueller, 1978). The first and most point in applying such approach is to regard to inter-correlation among the variables under study. It deals with singularity, when there is a complete correlation, very low and high correlation (multi-colinearity). The sample size more than 300 (Fields, 2005) is a pre-requisite condition in performing the procedure.

There are seven basic steps in performing FA (DeCoster, 1998): (1) collect measurements, (2) obtain the correlation matrix, (3) select the number of factors for inclusion, (4) extract the initial set of factors, (5) rotate your factors to a final solution, (6) interpret your factor structure, and (7) construct factor scores for further analysis. At the beginning of the analysis, there are 29 statements. To increase the consistency of interrelated statements in indices, we deleted a part of uncorrelated statements, because of very low or very high correlation. Based on results of the correlation matrix (R-matrix), the determining criterion is 0.001, which have a value more than the criterion declared by Field (2005), i.e., greater than 0.0001.

Table 2. Cross-tabulation of participants' gender and farming-job experience

			Experience in agricultural activities		Total	Chi-square	p-value
			Yes	No			
Gender	Female	Observed	42	176	218		
		Expected	71.4	146.6	218.0		
	Male	Observed	89	93	182	33.55	0.001
		Expected	59.6	122.4	182.0		
Total		Observed	131	269	400		
		Expected	131.0	269.0	400.0		

[*] Significant at level of p<0.001

For this reason, there is not any risk to run the FA. Moreover, the Kaiser-Meyer-Olkin assessed the appropriateness of the sample size. This measurement ranges between 0 and 1. The value of Kaiser-Meyer-Olkin is 0.8 to 0.9, which points out the acceptable size of sample applied in FA. To examine the null hypothesis, whether the correlation among the variables is not significantly different from zero (Cramer and Howitt, 2004), we also used Bartlett's test. The results show the rejection of this hypothesis (Chi-square=2968.16, p < 0.001).

Table 3 indicates the initial, extracted and rotated eigenvalues, relevant to the each factor or latent variable. Eigenvalues of each factor represent the variance accounted for the particular linear factor. The number of initial eigenvalues are 23. By applying extraction method, just four-factor 1, 2, 3, 4 explain 28.47, 9.31, 6.88, and 5.99 percentage of total variance, respectively. Rotated eigenvalues is used to simplify the interpretation of the factor analysis. As shown in table 4, a four-factor solution

(personal, educational, financial, and social) is confirmed for rotation based on the established criteria (Field, 2005). To determine the number of retained factors, we considered keeping only those factors with eigenvalues over 0.70 or 1.0 (Denis, 2005), and in this study only those factors with eigenvalues more than 1. Furthermore, factor-loading more than 0.40 are used to determine which statements are involved in and loaded on a given factor.

Factor 1 (personal) contains 7 statements: "Familiarity with agricultural fields prior to enter the college," "Acquaintance and familiarity with agricultural jobs," "Interest in working in agricultural jobs," "College students' participation in farming activities," "Contribution with academic scholars after graduation," "Background in agricultural activities prior to enter the college," and "Experience of working in farming after graduation." Factor 2 (educational) includes 6 statements: "Theoretical (impractical) courses," "Practical courses," "Agricultural training (inside

Table 3. Initial, extracted and rotated eigenvalues and total variance

Items	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.55	28.46	28.47	6.55	28.47	28.47	3.65	15.89	15.89
2	2.14	9.31	37.77	2.14	9.31	37.77	3.26	14.19	30.08
3	1.58	6.87	44.65	1.58	6.88	44.65	2.73	11.85	41.93
4	1.38	5.99	50.64	1.38	5.99	50.63	2	8.71	50.64
5	.98	4.24	54.88						
6	.92	4.01	59						
7	.90	3.91	62.81						
8	.85	3.70	66.51						
9	.84	3.67	70.18						
10	.74	3.22	73.41						
11	.70	3.03	76.44						
12	.67	2.89	79.33						
13	.63	2.76	82.09						
14	.54	2.34	84.43						
15	.53	2.31	86.74						
16	.49	2.14	88.89						
17	.45	1.96	90.85						
18	.43	1.90	92.75						
19	.40	1.75	94.499						
20	.35	1.52	96.02						
21	.32	1.42	97.43						
22	.31	1.35	98.78						
23	.28	1.22	100.00						

Extraction Method: Principal Component Analysis (PCA).

Table 4. Varimax rotation components pattern (Rotated Component Matrix)

Statements	Components			
	Personal	Educational	Social	Financial
Familiarity with agricultural fields prior to enter the college	.72			
Acquaintance and familiarity with agricultural jobs	.71			
Interest in working in agricultural jobs	.67			
College students' participation in farming activities	.63			
Contribution with academic scholars after graduation	.50			
Background in agricultural activities prior to enter the college	.73			
Experience of working in farming after graduation	.62			
Theoretical (impractical) courses		.65		
Practical courses		.75		
Agricultural training (inside of campus)		.74		
Agricultural training (outside of campus)		.68		
Extra-programs		.60		
Job consultation		.48		
Job income				.42
Family's financial supports				.77
A mount of primary capital				.81
Government' financial supports				.65
Social freedom			.65	
Family' supports in job exploration			.76	
Suitability of cultural circumstances			.76	
Consistency of job with people's mentalities			.56	
Socially job status			.63	
Encouraging from others			.59	
Explained total variance	6.55	2.14	1.58	1.38

Extraction Method: Principal Component Analysis
Rotation Method: Varimax with Kaiser Normalization

of campus)," "Agricultural training (outside of campus)," "Extra-programs," and "Job consultation." Furthermore, factor 3 (financial) include 4 statements: "Job income," "Family's financial supports," "A mount of primary capital," and "Government' financial supports." Factors 4 (social) also contains 6 statements: "Social freedom," "Family' supports in job exploration," "Suitability of cultural circumstances," "Consistency of career with people's mentalities," "Socially career status," and "Encouraging from others."

These factors are very important based on the agricultural college students' perception. Therefore, personal and educational factors are important in acquiring job because educational achievements, emotional factors, and individual values are regarded as the predictors of job development (Wilson, 2004). More importantly, the more college students study hard to accomplish their assigned tasks and as well as academic institutions provides better theoretical and job-based educational services, the more students perceive personal and educational factors as the determinants of job acquisition. It is also interpretable with SCCT's discourse, personal, environmental, and behavioral factors impress the processes by which people develop basic academic and job interests, make and revise their educational and vocational plans, and achieve performances of diverse quality in their academic and job pursuits (Lent et al. 2008). Personal factors emanate from individual intentions and behaviors, which play an important role in acquiring desire job. The impact of the personal characteristics on job acquisition is in line with researches, e.g., Lai et al. (2006). They give much attention to intrinsic factors, e.g., demographic attributes, lifestyle preferences, and students' personal values in job choice. McGhee and Cheek (1990) are also convinced that the determination of graduates' perceptions of their preparation for programs as well as their job patterns are the useful elements for making revision in program decisions. Moreover, the research findings unveil the impact social and economic

Table 5. Analysis of variance, 3 clusters

	Cluster		Error			
	Mean Square	df	Mean Square	df	F	p-value
Factor score 1	53.19	1	0.86	387	61.48	0.001
Factor score 2	67.03	1	0.83	387	80.82	0.001
Factor score 3	77.27	1	0.80	387	96.2	0.001
Factor score 4	1.72	1	0.99	387	1.72	0.191

Significant at $p < 0.001$
References: research findings

Table 6. Final Cluster Centers

	Cluster 1	Cluster 2	Cluster 3
Number of cases in cluster	132	163	96
Factor score 1	0.80	0.40	0.42
Factor score 2	0.30	0.25	0.01
Factor score 3	0.58	0.01	0.78
Factor score 4	0.29	0.78	0.93

Reference: research findings

Table 7. Comparison of the factor-score in two groups of male and female (t-student test)

Factors	Gender	Frequency	Mean	SD	t	p-value
Personal	Female	216	3.54	0.72	0.12	0.82
	Male	181	3.55	0.74		
Educational	Female	216	3.50	0.74	2.26[**]	0.02
	Male	179	3.32	0.87		
Economic	Female	216	3.78	0.75	0.19	0.84
	Male	180	2.79	0.63		
Social	Female	217	3.96	0.62	2.22[***]	0.001
	Male	182	3.68	0.71		

Reference: research findings

determinates of job acquisition. Amongst the statements, economic and financial supports from resources such as consultant peoples, families, NGOs, governmental institutions, and appropriate cultural circumstances are significant factors to acquire a job. In this respect, Tomasik et al. (2008) believe in the significant occupational consequences for peoples' future job pertain to financial, social, and psychological domains. However, if job planners and practitioners use a systematic viewpoint and not concentrate on the restrictive determinants, they can create effective strategies to solve job problems, e.g., unemployment or job dissatisfaction. This issue shows that job acquisition is a multidimensional because people do not make a once-only decision relevant to job choice (Churach, 2005). Therefore, job practitioners that concentrate on developing job skills and competencies not just focus on basic psychosocial aspects, e.g., aspirations and preferences, but also they regard infrastructural and financial aspects of job development and acquisition. Concentrating on such determinates facilitates achieving the desired goals.

Homogenized groups and job-acquisition-factor

We performed cluster analysis (CA) to group the cases (college students) using k-mean cluster analysis (KCA). CA is a numerical classification, varying depending on the research objectives (Li et al. 2007). KCA is also a non-hierarchical approach to group measures into a predetermined number of groups or k clusters. Through such approach, it is possible to minimize the within-cluster variance (WCV) and maximize the between-cluster variance (BCV) using an iterative method (Brown et al. 2006). Prior to conduct the KCA, an appropriate number of clusters are determined and each cluster constitutes a centeroid measure around the cases. Subsequently, cases are assigned to most likely cluster one by one. At each step, the centeroid

might be re-calculated (Bakaric 2006). Therefore, we used KCA to obtain clusters of college students based on the perceived determinants of job acquisition.

Factor scores are composite measure for each factor representing each object (Bakaric 2006). After the use of factor scores, each statement is represented by four-measure rather than 23 original measures. These four-factor scores represent each of four extracted factors. KCA categorizes cases rather than items or statements. Three clusters was gained by. KCA operates as apposite of analysis of variance (Bakarik, 2006), which starts with k random clusters, and then move objects between those clusters to reach objective such as diminishing variability within clusters and decreasing variability between clusters (Curtiss et al. 2005).

Therefore, F test in ANOVA assesses the between-group variability against the within-group variability. Then, KCA tends to assign cases inside and outside the clusters to receive the most different groups significantly. ANOVA results clears which of variables have the most different to cluster solution, and therefore, i.e., variables with greater value to F-value have the greatest differences among clusters (Table 5). The final cluster centers are computed as the mean for each variable within each final cluster. The final cluster centers reflect the characteristics of the typical case for each cluster.

Table 6 indicates three clusters. While cluster one, with 132 college students, perceive personal factors affect job acquisition, cluster two (n=163) include students who regard financial factors that have impact on job acquisition. Furthermore, students in cluster three (n=96 disparage the role of educational factors in job acquisition, and perceive the considerable role of social and financial factors.

Table 8. Economic status and job acquisition (ANOVA)

Factors	Economic status	Frequency	Mean	SD	F	p-value
Personal	Extremely poor	306	3.53	0.70		
	poor	3	2.39	1.48		
	Average	70	3.60	0.83	2.23	0.06
	Above average	3	3.93	0.10		
	Excellent	15	3.60	.65		
Educational	Extremely poor	306	3.42	0.81		
	poor	3	2.55	0.85		
	Average	70	3.38	0.82	1.15	0.32
	Above average	3	3.72	0.25		
	Excellent	15	3.58	0.79		
Financial	Extremely poor	306	3.77[a]	0.72		
	poor	3	3.06[a]	1.33		
	Average	70	3.84[b]	0.57	2.08[*]	0.03
	Above average	3	3.53[b]	0.23		
	Excellent	15	3.88[b]	0.54		
Social	Extremely poor	306	3.80	0.69		
	poor	3	3.57	0.89		
	Average	70	4.01	0.61	1.66	0.15
	Above average	3	3.47	0.54		
	Excellent	15	3.74	0.70		

* Significant at p < 0.05

Reference: research findings

Comparison of independent samples

We used independent-sample t-test to compare means-score of the personal, educational, financial and social factors in two independent samples, gender with two factorials or levels. The independent-sample t-test was performed to assess the significance of difference of the factors. The assumption of homogeneity of variances (HOV) was fulfilled. Therefore, there is a significant difference between the average scores of educational factors (t = 2.26, p < 0.02) and social factors (t = 2.22, p < 0.001) in two independent samples (Table 7). Hajian and Nasiri (2006) declare that gender is not associated with job future in college students. Conversely, Taylor et al., (2006) conclude that both two genders show that females experience a perceived greater job acquisition difficulty than males (Taylor et al., 2006). These difficulties might be relevant to different obstacles and challenges students encounter during the acquisition of job competencies.

Analysis of variance (ANOVA)

We conducted one-way ANOVA to compare the significance of difference of the variables, economic status with five and residence area with three levels (Table 8). Therefore, there is a significant difference between the average scores of economic factors (F = 2.08, p < 0.03) in five groups. LSD post hoc test also indicates there is the only difference between economic scores in two groups of "extremely poor," "poor" and other three groups, i.e., the more respondents possess better economic situation, the more they perceive that financial factors affect job acquisition. Students with excellent economic status are more likely to perceive the considerable role of financial determinants on job acquisition. Students who belong to rich families experience the role financial determinants on job acquisition more objectively than those who have not appropriate economic status. Salisbury et al. (2009) have reported well-established association exist between socio-economic conditions, financial need, working status.

We also carried out ANOVA to assess the significance of difference of the variable of residence area (Table 9). Therefore, there is only a significant difference between the average scores of economic factors (F = 4.91, p < 0.008) in three groups. As the LSD post hoc test indicates, there is difference between economic-factor scores in three groups of "State capital" and "city" and "rural". The more respondents belong to the category of rural areas, the more they perceive that economic and financial factors have impact on job acquisition. An account for this finding is the students, who live in rural areas, perceive a specific need to financial requirements to job acquisition. They usually live in theses area with no enough facilities. This is not in line with research findings by Hedjazi (2004), students' residence has no impact on vocational performance.

Table 9. residence area and job acquisition

Factors	Student residence	Frequency	Mean	SD	F	p-value
Personal	State capital	193	3.54	0.68		
	City	167	3.54	0.80	0.03	0.97
	Rural	37	3.57	0.67		
Educational	State capital	191	3.46	0.68		
	City	168	3.39	0.81	0.72	0.49
	Rural	37	3.31	0.92		
Economic	State capital	193	3.89	0.71		
	City	168	3.67	0.68	4.91*	0.008
	Rural	6	4.71	0.60		
Social	State capital (n=193)	193	3.85	0.64		
	City (n=32)	132	3.82	0.72	0.47	0.62
	Rural (n=38)	38	3.74	0.68		

* Significant at $p < 0.05$
Reference: research findings

CONCLUSION

This study aims identifying factors affecting job acquisition based on the agricultural college students. Being aware of the perceived determinants of job acquisition helps job planners to find the accounts for unemployment. Results of FA indicated a diversity of factors that contribute in job acquisition. Moreover, by clustering the college students into three homogeneous groups, it was revealed that these groups are differently regard the determinants of job acquisition. The substantial results are the impacts of gender, economic status and residence on economic and social-factor of job acquisition. As we suggested, the job planners should consider financially supporting the college students. Since the respondents disregarded and disparaged the important role of educational and training requirements (factors), the Iranian universities should develop the curricula consistent with college students' needs and competencies and their future job. The government and families should offer financial supports. Moreover, social catalyzers and modifiers should facilitate the social processes influencing the job acquisition. Students concentrate on many factors pertaining to future job so before each making decision about job, it is important to consider to people's attitude. Social affairs and job organization is required not only to train college students with skills and eligibilities, but also considers their attitude towards job. With this reason, vocational institutions should assign a responsibility for universities about students' future job. Since universities can survey students' attitude towards future job and can send results of these surveys to vocational organizations, their responsible in this regard is indispensable. This survey should be repeated to fully understand the effects of personal, educational, social and financial.

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REFERENCES

Abele A.E. Spurk D. (2008) The longitudinal impact of self-efficacy and career goals on objective and subjective career success. Journal of Vocational Behavior, 74(1): 53-62.

Allen T.D. Eby L.T. O'Brien K.E. Lentz E (2008) The state of mentoring research: A qualitative review of current research methods and future research implications. Journal of Vocational Behavior, 73: 343–357.

Bacharach S. Bamberger P. Biron M. Horowitz-Rozen M. (2008) Perceived agency in retirement and retiree drinking behavior: Job satisfaction as a moderator. Journal of Vocational Behavior, 73(3): 376-386.

Bakaric I.R. (2006) Methods of multivariate analysis to uncover socio-economic differences among special- economics entities. From http://www-sre.wu-wien.ac.at/ersa/ersaconfs/ersa06/papers/56.pdf

Brown C (1997) Sex differences in the career development of urban African American adolescents. Journal of Career Development, 23(4): 295-304.

Brown D. (2002) Career Choice and Development: applying contemporary theories to practice. Published by Wiley_Default.

Brown D.R. Stephens E.C. Ouma J.O Murithy F.M. Barrett C.B. (2006) Livelihood strategies in the rural Kenyan highlands. AfJARE, 11: 21-36.

Cartmell D.D. Garton B. L. (2000) An assessment of agricultural education graduates' preparation for careers in teaching and industry. Proceedings of the 27th Annual National Agricultural Education Research Conference: 531-542.

Carvalho A. (2005) Meaning of work and life role salience In a South African context: A cross-cultural comparison. Dissertation. Available from http://etd.rau.ac.za/theses/available/etd-10132006-124245/restricted/AP.pdf.

Child D. (2006) The essentials of factor analysis. Published by Continuum International Publishing Group, ISBN 0826480004, 9780826480002.

Churach D. (2005) Motivational drivers affecting career choices in the resource sector: The Science Career Inventory SCI. Fourth International Conference on Science, Mathematics and Technology Education, Victoria, BC, Canada, August 25-28, 2005.

Cramer D. Howitt, D.L. (2004) The Sage dictionary of statistics: a practical resource for students in the social sciences. Sage.

Coupland C. (2015). Entry and exit as embodied career choice in professional sport. Journal of Vocational Behavior, 90: 111-121.

Croom D.B. Flowers, J.L. (2001) Factors influencing an agricultural education student's perception of the FFA organization. Journal of Agricultural Education, 42(2): 28-37.

Curtiss J. Medonos T. Ratinger T. (2005) Ownership Form Effect on Large-Scale Farms' Performance: Case of Czech Agriculture. 94th EAAE Seminar from households to firms with independent legal status: the spectrum of institutional units in the development of European agriculture, Ashford UK, 9-10 April 2005.

DeCoster J. (1998) Overview of Factor Analysis. Available from http://www.stat-help.com/factor.pdf.

Denis, D. J. (2005). Factor analysis, university of Montana. Availavle from http://psychweb.psy.umt.edu/denis/scl/resources/fa_part_2.pdf.

Dries N. Pepermans R. Carlier O. (2008) Career success: Constructing a multidimensional model. Journal of Vocational Behavior, 73(2): 254-267.

Dyer J. E. Willaims D.L. (1997) Benefits of supervised agricultural experience programs: A synthesis of research. Journal of Agricultural Education, 38(4): 50-58.

Esters L.T. Bowen B.E. (2005) Factors influencing career choices of urban agricultural education students. Journal of Agricultural Education, 46(2): 24-35.

Ferreira J.A. Santos E.J.R. Fonseca A.C. Haase R.F. (2007) Early predictors of career development: A 10-year follow-up study. Journal of Vocational Behavior, 70: 61–77.

Field A. (2005) Discovering statistics using SPSS. 2nd edition, London: Sage.

Gaudron J. Vautier S.P. (2007) Analyzing individual differences in vocational, leisure, and family interests: A multitrait-multimethod approach. Journal of Vocational Behavior, 70: 561–573.

Germeijs V. Verschueren K. (2007) High school students' career decision-making process: Consequences for choice implementation in higher education. Journal of Vocational Behavior, 70: 223–241

Gobeli V.C. (1995) Background papers: Extension rural youth programs: Part of a comprehensive strategy for sustainable development in developing countries. In book of Expert Consultation on Extension Rural Youth Programmes and Sustainable. FAO publication. Development Available from http://www.fao.org/docrep/w1765e/w1765e09.htm.

Gratz S.J. (2004) Factors influencing supervised agricultural experience earnings of Ohio FFA state Degree recipients as reported on the Ohio FFa state degree application. Masters' thesis. Available from http://www.ohiolink.edu/etd/send-pdf.cgi?osu1080302672.

Hajian K. Nasiri A. (2006) Evaluation of medical students' attitude toward future job in Babol University of Medical Sciences 2003. Journal of Babol University of medical sciences, 8(1): 86-95.

Hannah S.J.A. Kahn S.E. (1989) The relationship of socioeconomic status and gender to the occupational choices of grade 12 students. Journal of Vocational Behavior, 34(2): 161-178.

Hauer K.E. Durning S.J. Kernan W.N. Fagan M.J. Mintz M. O'Sullivan P.S. Battistone M. DeFer T. Elnicki M. Harrell H. Reddy S. Boscardin C.K. Schwartz M.D. (2008) Factors associated with medical students' career choices regarding internal medicine. Journal of American Medical Association, 300(10): 1154-1164.

Hedjazi Y. (2004) The Impact of Socioeconomic Factors on the Success Rate of Tehran University Graduates in Faculty of Agriculture, Journal of Social Science, 11(3): 27-42.

Hofmans J. Dries N. Pepermans R. (2008) The career satisfaction scale: Response bias among men and women. Journal of Vocational Behavior, 733: 397-403.

Jin L. Watkins D. Yuen M. (2009) Personality, career decision self-efficacy and commitment to the career choices process among Chinese graduate students. Journal of Vocational Behavior, 74: 47-52.

Kazuyuki M. Kuo-lin W. (2006) Illusion of career development theories-for the departure of developing a demonstrative career development theory. The Economic Journal of Takasaki City University of Economics, 49(2), 17-30.

Kim J.O. Mueller C.W. (1978) Factor Analysis: Statistical Methods and Practical Issues. Published by SAGE, 1978.

Lai H.L. Peng T.C. Chang F.M. (2006) Factors associated with career decision in Taiwanes nursing students: A questionnaire survey. International Journal of Nursing Studies, 42, 581-588.

Larson J.H. (1995) The use of family systems theory to explain and treat career decision problems in late adolescence: A review. The American Journal of Family Therapy, 23(4): 328 – 337.

Lent R.W. Lopez A. M. Lopez F.G. Sheu H.B. (2008) Social cognitive career theory and the prediction of interests and choice goals in the computing discipline. Journal of Vocational Behavior, 73: 52–62.

Littman-Ovadia H. (2008) The effect of client attachment style and counselor functioning on career exploration. Journal of Vocational Behavior, 73: 434–439.

McGhee M.B. Cheek J.G. (1990) Assessment of the preparation and career patterns of agricultural education graduates, 1975-1985. Journal of Agricultural Education, 31(2), 17-22.

Miller R. Anderson R. State M. Swafford M. Seibel A. (2007) Student perceptions of preparation for and the benefit of FFA career development events on future employment in the field of agriculture. Southern Region conference: American Association for Agricultural Education Mobile, Alabama-February 3-6, 2007.

Moldo R.L. (2008) Family Systems Theory: A brief review. National Association of Jewish Chaplains' NAJC annual conference January 20-23, 2008.

Nagy G. Trautwein U. Lüdtke O. (2007) The structure of vocational interests in Germany: Different methodologies, different conclusions, Journal of Vocational Behavior, 76(2): 153-169.

Neault R.A. (2000) Planning for Serendipity? Career Management for Changing Times.

Available from http://www.contactpoint.ca/natcon-conat/2000/pdf/pdf-00-15.pdf.

Osipow S.H. (1990) Convergence in theories of career choice and development: Review and prospect. Journal of Vocational Behavior, 36(2): 122-131.

Porfeli E.J. (2007) Work values system development during adolescence. Journal of Vocational Behavior, 70: 42–60.

Richardson M. S. Meade P. Rosbruch N. Vescio C. Price L. Cordero A. (2009) Intentional and identity processes: A social constructionist investigation using student journals. Journal of Vocational Behavior, 74(1): 63-74.

Rowland K.D. (2004) Career decision-making skills of high school students in the Bahamas. Journal of Career Development, 31(1): 1-13.

Russo K. R. Flahive M. J. (2005). Factors Influencing Career Choices and Levels of Professional Satisfaction in SLP. http://www.SpeechPathology.com.

Salisbury M.H. Padgett R.D. Pascarella E.T. (2009) The effects of work on the educational experiences and liberal arts outcomes of first year college students. In annual meeting of the Association for Institutional Research, Atlanta, GA.

Shahbazi E. Ali-Beigi A. (2006) The required competencies of agricultural graduates for entering job market. Iranian Agricultural Extension and Education Journal, 21: 15-24.

Shirazi R. (1997) Investigation of motivating factors in choosing a teacher job from the perspective of high school teachers working in state institutions. M.Sc. thesis. Azahra University.

Taylor S. Ranyard R. Charlton J.P. (2006) Graduate Entry into the UK labour market: Demographic differences in perceptions of disadvantage. Proceedings of the 2006 IAREP, SABE Conference, Paris.

Thompson C. Thompson D.E. Orr B. (2003) A factor analysis of variables affecting CTSO advisors' satisfaction. Journal of Family and Consumer Sciences Education, 21(2): 1-9.

Tomasik M.J. Hardy S. Haase C.M. Heckhausen J. (2009) Adaptive adjustment of vocational aspirations among German youths during the transition from school to work. Journal of Vocational Behavior, 74(1): 38-46.

Tsaousides T. Jome L. (2008) Perceived career compromise, affect and work-related satisfaction in college students. Journal of Vocational Behavior, 73: 185–194.

Valcour M. Ladge J.J. (2008) Family and career path characteristics as predictors of women's objective and subjective career success: Integrating traditional and protean career explanations. Journal of Vocational Behavior, 73(2): 300-309.

Vos A.D. Soens N. (2008) Protean attitude and career success: The mediating role of self-management. Journal of Vocational Behavior, 73: 449-456.

Wang C. Lo Y. Xu Y. Wang W. Porfeli E. (2007) Constructing the search for a job in academia from the perspectives of self-regulated learning strategies and social cognitive career theory. Journal of Vocational Behavior, 70: 574–589.

Walsh J. Harrigan M. (2003) The termination stage in Bowen's family systems theory. Clinical Social Work Journal, 31(4): 383-393.

Welbourne J.L. Eggerth D. Hartley T.A. Andrew M. E. Sanchez F. (2007) Coping strategies in the workplace: Relationships with attributional

style and job satisfaction. Journal of Vocational Behavior, 70, 312–325.

Wilson P.A. (2004) The career development of senior-Level African American women working in community and technical college in the United State. The Dissertation, Available from http://www.coe.uga.edu/leap/adulted/pdf/wilson_patricia_a_200405_edd.pdf

Wu W.T. (2000) Vocational interests and career maturity of male high school students talented in math and science. Proc. Natl. Sci. Counc. ROCD, 10(3): 137-143.

Zamani G. H. (2002) Factors affecting agricultural college students to decide on their future jobs. Iranian Journal of Agricultural Science, 33(2): 81-87.

Zamani G.H. Azizi T. (2006) Executive administrators' perceptions towards agricultural graduates employment. Iranian Agricultural Extension and Education Journal, 22: 73-83.

Zikic J. Klehe U. (2006) Job loss as a blessing in disguise: The role of career exploration and career planning in predicting reemployment quality. Journal of Vocational Behavior, 63: 391-409.

Zikic J. Saks A.M. (2008) Job search and social cognitive theory: The role of career-relevant activities. Journal of Vocational Behavior, 74(1): 117-127.

Zhao J.H. Yu P. L.H. (2008) A note on variational Bayesian factor analysis. Neural Networks, 22(7): 988-997.