Investigating the relationship between the Individual Level Factors of Teamwork with Human Resource Performance across Head Offices of Agricultural Bank Branches in Tehran

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Abstract

Promotion of competition in markets, changing the taste of customers and technologic developments and other factors of modern world have ever involved the mind of managers, planners and experts of human resources dept of enterprises and this question is propounded that how employees’ performance level in the enterprises may be increased? Which factors cause improvement of human resources performance of an institute or service or manufacturing enterprise? Today, the experts of management science have concluded that the groups are assumed as the foundation of plenty of enterprise performance improvements and one of solutions for enterprises dilemmas is benefitting from teamwork, cooperation and participation of employees in decision-making that will result in considerably increase of working departments’ productivity, and the employees will achieve more satisfaction with their work, and in addition to meeting their emotional needs can increase their working productivity through achievement to higher levels of needs and natural growth.

This study intends to specify the association between individual level of workgroups (based on Driskell, Salas and Hogan 1987 model) and employees performance (according to ACHIEVE performance model). Descriptive correlative method has been applied for this study. The sample included 87 employees of bank branches management dept. in great Tehran who were selected by stratified random sampling based on sex, experience, educational level and organizational position. To collect the data, questionnaire was used and its validity and reliability was confirmed. At end, the obtained data was analyzed according to Pearson coefficient of correlation and multiple regression analysis. Summary of analysis demonstrated positive and significant association between individual characteristics of teamwork and characteristics of Achieve model in significance level 0.01% (P<0.0).

Keywords: Teamwork, Individual Level of Workgroup, Employees Performance

Introduction

The objective of establishing any institute, enterprise or trading company is earning profit and continuation of its life. For aiming this goal, the enterprises attempt to reduce their costs and enhance their profit through increasing the productivity of production agents. One of the most important production agents in any enterprise is human resources thereof. Nowadays, all world countries seek for achieving progresses in performance improvement and one of important topics that is raised in the enterprises is approaching to smaller firm size, more flat structures, more flexible operation and finding new and creative solutions for benefitting from groups as foundation of plenty of enterprise performance improvements (Schermherhorn, John R. et al, 1994). Hence, the groups are assumed as unavoidable factor of modern life and productive organizations benefitting from workgroups can continue their life (Rezaian, Ali, 2003).

The managers have understood that the teams have higher flexibility more than other workgroups and are better responsible to transforming environment. Thus, the teams are used as effective tools for managers toward increasing the job satisfaction and employees’ collaboration. Therefore, as the enterprises renovate themselves for increasing the competitive ability and working efficiency, have approached to team-making and group working to benefit from employees’ ability, better. Thompson (2000) stated that in a full teamwork model, depending on the team status, there are various necessary conditions the help successful
performance and achievement to team goals. Thompson assumes ability, motivation, cultural characteristics and strategy included in these factors.

**Groups and employees’ performance:**

A lot of definitions have been presented for workgroups (McDavid & Horary, 1968) defined the group as below: “An organized system of two individuals or more that are interacted to each other to help the system operation, incorporate a standard for effect of relations between members and follow norms that justify the group and each one of its members’ performance”. Considering the concept of motivation, the group may be defined as a collection of individuals that their collective existence is opportunity for people (Boss, B. M, 1960). Upon combining these approaches in definitions group, it may be assumed as a group of individuals that have common goal or destination and have the feeling of relatedness to group and attempt to make changes in each other (Afjeh, Seyed Aliakbar, 2001).

Briefly, in the applied studies, individual work has there advantages to teamwork, as follows (Rezaian, Ali, 2003):

1- Group judgment is better than personal judgment of people.
2- in case, solving the problem requires work division and interchange of information, the groups act more success than individuals.
3- The groups due to tendency to risky decision-makings may be more creative and innovative than individuals (Shaw, M.E., 1981), but the groups may create problems. The studies show that the individuals may not take effort in the group as well as work individually due to two reasons and consequently “low-working” phenomenon is formed. These reasons are as follows:
   1- Their share in teamwork is observed less.
   2- The individuals prefer to assign the main responsibility to the others (Latane, Bibb et al, 1979).

In consideration to the foregoing, it is concluded that the individuals’ behavior is extremely under effect of colleagues in workgroup. Whereas group efforts may manifest and express positive and negative existential aspects in individuals, the current managers need to have an appropriate familiarity with groups and group processes in order to avoid getting involved in their trap, moreover to benefit from their extensive talent.

**Group analysis:**

The enterprise success as a complex network of intervened groups is extremely dependent to quality of these groups’ performance. The groups must perform well like as individuals in order to cause the enterprise progress within long time, but this question is propounded that what does good performance of group mean?

**Team-making or group formation:**

According to Tuckman (1965), the group formation and its development include 5 stages: formation, involvement, solidarity, execution, and downfall or dissolution (Tuckman, B.W., 1965). On the other side, Love (1996) has presented Tuckman’s model in 4 stages: formation, involvement, solidarity and execution. Love (1996) to agree that a team is a type of group as the main subject, stipulated that a team passes the same development stages of a group. These four stages are described as below: formation: the first stage of a team and gathers the individuals for fulfilling a common goal. Involvement: the stage of encounter and
conflict, where the team members due to their differences conflict to each other (Schermerhorn, John R. et al, 1994). Solidarity is attained when the team develops its bond or connection and norms for solving the problems, decision-makings and fulfillment of duties. Execution is a stage wherein team members really undertake the agreed duties for pursuing the final goals or duties (Shaw, M.E., 1981). As mentioned formerly, the first stage of team development is formation. During this stage, the duty and goals are defined for team members and understood and agreed by them. On the other side, these goals may be understood and accepted well by the target team members, but if the team members have not perceived the roles, participation contexts, capabilities or limitations in their team, fulfillment of assigned duty becomes difficult. Therefore, team-making is formed based on this reality that each team member must have a clear defined role and participate in the team success based on their capabilities and limitations and ultimately play their role in the enterprise for increasing the profitability.

Driskell Model et al:
This model intends to perceive the relations between teamwork factors and their effect on the effectiveness of group performance that is comprised of three parts including input, process and output; input factors are divided in three individual, group and environmental factors. In this study, individual factors of teamwork and elements of individual factors including skills, individual status and personality are analyzed based on the said model.

Individual elements:

1- Skills:

means agility in work and workmanship and dexterity. The skill is capability of learning i.e. the talent of carrying out or predicting the results with the minimum time and energy consumption. A psychologist in the name of E.R. Guthrie (1952) has defined the skill so that includes the important features of skill. According to this psychologist, skill is a capability of reaching to the result with the specified confidence and spending the minimum working energy or time.

2- Status:

Individual position, situation and his/her position in the group or enterprise.

3- Personality:

different individual aspects and characteristics that distinguish the people from each other.

Performance management variables:
Hersey and Goldsmith have defined seven variables related to effective performance management using Achieve model as the major factors affecting the performance of human resources, as below:

1- Ability:
It is referred to the individuals’ knowledge and skill for successful fulfillment of duties. The employees that received better and more training, are able to benefit from the capital better and more efficiently and deliver more products (Yaghubi et al, 2009:8).

2- Clarity:

It is referred to the perception and acceptance of work procedure, location and quality of work performance by the employees. Employees for having a full perception of problem require the explicit and clarified intents and major goals, ways for achievement to these goals and their priorities (which goals are important within which time) (Yaghubi et al, 2009:8).

3- Help:

Organizational help or organizational protection that employees require it for effective completion of work (Gholamreza Khaki, 2007:54). Some factors of organizational protection are as follows: budget, means and facilities required for fulfillment of duty, necessary protection by other departments, accessibility of product and its quality and adequate reserve of human resources (Yaghubi et al, 2009:8).

4- Incentive:

It is referred to the motivation and motive of people for complete fulfillment of a specific duty successfully (Yaghubi et al, 2009:8). The motives are cause of behaviors. If the employees’ motive for performing a task is low, their performance will be damaged just like when they exclude any talent, knowledge or adequate skill.

5- Evaluation:

It is referred to daily feedback of performance and time to time reviews. The appropriate feedback process causes the employees to get aware of the quality of work performance and improve their weaknesses (Yaghubi et al, 2009:8). Evaluation means the employees’ behavior and performance to be evaluated based on the pre-determined and agreed goals and expectancies, employees’ weaknesses and strengths should be determined and their behavioral and performance transcript should be provided for them (Abolalayi, 2010:73).

6- Validity:

Validity term is referred to the legality and appropriateness of manager’s decisions about the human resources (Gholamreza Khaki, 2007:55).

7- Environment:

External factors that despite of six aforesaid factors can affect the employees’ performance and enterprise (Yaghubi et al, 2009:8).
Model:
In this study, Driskell, Salas and Hogan model including personality, skills and status elements have been used for independent variable and Achieve model of Hersey and Goldsmith including elements such as ability, clarity, incentive, evaluation, validity and environment for dependent variable (diagram 1).

Hypotheses:
Main hypothesis: In consideration of the foregoing and based on research model (diagram 1), the main hypothesis of this study is as below: “A significant relationship exists between individual indicators of workgroups and performance of employees”.
Secondary hypotheses:
1- A significant relationship exists between individual level of workgroup and ability of human resources.
2- A significant relationship exists between individual level of workgroup and clarity of human resources.
3- A significant relationship exists between individual level of workgroup and help of human resources.
4- A significant relationship exists between individual level of workgroup and incentive of human resources.
5- A significant relationship exists between individual level of workgroup and evaluation of human resources.
6- A significant relationship exists between individual level of workgroup and validity of human resources.
7- A significant relationship exists between individual level of workgroup and environment of human resources.
Methodology:
This study in terms of objective is an applied research and the data was collected by descriptive survey. Whereas the researcher intends to analyze the relationship between two elements, this study is a correlative research.

A questionnaire was used for collection of data that had been designed using written literature and Achieve model as well as Driskell, Salas and Hogan model. Its validity was confirmed by experts and reliability thereof confirmed by Cronbach’s alpha. Furthermore, as mentioned formerly, employees’ performance indices as dependent variable were selected based on Achieve model and independent variable based on Hogan model (diagram 1). For assessment of each one of variables, questions were propounded in the questionnaire and responders answered them according to 5-point Likert scale. To analyze the obtained data, analysis of correlation (Pearson’s coefficient of correlation) and two-way and one-way analysis of variance (ANOVA) were used.

The studied population consisted of employees of bank branches management dept. in great Tehran. In this study the whole population was analyzed. Number of responders was equal to 87 including 42 women (49%) and 45 men (51%).

Results

1- Description of answers: validity and reliability of instruments: whereas the questionnaire has been formulated based on known theories and models of team and group activities and its main items have been extracted directly from an organizational behavioral model in relation to teamwork, it is concluded that its contextual validity is appropriate. Reliability of questionnaire has been estimated based on Cronbach’s alpha equal to 0.933 that is acceptable.

Summary of study indicates that the responders to this study have almost average experience for fulfillment of group works (mean: 2.9 and standard deviation: 0.81). As showed in table (1), performance of groups that responders were member thereof have the mean value of 3.19 and standard deviation of 0.72.

As mentioned above, responders consisted of 45 men and 42 women. Age range of most of responders (72%) was 31-40 and 13.8% thereof placed in age range below 30. In terms of education, 58.6% of responders were holder of bachelor’s degree and 17.2% master’s degree. Organizational position of 86.2% of samples was staff member, 10.3% were expert and 3.4% had managerial positions. Most of responders (65.5%) had a work experience within 10-20 years and 20% below 20 years.

In continue, results of statistical tests on data are presented. At first, the questions were answered according to correlation analysis and later, the obtained data was analyzed by means of one-way and two-way analysis of variance for answering the supplementary discussions.

2- Analysis of correlation: For answering the study questions, Pearson coefficient of correlation was used. Table (1) shows the relationship between variables using this coefficient of correlation.

As it is observed, out of functional factors, environment with a confidence level more than 99% and help of human resources with more than 95% confidence level in alpha level 0.05% have significant association with individual factors and association with the other elements was rejected.
### Table (1): Mean value, standard deviation and correlation between variables

<table>
<thead>
<tr>
<th></th>
<th>Mean value</th>
<th>Std. deviation</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills</td>
<td>3.43</td>
<td>0.646</td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>Status</td>
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<td>0.66</td>
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<td></td>
</tr>
<tr>
<td>Personality</td>
<td>3.21</td>
<td>1.032</td>
<td>.784(***</td>
<td>.545(***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability</td>
<td>4.01</td>
<td>0.823</td>
<td>0.097</td>
<td>0.158</td>
<td>0.06</td>
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<tr>
<td>Clarity</td>
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<td>1.042</td>
<td>0.028</td>
<td>0.048</td>
<td>0.03</td>
<td>0.115</td>
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<td>Help</td>
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<td>.365(*)</td>
<td>0.229</td>
<td>.345(*)</td>
<td>0.239</td>
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<td>Incentive</td>
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<td>0.027</td>
<td>0.187</td>
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<tr>
<td>Evaluation</td>
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<td>0.921</td>
<td>0.166</td>
<td>0.22</td>
<td>0.13</td>
<td>0.059</td>
<td>.316(*)</td>
<td>0.178</td>
<td>-0.01</td>
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<tr>
<td>Validity</td>
<td>4.32</td>
<td>0.723</td>
<td>0.211</td>
<td>.320(*)</td>
<td>0.182</td>
<td>.395(***</td>
<td>0.049</td>
<td>.495(***</td>
<td>-0.06</td>
<td>4</td>
<td>0.23</td>
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<tr>
<td>Environment</td>
<td>3.9</td>
<td>0.934</td>
<td>.481(***</td>
<td>.375(*)</td>
<td>.499(**</td>
<td>0.014</td>
<td>0.047</td>
<td>.518(**</td>
<td>0.19</td>
<td>0.26</td>
<td>0.518(*)</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Conclusion: According to the summary of analysis of variance, upgrading the educational level of participants has a direct association with individual skill (F=6.950, p<0.01), individual status (F=5.058, p<0.01), and personality characteristics (F=7.641, p<0.01). According to the results of Tukey’s b test, responders with more experience of teamwork have stronger belief in individual skill, status, and personality characteristics.

Although the employees of higher educational level have better imagination of individual performance in teamwork, summary of two factor analysis of variance indicated that this subject has not affected the prioritization of factors effective on individual level. Table (2) shows the prioritization of factors affecting individual level of workgroup using Tukey’s b test. As it is observed, out of factors affecting individual level of team workgroup, help of human resources with mean value of 4.91 has the maximum priority and evaluation of human resources and incentive of human resources respectively with mean values 4.41 and 4.23 are placed in next priorities.
Table (2): Priority of workgroup characteristics as the viewpoint of responders

<table>
<thead>
<tr>
<th>Factors affecting the effectiveness of the group</th>
<th>Group by Tracyby test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>Ability</td>
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<td>Help</td>
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<td>Incentive</td>
<td></td>
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<td>Evaluation</td>
<td></td>
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<tr>
<td>Validity</td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>3.2356</td>
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</table>

According to the obtained results, only seventh hypothesis is confirmed, i.e. out of factors affecting the performance, only environment of workgroup has significant relationship with individual level of teamwork.
Table (3): Summary of hypotheses test

<table>
<thead>
<tr>
<th>Factors</th>
<th>Hypothesis</th>
<th>Result</th>
<th>Correlation</th>
<th>Significant level of correlation</th>
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<td>-</td>
<td>-</td>
</tr>
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<td></td>
<td>Status</td>
<td>✗</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Personality</td>
<td>✗</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Clarity</td>
<td>Skills</td>
<td>✗</td>
<td>-</td>
<td>-</td>
</tr>
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<td>Status</td>
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<td>-</td>
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<tr>
<td></td>
<td>Personality</td>
<td>✗</td>
<td>-</td>
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<tr>
<td>Help</td>
<td>Skills</td>
<td>✗</td>
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<tr>
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<td>Skills</td>
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<td>Status</td>
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<tr>
<td></td>
<td>Personality</td>
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<td>0.513</td>
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<td>&gt;0.01</td>
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