Impact of Safety Training on Employees' Motivation in Diagnostic Laboratories - An Empirical Study of Public diagnostic Laboratories in Kurdistan Region

Abstract

Training programs designed to boost employees’ motivation in Kurdistan Region’s diagnostic laboratories require well-planned and appropriate structuring to strengthen employees’ professionalism in the services they provide to the customers—the patients. Currently, the services that the laboratories provide are fraught with incalculable problems that range from unmet needs and lack of organizational assessment, inadequately skilled employees, inadequate employee and patient safety measures, environmental issues, and insufficient managerial skills to inadequate technical and technological skills. The purposes of this research are; to examine public laboratories in an attempt to establish their similarities and dissimilarities in terms of the quality of the services they provide; to investigate the extent to which public sector care about training programs; to analyze how employees’ motivation vary from one laboratory to another. For the data collection, 178 useful questionnaires were collected from participants of the four provinces of the Kurdistan Region. Their responses were collated and analyzed. This study’s findings reveal that the safety training have a significant positive impact on employees’ motivation.

Keywords: Diagnostic Laboratories, Safety Training on Employees

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INTRODUCTION
This study analyses the impact of safety training on employees’ motivation through a study conducted among employees in diagnostic laboratories in the public sector in four provinces in Kurdistan Region—Erbil, Sulaymaniyah, Duhok, and Halabjah. The study will cover the aim and objectives, background, literature review, methodology, data presentation, Data analysis and discussion of findings, and conclusion.

AIM AND OBJECTIVES
This study’s aim is to investigate the impact of safety training on employees’ motivation to bring about quality of service in Kurdistan Region’s public diagnostic laboratories. The overall aim of this thesis will be achieved through the following objectives:
- Establishing the relationship between safety training and employees’ motivation, examining critically how significant this relationship could be.
- Examining whether any changes to safety training will lead to significant changes in employees’ motivation.

Hypotheses
H₀₁: A significant positive correlation may be observed between safety training and employees’ motivation.
H₀₂: Any improvement in safety training will lead to a significant positive change in employees’ motivation.
H₁₁: No significant positive correlation may be observed between safety training and employees’ motivation.
H₁₂: Any increase in safety training will not lead to a significant positive change in employees’ motivation.

BACKGROUND
Access to high-quality, well-equipped, and professionally managed laboratories is crucial for a robust and reliable healthcare system, and health is one of the main pillars of any community (ASCLS, 2019). In Kurdistan, as a post-war region, healthcare is particularly important, and further investigation is required to understand the methods that are currently used and how these may be beneficially developed. Laboratories in Kurdistan Region play a key role in the health system, and all diagnostic issues are referred to these organizations; therefore, a close examination of the impacts of training on the performance of employees in clinical laboratories is merited (Moore, Anthony, Lim, Jones, Overton, & Yoong, 2014).
A study has stated (Speziale, 2015, p. A3) that organizations in today’s healthcare sector are universally facing several problems as a result of two chief factors: first, they are experiencing difficulties in achieving customer satisfaction, which requires the devotion of greater attention to challenging users, and second, they must modify their internal structures to
keep pace with the changes that are rapidly occurring in approach and technology. Hence, the development of a principal strategy aimed increasing value for customers (patients) by providing the best results at the lowest cost and the initiation of a shift from physician-centered institutes to organizational systems are timely.

A diagnostic laboratory is a construction, a section of a building, or other location that is equipped to carry out scientific research, tests, and inspections with the aim of producing medicine and chemical products and testing results. It has been observed (Goswami, Singh, Chawla, & Mallika, 2010, p. 63) that well-organized laboratory services are the keystone of contemporary healthcare systems. Scientific and systematic innovations have contributed considerably to developments in the arena of laboratory science; meanwhile, errors have remained the main concern. The most frequently encountered errors may be classified as pre-analytical, analytical, and post-analytical, depending on the timing of their presentation. Moreover, laboratory services are an essential aspect of disease analysis, controlling, treatment and the reaction to the treatment. Appropriate clinical and diagnostic techniques may facilitate early diagnosis of diseases that pose serious threats to health (Jain & Rao, 2015, p. 19).

According to Article 117 of Iraq’s constitution, Kurdistan Region is recognized as a federal region of Iraq (Iraq, 2005) and consists of three provinces—Erbil, Sulaymaniyyah, and Duhok—while Halabjah has recently been officially established as the fourth governorate. The region has a population of 5.2 million, which continues to increase (KRG, 2019). Hence, healthcare is among the top priorities of most families in Kurdistan, and the regional government has committed to sustainable improvement and reform in this sector. This will require the government to invest greater effort in clear and effective communication with citizens with regard to health services, health awareness efforts, and medical centers (KRG, 2019). Healthcare in Kurdistan Region is operated under two different sectors. Both the private and public sectors are under the supervision of the Kurdistan Regional Government’s Ministry of Health.

The table below shows the number of clinical laboratories that are officially registered by the Ministry of Health in both the public and private sectors in Kurdistan Region.

<table>
<thead>
<tr>
<th>No.</th>
<th>Province</th>
<th>Public</th>
<th>Private Lab.</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Basic</td>
<td>Advanced</td>
<td>Basic</td>
</tr>
<tr>
<td>1</td>
<td>Erbil</td>
<td>80</td>
<td>20</td>
<td>120</td>
</tr>
</tbody>
</table>
Information regarding the number of laboratories was obtained during interview (Saleh, 2017) and (Yaba, 2019). Most diagnostic laboratories in the public sector are located in government-run hospitals and health centers in the provinces listed in Table 1.

Based on information obtained in an interview the president of Hawler Medical University (Miran, 2018), medical diagnostic laboratories can be classified into three major types: class (A), class (B), and class (C). Specialist physicians can run class (A) laboratories, like clinical diagnostic laboratories in developed hospitals, as laboratories of this type are similar to highly complex laboratories. Biologists, microbiologists, biochemists, or chemists can run the second class of laboratories, class (B), like those in health centers. Medical diagnostic laboratories of this type operate similarly to moderately complex laboratories. The third class of medical diagnostic laboratories, class (C), are occasionally termed “side laboratories” and can be run by laboratory assistants. Laboratories of this type are mostly situated near private clinics and are similar in nature to waived laboratories.

It has been noted (FKKT, 2007, p. 5) that different laboratory types present several potential risks including cutting equipment, broken glass, injuries due to incorrect transfer of materials, splashes, and electrical shock. Other hazards may be listed under chemistry-specific risk categories, such as radioactive and flammable materials and uncontrolled chemical reactions. The major sources of risk in laboratories include toxic chemicals, radioactive materials, flammable reagents, deep-frozen gases, compressed gases, and hazardous equipment. However, laboratory equipment may also cause burns, fire, explosion, cuts, and electrical shock. Meanwhile, other health risks may arise due to the presence of poisonous and toxic materials, which are used in many laboratories. Several flammable materials may become explosive agents under certain conditions. The Globally Harmonized System (GHS) for Communication about Hazards—an internationally recognized system—classifies hazards into three categories: physical hazards, health hazards, and environmental hazards. All explosives—flammable aerosols, flammable gases,
gases under pressure, oxidizing gases, flammable solids, pyrophoric liquids, flammable liquids, self-reactive substances, pyrophoric solids, self-heating substances, organic peroxides, oxidizing liquids, oxidizing solids, flammable gases, and materials which, in connection with water, corrosive to metals—are counted as physical. Health hazards are considered to include acute toxicity, serious eye irritation or eye damage, skin irritation or corrosion, skin or respiratory sensitization, carcinogenicity, germ cell mutagenicity, reproductive toxicology, systemic toxicity from frequent contact, systemic toxicity from one-time contact, and aspiration hazards. Environmental hazards include acute aquatic toxicity and chronic aquatic toxicity with either bioaccumulation potential or quick degradability (Arnett, Barkley, Beak, & Becker, 2000, p. 50).

LITERATURE REVIEW

Training
Numerous benefits are derived from the concept of training, as documented by (Wilson, 1999), (Jensen, 2001), and (Sommerville, 2007). Workers in various organizations are, in fact, reaping the rewards of training in terms of improved skills, knowledge, attitudes, and behaviors (Traven, 2003) with results that include enhanced staff performance (Brown, 1994), job satisfaction, productivity, and profitability (Hughey & Mussnug, 1997). Based on the foregoing, training can be defined in various ways, as indicated below. For example, it may be defined (Biech, 2015, p. 8) as a process devised to assist an individual to acquire new knowledge, skills, or belief. As an outcome, individuals exhibit changes or conversions that can enhance or improve their work performance. Moreover, it has been defined as a planned process aimed at modifying attitude, knowledge, skill, or behavior through a learning experience that allows the individual to achieve effective performance in any activity or range of activities. Its purpose, in the work context, is to develop the individual’s abilities and to satisfy organizations’ current and future manpower needs (MSC, 1981, p. 62). Training endeavors to impart the knowledge, skills, and attitudes necessary to perform job-related tasks. Thus, its aim is to improve job performance directly (Truelove, 1992, p. 273).

Following the above definitions of training by various scholars, we can, therefore, opine that “changes of attitude” should be included in the definition of training. Wills has, however, refuted such a definition (Wills, 1994, p. 10), both because attitudes are notoriously difficult to quantify, and because training alone, he argues, is inadequate to bring about fundamental long-term changes in attitudes. Instead, he defines training as “the transfer of defined and measurable knowledge or skills”. Similarly, it has been stated (McLeod & King, 1996, p. 25) that training is “any activity or course, either formal or
informal (e.g., on-the-job), which has helped you to acquire the knowledge and skills to do your job”.

**Safety Training**

There are many different ways of improving occupational safety, including developing control and hazard prevention systems, managing medical surveillance programs, and studying incidents that occur, all of which may be realized and supported by training and education (Mercurio & Roughton, 2002). Thus, safety training is crucial, because employees will not implement safe work practices through control measures and warning signs unless they understand the risks and the significance of those safety measures (Alli, 2001). In the interest of health and safety, a systematic process should be in place to help employers reduce the risk of work-related illnesses and injuries. This will involve measures aimed at detecting, evaluating, and controlling hazards and risks to employees in all operations. To ensure safety, it is also important to establish management commitment and involvement, hazard detection and evaluation, hazard control, training, emergency response, incident investigation and reporting, and appropriate communication (SACUOGI, 2011, p. 1). As has been observed (Phelpstead & Neasham, Management of International Health and Safety, 2013), health and safety training may be viewed as the key contributing factor in competence. Scholars have also observed (Alli, 2001, p. 53) and (Mercurio & Roughton, 2002, p. 268) that learning cannot be limited to training session timelines and the classroom environment, since supervisors can efficiently deliver specific messages to staff in a few minutes. In safety training, as in all other types of training, several elements are critical, such as the identification of training needs, training design, training implementation, and assessment of the training’s effectiveness (Buckley & Caple, 2007, p. 29). Therefore, all training programs begin with the proper planning, and safety training programs are similar to all other types of training in this respect. To improve safety through planned training programs, strategies for quantifying improvements in safety should be identified, that is, the effects of safety training on employees’ performance should be evaluated following completion of the training (Mercurio & Roughton, 2002, p. 266). Therefore, like all other types of training, planning for safety training begins with the identification of training needs and determination as to whether the planned training is the appropriate solution to the current problem (Cekada, 2011, p. 28); and (Phelpstead & Neasham, Management of International Health and Safety, 2013, p. 68).

**Employees’ Motivation**

Motivation and satisfaction theories have been researched for over a century,
beginning with Taylor’s scientific study (1911), which stated that individuals work to improve their productivity and performance (Taylor, 1911).

The term “motivation” is derived from the Latin movere, which means “to move” in the English language. It can be defined as a process of psychological effort that provides purpose and control to individuals’ behavior. Every action has a motive, so motivation is concerned with the elements that influence individuals to behave in certain ways. Expanding on this definition, three key factors relate to motivation: direction (the thing that the individual is trying to do), effort (how diligently the individual is working), and persistence (the length of time during which the individual continues to work toward their goal) (Naomi, 2011, p. 17). Moreover, as a result of better understanding of the concept, several theories have been in this field. Studies have proposed (Champoux, 2011, p. 153) that motivation theories may be classified into two main types: needs theories and cognitive and behavioral theories. Each theory of motivation uses different methods to elucidate the reasons behind individuals’ behaviors. Each theory views motivation from the perspective that they embody. It has been stated (Stella, 2008, p. 20) that a qualified and motivated workforce is vital to enhancing the quality of services and productivity required to accomplish organizational objectives. The dilemma that several managers face concerns how they may create this type of motivation. Motivation is among the most significant issues in organizations because even employees with high levels of knowledge, skills, and abilities will not be able to perform optimally if they are insufficiently motivated (Addison & Brundrett, 2008). When employees are not motivated, they may indulge in anti-work behaviors, such as late-coming, negligence of duty, absenteeism, and failure to meet deadlines (Stella, 2008, p. 20) and (Singla, 2009). In taking the above explanation into consideration, motivation has been defined by many different authors as follows:

Motivation has been defined (Ryan & Deci, 2000, p. 54) as the state of moving toward doing something. However, motivation is refers to individuals’ desire to obtain specific benefits or outcomes (Lee, Scott, & Moore, 2002); (Manfredo, Driver, & Tarrant, 1996).

It has been asserted (Turnbull C., 2011, p. 19) that motivation constitutes a psychological process that results from the interaction between the individual and the surrounding environment. Behavior and psychological process remain related themes that play an important role in discussions of motivation.

These definitions lack discussion of various aspects of motivation, such as intrinsic and extrinsic motivation as the internal desire and external factors that
influence an individual’s will to perform a certain action.

Hence, motivation has been defined as a set of active forces that originate within and beyond an individual’s being to initiate job-related behaviors and determine their direction, form, duration, and intensity (Pinder, 1998, p. 11).

This definition seeks to explain the individual’s willingness to perform “job-related” issues; however, some motives are not job-related issues, and some individuals may perform certain activities as hobbies outside of work.

Therefore, motivation is the main drive for the variety of our actions. It refers to the “dynamics” of human behavior, which includes their desires, ambitions, and needs (Asondariya, 2008, p. 89). This expression covers several aspects that other authors missed, as it explains the different actions in life based on needs (external), desires, and ambitions (internal issues). Other authors rely on behavioral issues to define motivation (Guay, Chanal, Ratelle, Marsh, Larose, & Boivin, 2010, p. 712), arguing that motivation comprises the reasons that underly behaviors. Hence, motivation can be defined as the “attribute” that drives people to perform an activity or not (Broussard & Garrison, 2004, p. 106). Meanwhile, according to Burton (2012, p. 6), motivation may be defined as action that causes someone to perform a certain activity.

Looking at all the definitions, the various types of motivation have been explained (Lai, 2011, p. 4) as constituting a collection of values, interests, actions, and perceptions that are related to one another. Several approaches to motivation focus on cognitive behaviors (such as strategy use and monitoring), while others prioritize non-cognitive perspectives (such as beliefs, attitudes, and perceptions) or focus on both perspectives. Two major types of motivation may be distinguished: intrinsic and extrinsic. Intrinsic motivation refers to motivation that is energized by personal interest, pleasure, or enjoyment. Extrinsic motivation, it has been argued (Davis, Bagozzi, & Warshaw, 1992, p. 1112), refers primarily to actions that are involved in attaining valued results that differ from the action itself, such as payment, improved job performance, and/or promotions. Thus, extrinsic motivation impacts employees’ behavior by bestowing value on the outcomes of the required performance.

In the same vein, it has been reported (Reiss, 2012, p. 152) that psychologists have introduced two types of theories of motivation: multifaceted theory and dualism. Multifaceted theory identifies several genetically distinct motives, such as curiosity, hunger, power, fear, positive self-regard, and sex. By contrast, dualism classifies human motives into two categories, for instance, approach/avoidance, mind/body, and/or intrinsic/extrinsic motivation. It has been
argued (Nduka, 2016, p. 16) that intrinsic motivation derives from a personal interest or pleasure in the task, and does not include engaging in actions for the purpose of receiving external rewards; rather, it instills the sensation of inner interest or pleasure in the activity itself. Intrinsic motivation may be regarded as a force that involves performing activities without any external incentive. Individuals are intrinsically motivated when they seek interest, enjoyment, satisfaction of curiosity, personal challenge, or self-expression in their work. Hence, intrinsic motivation sustains and energizes activities by the impulsive “satisfaction inherent” in an effective volitional activity (Deci & Koestner, 1999, p. 658).

As mentioned above, motivation theories can be classified into two main types: needs theories and cognitive and behavioral theories. Each theory of motivation applies a different method to elucidate the reasons behind individuals’ behaviors. In needs theories, personal attributes or characteristics have been used to shed light on motivation. Such theories concern healthy characteristics and do not attempt to explain disorders such as psychoses. Some examples of these theories include Murray’s theory of human personality, Maslow’s hierarchy of needs, and McClelland’s theory of achievement motivation.

Herzberg’s theory of motivation-hygiene does not function clearly in either group of theories. It provides valuable explanations of motivation and occupies a transitional space between theories of needs and behavioral and cognitive theories. Cognitive theories include theory of expectancy, theory of equity, and theory of goal-setting. Theory of expectancy defines the process of decision making that people use to select from choices of action. The theory concerns the impact of numerous kinds of outcomes or rewards that people receive for their behaviors. Theory of equity complements theory of expectancy by highlighting the comparisons that people draw between themselves and others and the reasons that people may or may not feel that they are treated equally—a sense of injustice creates motivation for behaving in ways that minimize the unfairness. The theory of goal-setting elucidates how goals impact people’s performance and behavior. The only behavior theory is named behavior modification and is based on concepts that emphasize the role of external factors in building and controlling human behaviors (Champoux, 2011, p. 153).

Motivation can be classified into five major groups which can be further categorized within the range of several concepts, such as psychological needs, goals, and responses (Vroom & Deci, 1970). Managerial and administration sciences include job relation goals, job design, expectancy, and leadership, and several other theories in relation to this
approach, like X, Y, and Z, explain the relationship to work motivation (Locke & Latham, 2004, p. 389). Several papers and studies have discussed managerial science and its relationship to motivation (Barrick & Mount, 1991); (Judge & Ilies, 2002); and (Aelliot & Thrash, 2002). One of the other debates for the classification of motivation concerns psychological and productivity-related thought, and the discussion of managerial sciences is dominated by two different schools of thought: the psychological school and the productivity school (Turnbull C., 2011, p. 22).

There are several theories that have been proposed to explain motivation such as David McClelland’s Theory of Achievement Motivation, Fredrick Herzberg’s Theory of Motivation-Hygiene, Victor Vroom, Edward Lawler, and Lyman Porter’s theory of Expectancy, J. Stacy Adams’s Equity Theory, Edwin Locke’s Theory of Goal-Setting, Terence Mitchell, and Stephen Green’s Theory of Attribution, Maslow’s Theory of Needs Hierarchy.

METHODOLOGY
Research methodology is the body of knowledge that helps researchers to explore, explain, and assess methods to determine their resources and limitations, identify their consequences and presuppositions, and relate their potentialities to the advances of the research (Nwokeiwu, 2013, p. 120). This study examines the impact of Safety training on employees’ motivation in the public diagnostic laboratories. In Kurdistan Region, the required data concerning the number of employees in diagnostic laboratories was unavailable. Therefore, stratified random sampling was deemed appropriate. Stratified sampling is a technique that is generally used when the selected population is heterogeneous but can be allocated as a homogeneous sub-population group, referred to as strata (Pirzadeh, Shanian, Hamou-Lhadj, Alawneh, & Shafiee, 2011, p. 10).

Generally, 200 questionnaires were distributed among the employees of the public diagnostic laboratories from four provinces of Kurdistan Region (Erbil, Sulaymaniyah, Duhok, and Halabjah). However, only 178 of the questionnaire forms were useful for the study. For the questionnaire forms Likert scale design has been used.

DATA PRESENTATION
Table 1: Demography of Safety Training Questionnaire among Public Sector Employees (Diagnostic Laboratories)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Count</th>
<th>%</th>
<th>Lab. Tech.</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>102</td>
<td>57.30%</td>
<td>Lab. Tech.</td>
<td>7</td>
<td>3.93%</td>
</tr>
</tbody>
</table>
Table 2 shows the demography of the respondents, as it reveals that 57.30% of them were male and the rest of them were female. The highest ratio (44.94%) of employees in the sample are aged between 29 years old to the 38 years old as the second ratio (28.65%) of them belong to the age group of (18-28) years old. Questionnaires were distributed among respondents from the four provinces in the Kurdistan Region which is being explained in the table. Moreover, table (2) shows the title of the respondents in the public diagnostic laboratories. Hence the level of education shows that the majority of the respondents are the holders of bachelor’s degree (88.76%). Furthermore, the table indicates that the highest ratio of the respondents (48.88%) of the respondents have less than 5 years of working at their current position, and (42.14) of them are experienced for less than 5 years in general.

DATA ANALYSIS AND DISCUSSION OF FINDINGS

- Reliability Test:

For table 3, the relationship between the first phase of general training (M1) and the second phase of M1 is 0.857, the relationship between the first phase of safety training (M2) and the second phase of M2 is 0.971, the relationship between the first phase of employees’ motivation
(M3) and the second phase of M3 is 0.995. Consequently, this proves that the p-value is less than 0.001, which indicates a high level of significance. This means that a researcher can distribute the questionnaire among respondents for data collection.

Table 2: reliability test (test-re-test)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>M1. F.</td>
<td>0.857**</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>(P &lt; 0.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M2. F.</td>
<td>-</td>
<td>0.971**</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(P &lt; 0.001)</td>
<td></td>
</tr>
<tr>
<td>M3. F.</td>
<td>-</td>
<td>-</td>
<td>0.995**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(P &lt; 0.001)</td>
</tr>
</tbody>
</table>

- Questionnaires’ Reliability (Cronbach’s Alpha)

Scale reliability refers to the consistent, continuous, and dependable method of retrieving records or data with a data collection tool. Therefore, values need to be similar and comparable to one another, as many researchers use the scale method at different times for the same survey. It is also necessary to ensure that the method that has been applied for the purposes of data collection delivers reliable data that can produce consistent and precise results after examination (Louangrath & Sutanapong, 2018).

The Cronbach’s Alpha values are 0.913 > 0.60 for the safety training scale, 0.926 > 0.60. The results are also indicators of high levels of reliability. As a consequence, this method for data collection is highly reliable (see table 4).

Table 3: Reliability Test (Cronbach’s Alpha)

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>No. of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Training</td>
<td>178</td>
<td>49</td>
<td>0.913</td>
</tr>
</tbody>
</table>

Correlation Analysis:

Tables 5 indicates that the correlation coefficient between safety training and employees’ motivation equals 0.440**. Therefore, by taking the p-value into account, it can be concluded that there is a positive correlation between safety training and employees’ motivation as it is significant at 0.000 (p<0.0001/2-tailed). Therefore, H₀₁ can be accepted.
Table 4: Correlation analyses of safety training and employees’ motivation (public sector)

<table>
<thead>
<tr>
<th>Safety Training</th>
<th>Correlation Coefficient (p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employees’ Motivation</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety Training</td>
<td>0.440** 0.000</td>
</tr>
</tbody>
</table>

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

c. Listwise N = 44

Regression:

The results of the simple linear regression model in table 6 indicate the influence of the safety training on employees’ motivation, as it determines that the safety training significantly impact employees’ motivation. These results are supported by the F-test’s calculated value (7.277). With all this information in mind, H2 is accepted.

Table 5: Regression analyses of the safety training on employees’ motivation (public sector)

<table>
<thead>
<tr>
<th>Model Summary b</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>R</td>
</tr>
<tr>
<td>1</td>
<td>.603*</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), safety training

b. Dependent Variable: employees’ motivation

ANOVA a

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2.139</td>
<td>4</td>
<td>.535</td>
<td>7.277</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>3.747</td>
<td>51</td>
<td>.073</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5.886</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: employees’ motivation

b. Predictors: (Constant), safety training
## Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.577</td>
<td>.430</td>
<td>3.673</td>
<td>.001</td>
<td>Tolerance: .508 VIF: 1.970</td>
</tr>
<tr>
<td>ST</td>
<td>.153</td>
<td>.081</td>
<td>.298</td>
<td>1.897</td>
<td>.002 Tolerance: .508 VIF: 1.970</td>
</tr>
</tbody>
</table>

a. Dependent Variable: employees’ motivation

## CONCLUSION

Our intention throughout this study has been to ascertain the impact of safety training programs on employees’ motivation in the public diagnostic laboratories in Kurdistan Region. Through its examination of the relationship between safety training and employees’ motivation, the research has concluded that the literature supported its hypotheses and indicated that there is a significant relationship between safety training in and employees’ motivation. Hence, any change in safety training leads to significant changes in employees’ motivation.

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