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MODERATING EFFECT OF INDIVIDUAL DIFFERENCES ON THE RELATIONSHIP BETWEEN CONTENT, DELIVERY METHOD AND PERCEIVED EFFECTIVENESS OF TRAINING

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ABSTRACT

The business literature has mostly focused on the relationship between job performance and satisfaction of employees rather than the relationship between job performance and the training and development of employees. Additionally, the amount of research focused on determinants of training outcomes and effectiveness, is not satisfactory. This study analyzes the moderating effect of age, gender and seniority on the relation between the content and delivery of training programs and training effectiveness. Regarding training effectiveness, only the first two phases of the four levels model of Kirkpatrick (i.e. the satisfaction about the training and the learning outcome perceptions) are analyzed. A multinational corporation operating in Turkey is chosen as the sample for this study. The findings revealed that age and gender factors are insignificant in the first level of the Kirkpatrick model. However, seniority is the only factor affecting trainee satisfaction. Regarding the second level of Kirkpatrick's model, all age, gender and seniority factors affect the learning process perceived outcome. These findings support some previous research but contradict with some others.

JEL: M53, 015

KEYWORDS: Training, Development, Training Effectiveness, Age Effect, Gender Effect, Seniority Effect, Training Design

INTRODUCTION

If a company wants to have a competitive advantage in the global market, it needs to improve the capabilities, knowledge and skills of its workforce. Globalization has increased the competition for any company in the world regardless of the size and operations (Bresser-Pereira, 2010). More importantly, firms face new changes and challenges due to fast global and technological development. Technological advancements create the need for capabilities and competencies required to perform a particular tasks (Tai, 2006). Eventually, the human factor has become more important. In addition, the consumer profile has changed dramatically. Consumers' knowledge on what is available in the marketplace; with which attributes and prices has being dramatically increased (Clemons, 2008). Therefore, customer relations have become more important than it was in the past. Customer relations have also increased the importance of human capital in any company because human capital is the main channel of communication for any company to generate stronger relations with their customers.

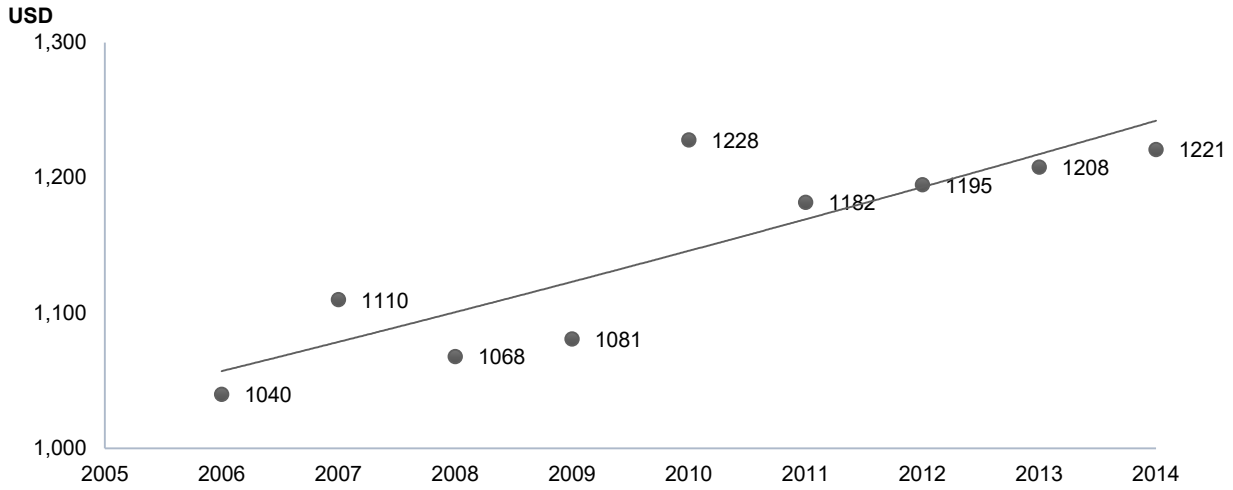
Changes taking place in the business environment have forced companies to modify their internal features such as the organizational structure, organizational culture (Bartlett and Ghoshal, 1999). Organizational structure is an important factor resulting in the failure of the training programs. Among these changes, human resources management has been highly important for developing competencies for the human capital

of any company. It is assumed that the workforce, with more developed and up-to-date competencies, could generate sustainable and hard to imitate competitive advantages over competitors.

Today's business environment changes so fast that every company must make their human capital qualified with the latest and up-to-date skills, abilities and competencies. Companies need to focus on training and development of employees if they want a sustainable competitive advantage. Consequently, training and development have been one of the most important research areas of the last few decades. Most of the literature has investigated the individual characteristics, organizational aspects, determinants of the training design and their effects on the training effectiveness. However, most studies have assumed the individual characteristics of trainees as control variables affecting the training result and outcome. The literature generally implies a certain effect of individual characteristics on the training effectiveness.

The data reported in the "World Economic Outlook" (www.td.org, 2014 report) shows that direct learning expenditure per employee for the year 2014 was $1,221. Organizations continued to invest in training and development for their employees with an inclining trend (Figure 1). As the world economy continues to grow, talent development will continue to have an important and valuable role in organizations. However, it is not related with the amount of money spent for training and development. Rather, it is related to the effectiveness in designing of training and development activities.

Figure 1: Organizations' Investment in Training and Development for their Employees



This figure shows the amount of investment (in USD) in training and development for employees between the years 2006 and 2014. The data for this figure is collected from 340 organizations of various sizes, industries and locations all around the world.

The literature regarding the training and development of the human resources is incomplete. Most academic literature focuses on the training effectiveness and training design relation. However, the moderating effects of the individual characteristics in this relation are generally ignored. This implies, based on the individual characteristics, some employees might tend to prefer some other training programs. In other words, there may not be one generally accepted training design that could maximize the training effectiveness but there might be more than one based on the characteristics of the employees such as age, seniority and gender. Based on this assumption, this study has focused on how the characteristics of trainees could be deterministic regarding the relation between the content and delivery methods of training program and the effectiveness of the training program.

This study examines how age, seniority and gender of trainees affects the relationship among the content and the delivery methods of the training programs and the perceived effectiveness of the training programs.

Specifically we focus on the satisfaction level and perceived learning outcomes of employees regarding the training program.

This study is limited to the analysis of the moderating effect of age, gender and seniority on the relation between the content and delivery of training programs and the training effectiveness. Regarding training effectiveness, only the first 2 phases of the 4 level model of Kirkpatrick (i.e. the satisfaction about the training and the learning outcome perceptions) are analyzed in this work. The study consists of an analysis of the literature regarding training and development. We provide empirical analysis of moderating effects in individual differences (i.e. age, seniority and gender) on the relation between the training design and training effectiveness.

LITERATURE REVIEW

Training effectiveness implies the trainee has achieved the targeted levels. More importantly, the trainee could transfer what s/he has learned from the training program into the job. This improves the performance of the employee and the performance of the company (Berkhof et al., 2011; Mestry, 2012). Studies about training effectiveness have been generally focused on the worth of the training program and the perceptions of the employees about the training program. Training content, how the training program is delivered and many other factors are highly influential on the effectiveness of the training program. In this study, the content, delivery method, source and perceived effectiveness of training program are taken into consideration for the identification of factors affecting the training program effectiveness (Aguinis and Kraiger, 2009; Griffin, 2010; Salas et al., 2012).

The content of training implies what the trainees need to know. The content of training must be specific to the needs of the employees and to the needs of the overall organization. The content of training matters for training effectiveness and job performance of the trainee. The trainee would be able to increase his/her performance once the content of the training is matched with the job performance and personal career goals of the employee (Buckley and Caple, 2009). Performance theory depends on how the trainee perceives the performance and if training is compatible with the content of the training. In other words, in this context, the perceptions of the trainee matter as well. Once the trainee believes that, his/her performance has increased because the training content is significantly influential on and compatible with the performance traits, then the effectiveness of the training increases. This not only increases the performance of the trainee after the training but also increases satisfaction of the trainee about the training program during the training.

The delivery method of any training program implies in which way the training program is exercised (Clark, 2011; Tan and Lim, 2012; Silberman and Auerbach, 2011). The methods are generally classified as trainer led (i.e. face-to-face in a classroom environment, on site and virtual classrooms or distance learning), self-paced training (i.e. online training, multimedia based training via CD-ROMs, DVD-ROMs) and Hands-on training (i.e. coaching, demonstrations, apprenticeship and cross training).

The company could prefer internal or external sources of training. For instance, if there is an employee that is an expert in linguistics, the company would prefer evaluating this strength to improve the linguistic skills of all other employees rather than outsourcing the required training program from outside the organization (Alexiou and Coutts, 2008; Martínez-Ros and Orfila-Sintes, 2012; Kotey et al., 2011). More importantly, based on the delivery source of training, the effectiveness of training may increase or decrease. Individual characteristics of the trainees could be influential as well since the more comfortable the trainee is in an internally sourced training program the more motivation increases and the effectiveness of training improves through the increase in performance. In another case, the trainee might feel more comfortable when the source of training is external then when the implementation of an external source of training could improve the effectiveness of training. The relationship between the delivery source of training and training effectiveness could be also dependent on other internal and external factors.

The effectiveness of training programs depends on many factors that include the delivery method and delivery source of training, the content of the training program and the duration. In addition, the number of employees could influence the effectiveness of training through changes in the level of trainee satisfaction and changes in the job performance of trainees after the program. However, the effects of all these factors on training program effectiveness could change based on how the trainees perceive the training program and training effectiveness (Arthur Jr. et al., 2003; Aguinis and Kraiger, 2009).

Besides the factors specified above, how the trainee perceives the overall organization and training program affects the final outcome regarding the effectiveness of training, satisfaction of trainee during the learning and training transfer accompanied by the job performance of the trainee (Tai, 2006; Weissbein et al., 2011; Huang and Chen, 2010). This reveals that management must focus on individual differences among employees, the overall perception of whole workforce about the organization and training program besides the training based on more tangible factors such as the place of training, the source of training and others.

Moderating Effects of Individual Differences on the Relationship between Training Determinants and Training Effectiveness

Today's human work force is more diverse than it was in the past. In the past, white male employees dominated most of the labor force. Today women, minorities such as Blacks, Hispanics, and Asians have all become increasingly important parts of the labor force. Management of these human resources has been tough for any company. Once the labor force is diverse, then expectations, career choices and other needs and demands of the labor force become diverse as well (Savickas et al., 2009).

This study assumes that training determinants such as training content and the training effectiveness relation could change based on the age, seniority and the gender groups within any workplace. Individual and group-based characteristics of the workforce such as age, seniority and gender have become more important in any business because the competency of the workforce implies increased ability to generate competitive advantages over competitors. Competency might also be involved in individual differences (Dubois, 2010).

Recent studies about issues regarding human resources management of today's businesses are the increasing age of the workforce and the high degree of introduction of new production techniques and managerial issues (Timmerman, 2000). This implies that training of the aging work force is compulsory for any company to stay competitive. In this regard, the main issue has been the compatibility between age conditions of the workforce and training program determinants. Today, in most cases technology companies, especially software companies, and social media businesses such as Facebook, Twitter and many others consist of a younger workforce. The working environment and working schedule are all adjusted based on the preferences of the younger generation (Ornatowski and Team, 2012).

Age diversity in working places has increased substantially in the last few decades. Both theoretical and empirical studies about age effects on the training program determinants and the training program effectiveness have increased as well. In one of those recent studies, Willis et al. (2006) found that older employees require a different training method than the conventional one. They concluded that long-term based training programs about the improvement of the cognitive skills generated better performance results for older employees. More recent studies find contradicting results including Ng and Feldman (2008). Once they separated the task performance and performance of the training, they could not find a significant effect of age on the training performance. This is interpreted, as there being no age effect on training effectiveness based on specific training performance. However, in the same study, the authors found that the age factor is largely effective on the overall job performance.

In the literature, individual features of employees are generally found significantly influential on job performance and job satisfaction of the employees. As noted above, besides the age factor, seniority and gender are important factors affecting the overall satisfaction and the performance of employees.

Seniority is assumed effective on training performance and outcomes based on the hypothesis that more senior employees with longer work experience are more inclined to generate higher performance during and after the training program (Murugan, 2007). Moreover, content of the training program might be more related to the seniority in some cases. Specifically, technical training programs require more experience and seniority of employee to generate better outcomes and be more effective from the perspectives of both employee and the company. Since senior employees become more able to improve their learning and job performance; they are more involved in the job requirements for a longer period.

Lim and Johnson (2002) concluded that seniority among all individual employee related factors could be more influential on training transfer. In another work, Lim and Morris (2006) referenced a study for the case of employment characteristics and training effectiveness and transfer by declaring that for the Asian example, the seniority of employees would not significantly affect the learning level of the employees during the training program. However, in another empirical study, Lim (2000) found that employees with longer work experience and shorter period of work experience demonstrate significant differences in learning transfer to job performance after the training program. As specified in the theoretical analysis, senior employees are more inclined to integrate, implement and transfer what they have learned during the training program into their overall job performance.

Gender has been highly regarded as an important individual characteristic of employees once job performance, job satisfaction and the training performance and satisfaction are considered. In the past, the dominance of white male employees resulted in job design and training programs developed based on the individual features of male employees. Until the last few decades, training programs and working conditions would not be developed by considering diversity in the workforce based on gender, race, and other important factors. Fahr and Sunde (2009) provided that male employees demonstrate significantly higher levels of training performance than female employees. The paper concludes that, especially for the male type of training programs that require more physical abilities, the difference between training scores of male and female employees increases even more. In this regard, these studies reveal that training transfers, training program outcome, and effectiveness might change based on the employee gender through the content of the training program.

Male employees are assumed to demonstrate a higher degree of training effectiveness than female employees. Especially for the training programs that have components that are more technical involved. However, another study revealed that although male employees tended to be more interested in technical issues than female employees; this does not imply any significant performance difference between the male and female employees regarding more technical training concepts (Torkzadeh et al., 1999).

In another study, Tai (2006) used the effects of employee self-efficacy on training effectiveness. In his study, age, gender, and other demographic variables are regarded as control variables. The main subject of the study was the self-efficacy effect on the training outcome. The results demonstrated that gender has a significant effect on training effectiveness only for the training transfer motivation.

Another study could not find any significant effect of demographic variables such as gender, age and the status of the employee in the company on training transfer and effectiveness. In this work, Santos and Stuart (2003) concluded that demographic factors may not be as significant as the training programs assumed by previous studies and researches. In this sense, the authors conclude there is still no consensus on the moderating effects of gender, age and seniority on the relation between the training determinants, design and the training effectiveness and training transfer.

Evaluation of Training Programs

One well-known and widely used training evaluation methods is Kirkpatrick's Four Levels of Evaluation Model (Saks and Burke, 2012). In this model, Kirkpatrick concluded that his evaluation model measures the following:
Level 1: Reaction of the student about the training program. This means how the trainee has thought and felt about the training program. At the first level, this model measures if the trainee is satisfied with the training program.

Level 2: The second level measures if the trainee has learned something from the training. In other words, the model of Kirkpatrick measures the level of change in knowledge, skills and abilities of the trainee before and after training program;

Level 3: In the third level, the model measures the behavioral change. The model considers if the capability of the trainee improves and this increases the performance of the trainee.

Level 4: In the fourth level, the training program is evaluated based on how changes in the trainee's performance resulting from the training program. Do these changes affect the business environment and the organizational performance?

The literature, states that the 4 level evaluation model of Kirkpatrick generally measures and evaluates the overall training approach in the organization. It is assumed that starting from the first level and going through the other levels, the cost and complexity of the training approach increases (Saks and Burke, 2012; Steensma and Groeneveld, 2010; Praslova, 2010). The effectiveness of training in every stage depends on the effectiveness of training in the previous levels of the evaluation model developed by Kirkpatrick.

Therefore, the increase in training programs' effectiveness is linked to improvement in every level as it is suggested by the evaluation model. In this respect, the four level of evaluation model implies that as long as the trainee is satisfied and has a positive attitude about the training program, there is increases learning by the trainee in the following level. After that, the motivation and job performance of the trainee improves. Eventually, the increase in job performance of individual trainees also improves the performance of the company and the outlook and posture of the company in the business environment.

DATA AND METHODOLOGY

In this study, workforce attitudes toward training programs and the outcome of training programs on ability, job skill and knowledge of the workforce are investigated. The analysis is completed in a randomly chosen multi-national company. The workforce from sales, human resources, marketing, logistics and other departments are included in the analysis. The opinions, beliefs and perceptions of employees about the training programs and their effectiveness are asked directly of the employees. Based on their answers the analysis is completed.

In this study, a questionnaire-based analysis is carried out. The questions are categorized into two groups based on the first two dimensions of Donald Kirkpatrick's model of 4-Levels "Evaluation of Training Programs": 1. Reaction of the student and 2. Learning. The questionnaire analysis is carried out based on a 5-scale (Likert scale) because it is believed that a 3-scale would not capture the attitude of employees that have attitudes or/and level of learning about the training program between neutral and high; neutral and low.

Implementation Model

In this study, the reaction of the participant to the training program and the outcome of the training program on the learning process and how the participant has implemented what he/she has learned in his/her job is investigated. The examination is based on the following factors; 1. Age of the employee 2. Seniority of the employee through the number of years worked 3. Gender of the employee.

The main indicators of the training programs are: 1.) Delivery method of the training (online, face-to-face or simulation, experimental based); 2.) Source of delivery of the training program (internal trainer or external trainer); 3.) Duration of the training (long term or short term); 4.) Volunteerism of the trainee (compulsory attendance or voluntary attendance); 5.) Number of participants (High or low participation); and 6.) Place of the training (inside of the corporation and work place or outside such as hotels, spa-hotels, training centers, etc.).

Suggested Hypotheses and Assumptions

This study assumes that attitude and the level of satisfaction of any employee about the training program depend on the age, seniority and gender of that employee. The first six hypotheses are about the first level of Donald Kirkpatrick model of 4-Levels of Evaluation Model. The last six hypotheses are about the second level of this Evaluation Model. The first six hypotheses evaluate how specific factors affect the relation between properties of training program and level of satisfaction as well as thought and attitude of the employee about the training. The last six hypotheses are based on the evaluation of how specific factors change effects of training program features on knowledge level and ability of the employee to complete his/her job and responsibilities at work.

Hypothesis-1: Gender, Age, and Seniority have an effect on the relationship between the delivery method of training and the level of satisfaction (positive or negative attitude) of the employee about the training program.

Hypothesis-2: Gender, Age, and Seniority have an effect on the relationship between the source of delivery of the training program (whether internal or external) and the level of satisfaction (positive or negative attitude) of the employee about the training program.

Hypothesis-3: Gender, Age, and Seniority have an effect on the relationship between the duration of the training and the level of satisfaction (positive or negative attitude) of the employee about the training program.

Hypothesis-4: Gender, Age, and Seniority have an effect on the relationship between the volunteerism of the employee about participating in the training program and the level of satisfaction (positive or negative attitude) of the employee about the training program.

Hypothesis-5: Gender, Age, and Seniority have an effect on the relationship between the number of trainees in the training program and the level of satisfaction (positive or negative attitude) of the employee about the training program.

Hypothesis-6: Gender, Age, and Seniority have an effect on the relationship between the choice of place where the training takes place (within outside of the organization) and the level of satisfaction (positive or negative attitude) of the employee about the training program.

Hypothesis-7: Gender, Age, and Seniority have an effect on the relationship between the delivery method of training and the level of learning of the employee and how employee reflects what s/he has learned into his/her duties and responsibilities.

Hypothesis-8: Gender, Age, and Seniority have an effect on the relationship between the sources of delivery of the training program (whether internal or external) and level of learning of the employee as well as how the employee reflects what s/he has learned into his/her duties and responsibilities.

Hypothesis-9: Gender, Age and Seniority have an effect on the relationship between the duration of the training and the level of learning of the employee and how employee reflects what s/he has learned into his/her duties and responsibilities.

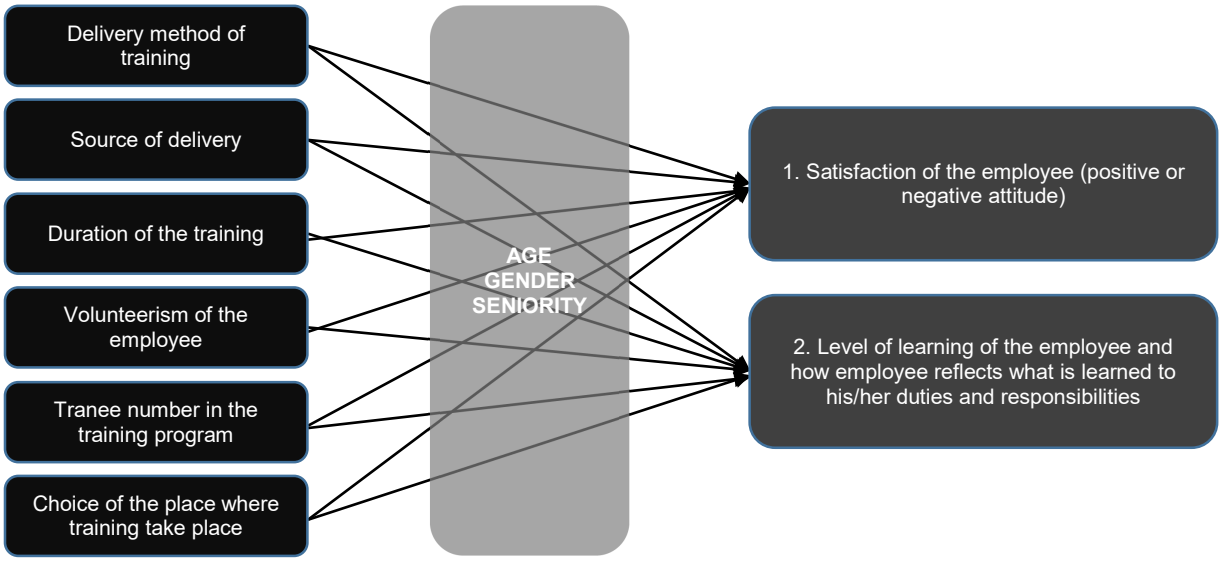
Hypothesis-10: Gender, Age and Seniority have an effect on the relationship between the volunteerism of the employee about participating in the training program and level of learning of the employee and how the employee reflects what s/he has learned into his/her duties and responsibilities.

Hypothesis-11: Gender, Age and Seniority have an effect on the relationship between the number of trainees in the training program and level of learning of the employee and how employee reflects what s/he has learned into his/her duties and responsibilities.

Hypothesis-12: Gender, Age and Seniority have an effect on the relationship between the choice of place where the training takes place and the level of learning of the employee and how employee reflects what he has learned into his/her duties and responsibilities.

The main purpose of this study is to show if there is a direct effect of individual differences (gender, age, seniority) on the relation between the training design and the training effectiveness by using the research data collected from a multinational company.

Figure 2: The Study Model



This figure represents the study model showing the relationships between the hypotheses specified above. The six boxes on the left represent main indicators of the training programs. The two boxes on the right represent the first two levels of Kirkpatrick's evaluation model. The relationships between these factors will be investigated based on age, gender and seniority.

Sampling Methods

A randomly chosen multi-national company that operates in many countries located in America, the Europe, the North Africa, the Middle East and the Far East countries is chosen as the basis of the statistical analysis. For the analysis, we divided the overall population of the organization with respect to department where the employee works. The chosen company mostly consists of sales and marketing employees. The "Layered Sampling method" is utilized such that from every department a specific number of employees are randomly chosen and taken into the sample. This is done based on the overall proportion of the specific department within the organization. In other words, every department is considered as a different layer of the overall organization. The analysis is carried out for different layers separately. Once the organization is considered as the population of the analysis, every department could be considered a subset of this population. To construct a sample that reflects the population, highly populated departments are given more weight in the sampling and more employees are selected from sales than marketing departments.

Once the organization is separated into different layers, the analysis was carried out for different types of training programs: corporate, personal development, organizational development and technical. The analysis was carried out for different types of training programs to generate better results. This was done because different training programs might require focus on different aspects of the training program.

The company chosen for this study consists of 293 employees in various locations of Turkey. There are 170 (58 % of population) employees in the sales department; 36 (12 %) in the marketing department; 33 (11 %) in the logistics department; 28 (10%) in the finance department and 26 (9 %) in other departments (HR, Customer Relations and legal departments).

The questionnaire was prepared in a digital format and the link is shared with the HR department of the company to be forwarded to the employees (white-collar only). Some 163 of the questionnaires were filled by the employees prior to the deadline (30 August 2013) producing a response rate of 55.6%. To control for data problems, 14 questionnaires were eliminated due to filling errors or incomplete answers. The final sample for use in this study included 149 questionnaire responses. Table-1 summarizes the main individual characteristics of the participants. According to the individual characteristics taken into consideration in this study, the sampling analysis has the following features.

Table 1 reveals that the main moderating individual factors of the trainees taken into consideration in this study varied sufficiently. Those moderating factors are age, gender and seniority measured in terms of years of experience. The sample includes an adequate number of trainees in every sub-category for every moderating effect: age, gender and seniority.

Table-1 Questionnaire Demographic Statistics

Questionnaire Demographic Statistics	Total	%
Gender		
Male	72	45%
Female	77	55%
Age		
18 - 25 Years Old	15	10%
25 - 35 Years Old	103	69%
Over 35	31	21%
Years of Experience		
Less than a year	3	2%
1-5 years	37	25%
Over 5 years	109	73%
Department		
Sales	64	43%
Marketing	33	22%
Logistics	13	9%
Finance	24	16%
Other	15	10%
Content of Training Program		
Technical	25	17%
Personal Development	28	19%
Corporate	51	34%
Communication, Team-based	28	19%
Other	17	11%
Education		
High school	0	0%
Vocational School	0	0%
Bachelor Degree	98	65%
Master Degree	49	33%
PhD	2	2%

This table shows the demographic characteristics of the sample of the study.

RESULTS

Reliability Analysis

The questionnaire consists of 43 questions based on a 5-point Likert scale. The questionnaire covers some personal differences to analyze their effect on the level of satisfaction and the level of learning of the participants. As the authors have designed the survey, there exists a need for reliability analysis before collecting the data.

The questionnaire analysis of this study consists of two parts based on Donald Kirkpatrick's model of 4-Levels Evaluation of Training Programs. In the first part of the questionnaire, the reaction and level of satisfaction of the trainee about the corresponding training program is measured. In the second part of the questionnaire, the level of learning and degree of improvements in the abilities and skills of the trainee are measured. To carry out the questionnaire analysis in a reliable way, initially the "Reliability of the Questionnaire Analysis" is carried out. The widely used Cronbach's Alpha test statistic is measured for the both first and second parts of the questionnaire.

As a result of reliability analysis, for the first part of the questionnaire, questions number 1, 4, 6, 7, 13, 16 and 21 are removed from the analysis. After removing these questions, The reliability value of Cronbach's Alpha increased from 0.665 to 0.804. For the second part of the questionnaire, questions number 3, 4, 5, 7, 12 and 16 are removed from the analysis increasing the value of Cronbach's Alpha from 0.727 to 0.802.

Validity Analysis

The next step is factor analysis to measure the validity of the questionnaire carried out, as the questionnaire passed the reliability analysis. Factor analysis for the first part of the questionnaire reveals the first part must consist of five factors including all 15 questions. More importantly, the questionnaire measures the degree of the satisfaction of the employees regarding the training programs by 73.25%. Some 73% of information regarding the satisfaction level of employees could be extracted from the first part of this questionnaire analysis. As this number is sufficiently high, we concluded the validity of the first part of the questionnaire is high as well.

The "component matrix" (Table-2) reveals the first part of the questionnaire analysis could be divided into five factors. For each question, the highest value obtained in the component matrix reveals the specific question should belong to the corresponding factor where the corresponding question gets the higher statistical value. Although the component matrix provides information about which question is related to each other, it does not actually affect the validity of the analysis but it specifies the number of factors needed to be considered.

Table-2: Component Matrix, First Part

	Component				
	1	**2**	**3**	**4**	**5**
Part1_Question_2	0.200	0.738	-0.170	.217	0.377
Part1_Question_3	0.435	0.128	0.517	.416	0.007
Part1_Question_5	0.802	-0.070	-0.310	-.234	-0.076
Part1_Question_8	0.446	-0.196	-0.407	.524	0.373
Part1_Question_9	0.542	-0.149	-0.255	-.447	0.077
Part1_Question_10	0.570	-0.180	0.344	.100	-0.221
Part1_Question_11	0.515	-0.349	-0.435	.342	-0.316
Part1_Question_12	0.402	0.383	-0.306	.406	-0.332
Part1_Question_14	0.859	-0.209	-0.019	-.105	0.158
Part1_Question_15	0.423	-0.397	0.555	.129	0.369
Part1_Question_17	0.452	0.358	0.365	.063	-0.426
Part1_Question_18	0.279	0.564	-0.003	-.221	-0.355
Part1_Question_19	0.844	0.090	-0.065	-.297	0.206
Part1_Question_20	0.180	0.830	0.064	-.072	0.347
Part1_Question_22	0.845	-0.056	0.224	-.109	-0.048

This table reveals that the first part of the questionnaire analysis could be divided into five factors.

Table 3 summarizes the factor analysis for the second part of the questionnaire analysis. The second element measures the validity of the questions of the employees regarding the learning phase, the second level in the 4 levels model of Kirkpatrick. Overall, the second part of the questionnaire provides validity information of 78.14% regarding the learning phase of the training. As this ratio is higher than 70%, we assumed that the second part of the questionnaire has high a validity to carry out the analysis.

According to the component table regarding the second part of the questionnaire, there must be also five factors for the second part of the study. Although the Component matrix is not directly related to the validity of the questionnaire, the component matrix implies that once the 15 questions of the second part of the analysis are taken into consideration, these 15 questions could be analyzed based on five main factors.

Independent Sample Tests

The Moderating Effect of Age: In this part, the aim is to understand moderating effects of age (an independent variable) on degree of satisfaction and the degree of learning of the employees. According to the moderating effect of age on the degree of employees' satisfaction level about the training program based on the main determinants of the training program itself, no age effect was found out. The findings reveal

that none of the Chi-Square statistical values are statistically significant for any question. This finding implies that the null hypothesis of the age does not have any effect on the relation between training program determinants and training effectiveness.

Table-3: Component Matrix, Second Part

	Component				
	1	**2**	**3**	**4**	**5**
Part2_Question_1	0.085	0.241	0.432	0.707	-0.096
Part2_Question_2	0.806	-0.082	-0.082	-0.401	0.008
Part2_Question_6	0.545	0.611	-0.221	-0.020	-0.453
Part2_Question_8	0.837	-0.167	0.165	0.281	0.034
Part2_Question_9	0.279	0.545	-0.443	-0.171	0.410
Part2_Question_10	0.017	0.714	0.337	-0.299	0.097
Part2_Question_11	0.782	0.159	0.068	0.027	0.123
Part2_Question_13	-0.147	0.751	0.112	0.119	0.319
Part2_Question_14	0.636	-0.245	0.621	-0.120	0.055
Part2_Question_15	-0.061	0.374	0.050	0.768	0.204
Part2_Question_17	0.540	-0.333	0.454	-0.148	0.388
Part2_Question_18	0.294	0.550	0.288	-0.100	-0.604
Part2_Question_19	0.690	-0.033	-0.431	0.203	0.010
Part2_Question_20	-0.092	0.833	0.049	-0.266	0.185
Part2_Question_21	0.589	-0.051	-0.555	0.265	0.017

This table reveals that the second part of the questionnaire analysis could be divided into five factors.

The second part of the analysis (the reaction of the employees through the learning process and getting new skills and abilities) reveals that for some questions and considerations, there is a significant age effect on the relation between training determinants and training effectiveness. Question 9 investigates the effect if the trainee earns higher scores once the training program is compulsory. According to the results, younger employees agreed that if the training is compulsory, the learning process has a more positive for them. But, as the employee gets older, the compulsory training is regarded as less satisfactory. Regarding question 10, the age group of 25-35 does not strongly agree with the assertion that the compulsory training is more effective as much as the younger and older employees do. Moreover, question 20 asks if the short term oriented training programs generate higher scores for the trainee or not. The results show, the age group 25-35 does not agree with this statement. In brief, the age factor is highly influential on the relation among the duration of the training and training effectiveness, the relation between the obligation status of the training program and the training effectiveness regarding the second phase of learning outcome analysis.

Moderating Effect of Seniority – Years of Experience: Once the seniority effect on the training determinants and the training effectiveness is considered, analyses reveal that seniority is influential on the satisfaction and learning outcomes of the training program. The first part analysis reveals that seniority matters for the answers to questions of number 5, 9 and 19. Questions 5 and 19 assert that reaction of the trainee is more positive if the company evaluates performance of external trainers for the training. The results show that senior employees agree more with this assertion than less senior employees. Regarding question 9, the more senior employees are more satisfied with the compulsory training programs.

The mean results reveal that regarding question number 2, the most senior employees, with more than 5 years of experience, believe that they get better learning outcomes when training is carried out face-to-face with the trainer. Regarding question number 9, the most senior employees do not have a higher degree of agreement with the assertion that compulsory training program would generate better outcomes such as increasing the skills and abilities during the learning process than the less senior employees do.

Moderating Effect of Gender: Another moderating factor that this analysis investigates is the gender effect. The results show satisfaction of employees with the content, delivery method and other determinants of the training program are not dependent on the gender of the employees. This implies there is no difference

between the male and female employees regarding their level of satisfaction with determinants of the training program.

Next, we examine data regarding learning outcome-training program determinants. Gender is statistically influential regarding face-to-face training and internal trainers involved training programs. Both male and female employees strongly agree that face-to-face training and internal training programs instructed by organizational members are highly regarded as satisfactory. However, female employees agreed more strongly with these assertions. The results are summarized in Table 4.

Table 4: Summary of the Results

Level of Evaluation	Age	Gender	Seniority
1st Level of Kirkpatrick Evaluation Model (Satisfaction)	No significant effect	No significant effect	More senior employees are more satisfied with "External trainers" and "Compulsory trainings"
2nd Level of Kirkpatrick Evaluation Model (Perceived Learning Outcome)	Older employees perceive a lower learning outcome with "Compulsory trainings".	The female employees perceive a higher learning outcome with "Face-to-face training" and "Internal trainers".	Employees that are more senior perceive a higher learning outcome with "Face-to-face training.
	Age group of 24-35 perceives a lower learning outcome with "Short term training programs".		More senior employees perceive a lower learning outcome with "Compulsory trainings"

This table shows a summary of the conclusions of the study.

CONCLUDING COMMENTS

This study focused on how individual factors have moderating effects on the relation between training determinants and training effectiveness. One multinational company operating in Turkey is chosen as the subject of the study. This study examines how the individual effects of age, gender and seniority, measured in terms of years of experience, affect the content and delivery method and training effectiveness relationship. The study focuses on the first two levels specified in the 4 level model of Kirkpatrick: the satisfaction, reaction of the employees to the training program, the learning process and outcome from the perspective of the employees.

The results revealed that age does not have a significant effect on the relation between the content and delivery method of the training program and the level of satisfaction of the employees. In other words, the satisfaction of the employees about the training program itself does not differ among the older and younger employees. However, the results show that the perception about the learning outcome changes based on employee age. As the employee gets older, the employee disagrees more with the idea that they could get higher scores once the training program is compulsory. On the contrary, the results also imply that employees belonging to the age group 25-35 more disagree about the effectiveness of the training program when compared to the younger and older age groups of employees. Finally, regarding the age effect, the age group of 25-35 disagrees more with the learning outcome of the short-term training programs than the younger and older employees do. The volunteerism and duration of the training programs could generate different learning outcomes based on age group. Why older employees think they have a better learning outcome if they choose voluntarily their trainings may be related may be because they already have had substantial fundamental (mandatory) trainings and they know it by heart. In addition, they may think they can evaluate themselves better than they can evaluate younger colleagues and they can choose the courses according to their needs and improvement areas without any push from the company.

When we compare this result with previous studies, we note that previous studies generally do not have a result showing the effect of age on the relationship between training determinants and training effectiveness.

Tai's study (2006) has a similar result with our study that there is no significant and direct effect of the age factor on the training effectiveness.

Another investigated factor is the "seniority" effect measured in terms of years of experience. Given the seniority level of the trainee in the organization, both levels of satisfaction about the training content and the learning outcome and reaction do change. Senior employees are strongly satisfied with the training programs where the trainers are outside of the organization. Indeed, as seniority increases, the training programs with external trainers are regarded as more satisfactory. As the seniority increases, the results also imply that compulsory training programs are regarded as more satisfactory. Regarding the learning outcome and training effectiveness, more senior employees perceive that face-to-face training generates better learning outcomes, better competencies, skills and abilities. More importantly, although the most senior employees are more satisfied with compulsory training programs, they do not agree that compulsory training would result in better learning outcomes.

Employees that are more senior are more satisfied with external trainers. This may be related with their long experience in the company. They know the company, and people inside the company. For this reason, they may need to see different faces and hear different perspectives from the external world. As internal trainers are from the same company, their mind-set, thoughts and even their knowledge have all been shaped with the current company's culture. External trainers may bring various ideas and perspectives from outside to in. Employees that are more senior also think that they can achieve a higher learning outcome if they get face-to-face trainings rather than other delivery types. Perhaps employees that are more senior need to have a closer contact with the trainer. In addition, they may not have enough motivation to learn new things by themselves. Group interaction and the presence of the trainer may increase their motivation for learning.

If we compare these results on the seniority effect with the previous studies, we note that our results are in line with them in some sense and contradicting them in some senses. For example, Lim and Morris (2006) assumed that both job satisfaction and the seniority of an employee are separate factors influencing the training effectiveness and training transfer. However, "the indirect possible effect" of seniority on the training effectiveness through its "direct effect" on the employee satisfaction about the training is not taken into consideration by the previous literature.

The final investigated effect is employee "gender". Employee gender is statistically insignificant regarding the relation between the content, delivery method and training effectiveness of satisfaction. In other words, the satisfaction with the training program does not change between the male and female employees regarding the design and determinants of the training program. However, the findings imply there is significant difference in how male and female employees perceive the learning outcome of the training program. Female employees agree more with learning outcome effectiveness of the face-to-face training programs than the male employees. The results also implied that female employees agree more on the effectiveness of the training programs carried out by the internal trainers such as managers, mentors and colleagues. The results of gender effects on the relationship between training properties and perceived learning outcome may be related to the need for communication by female employees. It may also be related with their preference for face-to-face training and internal trainer more than their male colleagues desire.

These conclusions are partly contradicting with some previous studies such as with the study of Santos and Stuart (2003). They concluded that demographic factors may not be as significant on the effectiveness of the training programs as assumed by the previous studies and researches.

To sum up, age and gender factors are found insignificant in the first level of the Kirkpatrick Model. This means the degree of satisfaction with the training program does not differ based on age and gender of the trainee. Seniority is the only factor affecting the satisfaction of the trainee. Senior trainees are more satisfied

with the training programs carried out by external trainers and the compulsory training programs. Regarding the second level of Kirkpatrick's model, all age, gender and seniority factors affect the perceived outcome of the learning process. When these results are compared to the findings of previous studies about the cases of training and development in other labor markets, these findings support some of the researches but contradict some others.

We hope these conclusions will help to training and development experts for designing and delivering better training by considering individual differences of the participants. Training and development experts should specifically consider age and seniority of participants when designing and executing training.

The results introduced in this article provide a useful guide for future research. However, it has some limitations. First, the study was completed in only one multinational company in Turkey. Future studies should consider more than one multinational companies or middle-and-small scale enterprises in order to arrive at broader conclusions. Secondly, this study investigated the effect of three individual differences (age, gender and seniority). Further researches may investigate the effect of other individual differences. Third, further researches may be done for the last two levels of Kirkpatricks model to identify the effects of behavioral change and organizational performance.

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