The Impact of Extraversion on Employee Loyalty with Mediating Role of Social and Career Adaptability in Saveh Chocolate Factory Mfg. Co. (PJS)

Mohammad Abdulshah¹
Department of Industrial Engineering, Semnan Branch, Islamic Azad University, Semnan, Iran

Amir Hakaki ²
Post Graduate Student of MBA, University of Semnan, Semnan, Iran

Ali Asghar Zarei³
Post Graduate Student of MBA, University of Semnan, Semnan, Iran

Mehran Mohammadnia⁴
Post Graduate Student of MBA, University of Semnan, Semnan, Iran

Hossein Saberian⁵
Post Graduate Student of MBA, University of Semnan, Semnan, Iran

Received 10 March 2016
Revised 24 February 2017
Accepted 19 July 2017

Abstract: This study is conducted with the aim of explaining the role of extraversion on employee loyalty with the mediating role of career and social adaptability among employees in a private organization. The research design is descriptive-correlational and the population is the employees of Saveh Chocolate Factory up to 240 people. According to Cochran's formula, the sample size of eligible people in this study is 172 subjects chosen randomly. The research data is collected by questionnaires of extraversion, social adaptability, occupational adaptability, and employee loyalty collected each of which has acceptable reliability and validity to study the mentioned variables. Pearson correlation and SPSS software are used to analyze the data. According to the Pearson correlation coefficient, the obtained results suggest that the relationship between extraversion and employee loyalty (ρ = -0.564) is a significant inverse relationship, and the relationship between social and occupational adaptability with employee loyalty (ρ =0.431, ρ =0.579) is a direct and meaningful relationship. Moreover, according to the results, the direct significant relationship between extraversion and social adaptability (ρ=0.453), extraversion and occupational adaptability (ρ=0.297), and occupational adaptability with social adaptability (ρ=0.487) are approved. The findings besides confirming the existence of a significant relationship between extraversion, social and occupational adaptability with employee loyalty show that each of the mentioned behavioral characteristics are associated with each other, and explain the quality of this relationship to be used for better analysis of the employee loyalty in organization.

Keywords: extraversion, social adaptability, occupational adaptability, employee loyalty.

Introduction

Due to the competitiveness of businesses and new challenges in the organization, stability and calm, especially in private organizations, are constantly overshadowed; of the most important consequences of the competitive world is the loss of skilled staff in an organization due to the provision of better opportunities in other organizations. On the other hand, over the past two decades, work, the knowledge of employees of the environment as well as their understanding of the behavioral characteristics of human beings have increased, which sometimes causes conflicts between the organization and employees. According to Chris Argyris’ growth theory (1957), organizations show resistance with mature human regarding human indices or people who move towards evolution. Based on research

¹ Email: Abdolshah@gmail.com (Corresponding Author)
² Email: a.hakaki@live.com
³ Email: ali00882r@yahoo.com
⁴ Email: mohamadnia.mehran@yahoo.com
⁵ Email: hossein.saaberian@gmail.com
results, the loyalty of employees in organizations is associated with the quality of the services provided whose result is customer satisfaction and loyalty to the organization and this will also lead to profitability and improvement in organizational performance (Yee et al, 2010). In compact and competitive markets in today's world, retaining worthy employees and development of staff loyalty to the organization have become important and a permanent challenge (Lai Wan, 2013). Researchers have proposed different views about loyalty. For example, Voyles (1999) in his book entitled "Are satisfied employees loyal?" states that employee loyalty is described by employee behaviors. In another view, loyalty is described as a process, that if a person with knowledge of the better conditions of a job, higher salaries and conditions that are more suitable refuses for accept jobs, it is seen as loyalty to the organization (H. Becker, 1960). Thus, although loyalty is a core concept accomplished by the staff, the role of organizations in creating, increasing and decreasing it cannot be ignored.

Many factors influence employee loyalty. In general, these factors can be divided into two categories: exogenous and endogenous. Exogenous factors are the ones that affect directly and independently from the organization, or are related work characteristics, but endogenous factors are related to behavioral features of employees. Of the exogenous factors such as spirituality in the organization, salaries, wages and bonuses, social contributions (Ineson et al, 2013) and organizational justice can be cited. Endogenous factors have received fewer studies than exogenous factors. In general, all factors related to personality traits and behavior of staff can be considered as endogenous factors. Endogenous factors can be categorized based on models and behavioral and personality studies. The most important and most well-known model that expresses the personality dimensions of human beings is the big five (Robbins, 2013) that categories various aspects of a character within five major categories. As a result, endogenous factors are the set of behavioral and personality characteristics. Organizations that stay inattentive in their attitude to these factors over time suffer many losses. Thus, studies related to recognition and determining of indicators effective on employee loyalty in an organization are of particular importance because assessing of the extent of employee loyalty greatly helps organizations planning for the future. Moreover, increased employee loyalty within the organization leads to increase in productivity and avoiding wasting costs related to education.

Since few studies have been conducted studying the influence of behavioral indicators on employee loyalty, this research tries to evaluate some of these indicators. Behavioral indices intended to be examined in this study are extraversion, social and occupational adaptability. Extraversion is considered as an important behavioral and personality characteristic that, it can be said, plays important roles in many aspects of a person's life, occupational adaptability can be considered as an important factor in job productivity of employees, a factor that may be influenced by similar characteristics in the community that is social adaptability. It is possible that each of these personality traits in turn has a significant impact on employee loyalty. Thus, the study tries to determine the type and extent of the relationship (direct reverse) between behavioral characteristics of extraversion, social and occupational adaptability with the strategic issue of employee loyalty in the organization. In addition, to complete information about these three behavioral characteristics, the influence and relationship of these three characteristics with each other have been investigated.

**Personality**

The first part of the word personality is persona that means a mask that old time actor wore over their faces, regardless of their original character, to play a role related to the mask over their face. Persona is the facial expression with which the human appears in society. Society, customs, and traditions of the community impose this look to the person. Persona is sometimes dramatic, and the real and private character of the individuals is disguised under the mask, called hypocrisy in slang and apparent behavior of the individual is not part of the real and original character of the person. Persona is sometimes the real personality of the individual true personality and there is a match between the facemasks and inner states. To the extent of the concordance between these two components, each person has a certain personality type and has a rate of mental-behavioral normality or abnormality. As the social impact is greater, the facemask thickness is greater. An overview of definitions of character shows that not all the meanings of the character can be found in a particular theory, but in fact, the definition of character
depends on the type of theory and idea of every scientist. For example, Carl Rogers sees character as an organized permanent self that is the center of all experiences. Allport (1961) calls character as a set of internal factors that direct all activities of an individual, and J. B. Watson (1928), father of behaviorism, character as an organized collection of habits. George Kelly (1963), one of contemporary cognitive psychologists, sees personality as the special individual approach in the search for interpretation of the meaning of life. Walter Mischel (1971) defines personality as definite patterns of behavior including thoughts and emotions building the compatibility of each person against his living environment. Many studies have been done on personality categories. Different categories are offered by different theories, for example, Raymond Cattell, in his research model, refers to sixteen kinds of personality traits while Hans Eysenck believes that the various features can only be put in three dimensions, calling them extroverted, neurotic and psycho (Daniel Nettle, 2007). However, it can surely be said that over the last twenty years two approaches have been the dominant framework to identify and classify personality traits (Robbins, 2013) that include Myers-Briggs personality type indicator, and Big Five Model of personality. However, it should be noted that the most used model is Big Five Model of personality.

Myers - Briggs Type Indicator (MBTI)
Myers and Briggs divide personality types into 4 categories (Robbins, 2013):

- **Extrovert versus introvert**: extrovert people are social, sociable and friendly, while introverted people are quiet and shy.
- **Intuitive versus sensory**: sensory people are pragmatic and prefer order, while intuitive type relies on subconscious processes and the overall picture is more at the center of their attention.
- **Thinking versus feeling**: The thinking type uses logic and reason to solve problems, while feeling relies on personal values and feelings.
- **Judger versus perceiver**: judgers want control and want to have a regular and structured world. Perceivers are flexible and spontaneous.

Personality model of Big Five Model
Robert McCrae and Costa divided personality types into five factors in 1999 (Robbins, 2013):

- **Extraversion**: refers to a person’s comfort in creating relationship.
- **Agreeableness**: refers to the inner desire of the person to capitulate to others.
- **Conscientiousness**: this is a benchmark for reliability and, responsibility, a person who is very conscientious is organized, reliable and sustainable.
- **Emotional stability**: this refers to one's ability against stress. People who have emotional stability are usually quiet, positive, self-confident and confident.
- **Openness Experience**: this refers to the interest and fascination of the person to novelty. Very open people are creative, curious and have artistic sensitivity facing experience.

**Extraversion**
Jung first used extraversion and introversion in the 1921. Jung believes that all people have the ability to both trends, but only one becomes dominant person in attitude, and the dominant attitude guides behavior and consciousness of the individual. In Jung's idea, an extroverted person is the individual that is focused on the outside world. In other words, and extroverted person is someone to whom the outside world is important. An extrovert person is an ambitious and easygoing person and his individual characteristics are often joy, passion and excitement (Daniel Nettle, 2007). Extraverts are social, cheerful, energetic, talkative and sociable, while introverts are reserved, cautious and silent people (Ferguson, 2009). Extraversion is a high-level trait identified as one of the aspects of character in biology approaches and extroverted people are usually friendly people, calling for gatherings and parties, activists and are people of the talks. Many studies have been conducted in connection with extrovert personality that mostly refer to traits such as jabber, sociability, being active, assertiveness and following the excitement (Costa & McCrae, 1992; Barrick et al, 2001, depue & Collins, 1999; Lucas et al., 2000). Robbins (2013) defined extraversion as the level of comfort in creating relationship by the person. The meaning of being social is the common thinking among the people, in thinking of the community, the
turning point of extraversion is sociability, but extraversion is not the same as sociability. Extraversion means one's ability to spend time in social activities and making new friends, but this privilege cannot tell you how much a person can keep these friends (Daniel Nettle, 2007). The extent to which a person can keep his friends reflects the individual's sociability. Many studies have shown the relationship between extraversion and various indices such as studies by Deneve and Cooper (1998), Higgins (1997) and Diener et al (1999) who have shown that extraversion is linked to happiness, social dominance, subjective well-being, life satisfaction and positive emotions. One important result of these studies is that happiness is associated with high levels of extraversion. Moreover, extraversion is related to cognitive assessment and interpretation in a pleasant and positive way (Uziel, 2006; Lucas & diener, 2001). Other studies have shown that extraversion is positively associated with positive emotional data processing, interpretation, recognition and judgments (Rusting, 1999; Rusting & Larsen, 1998). As a result, as happy people usually pay more attention to positive data, this attention to positive data or positive evaluation of data is the connection between extraversion and happiness (Noguchi et al., 2006). Foti and Hauenstein (2007) refer to the relationship between extraversion and social dominance. In a study, they state that introverted against extrovert people will benefit more social dominance, control of others, have the upper hand and are more outspoken. In addition, extraverts have many positive emotions, the emotions are called positive that are enabled in the action of following or getting resources that are valuable (Daniel Nettle, 2007). On the other hand, Kawamato (1999) in research states that extraversion and sociability factors make people prone to create positive affect speed and enthusiasm. Thus, according to the theory of Gray (1987) and Wallace et al (1991) the incentive of reward and punishment are essential for extraversion. Of course, it seems that extraverts are sensitive to signs predicting rewards while introverts are sensitive to signs predicting punishment (Derryberry & Reed, 1994). As a result, it can be said that expecting a reward associated with positive emotion is of other attributes of extraverted people (Zuckerman et al., 1999). There are different types among extraverts that can generally be categorized into four types:

1- **Thoughtful extravert** who lives strictly in accordance with the provisions of society.
2- **Emotional extravert** condemns thinking way and is very emotional.
3- **Perceiver extravert** focuses on joy, happiness, and the search for new experiences.
4- **Intuitive extravert**, because of great ability in taking advantage of opportunities, are success in business or in politics.

Of the negative points of extraverts is their more impulsiveness compared to introverts (acting on impulse and without previous thought) the probability of absenteeism higher and carry out more risk and emotional behaviors (Spirling & Persaud, 2003).

**Compatibility or social adaptability**

The adaptability, as extraversion, focuses on interpersonal communication trends. People with high scores in this index have more trust in others or in other words, they are faithful and sincere. However, people who earn low grades in the adaptability assessment are distrustful and suspicious of others, flattering and sometimes impulsive and less affected by compassion to perform generosity (Huczynski & Buchanan, 2000). Behavior of adaptable people is warm, generous and supportive (Migliore, 2011). Adaptability relates to the tendency of people to communicate with others. Adaptability attribute indicates the individual differences in general concern for social harmony. The value of adaptable people is known with others. They are generally considerate, friendly, generous, reliable, entrepreneur, and willing to compromise their interests with others (Rothmann & Coetzer, 2003). Compatible people accept changes easily (Williamson et al., 2008) and this feature helps to fit more with jobs (Zimmerman, 2008). Because these people seek a comfortable fit along with others, often avoid controversial issues causing differences (George & Jones, 1999). Incompatible or non-confirming people consider their personal interests above others (give greater priority to personal interests). They are generally indifferent about the welfare of others and rarely bother to put up for others. In some cases, skepticism of incompatible people towards others encourages them to be suspicious, lack of friendly relations and cooperation with others (Bartneck et al., 2013). Adaptability is dynamic process of growth and transformation, including the balance between what people want and what society accepts, in other words adaptability is a mutual process, on one hand, is the individual contact with the community.
effectively, and on the other hand, community provides tools through which the person actualizes his potential abilities. In this interaction, the individual and society are subject to change and a relatively stable compromise is created (Kapel & Newka, 1997). Among the factors related to coordination at work is the occupational adaptability. Adaptable employees can have a significant role in creating trusted relationships and contribution to the formation of cohesion in a group (Zimmerman, 2008). Satisfaction is the drive for behavior restoring, and dissatisfaction is the drive for adaptable behavior. In some places, the mismatch between the needs of a person and environmental benefits is dramatic and the person will be forced to go through adaptability (Dawis & Lofquist, 1984).

The occupational adaptability theory
Occupational adaptability includes explaining behaviors that lead to effective and good implementation of the tasks required and a positive attitude towards the role in new business. Occupational adaptability theory (OAT) is based on concept of the relationship between the individual and the environment. This theory considers job more than stepwise task-oriented processes, in fact, OAT states that work includes human interaction and is a source of satisfaction, reward, stress and many other psychological variables. The basic assumption of OAT is that people are in an attempt to create and maintain a positive relationship with their working environment. Two key elements of this theory are structure and adaptability with the work environment. According to Dawis and Lofquist (1984), people take their needs to workplace and work environment has some demands from the individual. As a result, to continue the work, the environment and the individual needed to achieve an extent of work adaptability (Zunker, 2006). Occupational adaptability is in its best state when the environment and individual have coordinated work needs with employment skills. Employees’ effort to improve their coordination with the business environment can be considered as measures to achieve occupational adaptability. Usually adaptability is achieved following one of these two states: action and reaction. In action, employees are trying only to change their workplace, while in reactive mode, they are trying to adapt themselves better with working environment (Dawis & Lofquist, 1984).

Factors affecting occupational adaptability
In studies, Dawis and Lofquist (1984) stated the factors affecting occupational adaptability as follows:

- **Money**: In return for activity that labor force does, he should be given money, but this money should not lower his character.
- **Job security**: workers should have the confidence that what they do will continue for years. Job security is sometimes more important than money. In some cases, the person is interested in a permanent job even if the salary or wages are not high.
- **Suitable working conditions**: people like to work in a clean, decent, interesting and pleasant environment.
- **Advancement opportunities**: opportunities to progress should mean that the workforce knows that by having certain conditions needed he can be promoted to high ranks and earn higher compensation.
- **Personal relationships**: People like to work with people with whom there is love and mutual relationship, in fact human resources are interested in others’ being kind and friendly and her business promotion’s being considered by managers.
- **Coordination with individual talent**: when the job is in harmony with his physical and mental talent, he enjoys working.
- **Coordination with relish**: This indicator refers to the proportion of the work with human interests.
- **Skill**: this means the skill level that the individual has acquired in successful implementation of something in the past.
- **Non-discrimination between human resources**
The consequences of occupational adaptability versus non-adaptability

According to adaptability Dawis and Lofquist (1984), it could be understood that occupational adaptability leads to the commitment of labor to carry out their duties, and the person will have better and healthier mental and physical performance. Moreover, it should be reminded that when a person is satisfied with his job tries and puts more effort and increases his skills that leads to increased productivity in long run for the organization. In contrast, if there is occupational inadaptability, cases such as delay and voluntary absence increase among employees and if this inadaptability is more than before, it can lead to early retirement or leaving work. Table 1 describes the consequences of occupational adaptability and inadaptability (Dawis & Lofquist, 1984):

<table>
<thead>
<tr>
<th>The consequences of occupational inadaptability</th>
<th>The consequences of occupational adaptability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay</td>
<td>commitment</td>
</tr>
<tr>
<td>Absence</td>
<td>Physical and mental health</td>
</tr>
<tr>
<td>Early retirement</td>
<td>Increase in Productivity</td>
</tr>
<tr>
<td>Leaving job</td>
<td>Acquiring new skills</td>
</tr>
</tbody>
</table>

Loyalty

Studying the history of the studies done on loyalty show that the studies that try to define loyalty are a considerable amount of research. The most fundamental problem faced by researchers in these studies is failure to reach a common definition of loyalty (Pritchard & Howard, 1997). So far, there are so many discussions whether loyalty is an attitude or a combination of attitudes and behavior (Akin, 2012). Loyalty is a positive mutual word based on cooperation. In most cases, loyalty is attributed to people, companies and products. Some say that loyalty is a positive attitude to an entity (brand, product or service) and supportive behavior towards it. Loyalty is also defined in terms of commitment to something or someone (Morrall, 1999). Another definition of loyalty is devotion and emotional attachment to certain things that may be relevant to a person, a group, a task or an objective (Powers, 2000).

Loyalty to the organization

First, we should know that organizational commitment and employee loyalty are intimately related. This correlation is so much that distinguishing them from each other is not possible. Researchers have offered different views about loyalty. For example, Voyles (1999) states that loyalty of employees is defined using employee behaviors (when he remains in the organization for a long time, the amount of time that employees spend for the organization's goals and objectives, and when a worker grows within the organization and creates value for the clients). From another perspective, employee loyalty to the organization is the spiritual and emotional sense of belonging to the organization and being sensitive to what is considered as the epitome of organization. In this view, loyalty is conceivable and assessable from all aspects of functionality, communication, administrative and organizational behavior (Mackay & Ian, 1993). Moreover, employee loyalty can also be defined as workers who feel committed to the success of organization and believes that his organization is the best choice to work. H. Becker (1960) has described loyalty as a process; he believes that if a person with knowledge of the better jobs condition, higher salaries and better conditions of employment refuses to accept the job, he is loyal to the organization. Based on the studies, basic proposition is proven that the level of their satisfaction influences employee loyalty. Considerable numbers of preceding studies show that employees' satisfaction has a positive relationship with their loyalty in their companies as well as a negative correlation with their intention to leave their service (Brown & Peterson, 1993; Griffeth et al., 2000 Griffeth et al, 2001; Martense & Gronholdt, 2001). Allen and Meyer (1997) say that loyalty can be recognized by three factors:

1. Strong belief in the values of the organization
2. Great effort to achieve organizational goals
3. Great desire to stay in the organization
In this model, loyalty of the individual to the organization is due to his commitment to the organization and its goals (Savareikiene & Daugirdas, 2009). Low level of turnover among satisfied employees comes from the fact that, satisfied employees compared with dissatisfied employees believe that interests is gained by them by staying in the organization, so they show more willingness to have high level of loyalty and commitment to the organization and it is somehow impossible that they leave their job.

Methods
This study focuses on studying the effect of behavioral indicators of extraversion, social and occupational adaptability on employee loyalty in the organization because loyalty of the employee is an important factor in today's competitive market in the world. Conceptual model of the research discusses the positive results in case of the presence or increase of loyalty of the employee generated by these three behavioral characteristics in accordance with the Figure 1.

Figure (1): Conceptual model of the research

Assumptions of the research
Assumptions of the research include:

- **Hypothesis 1)** there is a significant relationship between extraversion and employee loyalty.
- **Hypothesis 2)** there is a significant relationship between social adaptability and loyalty of employees.
- **Hypothesis 3)** there is a significant relationship between occupational adaptability and employee loyalty.
- **Hypothesis 4)** there is a significant relationship between extraversion and social adaptability of employees.
- **Hypothesis 5)** there is a significant relationship between extraversion and adaptability of employees.
- **Hypothesis 6)** there is a significant relationship between social adaptability and occupational adaptability.

Given the variables considered hypothesis, the first, second and third hypotheses are proposed as the main hypothesis that examine the existence of the relationship between each of the variables with employee loyalty and three hypotheses fourth, fifth and sixth are proposed as sub-hypotheses examining the relationship between each of the variables with each other. Operating model shows the relationships between variables and assumptions considered in accordance with Figure 2.
Research Methodology

Research can be defined as an organized attempt to assess the specific problem that needs a solution and includes steps that are followed to find answers to our question. Research method is set of rules, valid (reliable) and organized instruments to check reality, discover unknowns and solve problems. The present study is an applied research regarding the objective and in terms of nature, it is descriptive and survey.

\[
\begin{align*}
  n &= \frac{z^2 pq}{d^2} + 1 + \frac{1}{N} \left( \frac{z^2 pq}{d^2} - 1 \right) \\
  &= \frac{(1.96)^2 \times 0.5 \times 0.5}{(0.05)^2} + 1 + \frac{1}{90} \left( \frac{(1.96)^2 \times 0.5 \times 0.5}{(0.05)^2} - 1 \right) \\
  &\approx 172
\end{align*}
\]

Formula 1: Calculation of the sample size

The population is the employees of Saveh Chocolate Factory. The total number of plant employees was 240 people, from which 90 people were eligible to complete the survey questionnaire (those with a diploma, bachelor's degree, and master's degree). Based on a formula to determine the sample size (Cochran's formula) from a community of 90, sample size is obtained as 172, which in this study were selected by simple random sampling. Data collection tools to collect secondary data is combined books, theses, articles, and Internet and standard questionnaires.

Validity and reliability of the study

In this study, the conceptual validity is used. This is because when experimental validity is not available or it is difficult to get validity through experiment or practically. In fact, through evidence and criteria the researcher tries to show that the concept measured is valid. In this study, to determine the reliability of the test, Cronbach's alpha using SPSS software is used. In this method, if the alpha is more than 0.7, the reliability of the test is acceptable, if the ratio is between 0.5 to 0.7, the reliability is average, and if Cronbach's alpha value is less than 5.0, the reliability will not be acceptable. Table 2 shows the Cronbach's alpha obtained for each of the questionnaires.
Table (2): Cronbach's alpha values for each questionnaire

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Cronbach's alpha</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loyalty</td>
<td>0.95</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Extraversion</td>
<td>0.72</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Social adaptability</td>
<td>0.81</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Occupational adaptability</td>
<td>0.72</td>
<td>Acceptable</td>
</tr>
</tbody>
</table>

Results

Descriptive statistics of the population studied

With regards to qualified individuals (with diploma, bachelor's degree and master's degree) of the total 240 plant employees, 90 people qualified were given questionnaires, of whom 172 were determined on the basis of Cochran's formula with 5 percent error were identified for sampling. Of the 172 eligible subjects, 41 are males and 32 females that approximately 56 percent are men and 44% are women of the total sample size according to Figure 3.

Also from among 172 people qualified in terms of education level, 6 persons have diploma school degree, 45 people have bachelor's degree and 22 have a master's degree and approximately 8% of people have diploma, 62 percent have bachelor's degree and 30% have master's degree of the total sample size according to Figure 4.
Reviewing normality and descriptive information of variables

Before testing the hypotheses of the study, it is necessary to evaluate the normality of quantitative variables using Kolmogorov-Smirnov test. The normal variable is a variable where majority of data are concentrated around the mean, the rest is scattered completely symmetrical around the mean, and as we move away from the mean, the abundance of data gets less.

Kolmogorov-Smirnov test is a test to measure quantitative data. In this test, if the level of significance, the p-value or criteria for decision (sig) is less than 0.05, data cannot have a normal distribution. Table 3 examines the normality of the variables and dimensions capable of deciding it.

Table (3): Significance level of variables

<table>
<thead>
<tr>
<th>Research variables</th>
<th>Significance level (sig)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>0.085</td>
</tr>
<tr>
<td>Loyalty</td>
<td>0.075</td>
</tr>
<tr>
<td>Social adaptability</td>
<td>0.201</td>
</tr>
<tr>
<td>Occupational adaptability</td>
<td>0.064</td>
</tr>
</tbody>
</table>

According to the table above, we can conclude that significance level of quantitative variables is more than 0.05. Thus, the quantitative variables above are normal, so normality of the variables justifies using parametric tests to infer the hypothesis. To evaluate the descriptive information of variables, mean and standard deviation were used, and to determine the relationships between variables, Pearson correlation coefficient (ρ) was used as shown in Table 4.

Table (4): Descriptive indices and internal correlation between variables

<table>
<thead>
<tr>
<th>Row</th>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Extraversion</td>
<td>30.45</td>
<td>6.489</td>
<td>1</td>
<td>0.453</td>
<td>0.297</td>
<td>-0.564</td>
</tr>
<tr>
<td>2</td>
<td>Social adaptability</td>
<td>29.66</td>
<td>5.799</td>
<td>1</td>
<td>0.487</td>
<td>0.431</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Occupational adaptability</td>
<td>115.80</td>
<td>15.512</td>
<td>1</td>
<td></td>
<td>0.579</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Loyalty</td>
<td>104.79</td>
<td>12.352</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

According to Table 4, the first three variables had inter-relations and had a significant relationship with dependent variable that is loyalty meaningful and obtained based on the assumption discussed at the beginning of the section. In the following, we will have a closer look at each of hypothesis.

Testing the first hypothesis

In studying the first hypothesis, the relationship between extraversion and loyalty of employees with moderate correlation in the negative direction was confirmed as is shown:

H₀: There is no significant relationship between extraversion and employee loyalty.  \( \rho = 0 \)

H₁: There is a significant relationship between extraversion and employee loyalty.  \( \rho \neq 0 \)

The correlation coefficient between the variables and significance level of extraversion and loyalty are shown according to Table 5 as follows:

Table (5): Pearson correlation coefficient between variables of the first hypothesis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Loyalty</th>
<th>Pearson correlation</th>
<th>Significance level (sig)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td></td>
<td>*-0.564</td>
<td>0.000</td>
</tr>
</tbody>
</table>

According to Table 5, there is a moderate correlation in negative direction (-0.564) between extraversion and employee loyalty at 95%, which is significant considering sig=0.000, these results confirm our first hypothesis that there is a significant relationship between these two variables. This means there is a significant inverse relationship between extraversion and employee loyalty (sig<0.05).

Testing the second hypothesis

In studying the second hypothesis, the relationship between social adaptability and loyalty of employees with moderate correlation in positive direction was confirmed as is shown:
H0: There is no significant relationship between social adaptability and employee loyalty. \( \rho = 0 \)

H1: There is a significant relationship between social adaptability and employee loyalty. \( \rho \neq 0 \)

The correlation coefficient between the variables and significance level of social adaptability and loyalty are shown according to Table 6 as follows:

| Table (6): Pearson correlation coefficient between variables of the second hypothesis |
|----------------------------------------|-------------------------------|
| Variable                              | Loyalty                       |
|                                       | Pearson correlation            |
| social adaptability                   | 0.431                         | 0.003                      |

According to Table 6, there is a moderate correlation in positive direction (0.431) between social adaptability and employee loyalty at 95%, which is significant considering sig=0.003, these results confirm our second hypothesis that there is a significant relationship between these two variables. This means there is a significant inverse relationship between social adaptability and employee loyalty (sig<0.05).

**Testing the third hypothesis**

In studying the third hypothesis, the relationship between occupational adaptability and loyalty of employees with moderate correlation in positive direction was confirmed as is shown:

H0: There is no significant relationship between occupational adaptability and employee loyalty. \( \rho = 0 \)

H1: There is a significant relationship between occupational adaptability and employee loyalty. \( \rho \neq 0 \)

The correlation coefficient between the variables and significance level of occupational adaptability and loyalty are shown according to Table 7 as follows:

| Table (7): Pearson correlation coefficient between variables of the third hypothesis |
|----------------------------------------|-------------------------------|
| Variables                              | Loyalty                       |
|                                       | Pearson correlation            |
| Occupational adaptability              | *0.579                        | 0.000                      |

According to Table 7, there is a moderate correlation in positive direction (0.579) between social adaptability and employee loyalty at 95%, which is significant considering sig=0.000, these results confirm our third hypothesis that there is a significant relationship between these two variables. This means there is a significant inverse relationship between occupational adaptability and employee loyalty (sig<0.05).

**Testing the fourth hypothesis**

In studying the fourth hypothesis, the relationship between extraversion and social adaptability with moderate correlation in positive direction was confirmed as is shown:

H0: There is no significant relationship between extraversion and social adaptability. \( \rho = 0 \)

H1: There is a significant relationship between extraversion and social adaptability. \( \rho \neq 0 \)

The correlation coefficient between the variables and significance level of extraversion and social adaptability are shown according to Table 8 as follows:

| Table (8): The Pearson correlation coefficient between variables of the fourth hypothesis |
|----------------------------------------|-------------------------------|
| Variables                              | Social adaptability           |
|                                       | Pearson correlation            |
| Extroversion                           | *0.453                        | 0.000                      |

According to Table 8, there is a moderate correlation in positive direction (0.453) between social adaptability and employee loyalty at 95%, which is significant considering sig=0.000, these results confirm our fourth hypothesis that there is a significant relationship between these two variables. This means there is a significant relationship between social adaptability and extraversion (sig<0.05).
Testing the fourth hypothesis
In studying the fifth hypothesis, the relationship between extraversion and occupational adaptability with a weak correlation in positive direction was confirmed as is shown:

\( H_0: \) There is no significant relationship between extraversion and occupational adaptability. \( \rho = 0 \)

\( H_1: \) There is a significant relationship between extraversion and occupational adaptability. \( \rho \neq 0 \)

The correlation coefficient between the variables and significance level of extraversion and occupational adaptability are shown according to Table 9 as follows:

<table>
<thead>
<tr>
<th>Variables</th>
<th>Occupational adaptability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson correlation</td>
</tr>
<tr>
<td>Extroversion</td>
<td>0.297</td>
</tr>
</tbody>
</table>

According to Table 9, there is a weak correlation in positive direction (0.297) between occupational adaptability and employee loyalty at 95%, which is significant considering sig=0.029, these results confirm our fifth hypothesis that there is a significant relationship between these two variables. This means there is a significant relationship between occupational adaptability and extraversion (sig<0.05).

Testing the sixth hypothesis
In studying the sixth hypothesis, the relationship between social adaptability and occupational adaptability with a moderate correlation in positive direction was confirmed as is shown:

\( H_0: \) There is no significant relationship between social adaptability and occupational adaptability. \( \rho = 0 \)

\( H_1: \) There is a significant relationship between social adaptability and occupational adaptability. \( \rho \neq 0 \)

The correlation coefficient between the variables and significance level of social adaptability and occupational adaptability are shown according to Table 10 as follows:

<table>
<thead>
<tr>
<th>Variables</th>
<th>Occupational adaptability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson correlation</td>
</tr>
<tr>
<td>Social adaptability</td>
<td>*0.487</td>
</tr>
</tbody>
</table>

According to Table 10, there is a moderate correlation in positive direction (0.487) between occupational adaptability and employee loyalty at 95%, which is significant considering sig=0.028, these results confirm our sixth hypothesis that there is a significant relationship between these two variables. This means there is a significant relationship between occupational adaptability and social adaptability (sig<0.05).

As a result, all the six hypotheses considered were confirmed of which the third hypothesis denoting the meaningful relationship between occupational adaptability with loyalty has the highest correlation coefficient 0.679. The fifth hypothesis denoting that there is a significant relationship between extraversion and occupational adaptability has the lowest coefficient of correlation. Moreover, the first hypothesis with a correlation coefficient of -0.564 confirms the inverse relationship between extraversion and employee loyalty. Figure 5 shows the general relationship between variables and correlation coefficient obtained based on the operational model.
Figure (5): The findings based on operational model of the research

Direct and indirect effects of independent variables on the main dependent variable that is the loyalty of staff, taking into account different routes are presented in Table 11. In order to estimate the extent of the effect, SPSS software, multivariate linear regression analysis and path analysis were used.

Table (11): Direct and indirect effects of variables

<table>
<thead>
<tr>
<th>Row</th>
<th>Variables</th>
<th>Mediating variable</th>
<th>Direct effect</th>
<th>Indirect effect</th>
<th>Total effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Extroversion</td>
<td>loyalty</td>
<td>Social adaptability</td>
<td>-0.564</td>
<td>0.195</td>
</tr>
<tr>
<td>2</td>
<td>Extroversion</td>
<td>loyalty</td>
<td>Occupational adaptability</td>
<td>-0.564</td>
<td>0.172</td>
</tr>
<tr>
<td>3</td>
<td>Social adaptability</td>
<td>loyalty</td>
<td>Occupational adaptability</td>
<td>0.431</td>
<td>0.282</td>
</tr>
<tr>
<td>4</td>
<td>Social adaptability</td>
<td>loyalty</td>
<td>Occupational adaptability</td>
<td>----</td>
<td>0.579</td>
</tr>
<tr>
<td>5</td>
<td>Extroversion</td>
<td>Social adaptability</td>
<td>----</td>
<td>0.453</td>
<td>----</td>
</tr>
<tr>
<td>6</td>
<td>Extroversion</td>
<td>Social adaptability</td>
<td>Social adaptability</td>
<td>0.297</td>
<td>0.221</td>
</tr>
<tr>
<td>7</td>
<td>Social adaptability</td>
<td>Occupational adaptability</td>
<td>----</td>
<td>0.587</td>
<td>----</td>
</tr>
</tbody>
</table>

As seen in Table 11, the effects of extraversion on loyalty directly is -0.564 and indirectly with the mediating role of social adaptability are 0.195 and the total effect is -0.369. By changing the mediating variable and the mediating role of occupational adaptability, the direct and indirect effects of extraversion on loyalty are, respectively, -0.564 and 0.172 that in this way the total effect is -0.392. It was seen that the effect of extraversion on loyalty in the presence of mediator in both ways reduces. In determining the amount of social adaptability impact on loyalty as seen in the conceptual model, occupational adaptability plays a mediator role that causes the indirect effect of 0.282 and increase in the overall effect. In determining the effect in three relations that is occupational adaptability and loyalty, extraversion and social adaptability and social adaptation and occupational adaptability, there is no mediator and the total impact is the same as direct impact.

Conclusions

This study was conducted to examine the relationship between the three behavioral characteristic including extraversion, social adaptability and occupational adaptability with loyalty as well as the relationship between these three features. Hence, the bivariate correlation matrix was calculated and plotted between variables (Tables 5 to 10). The results of Pearson correlation coefficient test showed that all the research hypotheses were confirmed. Research findings have four major findings and
conclusions discussed in more depth in the coming lines. The only inverse relationship is between introspection and loyalty. Extraversion is associated with social interactions; extroverted people are successful in communicating with others. They are essentially talkative, active and hopeful about future. Results of correlation analysis showed the more of this feature the people have, they will be less loyal to the organization. The relationship between these two variables in this study, with a correlation coefficient of -0.564 is negative (inverse) and significant. By increasing social adaptability, the loyalty of employees increases, it can be noted that adaptable people get more positive results in cooperative behavior rather than competitive behavior and also because there is warmth and optimism in them, adaptability is detected as a powerful stimulus to continue a positive relationship with others. They also have more flexibility to change the attitude and relationship analysis. Social adaptability in this study, with the correlation coefficient of 0.431, has a significant correlation with loyalty.

The highest correlation coefficient was between occupational adaptability and loyalty, which is positive and significant; in fact, by increase in the occupational adaptability, employee loyalty to the organization increases. It can be said that staff with occupational adaptability have a compatible and suitable psychological mood to their jobs and their efforts to improve the business environment can be considered as measures to achieve occupational adaptability. Results of correlation coefficient analysis showed that as the employees are more successful in achieving occupational adaptability, they would be more loyal to the organization. The relationship between these two variables in the study was positive and significant 0.579. Of the other results obtained is the positive and significant relationship between extraversion and occupational and social adaptability. In fact, with an increase in extraversion, occupational and social adaptability increase, so that the relationship between extraversion and occupational adaptability with a weak correlation of 0.297 and positive and moderate relationship with social adaptability 0.453 were observed. The results also showed that there is a significant positive relationship between occupational adaptability with social adaptability. Generally, people try to create and maintain a positive relationship with their work environment (occupational adaptability), in fact, and the more successful they are in creating this in the society (social adaptability), they will get it workplace as well. In this study conducted, there is a significant positive correlation between these two adaptabilities with correlation of 0.487.

Among the important suggestions in order to continue the research investigating the relationship between the mentioned variables can be proposed at the level of all private organizations, this study can obtain beneficial results with respect to these variables. In addition, due to the inverse relationship between extraversion and employee loyalty, studying the variable affecting extraversion can be proposed as the components factor in enhancing employee loyalty to the organization, so that these elements reduce the negative correlation between these two variables and changing extraversion into an important factor in increasing employee loyalty. According to the second and third hypotheses tests, where the direct relationship between social adaptability and job loyalty has been approved, it can be noted that the adaptable people will be more loyal and will have higher productivity leading to lower costs of issues such as cost of hiring, training, alternative new force and so on. As a result, studying the relationship between the productivity of employees and their behavior indices can be characterized as one of the most important issues in the upcoming studies.

References

sessment, 9, 9–30.


