Mutah University
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Motivation and Performance of Physicians and Dentists Working in The South of Jordan

Prepared by:
Shoroq Salem Al-Tarawneh

Supervised by:
Professor Dr. Waqar Al –Kubaisy
Assistant Professor Dr. Khalaf AL-Tarawneh

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أ.د وقار عبد القهار عبد الحميد الكبيسي		مشرفا ومقررا
د. نضال عوض عبد النوايسه		عضوا
أ.د ابراهيم فهمي عبد المنعم خربوش		عضوا
د. رامي عبدالله محمود سعاده		عضو خارجي

عميد كلية الدراسات العلي

أ.د عمر المعايطة

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كلية الدراسات العليا

DEDICATION

This thesis is dedicated to the soul of my father, to my family for their support, my lovely mother, my dear brothers, Dr. Haroon, Mr. Mamoun, Mr. Mohammad, and my dear sisters (Maryam, Arwa, Nahyah, Mona, and Hiba)

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Abbreviations

ANOVA: Analysis of variance

CHCs: Comprehensive Health Centers

HCCs: health care centers

HCWs: Health care workers

IBM: International Business Machines

JD: Jordanian Dinar

KM: kilometer

MDGs: Millennium Development Goals

MOH: Ministry of Health

PHCS: Peripheral health centers

PHCs: Primary health centers

RMS: Royal Medical Services

SD: Standard Deviation

SPSS: Statistical Package for Social Sciences software

WHO: World Health Organization

Abstract

Motivation and Performance of Physicians and Dentists Working in The South of Jordan

Shoroq Salem Al-Tarawneh

Mutah University, 2020

Background: Staff performance reflects an essential part of the organization pillars, and the performance of the health sector depends on employee motivation.

Objectives: The main objective of the study was to detect the relationship between motivation (extrinsic and intrinsic motivation) and the performance of physicians and dentists in health centers in two governorates in southern Jordan (Al-Karak and Al-Tafila). Another objective is to identify performance and motivation relations with the social-demographic factors.

Methods: A cross-sectional study was conducted during the period from January to June 2020 at health centers in Al-Karak and Al-Tafila. All of the physician and dentists working at these two governorates were included. A pilot study was carried out prior to conducting the main study. A self-administered structured validated questionnaire was used for data collection, and this questionnaire used a program based on a five-point Likert scale. As descriptive as well as inferential statistics were carried out, like t-test, correlation, and analysis of variance (ANOVA). By using SPSS version 19, ($\alpha<0.05$) was considered as the significance level.

Results: The rate of response was 96%. The whole motivation showed a moderate level (mean=3.21±0.64), the intrinsic motivation showed a moderate level (mean= 3.26±0.730), and the extrinsic motivation showed a moderate level (mean=3.14±0.80). The performance level also showed a moderate level (mean=3.48±.0.68). No statistical significance was detected regarding the socio-demographic factors, neither to the performance nor with motivation, except actual working hours of the participants ($p<0.03$). There was a statistically significant positive correlation between overall motivation and performance ($r=0.45$, $p<0.001$), between intrinsic motivation and performance ($r=0.446$, $p<0.001$), as well as, between extrinsic motivation and performance ($r=0.310$, $p <0.001$).

Conclusion: Physician's and dentist's performance and motivation factors showed a moderate level. Both types of motivation showed a positive correlation with the performance of the participants, however, there was no significant relation of socio-demographic variables with performance or motivation.

Keywords: Performance, motivation, extrinsic motivation, intrinsic motivation, south of Jordan, physicians, dentists.

الملخص

التحفيز وأداء الأطباء وأطباءالأسنان العاملين في جنوب الأردن

إعداد: شروق سالم الطراونة

جامعة مؤتة، 2020

الخلفية: يعكس أداء الموظفين جزءًا أساسيًا من ركائز المنظمة ، ويعتمد الأداء في القطاع الصحي على تحفيز الموظفين.

الأهداف: كان الهدف الرئيسي من الدراسة هو الكشف عن العلاقة بين التحفيز (التحفيز الخارجي والذاتي) وأداء الأطباء وأطباء الأسنان في المراكز الصحية في محافظتين في جنوب الأردن (الكرك والطفيلة). هدف آخر لهذه الدراسة يتمثل في تحديد علاقة كل من الأداء والتحفيز مع العوامل الاجتماعية والديموغرافية للمشاركين.

الطريقة: أجريت الدراسة باستخدام المسح المقطعي خلال الفترة من كانون الثاني حتى حزيران 2020 في المراكز الصحية في الكرك والطفيلة. تضمنت هذه الدراسة جميع الأطباء وأطباء الأسنان العاملين في هاتين المحافظتين. تم إجراء دراسة تجريبية قبل إجراء الدراسة الرئيسية. تم استخدام استبيان ذاتي التنظيم ذو مصداقيه لجمع البيانات، استخدم هذا الاستبيان برنامج يعتمد على مقياس ليكرت (خمسة مقاييس). كما تم إجراء إحصاءات وصفية واستنتاجية ، مثل اختبارt، الارتباط، وتحليل التباين (ANOVA)، باستخدامSPSS الإصدار رقم19،<0.05 يعتبر مستوى ذو دلالة.

النتائج : كان معدل المستجيبين للدراسة 96٪. اظهر التحفيز الكلي مستوى معتدل (mean = 3.21 ± 0.64)، أظهر التحفيز الذاتي مستوى معتدل (mean = 3.26 ± 0.730)، وأظهر التحفيز الخارجي مستوى معتدل (mean = 3.14 ± 0.80). كما أظهر الأداء مستوى معتدل (mean = 3.48 ± 0.68). لم يتم الكشف عن أي علاقة ذات دلالة إحصائية بين العوامل الاجتماعية والديموغرافية و الاداء، وكذلك التحفيز، باستثناء ساعات العمل الفعلية للمشاركين (p=0.03). وجد ارتباط إيجابي ذو دلالة إحصائية بين التحفيز الكلي و الأداء(r=0.45, p p<0.001) ،بين التحفيز الذاتي والأداء (r=0.446,p<0.001)، وكذلك بين التحفيز الخارجي والأداء (r = 0.310, p < 0.001).

الاستنتاج: اظهر الأداء والتحفيز للأطباء واطباء الاسنان مستوى معتدل. لم يكن التحفيز والأداء مرتبطا بالعوامل الاجتماعية والديموغرافية. إن تحفيز الأطباء وأطباء الأسنان بنوعيه يؤثر بشكل إيجابي على الأداء.

الكلمات المفتاحية: الأداء، التحفيز ،التحفيز الخارجي، التحفيز الذاتي، جنوب الأردن، الأطباء، أطباء الأسنان

Chapter One
Introduction

1.1Theoretical Background

The world health organization (2010) indicated that health care workers (HCWs) are an essential part of any country's health system, and effectively skilled, proficient, and motivated workers are important in the delivery of quality health care. Thus, the motivated workers are very vital in improving health outcomes. Toode, Routasalo, and Suominen (2011) stated that, the worker must be positively motivated, to respond to the growing challenges, difficulties, and demands on the healthcare system, which considered an important promotion. On the other hand, when the performance of employees at work is weakened as a result of demotivated health care workers, the output and quality of health care services will be affected, and become less efficient and less effective (Kasenga and Hurting, 2014).

Employee motivation as outlined by Robbins and Coulter (2003) is "willingness to exert high levels of effort towards organizational goals, conditioned by the ability of such effort to satisfy some of their individual needs". This suggests that the organizations have to help employees attain and get their individual needs by motivating them, while they work towards achieving the aims of the organizations. Likewise, Franco, Bennett, Kanfer, and Stubblebine (2004) revealed that when an interaction occurs between work conditions and persons in the organizational circumstances, a fit happed between these connections and the social environment that lead to outcome called motivation. There are two types of motivation (extrinsic and intrinsic powers) as classified by Nadim, Chaudhry, Kalyar, and Riaz (2012), in case of a worker who is an extrinsically motivated, he/she might perform his/her activity to attain something such as a salary, or he/she motivated by non-monetary conditions. Whereas, the employee who undertakes duties and tasks for the feeling of achievement and responsibility, is considered an intrinsically motivated employee, yet both factors influence employee's actions, attitude, and behavior.

The performance of employees reflects an essential part of the organization pillars to attain its goals. Performance as defined by Campell (1990) is "the degree to which an organization member contributes to achieving the goals of the organization". Moreover, Aguinis (2009) described that performance includes the behaviors and attitudes of employees, workers themselves, in addition to the procedures, metrics, and outcomes of the performance. WHO (2006) characterized the performance as a combination and mixture of employees being capable, available, creative, responsive, and

productive. Moreover, Oosthuizen (2001), recommended that employees must have a positive motivational opportunities to make a sustainable good performance, but, Bolman and Deal (2015) assumed that the worker withdraws, and displays negative attitudes and behaviors, such as less commitment and absenteeism, when he/she is unhappy and uncomfortable with him/her work. These behaviors reversibly impacted on worker performance, consequently, bad quality, worse productivity, and a reduced amount of efficiency in the organization. Also, Franco et al. (2004) mentioned some of the behaviors resulted from obstacles to motivation in the workplace, and the most common behaviors were noticed in health care organizations are lateness and absence, shortage of politeness to patients, and reduced process quality.

The performance and outcomes of the health sector reliant on worker motivation as affirmed by Martinez and Martineau (1998). Consequently, clear job potentials and adequate apparatus must be provided to the health worker in their workplace. And the health sector has to provide the staff continuous training, expertise, and a helpful administrator (Luoma and Crigler, 2002). As displayed by Henderson and Tulloch (2008) the outcomes of the health system will be efficient and effective by keeping health employees positively motivated, gratified and inspired, and that's what occurred in developed countries and urban regions, but health employees who working the developing countries, particularly rural areas, they are unmotivated, because they may feel most lonely and isolated, working longer hours, and the place in which they work has scarcer resources. As a result, the WHO (2006) demonstrated that there was a rising need, and more interventions have to be conducted to reinforce the health systems in developing countries to meet and achieve the millennium development goals (MDGs). But, WHO (2006) supposed that, there are main restrictions and obstacles to reaching the MDGs, for example, the absence of suitably, qualified, trained, and motivated staff. These obstacles have to be overcome to improving the retention of workforces, which is very significant for the health system performance (WHO, 2006).

Jordan is a developing country, lower middle-income rates, and insufficient natural resources. With a population of 9.5 million individuals across 12 governorates, 6.4 million of the population lives in urban regions (MOH Strategic Plan, 2013-2017). The motivation of health workforces in the ministry of health (MOH) is one of the most noticeable health sector challenges, especially rural areas. The MOH Strategic Plan (2013-2017) stated that, 2.7% of MOH physicians leave the country for many reasons, one of them is the motivational system. Furthermore, Dieleman et al. (2017) explained that the motivation system is completely different in MOH, it permitted on

qualifications, experience, and academic degree. And not on the performances of health worker.

About 38% of the country's health services are provided by the MOH through (98 comprehensive health centers, 377 primary health centers, 202 peripheral health centers, and 31 hospitals. University hospitals, Royal Medical Services (RMS), and the private sector provide 9%, 18%, and 34% of health services, respectively (MOH Strategic Plan, 2013-2017). An important point for the comprehensive and primary centers, they provide almost the same services, as basic preventive and therapeutic services, dental health services, emergency services, maternity and childhood services, and school and education health. But they differ in working hours, the comprehensive centers, part of which provides services from eight am to eight pm, while the other provides services 24 hours, whereas primary centers provide services from eight am to four pm (MOH, 2019).

In this study, the researcher focused on studying the impact of motivation on the performance of physicians (general and professionals) and dentists (general and professionals) in health centers in the southern governorates (AL-Karak and AL-Tafila) in Jordan. The current study sheds light on the extent of achievement with regard to motivation system and performance of physicians and dentists in health centers. The study addressed the relationship between motivation and performance to find out the nature of the relationship existing in the health centers, and how to give recommendations to address the negative motivation in case it existed.

This study was conducted in two southern governors (Al-Karak and Al-Tafila). Al-Karak governorate is located to the south of the capital, Amman. The center of this governorate is about 120 km from the capital, and is inhabited by more than 350.000 people, distributed over an area of 3.495 km² of various lands. This governorate is divided administratively into seven brigades. The governorate is served by a wide health care sector, which is composed of two public hospitals, two private hospitals, and 63 puplic health centers (seven comprehensive centers, 36 primary centers, 20 periphral health centers (PHCs), in addition to enormous numbers of private medical clinics and centers, includes specialty clinics, general medicine clinics, dental clinics, medical laboratories, and radiology centers (MOH, 2019).

Regarding Al-Tafila governorate, it is located to the south of the capital, Amman, the center of the governorate is about180 km from the capital, and is inhabited by more than 106.500 people, distributed over an area of 220 km² of various lands. The governorate is divided administratively into three brigades. The governorate is served by one public hospital, and 25 health centers (six comprehensive centers, 11 primary centers, eight sub-centers). A wide private

medical sector includes specialty clinics, general medicine clinics, dental clinics, medical laboratories (MOH, 2019). These two governorates (Al-Tafila, and Al-Karak) were chosen randomly from four governorates (Ma'an, Aqaba, Al-Tafila, and Al-Karak governors). Moreover, the number of doctors and dentists are more than those in Ma'an and Aqaba; therefore, the sample will be more representative.

1.2 The problem statement

The workforce working in the health sector in Jordan suffers from many challenges and difficulties, such as low salaries, work conditions, and lack of training programs; all of these factors are considered as motivation. The above-mentioned challenges and other ones affect the health workforce, and pushed many of them to emigrate to other countries to improve their conditions. Moreover, many doctors, dentists, and trained health professionals are migrating or leaving to work in the private sector. Also, many challenges and difficulties adversely affect the performance of the employees and the quality of health services provided, which is one of the most important goals of the health system in Jordan.

The ministry of health has adopted some measures to address these challenges, and attempted to maintain its workforce and improve quality, such as amending the incentive system. However, this is not enough to face many challenges, especially for the workforce in the southern governorates, which are suffering more, because the place of work has fewer resources than other health centers. Additionally, workforce feel that they are more isolated from other colleagues. Thus, this study will try to pay more attention to this problem to see if there are any types of motivation in health centers located in the southern governorates, and how these motivational factors will affect performance? And in case these factors do not exist, how this gap will be resolved, by proposing some measures to motivate the workforce in southern Jordan.

1.3 Rationales and Significance of the Study

Generally, the performance of some employees may be unsatisfactory, including those working in the health sector in the southern governorates. Therefore, this study may allow detecting the factors that may relate to insufficiencies in performance. As far as, the researcher knows few studies were conducted in health centers to investigate the medical staff and dentist's performance, and its relation to motivation, especially in the southern governorates of Jordan (most of the studies were conducted in the private sector). Also, no comprehensive studies fully investigated the health workers' motivation in the health sector in Jordan.

1.4 The study questions

This study was developed to answer the following questions:

1. What is the status of the performance of physicians and dentists working at health centers in Al-Karak and Al-Tafila governorates?
2. Is there a relation between performance and socio-demographic factors?
3. Is there a relation between motivation and social-demographic factors?
4. Is there a relationship between motivation and performance?
5. Is there a relationship between extrinsic motivation and performance?
6. Is there a relationship between intrinsic motivation and performance?
7. Which types of motivation factors have more effect on the performance?

1.5 The study objectives

1.5.1 General objective

The main objective of this study is to identify the relationship between motivation and performance of physicians and dentists in health centers in two governorates (Al-Karak and Al-Tafila) in the south of Jordan.

1.5.2 Specific objectives

1. To identify the relation between the performance of physicians and dentists and socio-demographic factors.
2. To identify the relation between the motivation of physicians and dentists and socio-demographic factors.
3. To assess the relationship between extrinsic motivation and performance of physicians and dentists.
4. To assess the relationship between intrinsic motivation and performance of physicians and dentists.
5. To identify which one of the two factors of motivation has more effect on the performance of physicians and dentists.
6. To identify the status of the performance of physicians and dentists.

1.6 The study null hypotheses:

1. There is no relationship between the performance of physicians and dentists and motivation
2. There is no relationship between the performance of physicians and dentists and extrinsic motivation
3. There is no relationship between the performance of physicians and dentists and intrinsic motivation
4. There is no relation between socio-demographic factors and the performance of physicians and dentists.
5. There is no relation between socio-demographic factors and motivation of physicians and dentists' performance.

1.7 Operational Definitions

Motivation: " a series of energizing force that originate both within and beyond an individual's self"(Herselman, 2001).

Intrinsic motivation: is defined as doing an activity for its inherent satisfaction (Ryan and Deci, 2000, a), e.g. achievement and development.

Responsibility: the degree of freedom an employee has to make their own decisions, and implement their ideas, as well as, the ability to solve their own problems. (Shanon, 2005).

Advancements: the expected or unexpected possibility of promotion, positive status, or position of the person or employee in the workplace (Shanon, 2005).

Achievement: achieving a specific success, as an example, completing a difficult task on time, making new things, and seeing positive results (Alshmemri, Shahwan, and Maude, 2017).

Extrinsic motivation: when an individual performs an action or behavior because he/ she is affected by external factors, such as rewards or punishments. (Shrestha, 2017), e.g. salary and working conditions.

Working conditions: involve the physical factors surroundings the job, and whether there are good or poor facilities. Working conditions may include the amount of work, space, temperature, tools, ventilation and safety (Alshmemri et al. ,2017)

Job Security: is the probability that the worker will keep his/her job (Alshmemriet al., 2017).

Relationship with the worker: how you feel about your relation with colleagues (Sanjeev and Surya, 2016).

Supervision: managers' ability to guide, respect, and train employees on various aspects of the job (Sanjeev and Surya, 2016).

Performance: the degree to which an organization member contributes to achieving the goals of the organization (Campbell, 1990). As an example, the staff is available, competent, productive, and responsive.

Primary health centers (PHCs): health centers that provide basic preventive and therapeutic services, dental health services, emergency services, maternity and childhood services, as well as school and education health. The working hours of these centers extend from eight am to four pm (MOH, 2019).

Comprehensive health centers (CHCs): health centers that provide basic preventive and therapeutic services, dental health services, emergency services, maternity and childhood services, and school and education health. Some of these centers provide services from eight am to eight pm, while other centers provide services for 24 hours (MOH, 2019).

General practitioner: is a medical doctor who treats chronic and acute illnesses and provides preventive care and health education to patients. A

general practitioner manages natures of illnesses that present in an undifferentiated way at an early stage of development, which may require crucial intervention. (The European definition of general practice/family medicine WONCA Europe, 2011).

Professionals (specialists): doctors who are diagnosed, treat, and prevent illness, injury, and other physical and mental impairments using specialized diagnostic, testing, physical, medical, surgical, and psychiatric techniques, through the application of the principles and measures of modern medicine. (ISCO, 2008).

Dentist: is a doctor who specializes in dentistry, the diagnosis, prevention, and treatment of diseases and conditions of the oral cavity.

Chapter Two
Literature Review

2.1 Introduction

This part of this thesis presents a discussion about knowledge and information retrieved from reviewing the numerous literature related to topics concerning motivation, including the definition, types, and theory of the motivation. In addition, this chapter provides knowledge and information regarding performance issues, including the definition, types of performance, and the relationship between performance and motivation, particularly among individuals working in the health care sector in the world and in Jordan. The purpose of the literature review is to establish the conceptual framework, through re-packaging and analyzing this review, to ascertain variables that were used as a foundation for this study and had been investigated in this study. This chapter was arranged into seven sections.

2.2 Definitions of Motivation:

Armstrong (2001) argued that, there is an expansively used to the concept of motivation in the literature, and researchers have multiple and various viewpoints concerning this subject. Elliot and Covington (2001) define Motivation as "a theoretical concept used to explain behavior, it represents the reasons for people's actions". And, motivation clarified by Chowdhury (2006), as to progress moving, encouraging attitude, and supporting aims - directed behavior.

Many scholars describe motivation as a force such as Aladwan, Bhanugopan, and Fish (2013) said that motivation is the whole set of forces that directed people to behave and work in very precise and specific ways. In addition, Okorley and Boohene (2012) outline motivation as the powerful energy that drives, moves, and stimulus persons towards achieving their aims and objectives in a positive manner. That description too was described by Robbins and Coulter (2003), who define motivation as 'the procedures that account for a person's power, persistence of effort, and direction toward achieving goal". It may be noted that this definition (the definition of Robbins and Coulter) was mentioned in another way, but it is more detailed and clearer, so as detailed by Greenberg and Barron (2000), who said that the motivation can be divided into three important and key parts, where the first part is; that simulation deals with drive, energy and strength lies behind the reason for the persons action and doing remarkable work and being successful, in addition to their eagerness to leave a success stamp of that work. As for, the second part, it refers to the choice and methods that people take for their

behavior, while the third part deals with the possibility of preserving motivated behavior and extending its duration to to continue trying achieve the goals.

The term motivation was identified by researchers based on certain dimensions. Some of these dimensions related to the kinds of motivation and the other related to the measurements of performance. For example, motivation is kind an of powers, originating together within and outside the person, that start activity and determine its forms (Raymour and Timothy ،1991). Which means in another language as mentioned by Cole (1997), motivation as a way or path in which persons select between varied, alternative and diverse forms of behavior to attain personal aims. The aims wanted and desired by individuals can be physical, such as a promotion or monetary reward, or intangible, such as achievements and self-esteem.

Moreover, concentration on physical view was by Alian (2000) as cited by Al-hawary and Banat (2017), to express motivation concept, in which Alian said the persons are driven by a group of incentive to select a suitable action that achieves their desires and goals. Also, Luthans (1992) adopted the external and physical perspective by indicated that, the motivation is reflect the emotional dimension of the workers, working conditions, and the nature of the environment in the organization.Whereas Smith (2002) adopted in his definition the inner perception of motivation, when he said when individuals participate in decision-making, when they are able to carry out and execute actions that have a direct positive impact on their actions, and when they are given chances, that will enable them to demonstrate their ability to provide worthy ideas and skills, collectively, these factors will motivate persons. Lastly, Mowday (1982) linked the definition of motivation to performance when he said that, motivation considered as a driving force for organizational performance and attachment to the organization, that represented by adhering to the values of the organization, an intent to remain in it, and a readiness to exert efforts.

Therefore, from the aforementioned information, definitions of motivation have been constructed through time. But the definition adopted by the researcher, and which used in this study is the one provided by Herselman (2001) who explains the motivation as "a series of energizing force that originates both within and beyond a person's self".

2.3 Types of Motivation

Motivation is a multidimensional construct as defined by Herselman (2001) who explained the motivation as "a series of energizing force that originates both within and beyond a person's self". In the sense that, this definition has two remarkable features, firstly, motivation is identified as an internal energizing power that induces action in workers, and the second an external force that drives employees to achieve the tasks and missions. That is, it clarifies what motivated workers to achieve the work, how hard they will put effort to do so, and when the worker will stop (Meyer, Becker, and Vandenberghe, 2004). Thus, these two features are called intrinsic and extrinsic motivation as generally classified by Afful-Broni (2012). This statement is reinforced by Chaudhary (2012), who affirmed that there are two main categories of motivation which could be marked as intrinsic and extrinsic motivation. Cerasoli, Nicklin, and Ford (2014) confirmed the need to distinguish motivation in these two ways (extrinsic and intrinsic) for practical goals, in order to determine the strength of the motivation, determine the direction and guiding of the motivation, and the perseverance of the motivation in order to improve performance.

Various assumptions discussed the association between intrinsic and extrinsic motivation. First theory supposed that the two types of motivation must work together and not independently to encourage employees. That is, the motivation to perform should be greater in a situation in which both intrinsic and extrinsic motives are provoked. Thus, it was thought necessary to make jobs interesting and challenging, which means, financially rewarding, as well as, intrinsically satisfying. Secondly assumptions, it was supposed that the two kinds of motivation were independent of each other, the existence of one would not command either the existence or absence of the other. For example, Some individuals earn a good salary, but dislike their works, otherwise, others enjoy and appreciate their works vastly, even though the pay is low (Hwara, 2009). Greenberg and Baron (2000) suggested that, the two variables of motivation contained a basic and primary motive power to be initiators of employees' own behavior. As will be discussed in detail as follows.

2.3.1 Intrinsic Motivation

Ryan and Deci (2000, a) defined intrinsic motivation as "the doing of an activity for its inherent satisfaction", he said that individuals represent the natural disposition in them to achieve and learn something, when they perform the activity and actions for their inherent gratifications, rather than for some discrete outcome, in addition, Ryan and Deci (2000, b) indicated that, when the employees are intrinsically motivated, this means to execute a task because it is inherently enjoyable or interesting as an achievement. Amabile (1993) discussed the intrinsic motivation definition before Ryan and Deci, by outlining intrinsic motivation as persons are intrinsically motivated, when they look for enjoyment, satisfaction of curiosity, interest, or personal challenge of the work and self-expression. In addition, this definition presented more meticulously by Chaudhary (2012), as he said that the internally motivated person is engaging in an activity for its own purpose, for its own interest and benefit, or for the preference and satisfaction derived from capability. Employees who intrinsically motivated like to have considerable freedom to make decisions, an opportunity for advancement, and freedom to express creativity.etc. However, external rewards such as money, praise are not the key reason to involve in activities, the task itself is the core source of motivation since it provides challenges, opportunities for personal growth and achievement to the employees (Owoyele, 2017).

On the other hand, several authors (Koys, 2001; Heskett, 1997; and Harter, 2002) as cited by Munisamy (2013) debated that, one of the significant factors that create gratification among workers is the motivators to satisfying individual's desires for meaning and personal growth and includes advancement ,the work itself, achievement, responsibility and a recognition. McClelland and Burnham (1994) described the intrinsic motivators as the natural, internal experiences that go along with the behavior. Intrinsic motivation is the force source that is important to the active nature of the human. Hwara (2009), argued that, such motivation arises spontaneously from internal tendencies and can motivate behavior even without the support of extrinsic motivators or environmental controls.

There are many factors of intrinsic motivation discussed in many motivation theories that will be mentioned later, consequently, the definition of intrinsic motivation in various of the previous studies is related to one or more than a factor. For example, Chaudhary (2012) said that intrinsically motivated activities are the one that is determined by a person's wants for feeling competent, and George and Sabapathy (2011) shown that, feelings of success, capability and achievement are examples of intrinsic motivators which defined by Alshmemri et al. (2017) as achieving a specific success, for example,

completing a difficult task on time, getting something new, or seeing positive results of one's work. Therefore work motivation, according to Franco et al. (2004) occurs when there is an association between individual and organizational aims. When accomplishment of organizational aims is connected with personally desired efforts, such as a sense of achievement, and when employees feel the sense of achievement in the work, this will significantly influence job satisfaction and considered a positive experience for most employees (Hur, 2017). Consequently, this impacts positively employee retention and organizational commitment as affirmed by Weisberg and Dent (2016).

In addition to achievement, responsibility considered one of the most important factors for intrinsic motivation, as Jefferson (2019) said that to motivate employees intensely, the manager has to expand responsibilities for them, this induces a feeling of fulfillment, and influences job gratification and a sense of control. Responsibility is defined by Shanon (2005) "the degree of freedom an employee has to make their own decisions and implement their own ideas", and Jefferson (2019) affirmed this definition given by Shanon as he said that, what encourages workers to carry out their work duties freedom in efficiently and effectively way, when they have the control and confidence to perform their job without having to seek permission from managers. Responsibility has many features including self-scheduling, ability to connect with clients freely, be free will to get the tools essential to complete the work, and visibility amongst clients a recognizable member in a process (Herzberg et al., 1959) as cited by Jefferson (2019).

Besides these factors, advancement is intrinsic motivation, for what Shanon (2005) recognized it as the expected or unexpected possibility of promotion, positive status, or position of the person or employee in the workplace. Stones and Freeman (1992) said that, advancement gives a picture of upcoming opportunities in languages of promotion, is a motivating factor for performance and growth of skills, and Wilson (2015) stated that, to prepare the worker for career advancement, and the worker receives benefits from the knowledge and skills, the organization have to incorporate training and development program in an actual way, on the other hand, as Mwanje (2010) cited in his study, that the Nomura Research Institute (2005) reported that negative impact on confidence, job satisfaction and the performance may occur if employee's opportunities for advancement are not met.

2.3.2 Extrinsic motivation

Extrinsic motivation refers to the performance of an activity in order to achieve some separable outcome as mentioned by Ryan and Deci (2000, a). Whereas Coetsee (2002) indicated that, extrinsic motivation would be external factors as salary, benefits, relationships, working conditions, safety, and security, that stimulate the individual to do something. In addition, Herzberg et al. (1959) as cited by Jefferson (2019) postulated that, the supervision, personal life, salary, job security, interpersonal relationships, and working conditions are considered hygiene factors (extrinsic motivators) that influence worker's job performance and satisfaction. Moreover, Herzberg, Mausner, and Snydermann (1959) as cited by (Jefferson, 2019) expected that, an absence of any factor hygiene factors could increase employee disappointment, although these factors are not satisfier, and Giancola (2014) supported this idea when he said that, extrinsic motivation is not related to the satisfaction the worker gets from execution the task itself, but from the external outcomes of the task such as incentives or financial rewards.

George and Sabapathy (2011) Clarified that, extrinsic motivation is associated to 'tangible' rewards, as well as Mohsan, Nawaz, Khan, Shaukat and Aslam (2004) added to that, workers who are externally motivated, perform tasks by some reward, promotion praise, and pay, but they may don't like the tasks. Furthermore, Chaudhary (2012) gave more clarity to this belief when he agreed that, monetary incentives and any benefits that are linked to action, such as increased salary and extra time bonus and non-monetary incentives like promotions and job security, considered suitable tools to inspire individuals to perform the job. For example, Alshmemri et al. (2017) defined Job security is the probability that a person will keep his/her work, and it is considered one of the most crucial and important factors for driving employee motivation and improve the performance.

One of the most important extrinsic factors is working environment, that defined by Kohun (1992) as cited by Bushiri (2014) "an environment comprises the whole of power and energy, actions and other influential factors that are currently and, or potentially contending with the employee's activities and performance". In detail Opperman (2002) outlines the working environment is a combination of the technical environment (working conditions), the human environment, and the organizational environment. The working environment refers to equipment, tools, physical element, and another, technological infrastructure that permit the employee to perform their own tasks and activities, as for example the amount of work, temperature, space, ventilation, tools, safety and the amount of working. To clarify the relationship with supervision and its importance as a motivational factor, Owoyele (2017)

clarified that, the employee wants to have a sense of belonging, have taken part and input into decisions that affect them, and feel important and respected, this achieved by good leadership relations and good communication with supervisors. Consequently, this was recognized as an important factor in the promotion of worker motivation.

2.4 Theory of Motivation

There are many theories of motivation. These theories trying to clarify why workforces behave the way they do. These theories trying to designate the emergence of motivation, its direction, strength, and duration of certain behavior and its relationship with motivators. One of these theories is " Herzberg's two-factor theory", in which Herzberg determined two groups of factors in outlining employees working attitudes and level of performance, named motivation & hygiene factors (Robbins and Coulter, 2003). Figures (2.1) showed these factors (motivation & hygiene factors) and relation with satisfaction:

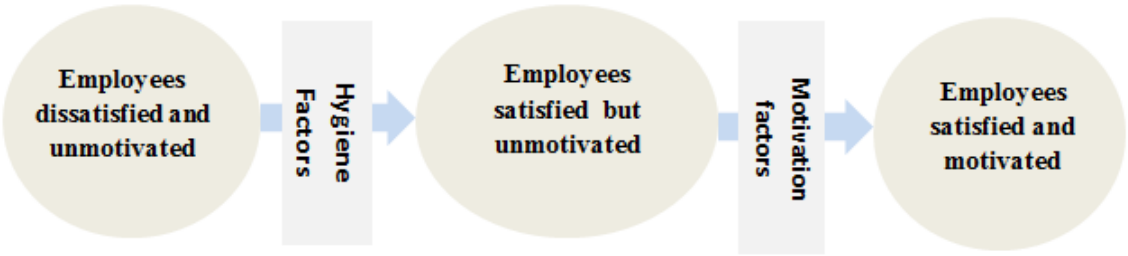


Figure (2.1)
Two-Factor Theory Of Fredrick Herzburg, (Robbins and Coulter, 2003).

As an example of some hygiene factors (extrinsic factors) were: supervision, job security, working conditions, salary, personal life, and interpersonal relations, and an example of motivating factors (intrinsic factors): achievement, responsibility, recognition, and advancement. (Pardee, 1990). Robbins and Coulter (2003) explained the action of the above factors, as when higher-level needs (intrinsic elements) supplied, the employees will be motivated, while realizing and meeting the lower-level requirements (extrinsic elements), don't motivate employees to the highest power, but would only avert them from being dissatisfied. Moreover, in this theory, the employees have to be intrinsically and extrinsically motivated. The motivating factors are attached to each other, so the presence of extrinsic factors will only remove employees' work dissatisfaction, while an intrinsic factor will nurture employees' inner growth and development which leads to greater productivity and performance (Robbins and Coulter, 2003).

Another theory is a Goal-setting theory, which is considered as one of the most modern theories of motivation. The goal-setting theory was developed by Locke and Latham (2002). This theory stated that, an employee will achieve the aims faster and accurately, when the aims are specific and precisely convincing. Locke and Latham (2002) clarified that, when an employee is committed to his/her goal, when the attainment of a goal is important for him/her, and he believes that he is able to achieve it, the impression of goals on performance will be better, moreover, when the goals are difficult, it works as energizing function, so it will lead to more effort than easy goals and may enhance performance These goals have been recently directed by Grant (2012), who described the goal-setting criteria as SMART criteria in which goals are: specific, measurable, attainable/achievable, relevant, and time-bound.

2.5 Performance

Well known fact that the performance considered as the main perception inside any work and organization. A diversity of clarifications was attributed to the concept of the performance. Performance as defined by Campell (1990) is "the degree to which an organization member contributes to achieving the goals of the organization". Moreover, performance as described by, Sabir, Iqbal, Rehman, Shahand, and Yameen (2012) is a multi-factor intended to attain outcomes, and has a major linking with planned objectives of the organization. Furthermore, Thao and Hwang (2015) clarified that the performance of worker to be successful, needs a combination of tasks performed by individuals, and outcomes measured by an administrator with pre-defined adequate standards, in addition to the available resources. In addition, Aguinis (2009), described that performance includes the behaviors of employees themselves, beside the outcomes of an employee's behavior.

Generally, the performance includes task and contextual performance. Task performance refers to "a person's proficiency with which he or she performs activities which contribute to the organization's technical core". While the contextual performance refers to "activities which do not contribute to the technical core, but which support the organizational, social, and psychological environment in which organizational goals are pursued" (Borman and Motowidlo, 1993). Performance is associated with many factor a quality, quantity of the output, the efficiency and effectiveness of work completed, presence or attendance on the job, and timeliness of output (Mathis & Jackson, 2009).

Employee performance is affected by many factors as described by Stewart (2010), for example, norms and values of organizational culture, these norms are hidden but have a great effect on the persons and their performance,

as well as performance is the combination of employees being available (retained and present), competent, productive and responsive (WHO, 2006). Besides these factors, Shahzadi, Javed, Pirzada, Nasreen, and Khanam (2014) mentioned that, worker performance involves quantity and quality of output, existence at work, and timeliness of output. In detailed, Robbins and Coulter (2003) distinguished that, measurement of the performance done by specific traits as effectiveness, quality, efficiency, creativity, innovation, cohesiveness, flexibility, commitments, customer relations, satisfaction, communication patterns, and worker efforts towards the goals of an organization.

2.6 Impact of Motivation on Performance and Related Studies

Mitchell (1982) described the formula of performance as cited by Imran (2017) as the following: Performance= ability *understanding of the task * motivation *work environment that measured the relevance and importance of motivation in performance. This means there is an important relation and connection between motivation and performance as clarified by Afful-Broni, 2012), if the motivation factors present in the work, the performance will get better, the quality of work will be improved, on the other hand, absence of motivation factor lead to losing the concern on work, that represented by absenteeism, the worker is not available, consequently, lead to the poor performance of an organization as a whole. In addition, Armstrong (2001) stated that performance is based on the level of efforts and capabilities, motivated staff outcome will be improved by teamwork and the extent to which there is a culture of improvement. On the other hand, Hughes, Ginnett, and Curphy (2002) stated that, difficulties of performance can be recognized to a shortage or lack of motivation, unclear expectations, insufficient skills, and resource shortages.

Audio-Adjei, Emmanuel, and Forster (2016) from their study in Ghana found motivation is a chief contributing factor to influence the performance of employees. An example of extrinsic motivation is job security which was viewed by the population in the study applied by Jimenez and Didona (2017) as it has a major relation with performance and the more the worker's sense of protection against losing their jobs, the tendency is to perform well in their work. Similarly, a study done by Mangkunegara and Augustine (2016) on physicians' performance, they have found that the training has no related to physicians' performance but work environment and other extrinsic motivation have a very influence.

In addition, in a study done in Pacific and Asian countries, Henderson and Tulloch (2008) found that, financial incentives that target to increase the number of physicians in rural areas, are more probable to be valued and

appreciated by physicians, and the incentives intended to attract and retain health employees more other factors. On the other hand, Orasa (2014) found from his study that, the majority of the of workers was unmotivated, and the performance negatively affected, because a major extrinsic motivating factor as salaries and compensation payments are not enough.While the previous study focused on financial motivation, a study done by Lambrou, Kontodimopoulos, and Niakas (2010) among medical and nursing staff, they have displayed that performance was influenced by both financial and non-financial incentives, the main motivating factors were appreciation by managers and stable job/income and training. But the main discouraging factors hard working conditions. Conversely, Dobre (2013) focused on the intrinsic motivation, his study revealed that, personal growth, need for achievement, and self-actualization have a positive impact the performance.

Regarding Jordan, a study applied by Diab (2015) in the Jordanian ministry of health, has found that there is an agreement about motivation system among staff, they agree that the motivation system attained its aims, and improved the employee's performance. Correspondingly, Al-Hawary and Banat (2017) found that nurses in the private hospital also agree with the effect of extrinsic non-monetary motivations on the performance, for example work environment. Moreover, in a study conducted by Dieleman et al. (2017) in Jordan, there is a relation between performance and motivation of health worker. In addition, a study performed by Franco et al. (2004) on the determinants of health worker motivation in Jordan, distribution of tasks among employees, and a clear job description may achieve the quality of work. Similarly, Dahkoul (2018) study revealed that training has a good effect on employee performance because it increasing the chance of advancement.

2.7 Conceptual Framework

Conceptual framework as clarified by Imenda (2014), is a conclusive result of carrying together a number of related concepts to define or estimate a given event or give a wider understanding of the study problem of concern; it shows a better map of probable relationships. Therefore, a conceptual framework is a joined way of seeing the problem (Liehr and Smith, 1999).

A review of the literature was performed to identify a framework and construct it, which aids to classify key concepts, draw relationships, and highlight meaningful interactions between the concepts that have emerged from the literature. The following conceptual framework was developed to guide the study (Figure 2.2).

It is designed around the concepts of motivation and performance. Based on the literature review, the researcher identified the motivation variables, such

as intrinsic motivation factors, for example achievement and advancement, etc. And extrinsic motivation factors like relationship with supervisor and work conditions, etc. The researcher would also like to investigate whether these variables impact the performances of physicians and dentists who work in health centers in the south of Jordan (Al-Karak and Al- Tafila governorates).

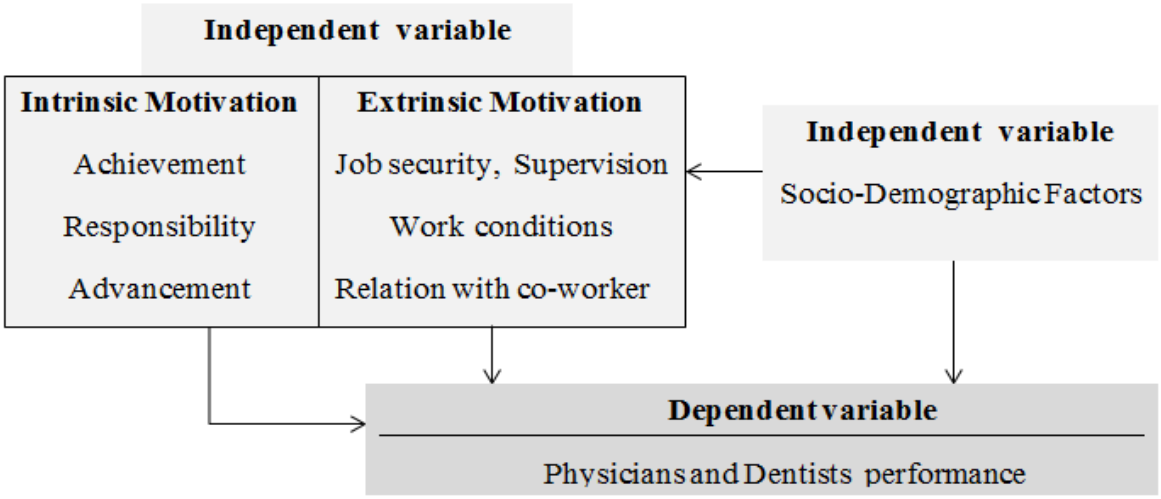


Figure (2.2)

Conceptual framework for studying motivation and performance of physicians and dentists working at HCCS at Al-Karak & Al-Tafilah governorate during 2020, (researcher design, based on the literature review).

Chapter Three
Methodology

3.1 Study Design

A cross-sectional study was conducted to study the relationship between motivation and performance of dentists and physicians working at health centers in two governorates (Al-Karak and Al-Tafila) in southern Jordan.

3.2 Study Setting

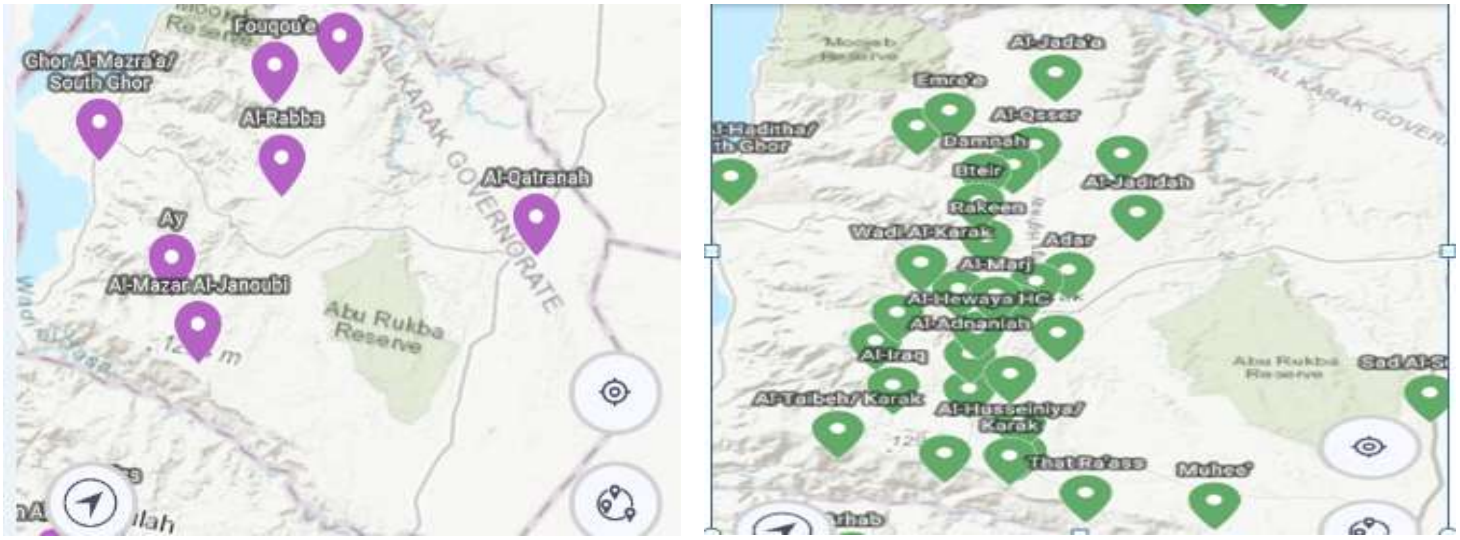
The study was carried out in health centers located in two governorates (Al-Karak and Al-Tafila) in the south of Jordan. These health centers consist of seven (7) comprehensive health centers (CHCs) and 36 primary health centers (PHCs) in Al-Karak governorate. While in Al-Tafila governorate there is six (6) comprehensive health centers (CHCs), and 11 primary health centers (PHCs). The names of all these centers are declared in the table (3.1).

Table No (3.1)
Comprehensive health centers and primary health centers in Al-Karak and Al-Tafila governorates. 2020

Governorate	Comprehensive Health Centers (CHCs)	Primary Health Centers (PHCs)
Al-Karak	Al-Karak Al-Mazar Al-Janoubi Al-Qatranah Ay Health center Fouqou'e AL- Rabba Ghor Al-Mazra'a/ South Ghor	Al-Yarout, Joza, Areeha, Muhee', Al-Husseiniya/ Karak, Talal, Emre'e, Mu'aab, Majra, That Ra'ass, Mou'ta, Adar, Al-Taibeh/ Karak, Al-Qsser, Al-Marj, Al-Samakiah, Al-Jada'a, Al-Thnayah, Al-Ghweir, Rakeen, Al-Iraq, Al-Adnaniah, Kuthraba, Al-Jadidah, Manshiat Abu Hammour, Al-Shahaibeh, Bteir, Damnah, Sarfa, Wadi Al-Karak, Soul, Mrawed, Al-Hewaya , Ghor Al-Haditha/ South Ghor, Ghor Al-Safi(Saleha bent Asem/ South Ghor) , Al-Ma'amourah/ South Ghor.
Al-Tafila	Al-Tafilah, AlQadissiah Al-Hassa Bassira Al-Eiss Ein Al-Baidah	Al-Tafilah Al-Awali, Ayma, Sanfahah, Ghrandal, Al-Jarf, Abu Banna, Arhab, Arweem, Al-Mansourah, Wadi Zaid, Jaber Al-ansari .

***Source (MOH, 2019)**

The distribution of health centers (comprehensive and primary health centers) according to the area of location in Al- Karak & Al-Tafila, shown in figure (3.1) (3.2) respectively:



Figures (3.1)
The distribution of health centers (comprehensive and primary health centers) according to the area of location in al- Karak, (MOH, 2019).

Figures (3.2)
The distribution of health centers (comprehensive and primary health centers) according to the area of location in Al-Tafila, (MOH, 2019).

3.3 Study Population

The targeted population for this study included two categories of participants. The first category was physicians (general practitioner and specialists), and the second category was dentists (general practitioner and specialists), who work in all those 60 health centers in Al -Karak and Al-Tafila governorates, mentioned above (the study setting). The total number of physicians and dentists working at all those 60 chosen health centers at Al-Karak and Al-Tafila according to MOH was (177) individuals (MOH, 2019), and they are distributed as shown in table 3.2.

Table No (3.2)
Study population distribution at Al -Karak and Al -Tafila governorates during 2020.

	Physicians				Dentists			
	General practitioner		Specialists		General practitioner		Specialists	
Governorate	N	Percent %	N	Percent %	N	Percent %	N	Percent %
Karak	73	41.2	7	3.9	34	19.2	6	3.4
Tafila	31	17.5	4	2.3	18	10.2	4	2.3
Total	104	58.7	11	6.2	52	29.4	10	5.7

N=177

***Source (MOH, 2019)**

3.3.1 Eligibility Criteria

3.3.1.1 Inclusion Criteria

Physicians and dentists work with a fixed permanent contract, and have at least one year of work experience during the data collection period.

3.3.1.2 Exclusion criteria

Physicians and dentists who are absent from work due to long sick leave, or take leave without pay, and physicians and dentists who work temporarily as compensation for absentee doctors, and who are working with a temporary contract.

3.4 Sampling Methods and Sample Size Calculation

The researcher considered the total population of the study to overcome some obstacles. Therefore, all the physicians and dentists who work at the chosen health centers (177 individuals) were enrolled in this study. Number of physicians and dentists were obtained from Al-Karak health directorate and Al-Tafila health directorate via the website of the Jordanian ministry of health, and

by direct asking of employee's affairs department in both directorates of health (AL-Karak and Al-Tafila governors).

3.5 Variables of the Study

Independent Variables, the first one is socio-demographic variables mentioned in section 3.6.1, the second one is motivation in general which was captured by asking questions about two parts: extrinsic motivation, and questions about intrinsic motivation with these domains which are shown in table 3.7, while the dependent variable of the study is represented by the performance of employees.

Table No (3.3)
Distribution of domain according to number of items

Motivation Type	Domains	Number of Items
Intrinsic Motivation	Responsibility	4
	Achievement	4
	Advancement	4
Extrinsic Motivation	Work Conditions	4
	Job Security	1
	Supervision	3
	Relation With Co-Worker	2
Total		22

3.6 Period and Time of the Study

This study was conducted during the period from first January up to 4 Jun 2020. Three months were spent in each governorate.

3.7 Collection Tools and Methods

3.7.1 Data Collection Instruments

A self-administered questionnaire with 43 close-ended questions of pre-determined answers were used to obtain data on motivation and performances from physicians and dentists, who give consent to participate voluntarily in this study. The questionnaire composed of two main parts, motivation part and performance part. Regarding the motivation part, it was constructed through the combination of items from reliable and validated three questionnaires (Buabeng, 2016; Cooper, 2001; Munisamy, 2013). In detail,

the motivation part consists of two-section, intrinsic motivation (12 items), and extrinsic motivation (10 items). Intrinsic motivation articulated about three domains, responsibility, achievement, and advancement. The four (4) responsibility items were developed from the previous Munisamy study questionnaire (Munisamy, 2013). These items are concerned with the manner in which the participants enjoy a certain level of autonomy in doing their duties, bearing all responsibilities related to participants' jobs, the willingness of participants to accept their mistakes, and sharing responsibility with others.

The second domain is about achievement, in which its four (4) items were formulated from the Buabeng study questionnaire (Buabeng, 2016). Achievement domain discussed if achievement enhances performance, recognition of achievements, the importance of making influence, and the importance of comparison with colleagues. The third domain of intrinsic motivation is advancement, four (4) advancement items, framed from the Cooper study questionnaire (Cooper, 2001). The advancement items discussed participant's satisfaction with a chance for advancement, training opportunities, avalibality of strategies to remove obstacles to career advancement, and readiness of participants to read and participation in scientific publications.

The second part of the motivation is extrinsic motivation, which consisted of ten (10) items developed from the Munisamy study questionnaire (Munisamy, 2013). Extrinsic motivation part includes four (4) domains, the work conditions domain with four (4) items discussed the availability of the tools and resources, participant's satisfaction with working hours and distribution of work obligations, and availability of safe and comfortable environment. The second domain consisted of one item about job security related to the feeling of participants with job security in their work. Supervision domain includes three items about receiving the right amount of support and guidance, participation in decision-making, and the nature of the relationships with the manager. Lastly, the domain of relationships with co-workers includes two (2) items about whether the participants receive respect from their colleagues, and if cooperating with other employees will reduce the workload.

As for the performance part of the questionnaire, it was constructed by the researcher based on a review of previous literature and reviewing job performance appraisal for doctors and dentists. This part consisted of 21 items on the employee’s performance from the point of view of the employees. The employee’s performance items are a mix between employee's behavior and output of performance. The first four items discussed employee commitment, and the extent of compliance with the organization's policies and legislation,

commitment to the job description and general safety rules, as well as the acceptance of guidance from the supervisor.

Some items discussed topic related to absenteeism, working hours, responsiveness, availability, and its relationship with the completion of participant's tasks effectively. Many items discussed coping with stress and difficult situations, such as the willingness of employees to exert more effort, readiness to provide services outside the health center, if the participants have the full skills and the ability to deal with the emergency cases, and participants circumstances (family and personal) and their effect on the performance. Finally, some items discussed the output of performance; for example, doing the tasks accurately and perfectly (effectively) by the participants, if the participants achieve higher than the targets set by the health organization, whether the exposure to working pressure affects the quality of the participant's performance, and if the number of patients treated by participants is considered an indicator for their performance.

Each item in both parts (motivation and performance) received a response of five (5) option (Likert scale) ranging from one to five, (strongly disagree =1, disagree = 2, fairly agree = 3, agree = 4, strongly agree = 5). In addition to the previous two-part (motivation and performance), the questionnaire included a part related to socio-demographic data. This section consisted of 12 questions concerning: name of the governorate, workplace, gender, age, marital status, profession, graduation country, experience in the ministry of health, duration of work in the current position, administrative position, salary, actual working hours per day and working days per week. After constructing the questionnaire, a pilot study was conducted to assess the consistency of the questionnaire, and tested by experts for clarity, completeness and accuracy (reliability and validity).

The researcher conducted a pilot study to assess applicability and convenience, through a questionnaire distributed to 18 (10% of the total study sample) participants who were randomly chosen from outside the study sample, which is Al-Karak government hospital. The purpose of the pilot study is to measure the reliability and validity of the study. Reliability expresses the consistency and stability of the research method. The Cronbach's alpha coefficient test was used to measure and materialize reliability of a questionnaire study and the results were as shown in table (3.3).

Table (3.4)
The Cronbach alpha reliability value of questionnaire items used in this study

Item Numbers	Dimensions	Number	Cronbach Alpha Value
1-4	Responsibility	4	0.644
5-8	Achievement	4	0.692
9-12	Advancement	4	0.938
13-16	Work Condition	4	0.734
18-20	Supervision	3	0.915
21-22	Relation With Coworker	2	0.984
1-22	**Independent variable (Motivation)**	**22**	**0.926**
23-43	**Dependent Variable (Performance)**	**21**	**0.918**
1-43	**Questioners at all**	**43**	**0.944**

The value of Cronbach's alpha coefficient is high for each domain, rang from (0.644-.984) for the motivation part with totality 0.926, the value of Cronbach's alpha coefficient related to the performance part was 0.918, that means, the total Cronbach's alpha coefficients of the questionnaire are high (0. 944) and the reliability is attained.

Five Independent public health and administrative experts in Jordan with extensive experience in health surveys were asked to evaluate the Arabic language version of the questionnaire (appendix III). After that, they completed content validity index (CVI) sheet. To evaluate each group of questions were used: non relevant (1), relevant but needs slight modification (2), somewhat (3), and very relevant (4), with total acceptable CVI = 86%. Comments from patients in the pilot study were considered for an improved final version of the questionnaire at the end of the data collection final version of the Arabic questionnaire(appendix II) was translated to English language (appendix I). For data entry and analysis using SPSS Version 19.0.

3.7.2 Distribution of Questionnaires and Collection

A total of 177 of Self-administered questionnaires were given out personally by the researcher to the participants (physicians and dentists) in the chosen health centers. Permission was taken from the A-l Karak health director and Al-Tafila health director to carry out the study in health centers. Additionally, the researcher obtains permission from the head of the health centers before distributing the questionnaires to the physicians and dentists. A short explanation of the procedure was discussed. The employees were given

enough time to complete the questionnaires, the questionnaires were voluntary, and the participant anonymity and confidentiality was assured before participating in the study. Part of the questionnaire was distributed to the participants, and the researcher waiting period of time until the questionnaires were filled out, and then the questionnaires were collected on the same day, and this is what happened in Al-Tafila Governorate. While the other part of the questionnaire was distributed to the participants, and then collected over a period of time, more than one day, and this is what happened with most of the questionnaires distributed in Al-Karak Governorate.

170 questionnaires were collected from the participants with a response rate of 96%, but the number of questionnaires that were analyzed was 161 questionnaires since five (5) of the questionnaires were not completed (missing data), and four (4) questionnaires did not meet the inclusion criteria (less than one year of work experience).

3.8 Ethical Consideration

3.8.1 Ethical approval

Ethical approval was obtained from Mutah university ethical committee. Also, informed consent was obtained from each participant in the study. Permission was taken from Al-Karak health director and Al-Tafila health director (Appendix, IV) to carry out the study in health centers, in addition, permission was taken from the heads of the health centers in both governorates (Al-Karak, and Al-Tafila) to facilitate the study application and distribution of the questionnaires.

3.8.2 Confidentiality

The names of the participants are not mentioned either, in the questionnaire, nor during entering the data.

3.9 Data Analysis

The questionnaire was completed and analyzed using SPSS software version 19 (IBM, 2010), and a level of significance will be set at < 0.05. After collecting and entering data, it was checked to ensure the data is complete and error-free. Outcome measures were based on a Likert scale coding (strongly agree, agree, fairly agree, disagree, and strongly disagree).

The dependent variables which are the response of the participants was measured by a Likert scale ranging from one to five, (strongly disagree =1, disagree = 2, fairly agree = 3, agree = 4, strongly agree = 5), while the independent variables that included socio-demographic variables of the study population were described as a frequency (number) and percentage (%), and the second independent variable (motivation) was measured by a Likert scale

ranging from one to five. Data were presented as mean ± SD. The t-test was used for the comparison of two independent groups with continuous variables. More than two group means were compared by using analysis of variance (ANOVA) with post hoc. Pearson correlation was used to detect the correlation relationship between two continuous variables. The significance level used as < 0.05.

Chapter Four
The Study Results

4.1 Introduction

This study was designed to detect the relationship between motivation and the performance of physicians and dentists working at health centers in two governorates in the south of Jordan (Al-Karak and Al-Tafilah governorates), and to identify the relationship between socio-demographic characteristics of respondents with both motivation and performance. A total of 177 questionnaires were distributed during the period from first January up to 4 Jun, 2020 (6 months).

A sample of one hundred and seventy questionnaires was returned, which gives a response rate of 96%. After that, data were inserted using SPSS software, cleaning and checking of the data were carried out. Therefore a total of 161 questionnaires were found in complete status; in other words, 161 (95%) dentists and physician questionnaires had the eligible characteristics to be enrolled in the study. This chapter covers the data analysis collected from the returned questionnaires, showing the findings and results of analysis through graphs, tabular summaries and interpretations of their implication.

4.2 Background of Participants

4.2.1 General Socio-demographic Characteristics of Participants

The socio-demographic characteristics of participants are organized in the following areas: governorate, gender, age, and marital status. Table 4.1 shows the distribution of study respondents according to the socio-demographic characteristics:

Table (4.1)
Distribution of Socio-demographic characteristics of physicians and dentists working at HCCs in Al-Karak and Al-Tafilah governorates during 2020.

Socio-demographic data		Frequency	Percent %
Gender	Male	101	62.7
	Female	60	37.3
Age (years)	≤30	47	29.2
	31 - 40	86	53.4
	41 - 50	22	13.7
	≥51	6	3.7
Marital Status	Single	64	39.8
	Married	90	55.9
	Divorced	7	4.3
Governorate	Al-Karak	110	68.3
	Al-Tafila	51	31.7

Regarding the age of respondents, the age of respondents in this study ranged between 27-55 years, with a mean and standard deviation (SD) 35.0 ± 6.2 years, as the age of participants was categorized according to a decade, the highest rate (53.4%) was related to those group aging (31-40) years, followed by those their age was less than 30 years old (29.2%),while those physicians and dentists aging more than 50 years constituted the lowest rate (3.7%) in this study as shown in table 4.1. This study found that, almost two-thirds of the respondents 101 (62.7%) were male, while only 60 respondents (37.3%) were female.

In respect to the marital status, this study categorized the marital status into four groups (single, married, divorced, and widower). The higher perecentof participants were married (55.9%), the second category was the single group constituted 39.8 %, only seven (4.3%) respondents were reported as divorced. In respect to governorate in which the participant work, more than two-thirds (68.3%) of the respondents' physicians and dentists work in Al-Karak governorate, and the remaining participants (31.7%) working in Al-Tafilah governorate.

4.2.2 Work Characteristics of the Participants

Table 4.2 consisted of items about work characteristics of the participants, namely: The workplace in which respondents work, the country of graduation, duration of experience in the ministry of health, duration of work in the current center, his/her administrative position in the HCCs, monthly income, the number of working days per week, and the number of actual working hours per day.

Table No (4.2)
Work characteristics of the participants working at HCCs in Al-Karak and Al-Tafilah Governorates during 2020

Work characteristics of the participants		Frequency	%
Categories of Respondents	Dentists (general)	47	29.2
	Dentist (specialists)	7	4.3
	Physicians (general)	97	60.2
	Physicians (specialists)	10	6.3
Workplace	Primary health center	96	59.6
	Comprehensive health center (CHC)	65	40.4
Graduation Country	Jordan	74	46.0
	Other Country	87	54.0
Experience in the ministry of health (years)	≤ 5	80	49.7
	6-10	30	18.6
	11-15	35	21.7
	≥ 16	16	9.9
Duration of work in the current position (years)	≤ 5	130	80.7
	6-10	23	14.3
	≥ 11	8	5.0
Administrative position	No	108	67.1
	Yes	53	32.9
Monthly income (JD)	≤ 750	95	59.0
	751-1100	57	35.4
	≥ 1101	9	5.6
Actual working hours per day (hours)	≤ 6	48	29.8
	7-9	102	63.4
	≥ 10	11	6.8
Working days per week	≤ 3	45	28.0
	4-5	20	12.4
	6	96	59.6

In this study, 107 (66.5%) were physicians and 54 (33.5%) were dentists. The general physician's category was the highest one with rate 60.2% (97), followed by general dentists percentage 29.2% (47), the category of physician specialists formed 6.3% (10/161) of total participants(four family doctors, three pediatricians, two gynecologists, and one internal specialist), while the category of dentists specialists formed 4.3% (7/161) of total participants (two oral and maxillofacial surgery, two pedodontists, one prosthodontics, one orthodontists and one periodontists).

The findings regarding workplace in table 4.2 illustrate that, approximately 59.6% physicians and dentists at both governorates work in primary health center (PHCs), which constitute a higher percentage of respondents. On the other hand, 65 (40.4%) of physicians and dentists work at comprehensive health center (CHCs).

By asking which country the physicians and dentists graduated from, the result showed that, more than half (54%) 87 of physicians and dentists graduated from abroad of Jordan, while the remaining 74 of respondents (46%), their graduation was from Jordanian universities. Figure 4.1 exhibits the percentage of graduating from each country.

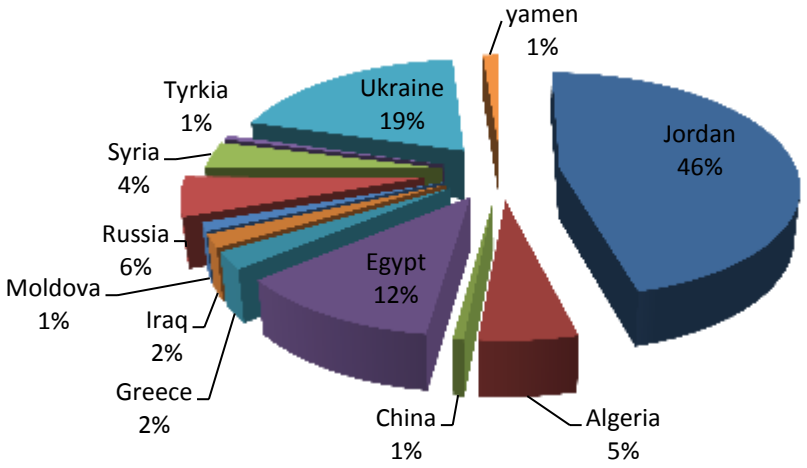


Figure (4.1)
The percentage distribution of participants working at HCCs at Al-Karak and Al-Tafilah Governorates during 2020, according to Graduation country

Inquiring about the years' duration of experience within the MOH, the study revealed that the lowest duration was one year experience and the highest was 26 years. The mean and standard deviation of the duration of the experience was 7.5 ± 5.8 years. Almost half (49.7%) of those physicians and dentists have an experience of 5 years or less, followed by those having 11-15

years of experience (21.7%), whereas only 16 (9.9%) respondents have 16 years and above.

Regarding, the duration of the respondent, he/she spent in the current health center, this duration ranged from one year to 17 years, with a mean and standard deviation 3.8±3.3 years. The majority of participants (80.7%) spent 5 years or less in the current health centers, followed by 14.3% of the respondents who work in the current health center from six to ten years. The respondents were asked if they have an administrative position. More than two-thirds (67.1%) of the physicians and dentists have no administrative position, while the remaining 53 (32.9%) participants, in addition to their clinical work, they have an administrative position (head of the center).

By asking each participant regarding about his /her monthly income, this study found that the maximum monthly income was 1.450 JD, and the minimum monthly income was 450 JD, mean and standard deviation were 739 ± 183.6 JD per month. In addition, almost 59% of the participants earn no more than (750) JD per month, and 35.4% have a monthly income 751-1100 JD, while only nine participants (5.6%) earn above 1100 JD. This study detected that 96 (59.6%) participants weekly working six days, 45 (28%) working three days or less per week, while only 20 (12.4%) participants working 4 or five days per week..

Figure 4.2 displays the distribution of respondents according to a number of days working per week. Additionally, this study revealed that, 102 (63.4%) of the whole participants working daily for seven to nine hours, 48 (29.8%) working 6 hours or less. While 11 (6.8 %) participants working ten hours or more per day. Interestingly, three of those 11 participants were working 24 hours per day.

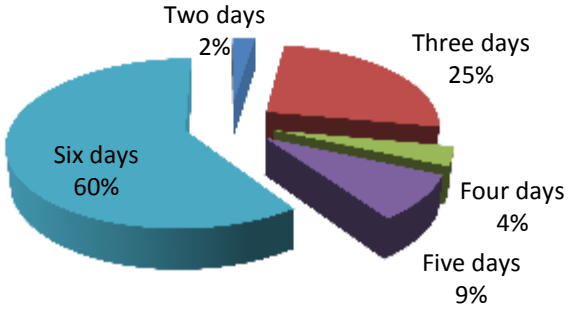


Figure (4.2)
The percentage distribution of Physicians and dentists working at HCCs at Al-Karak and Al-Tafilah Governorate during 2020 according to working days per week.

4.3 Motivation and Performance Statistical Analysis

The results of the descriptive statistical analysis of the collected data regarding motivation and performance were presented by the value of the means and standard deviations. Table 4.3 shows the mean values that will be used to interpret the data.

Table (4.3)
Ranks of the mean values of the study motivation and performance variables

High	Medium	Low
3.67-5.00	2.34-3.66	1-2.33

The category3.67-5.00 reflected a high level of agreement, and the participants strongly agree or agree to the items of the questionnaire, in addition, category 2.34-3.66 displayed a moderate level of agreement, while, the mean equal or less than 2.33, considered as a low level of agreement, and the participant does not agree with the items of the questionnaire.

4.3.1 Motivation, Extrinsic Motivation, and Intrinsic Motivation

The mean and standard deviation for the whole motivation (both extrinsic and intrinsic motivation) was 3.21±.644, as shown in table 4.4. This means the 161 physicians and dentists moderately agreed with motivation in all of the HCCs at both Al-Karak and Al-Tafilah governorates.

By addressing the two types (intrinsic and extrinsic) of the motivation issue, the study found that the mean and SD of the intrinsic motivation exhibited by the 161 physicians and dentists was 3.26±0.730. This mean of the intrinsic motivation involved the means and SD of three domains, responsibility (3.58±0.93), achievement (3.14±0.87), and advancement (3.05±1.03) as shown in table 4.4. In respect to extrinsic motivation of the participants, the mean and standard deviation for extrinsic motivation was 3.14±0.80, and it is moderately agreed by the participants. Likewise, the extrinsic motivation domains were agreed by the physicians and dentists with a moderate degree, relationships with coworkers 3.53±0.99, job security, 3.24±1.22, work conditions 3.08±0.94, and supervision 2.94±0.99.

Table (4.4)
Ranks of motivation and performance of physicians and dentists working at HCCs at Al-Karak and Al-Tafilah governorates during 2020.

No	Study variables	Mean	Standard Deviation	Level
1-4	Responsibility	3.58	0.933	Moderate
5-8	Achievement	3.14	0.867	Moderate
9-12	Advancement	3.05	1.028	Moderate
-	**Intrinsic Motivation Factors**	3.26	0.730	Moderate
13-16	Work conditions	3.08	0.941	Moderate
17	Job security	3.24	1.217	Moderate
18-20	Supervision	2.94	0.986	Moderate
21-22	Relation with coworkers	3.53	0.986	Moderate
-	**Extrinsic Motivation Factors**	3.14	0.796	Moderate
-	**Whole Motivation**	3.21	0.644	Moderate
23-43	**Performance**	3.48	0.683	Moderate

4.3.2 Relation of motivation and socio-demographic factors

4.3.2.1 Relation of motivation and general socio-demographic factors

One of the study questions was whether there is a relationship between socio-demographic factors and motivation. The results in this study, table 4.5, found that the motivation score means of those working at Al-Karak was higher (3.25±0.64) than those working at Al-Tafila health centers (3.10±0.64). However, by using a t-test, statistically, this study detected no significant difference in the motivation mean scores of those working in Al-Karak and at Al-Tafila health centers t= 1.373, p=0.172. In addition, this study revealed that females working in health centers at both Al-Tafila and Al-Karak governorates, showed a lower motivation score mean (3.18±0.68) than males (3.22±0.63), but, this difference was not statistically significant t=0.383, P=0.702.

By categorizing the age of the 161 participants into four groups depending on the decade, this study detected that the highest mean score of motivation was 3.23±0.63 among respondents age 31-40 years old, followed by (3.20±0.66), those aging 30 years or less. Those participants with an age of 51 years and above had a mean score of motivation of 3.17±0.82, while the lowest motivation score mean was found among the participants having an age of 41 to 50 years (3.12±0.66). However, by using the ANOVA test, no statistically significant differences were detected in the motivation score mean between all those age groups F=.188, P=0.904. Regarding the marital status of

the respondent, this study found that there is a difference in motivation means between married (3.23± 0.62), Single (3.20±0.66), and divorced (2.96±0.86). But, it clarified that, this difference statistically is not significant F=0.56, P= 0.572.

Table (4.5)
The socio-demographic factors of the Participants and its relation to motivation of participants working at HCCs at Al-Karak and Al-Tafilah Governorates during 2020.

Factors	Variable Categories	Mean	Standard Deviation	Test of Significant	P-value
Governorate	Al-Karak	3.2537	0.64292	t=1.373	0.172
	Al-Tafila	3.1043	0.64226		
Gender	Male	3.2214	0.62670	t =0.383	0.702
	Female	3.1811	0.67801		
Age (years)	≤ 30	3.2041	0.65691	F=0.188	0.904
	31 - 40	3.2326	0.63039		
	41 - 50	3.1178	0.66207		
	≥ 51	3.1742	0.82292		
Marital status	Single	3.2017	0.66301		
	Married	3.2288	0.61723	F=0.560	0.572
	Divorced	2.9610	0.85539		

4.3.2.2 Relation of Motivation and work characteristics of Participant

Regarding the type of Health center that the physicians and dentists work in this study found, as presented in table 4.6, that those working at the comprehensive health centers presented higher motivation score mean (3.25±0.69) than those working at primary health centers (3.18±0.61). However, this difference was not statistically significant t=0.677, P=0.499. In addition, the motivation score mean of participants who graduated from the Jordanian universities was less (3.19±0.73) compared to the motivation mean (3.22±0.57) for the participants who graduated from abroad countries. Nevertheless, the t-test analysis result showed that statistically there was no significant difference between motivation mean of those who graduated from Jordan and those who graduated from other countries t=0.367, P=0.714.

In this study, motivation means of the dentists (3.01±0.59) were lower than the mean motivation of the physicians (3.16±0.68), however, this difference statistically was not significant (t=0.362, P=0.718). Regarding the specialty of the participants in the ministry of health, and its relationship to the

status of motivation, the study found that the score motivation mean was 3.29±0.76 for those who did not specialize, and score mean was 2.56±0.78 for who specialized. However, those differences of the motivation mean were not statistically significant t=1.213P=.227.

In order to investigate whether the participant motivation has a relationship with the administrative position in the health center, this study revealed that the mean of motivation score was 3.48±1.20 among physicians and dentists who have no administrative position, and the mean of motivation score was 3.42±0.97 among those who have an administrative position. Nevertheless, by using the t-test, no statistically significant differences were detected in the motivation mean between those two groups, t= 0.449, p=0.654. In order to investigate whether motivation has a relationship with the monthly income of the participant, the study revealed that the highest mean of motivation score was 3.23±0.64 among physicians and dentists who earn (751 -1100) JD per month, followed by (3.20±.66) for those earning 750 JD or less per month. On the other hand, the lowest mean of motivation score was 3.10±0.477 among those earning more than 1100 JD monthly. Nevertheless, by using the ANOVA test, no statistically significant difference was detected in the motivation mean between those three different groups of monthly income, F =0.158, p=0.854

Regarding the duration of the experience of the participants in the ministry of health, and its relationship with the status of motivation, the study found that the highest score motivation mean was 3.32±0.53 for physicians and dentists with 11-15 years of experience, compared to the lowest (3.15±0.65) motivation mean for those who have five years or less of experience with the ministry of health. While the motivation mean for those working six to ten years with the ministry of health was 3.24±0.78. However, the differences in motivation means were not a statistically significant F=0.618, P=0.604. Concerning the duration of the physician or dentist working in the current position, at the current health centers, and its effect on the participant's motivation, motivation differences were found with the duration of working in the current position. Interestingly, this study revealed that with the increasing the duration of working in the current place (≤5, 6-10, ≥11), the mean score of motivation increased (3.19±0.66, 3.21±0.60, and 3.44±0.47) respectively. However, this difference was not statistically significant, F=0.548, P=0.579.

One of the most important things in the issue of work is the number of working days per week that the individual usually does. Therefore, to detect the relationship of the number of working days per week with motivation, the results of the analysis exhibited that the mean of the motivation for the

physicians and dentists who work four or five days per week was 3.32±0.58, and those working three days or less had motivation means of 3.19±0.64. While those working six days had a motivation mean of 3.19±0.66. Although there is a difference in the means of motivation, the ANOVA results showed that the differences are not statistically significant F=0.188, P=0.711. Table 4.6.

Moreover, this study found that the mean of motivation for the physicians and dentists with respect to the number of actual working hours per day differed. The highest mean of motivation (3.66 ±0. 42) was among those working ten hours and above, while those working 7-9 hours showed the lowest motivation mean (3.14±0.59). Those working six hours or less had a motivation mean of 3.25±0.74. By using the ANOVA test, interestingly, this study detected that there is a significant difference in mean motivation between different groups of the actual work hours per day F=3.58, P= 0.030.Therefore a Post-hoc analysis (Scheffe model), as shown in table 4.7, was performed to determine which group regarding the actual working hours is significant. The post-hoc analysis, which was performed on motivation revealed that there is a statistically significant difference in mean motivation p= 0.011 between the category (7-9 hours) and the category (10 hours or more) as illustrated in table 4.7.

Table (4.6)
Work Characteristics of the Participants and its relation to motivation of participants Working at HCCs at Al-Karak and Al-Tafilah Governorates during 2020.

Factors	Categories	Mean	Standard Deviation	Test of significant	p - value
Workplace	Primary health center	3.1780	0.61072	t= 0.677	0.499
	Comprehensive health center	3.2483	0.69412		
Graduation Country	Jordan	3.1861	0.72615	t= 0.367	0.714
	Other countries	3.2236	0.56968		
Catogery of participants	Dentist	3.0171	0.5911	t= 0.362	
	Physicians	3.1612	0.6833		0.718
Specialty	No	3.2911	0.7611	t=1.213	0.227
	Yes	2.6533	0.7862		
Administrative position	No	3.4822	1.2031	t= 0.449	0.654
	Yes	3.4210	0.9683		
Experience in the Minister of Health(years)	≤ 5	3.1511	0.64562		
	6-10	3.2409	0.77738	F=0.618	0.604
	11-15	3.3221	0.52679		
	≥ 16	3.1648	0.62144		
Duration of work in the current position	≤ 5	3.1913	0.66037		
	6-10	3.2115	0.60823	F= 0.548	0.579
	≥ 11	3.4375	0.47916		
Monthly income (JD)	≤ 750	3.2024	0.66460		
	751-1100	3.2297	0.64066	F= 0.158	0.854
	≤ 1101	3.1010	0.47715		
The number of actual working hours per day	≤ 6	3.2519	0.73944		
	7-9	3.1359	0.59796	F= 3.580	0.030
	≥ 10	3.6612	0.42023		
The number of working days per week	≤ 3	3.1859	0.63768	F= 0.188	0.711
	4-5	3.3182	0.57817		
	6 days	3.1927	0.66435		

Table (4.7)
ANOVA: multiple Comparison analysis with Post hoc (Scheffe Model) three categories of working hours per day and motivation

Working hours per day	Mean	6h or less		7-9 h		10h and above	
		Difference	p	Difference	p	Difference	p
6h or less	3.2519	-	-	0.1160	0.307	0.4093	0.06
7-9h	3.1359	0.1160	0.307	-	-	0.5253	0.011
10h and above	3.6612	0.4093	0.06	0.5253	0.011	-	-

4.3.3 Performance

The mean and standard deviation for the performance of participants was 3.48±0.68, as shown in table 4.4. This means that the 161 participants moderately agreed with performance in all of the chosen HCCs at both Al-Karak and Al-Tafilah governorates.

4.3.3.1 The Relation of Performance and General Socio-Demographic Factors

Regarding the study question, is there a relationship between socio-demographic factors and performance, the findings in table 4.8 revealed that the performance mean score of those working at Al-Tafila health centers (3.46±0.56) was lower than participants working at Al-Karak (3.48±0.74), however, this study exposed no significant difference in the performance mean score of those working in at Al-Karak and at Al-Tafila health centers t= 0.075, p= 0.940. In addition, this study showed that the performance mean score (3.39±0.77) for females working in health centers was lower than the participants male mean sore (3.52±0.63), but this difference was not significant t=1.185, p=0.238.Through grouping the age of the 161 respondents into four categories based on the decade, the current study revelead that the highest mean of performance was (3.65±0.61) among the respondents with the age 51 years and more. The category 30 years or less had a performance mean (3.49±0.63), followed by performance mean (3.48±0.70) for the category (31 to 40 years), whereas, the lowest performance score mean (3.39±0.79) was for respondents whose age ranged between (41–50) years. Nevertheless, by using the ANOVA test, no statistically significant differences were detected in the performance mean between all those age categories, F=0.246, P=0.864. Concerning the marital status of the participants, the study found that there, the performance mean of married group was 3.49±0.62, single (3.40±0.69), and the performance mean of divorced group was 3.12±0.42. But, it clarified that, this difference is not statistically significant, F=1.015, P= 0.365.

Table (4.8)
The socio-demographic factors of the Participants and its relation to performance of participants working at HCCs at Al-Karak and Al-Tafilah Governorates during 2020.

Factors	Variable Categories	Mean	Standard Deviation	Test of Sigfinicant	P-Value
Governorate	Al-Karak	3.4784	0.73617	t = 0.075	0.940
	Al-Tafila	3.4697	0.55972		
Gender	Male	3.5248	0.62593	t =1.185	0.238
	Female	3.3929	0.76917		
Age (years)	≤ 30	3.4904	0.62546	F= 0.246	0.864
	31 - 40	3.4767	0.69831		
	41 - 50	3.3918	0.78987		
	≥ 51	3.6508	0.60734		
Marital status	Single	3.4003	0.69411	F= 1.015	0.365
	Married	3.4931	0.68989		
	Divorced	3.1156	0.42401		

4.3.3.2 Relation of performance and work characteristics of Participants

Concerning the type of health center that the participants working in, the presented findings in table 4.9 revealed that those working at the primary health centers presented a slightly higher performance mean score (3.48±0.71) than those working at comprehensive health centers (3.47±0.64). But, this difference statistically was not significant t=0.075, P=0.940. Moreover, the performance mean of respondents who graduated from abroad countries was 3.55±0.68, and the respondents graduated from the Jordanian universities was 3.39±0.68. However, the t-test result presented that statistically there was no significant difference, t=1.460, P=0.146.The current study showed the performance means scores of dentists (3.89±0.99) were higher than the mean performance of physicians (3.66±0.62). Nevertheless, this difference not statistically significant, t=0.434, P=0.665. Concerning the specialty of the respondents in the MOH, and its relationship with the performance, this study found that the performance mean score was 3.344±1.01 for those who did not make specialization, and the performance mean score was 3.25±0.56 for participants who specialized. Nevertheless, the differences in the performance mean were not significant t=0.314, P=0.754. to investigate whether the participant performance has a relation with the administrative position in the health center, the study exposed that the mean score of performance was 3.59±0.89 among participants who have no administrative position, while the mean score of performance was 3.38±0.0.73 among those who have an

administrative position. Nevertheless, t-test revealed no significant difference was found, it =1.116, p =0.245. In order to investigate if the performance has a relation to the monthly income of the respondents, the study revealed that the mean of performance score was 3.48±0.69 among physicians and dentists who earn 750 JD or less per month, and it was the highest mean, followed by 3.47± 0.69 for those earning between 751 JD and 1100 JD per month. While, the lowest mean of performance score was 3.44±0.67 among the respondents earning more than 1100JD monthly. But, the ANOVA test detected no statistically significant difference in the performance mean between those three different categories of monthly income, F=0.007, p=0.993.

Concerning the duration of the experience in MOH, and its relation to the status of performance, the current study found that the performance mean was 3.61±0.63 for respondents with 11-15 years of experience, 3.40±0.81 was the lowest performance mean for those who have 6-10 years of experience with the MOH. While the performance mean for the respondents working ≤ 5 years with the MOH was 3.41±0.67, and the performance mean score for the respondents working 16 years and above was 3.61±0.62, however, these differences statistically were not significant F=0.972, P=0.408. Regarding the duration of the participants working at the recent health centers and its impact on the participant's performance, this study displayed that performance means score regarding duration of working in the current place ≥11, 6-10, ≤5 years were 3.68±0.36, 3.44±0.65, 3.47±0.71 respectively. However, this difference not statistically significant F=0.413, P=0.663. Regarding working days, and to detect the relation of the number of working days with performance, the findings of the analysis exhibited that the performance means score for the participants who work 4 to 5 days per week was 3.66±0.58, and the mean score of performance for participants working three days or less was 3.46±0.69, whereas the respondent working six days had a performance mean of 3.44±0.69. There is a difference in the means of performance, but, statistically by using the ANOVA test, the difference is not significant F=0.894, P=0.411, table 4.9. Furthermore, this study found that the mean of the performance for the physicians and dentists with respect to the number of actual working hours per day varied. The highest mean of performance (3.66±0.45) was among participants working ten hours and more, and the lowest performance mean (3.41±0.74) was for those working six hours or less had, while those working seven to nine hours had a performance mean score of 3.48±067. Using the ANOVA testy presented that there is no significant F=625, P= 0.537, as presented in table 4.9.

Table (4.9)
Work Characteristics of the Participants and its relation to performance of participants Working at HCCs at Al-Karak and Al-Tafilah Governorates during 2020

Factors	Categories	Mean	Standard Deviation	Test of Sigfinicant	P-value
Workplace	Primary health	3.4777	0.71295	t=0.075	0.940
	center	3.4725	0.64287		
	Comprehensive health center				
Graduation Country	Jordan	3.3906	0.68410	t =1.460	0.146
	Other Countries	3.5479	0.67846		
Catogery of participants	Dentist	3.8911	0.98511	t =0.434	0.665
	Physicians	3.6633	0.6280		
Specialty	No	3.3425	1.00651	t =0.314	0.754
	Yes	3.2455	0.56275		
Administrative position	No	3.5944	0.88503	t=1.116	0.245
	Yes	3.3810	0.73012		
Experience in the Minister of Health (Years)	≤ 5	3.4149	0.66672		
	6-10	3.4079	0.80712	F=0.972	0.408
	11-15	3.6122	0.63291		
	≥ 16	3.6071	0.61905		
Duration of work in the current position (Years)	≤ 5	3.4696	0.70538		
	6-10	3.4369	0.64811	F=0.413	0.663
	≥ 11	3.6845	0.36349		
Monthly income (JD)	≤ 750	3.4787	0.68682		
	751-1100	3.4745	0.69129	F=0.007	0.993
	≥ 1101	3.4497	0.67348		
The number of actual working hours per day	≤ 6	3.4147	0.74390		
	7-9	3.4837	0.67539	F=0.625	0.537
	≥ 10	3.6667	0.45525		
The number of working days per week	≤ 3	3.4550	0.69398	F=0.894	0.411
	4-5	3.6667	0.57725		
	6	3.4454	0.69873		

4.3.4 Relationships of Motivation and Performance

4.3.4.1 Relationship of whole Motivation (extrinsic and intrinsic) and Performance.

In order to answer the question of whether there is a relationship between motivation and performance of physicians and dentists working at health centers in Al-Karak and Al-Tafila governorates, Pearson Correlation (r) was used between motivation and performance to detect this relationship. The result, as presented in table 4.10, showed that there is a statistically direct significant ($p \leq 0.001$) moderate strength correlation ($r = 0.450$) between the performance of physicians and dentists and the whole motivation (extrinsic and intrinsic motivation). Figure 4.3 shows the relationship between motivation and performance of physicians and dentists.

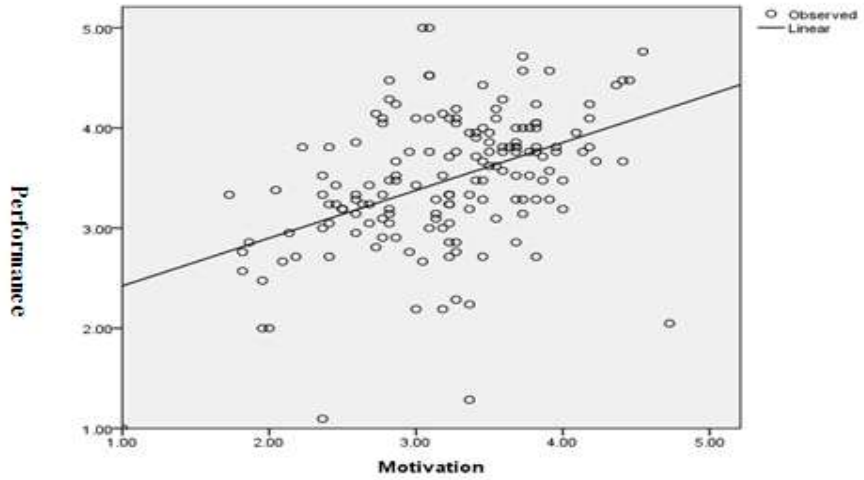


Figure (4.3)
the relationship between motivation and performance of physicians and dentists

Table (10)
Motivation and its relation to performance of physicians and dentists Working at HCCs at Al-Karak and Al-Tafilah Governorates during 2020, (N= 161)

	Performance	
Type of motivation	**Pearson Correlation (r)**	**P- value**
Whole Motivation	0.450	P < 0.001
Intrinsic motivation	0.446	P < 0.001
Responsibility	0.427	P < 0.001
Achievement	0.320	P < 0.001
Advancement	0.293	P < 0.001
Extrinsic motivation	0.310	P < 0.001
Work condition	0.232	0.003
Job security	0.075	0.345
Supervision	0.226	0.004
Relation with colleagues	0.424	P < 0.001

4.3.4.2 Relationship of Intrinsic Motivation and Performanc

This study also aimed to identify the physicians and dentist's performance and its relationship separately to each type of motivation (extrinsic or intrinsic motivation), thereafter, to determine which type of motivation had a greater effect on participant's performance.

With respect to the relationship between the intrinsic motivation and performance of the physicians and dentists, the statistical analysis was carried out, using the Pearson correlation. The result exhibited in (figure 4.4) showed that intrinsic motivation has a significant, almost moderate strength direct correlation (r=0.446) with the physicians and dentist's performance (P<0.001).

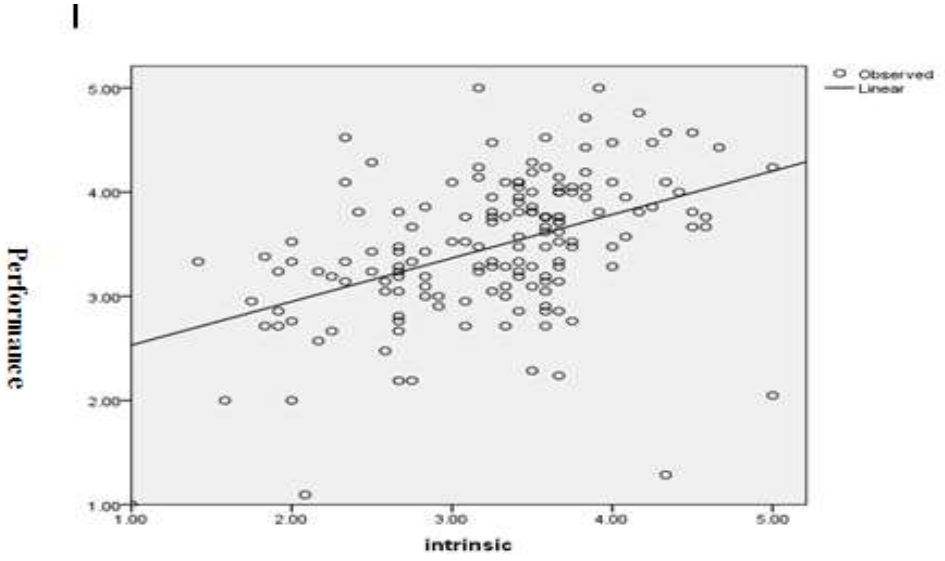


Figure (4.4)
The relationship between intrinsic motivation and performance of physicians and dentists.

Moreover, by investigating the relations of the three-domain of the intrinsic motivation with the performance, and which one of it has the highest correlation, the statistical analysis showed that the responsibility domain had a significant highest (r=0.427) moderate strength with the physicians and dentist's performance (P<0.001). Whereas the advancement domain exhibited the weakest (r=0.293) statistically significant positive correlation with the performance of the participants at the level (P<0.001). In this study, the achievement domain showed a statistically weak (r=0.320) significant positive correlation with the performance of the participants (p=0.000), as shown in table 4.10.

4.3.4.3 Relationships of Extrinsic Motivation and Performance

In order to answer the question of whether there is a correlation between the extrinsic motivation and the performance of physicians and dentists, working at health centers at Al-Karak and Al-Tafila governorates, the study results indicated that extrinsic motivation (as presented in table 4.10), has a direct statistically significant (P<0.001) weak correlation (r=0.310) with the performance of the physicians and dentists. Figure 4.5 shows the relationship between extrinsic motivation and performance of physicians and dentists.

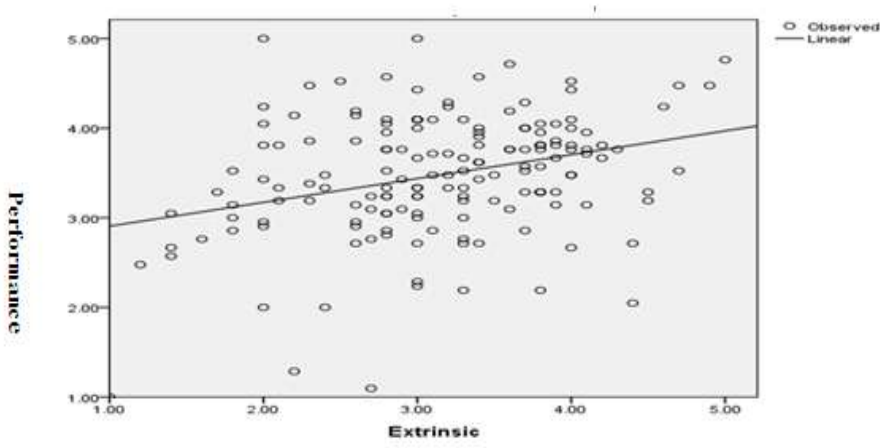


Figure (4.5)
The relationship between extrinsic motivation and performance of physicians and dentists.

Furthermore, to identify the relations of domains with the performance, and which one of the four domains (relation with a co-worker, supervision, work conditions, and job security) of the extrinsic motivation possess the strongest relationship with the performance of physicians and dentists. Therefore, through the Statistical analysis and using correlation, the domain related to the relation with a co-worker exhibited the strongest ($r=0.424$) significant direct correlation with the participant's performance ($P<0.001$) in this study. Similarly, both domains, the supervision domain, and work condition domain statistically showed a significant direct weak correlation ($r=0.226$, $p=0.004$, $r=0.232$, $p = 0.003$ respectively), with the performance of the participants. On the other hands, the job security domain showed insignificant weakest ($r=0.075$) direct correlation with the participant's performance ($p= 0.345$), as shown in table 4.10.

Lastly, but not the least, the results are answering the question of this study, which kind of motivation (intrinsic, extrinsic) having a stronger correlation with the performance of physicians and dentists. By looking to tables 10 above, interestingly the intrinsic motivation demonstrated the stronger ($r = 0.446$) significant direct correlation ($P<0.001$) relationship with performance of physicians and dentists working at health centers in Karak and Tafila governorates compared to the extrinsic motivation ($r=0.310$, $P<0.001$).

Chapter Five
Discussion and Recommendation

5.1Discussion

This study was conducted to identify the relationship of motivation and its types with the performance of physicians and dentists working at health centers in Al-Karak and Al-Tafilah governorates. Also, this study aimed to detect the relationship between socio-demographic characteristic and motivation, and the relationship between socio-demographic characteristic and performance.

Regarding motivation (extrinsic and intrinsic motivation), the overall motivation level of the whole participants was moderate (mean= 3.21±.644). This result showed a lower level of agreement than those found by Monis (2017) study result in Thailand, who reported that the participants showed a high level of motivation. The result of the current study seems to be reflecting the reality of the motivational status of the physicians and dentists working at health centers in Al-Karak and Al-Tafila governorates. In other words, there are motivating factors available in health centers for physicians and dentists, but this motivation did not reach the highest level, the level that may be desired and required by all participants. Additionally, the moderate level (mean=3.26±0.730) of the overall intrinsic motivation factors (responsibility, achievement, and advancement) supporting Orasa (2014) study finding in Tanzania which showed that there is a moderate level of intrinsic factors of motivation among health care workers. The result in the current study means that the physicians and dentists feel the availability of the internal factors of motivation, most probable that, because a high proportion of them were adult individuals (80%), and they are still fresh with experience less than five years (50%). Therefore, they want to make an influence, looking forward to their achievement, they were striving to achieve the success in tasks that have been given to them, such as accomplishing difficult tasks within the limited time or solving a problem related to their job, etc. Also, the physicians and dentists realize that they have a certain amount of accountability and freedom to make the right decisions at the proper time due to the nature of their work. Moreover, concerning the advancement of physicians and dentists, they seek to achieve a good level of progress in their work and career development, despite the presence of obstacles to progress and routine nature of their work. In another word, the intrinsic factors are the ones that offer health care workers' confidence to perform their activities. In order to provide a feel of confidence and total self-reliance, doctors love to face the difficulties and challenges associated with their work, as well as looking to assume responsibilities with high efficiency (Orasa 2014). However, the results of the current study showed lower intrinsic

motivation than that found by Monis (2017) study result in Thailand, who reported that the participant showed a high level of intrinsic motivation regarding achievement, responsibility and advancement. Monis attributed this result to meet aims and goals, satisfying needs and desires, and feeling with success and accomplishment, workforces act or doing something effectively and quickly with more effort. This variation from the current study could be attributed to the case that the participants of the Monis study were working in general firms in Thailand; in another word, his population sample was different from the current study in several aspects.

The moderate level (mean=3.14±0.80) of all extrinsic motivation dimensions (work conditions, job security, supervision, and relation with coworkers) in this study. This study supports Dileman et al. (2017) study results among physicians and nurses that was conducted in Jordan. On the other hand, the result of this study contradicts other studies, such as Orasa (2014) study result in Tanzania, which exhibited a low-level of the extrinsic motivation of healthcare workers (country). Orasa attributed his findings, to dangerous and low level work conditions, very low monthly salary and strict working hours. On the other hand, Monis (2017) in Thailand found that the general firm employees demonstrated that a good relationship between colleagues, work security was assured, the relationships of a supervisor with the worker were excellent, and comfortable working conditions, so a high level was attained of extrinsic motivation. The variation in the result could be related to variation in the study population, workplace, manger, type of organization. However, the current study gives the impression that physicians and dentists were moderately satisfied with the working conditions, and the availability of the necessary tools for their work. Besides that, the participants of the current study were moderate feel job security, satisfying relationships with superiors and colleagues at work, and they have respect and good relations with their managers and colleagues, which motivates them to work well, thus they are not thought to leave their work. Moreover, the employees being respected and appreciated by the others, and having social support, as well as, good cooperation with their colleagues. (Dileman et al., 2017). All these factors will boost to improve the performance of employees and motivated them to work well, thus they will not decide or think to leave the workplace (Dileman et al., (2017).

Concerning the relation between motivation and socio-demographic factors**,** supporting the study conducted in Malaysia by Edrak, Chan, Gharleghi, and Thiam (2013), this study found that there are no significant differences between males and females regarding the motivation both intrinsic and extrinsic. Most probably, this result could be as explained by Edrak et al., that the motivation of employees must not be linked to gender, because it is an

individual attitude, it's not affected by the physiological conditions of the individual, or the biological one. In the current study, the result is most probably attributed to the fact that the highest percentage (62.7%) of the participants working in health centers in Al-Karak and Al-Tafila were males. Concerning the age of dentists and physicians, and its relationship to motivation. This result is consistent with the result of a study conducted in Ghana by Buabeng and Partial (2016), where they attributed these results to the fact that they were all of only just the similar age. The results contradict with the results of a study conducted in Cyprus by Lord and Farrington (2002), who reported that, the influence of motivation declines as the person's increase in the age. The married participant showed an insignificant higher motivation mean than the other marital status, this result is in agreement with Buabeng and Partial (2016) study result done in Ghana.

Similarly, the current study supports Buabeng and Partial (2016) result, which revealed that no significant relationship was detected between the level of motivation and variation in the participant's income. This current finding could be due to the fact that a higher percentage (60%) of the participants' salaries is almost similar. This could be attributed to the number of years of experience $\leq$ 5 years. The level of motivation showed no significant relationship with governorate, workplace as well as the country from which the participant graduated. The justification for this result may be due to being under the central control of the ministry of health, and these factors are treated equally, and no rewards are granted by the ministry of health regarding these factors. Also, the administrative position exhibited no significance with the motivation of participants. Participants who have no an administrative position had a lower level of motivation than those having administrative position, and this could be explained by many factors, first, they're always busy, and their income higher than others.

The current study revealed disparate results regarding the duration of experience in the ministry of health from the result shown by Jefferson (2019) study that was conducted in Washington. The result of the current study could be attributed to the fact that half of participants (50%) their duration of experience in the ministry of health was ($\leq$5) very short and that approximately 60 % of this portion have only a one year or two years of experience. Regarding, duration of experiences of work at the current position, results of this study were similar to the result of the study done in Tanzania by Sato et al. (2017), which revealed that there is no significant effect of duration of the work at the current place on the motivation of participants. The result in the current study means that the motivation of physicians and dentists is not related to their duration of work at current health centers, most probably this result could be,

because a high proportion (80%) of them has a duration less than five years, and the participants were adult individuals. Similarly, this study revealed that the motivation of participants was not affected by working days, but affected by working hours; This is attributed to those who work longer hours, although they may feel tired and fatigued, this makes them feel more responsible, more achievement and self-actualized, may receive some kind of appreciation and financial incentives in exchange for their work for longer hours. This result contrary to the study result conducted in India by Sunitha (2016), as workforces work for long hours, they feel more exhausted, and this is considered as the demotivating factor for the workforces. So, the application of timetables with flexible working hours will motivate workers.

Regarding performance and its relation with socio-demographic factors**,** the moderate level (mean= 3.48±.0.68) for the overall performance of the whole participants in this study, appears to be reflecting the actuality and status of performance at health centers in Al-Karak and Al-Tafila governorates, as perceived by physicians and dentists. This result supported findings of Dileman et al. (2017) study in Jordan. On the other hand, the current study showed higher motivation mean than that conducted by Dieleman & Harnmeijer (2006) in the Netherlands. Dieleman& Harnmeijer exhibited that, health workers do not exist, does not provide high-quality services, the justifying of these results was due to administration styles may be firm, bad working conditions, no safety protocol at work,whereas it is lower than Schoo, Stagniti, Mercer, and Dunbar (2005) study result conducted in Australia, where the authors clarified the increase improvement of performance due to donation of workers continuous development, upholding fresh care models to prevent exhaustion, pressure, and fatigue of specialists. The result in the current study could be attributed to many factors that may relate to firm regulations and legislation, modest financial capabilities, work conditions not excellent, large numbers of patients treated, the lack of adequate resources, and possibly management practice, as mentioned by Dieleman & Harnmeijer (2006). Concerning the relationship between performance and socio-demographic factors ,the results of this study showed that participants' performance is not affected by the type of the workplace (governorate and type of health centers) in which they work in, most probably because the conditions of all health care centers in both governorates are similar. Similarly, neither the administrative position, nor the graduated country showed an effect. Supporting the study done in Kenya by Kenneth (2017), this study found no noteworthy differences between males and females regarding the performance, whereas, the performance of participants is not related to their age. This result is inconsistent with the result of Maksić's (2016) study conducted in the clinical center university of Sarajevo. Maksić reported

that there is an important difference between performance and age categories of workers. Maksić attributed this result to the fact that the desires and requirements of individuals are related to the aging process. Consequently, this changes the features of job tasks that are performed by persons, and ability to perform the duties which would, in turn, influence employees' performance. The results advocate Alkasseh & Kweik (2019) study findings in Palestine, which showed that the performance of employees was not related to the marital status of participants, they attributed to this result to the fact that the work should be separated from any social position of the workers.

Regarding the category of participants and their specialization and performance, although the job categories showed differences in mean motivation, as general practitioners' had a higher level of motivation than that of the specialist, as well as dentists (general practitioner and specialists), had a higher level of motivation than physicians(general practitioner and specialists), there were no statistically significant differences with performance. This result contradicts with the results of Kenneth (2017) study. This result is attributed to the fact that all general practitioners (dentists and specialists) have medical tasks and duties that are completely different from each other, and this is why performance is not affected by the classification of the profession. Contradicting to several authors (Alkasseh and Kweik, 2019; Maksić, 2016), this study couldn't find any relationship between monthly income of the participant and his/her performance, However, the justification is given by Maksić (2016) that, the performance increase as an increasing the financial outflows, because the workers will obtain a feel of security and satisfaction. In the current study, most probably, this result could be attributed to the fact that most participants have short experiences in the ministry of health ≤ 5 years. It is also possible that the participants did not want to link performance to their monthly income due to the few years of experience for most of them. Perhaps they believe that the monthly income will increase with the increase in the number of years of experience.

Supporting to Alkasseh and Kweik (2019) study results, this study didn't detect any relationship between the performance of participants, and the duration of their experience in ministry of health. Alkasseh and quick attributed this result to the similar services that are provided irrespective the years of experience. In this study, the finding can be attributed to the short years of experience, in that the participants were unable to acquire sufficient skills or participate in training programs in order to develop performance.

Contrary to the results of the Kenneth (2017) study in Kenya, this study showed no significant relationship between participant's performance and the duration of work in the current location (health centers). Kenneth explained the

result to the fact that worker abilities will be stronger, the confidence will be greater, and the employee is assured that he will get more profits, and will not lose it in the future, if he/she stays in the same workplace. In this study, the majority of participants (80%) working in current health centers for a period of five years or less, so the short period of work in the current location (health centers) may be a justification for this result. This study indicated that the performance of participants is not affected by the number of working days, this result contradicts with Buabeng and Partial (2016) study result in Ghana, who suggested that, as the health workers work more days and have more working load, they will not have enough rest, and there will be more errors in their work. Consequently, the quality of the performance will be less. Additionally, the performance of participants is not influenced by working hours, this result did not confirm Kodz et al. (2003) study results in London, who said that long hours of working lead to reduced performance and decreased output. The current study result may be explained due to the case that 63% (102) of participants work seven to nine hours and 97 participants from 102 participants work eight hours. These hours (8 hours) are considered the official working hours approved by the ministry of health in most health centers, and perhaps if the number of hours worked was less or more, the performance would be influenced positively or negatively.

Concerning the relationship of motivation and performance, the positive significant correlation ($r=0.450$, $p=0.000$) between performance and the whole motivation (intrinsic and extrinsic motivation) of the participants in this study, is supporting the several previous studies done by Alhassan et al. (2013); Al-Madi, Assal, Shrafat & Zeglat (2017); Afful-Broni (2012); Dieleman, Toonen, Touré, & Martineau (2006); and Mbindyo, Gilson, Blaauw & English (2009). This result means that whenever the physician or dentist is motivated (intrinsically and extrinsically), this will be reflected positively on the level of his/her performance, so it is not reasonable for his performance to improve, if he/she feels a decrease in intrinsic and extrinsic factors of motivation. In other words, the participants' performance is enhanced by an increase in any efforts to change the behavior of employees. When performance improves as a result of the motivation of the participant, the physician or dentist will be more committed to the organization's policies and legislation, and more committed to general safety rules. The physician or dentist will accept the guidance from the supervisor, he/she will be more responsive, and more willing to exert more effort. The physician or dentist will perform the tasks more accurately and perfectly (effectively), etc. In addition, Alhassan et al. (2013) found that, the low level of health worker motivation cause low service quality, as long waiting times and the health care worker's impatience of patients

Supporting the finding of the studies of Buabeng & Partial (2016); Damij, Levnajic, Skrt, & Suklan (2015); and Owoyele (2017). This study found a positive significant correlation (r= 0.446, p= 0.000) between the performance and the intrinsic motivation of the participants. This result means that when the physician or dentist achieves esteem, gratification, self-confidence, sense of importance, and recognition, his/her performance will improve. The intrinsically-motivated physician or dentist will enjoy their work and often perform more effectively and creatively. A worker who intrinsically motivated does missions for its own sake, for growing his /her accountability, self-actualization, and development (Buabeng & Partial, 2016). Moreover, if the employees involved in decision-making practice, or have the chance to do expressive new things, or their success recognized by another, the performance of the employees will enhance (Damij et al., 2015). The task is considered a motivating factor for improving the performance, because it is the core source of motivation, as it offers challenge tasks, chances for personal growth, and success to the worker (Owoyele, 2017).

The results of this study regarding the domains of intrinsic motivation found that there is a positive significant correlation (r=0.427, p= 0.000) between the performance of the participants in this study and the responsibility. This result supported the result of a study done by Sunitha (2016) in India and Jefferson (2019) in Washington. On the other hand, the current study contradicts with the result of Monis (2017) study in Thailand. The result in the current study is attributed to the fact that the performance of the physicians or dentists will improve when they feel free to make their own decisions and implement their own ideas, when they able to bear all the duties assigned to them, preparedness to accept their mistakes, and the ability to solve them on their own, and having autonomy in their work. Also, to raise the commitment of employees to their work, staff have to achieve freely their duties and tasks assigned to them (Jefferson, 2019). The employees will be motivated in a positive way when they get more obligations and are assigned to do new tasks; therefore, they get satisfied, and their performance will be enhanced and get better (Sunitha, 2016).

Achievement results showed that the performance of the participants and achievement had a significant positive correlation (r=0.320, p=0.000). This finding was in line and supported the previous studies, Edrak et al. (2013); Hassan et al. (2013); Hur (2017); Mangkunegara & Agustine (2016), whereas, the current finding contradicted with Monis (2017). This result is may attributed to the fact that the physicians or dentists may tend to work harder, complete a difficult task on time, make an influence, and perform extra efforts, for seeing positive results of their work, achieving a specific success, and recognition of

their achievement, consequently, the performance will improve as the physicians or dentists increase their desire to attain achievements. When the employees get strenuous tasks, new and imaginative tasks, they will be motivated, and their performance will get better (Al-Hassan et al., 2013). A sense of achievement is personal-desired outcomes, which is connected to the accomplishment of organizational aims. Consequently, when the worker feels with an achievement, this will expressively influence the performance (Hur, 2017). As the employee making an additional effort, his/ her effort will be acknowledged and recognized by the supervisor, so the employee feels more confident. Consequently, this impacts positively employee performance and commitments (Weisberg and Dent, 2016).

Concerning advancement, the result of the current study is consistent with the results of Dieleman et al. (2006); Buabeng & Partial (2016); Wilson (2015); and Kenneth (2017), which revealed that here is a significant positive correlation ($r = 0.293$, $p = 0.000$) between the performance of the participants and advancement, whereas, this finding disagrees with Monis (2017). The current study attributed that to the fact that the physicians or dentists desire to participate in training programs to learn and enhance their knowledge, developing their capabilities, participation in scientific publications, and having a continuous learning. All of the above gives an image of upcoming opportunities for positive status and promotion, and considered as the best motivator for boosting the physician's or dentist's performance. Incorporating training and development is a real way to prepare staff for career advancement, and the workers benefit when they receive the knowledge and skills to advance (Wilson, 2015). The motivation of workers will be improved, as well as, the competency of them, when the employees provided by interactive training, professional development, and continual education (Dieleman et al., 2006).

A positive significant correlation ($r=0.310$, $p= 0.000$) was found between the performance of the participants and the intrinsic motivation. This result supported findings of the Dileman et al. (2017); Lambrou et al. (2010); Buabeng & Partial (2016); Jefferson (2019); Mohsan et al. (2004); and Chaudhary (2012). On the other hand, the result of this study contradicts with Damij et al. (2015) study. The result of the current study could be attributed to the case that the performance of the physicians or dentists is affected by the presence of external motivation factors, which impact them to do something. For example, when the physicians or dentists believe that the external factors in their work are excellent, the availability of a comfortable environment, and good relationships with their colleagues, etc., make them feel comfortable and safe; this makes them more focused on their work. Therefore, they will perform their tasks better, such as providing quality services, be more committed to their

work, and make more efforts, etc. Worker attitude towards the work is resolute by the apparent profits that are attached to an accomplishment, such as payments which are a proper factor that moves persons to perform the job, it can be in the form of monetary, or non-monetary incentives, such as job security and work environment (Chaudhary, 2012).

The findings of this study regarding the domains of extrinsic motivation and performance showed that performance of participants has a positive significant correlation (r=0.424, p= 0.000) with colleague relationships. This result is similar to the findings of Maksić (2016); Brown, Gardner, Oswald, & Qian, (2007); and Peters, Chakraborty, Mahapatra, & Steinhardt (2010). However, this result contradicted with Damij et al. (2015). The current result could be attributed to the nature of the medical profession which is teamwork, primarily represented in relationships of respect, sharing experiences, teamwork that reduces work pressure. When, there is a lack of personal relationships with co-workers, it is very difficult to communicate with each other, and this negatively affects their performance. The performance of employees is related to good communication and relationships with coworkers, respectable relationships make them more comfortable and gratified (Brown et al., 2007). Regarding supervision, a positive significant correlation (r=0.226, p= 0.004) is manifested between the performance of the participants and the supervision. This result supported Afolabi, Fernando, & Bottiglieri (2018); Owoyele, (2017); and Jefferson (2019). On the other hand, the current study contradicts with Damij et al. (2015). The justifications of this result is that the physicians or dentists who receive supportive communication with supervisor, a good amount of guidance and support from supervisors, good relationship with supervisor, and share in the process of decision-making, they will feel more confident, and more comfortable, which, would in turn enhance their performance. Respectable leadership relations with the administrator are a vital factor in promotion worker motivation, providing workers with the supports and assistance, the employee may have may feel more committed to their organization, so their performance will get better (Owoyele, 2017).

Work conditions results support the findings of Opperman, (2002); Henderson and Tulloch, (2008); Flynn, & Hons (2013); Bushiri, (2014); and Munisamy (2013), which revealed that there is a positive significant correlation (r =0.232, p = 0.003) between the performance of the participants and the work conditions. Conversely, Damij et al. (2015) showed the contrary result. In the current study most probably this result could be due to the fact that when the physicians or dentists have the right materials and apparatus, safety equipment, good an amount of work and equal distribution of work obligations, adequate resources and appropriate infrastructure, they will achieve tasks easier and more

quickly, and may improve the confidence of health workers. Therefore, that enhances the physician's or dentist's performance. The working environment has a robust effect on employees' gratification and performance, because all workers need adequate facilities and improved conditions to do their work effectively (Henderson and Tulloch, 2008). When good conditions and safety equipment are available, and when the amount of work is acceptable and not exhausted, the employee will work without worry, which would in turn, enables an employee to perform accountabilities and activities in a better way (Opperman, 2002).

On the other hand, the current study results revealed that, job security has no statistical significance ($p=0.345$) correlation ($r=0.075$) with the performance of physicians and dentist. This result contradicts with Buabeng & Partial (2016) and Jimenez & Didona (2017). The justification for the current result is that physicians and dentists have permanent contracts at the ministry of health, and whatever the punishment, he/ she is rarely dismissed from the job. Also, if they lose their job, they may work in the private sector or at their clinic, thus their performance is not affected by job security. While Buabeng and Partial (2016) stated that, there is a significant direct relationship between job security and performance, in that when workers no frightened that there is a threat to their work, and they will not lose their job, they will perform their duties well. The performance of workforces has a major relationship with job security, and the more the workers feeling secure in their jobs, the more susceptibility they will have to perform better (Jimenez and Didona, 2017). Regarding which type of motivational factors has a more positive impact on the performance of physicians and dentists working at health centers in Al-Karak and Al-Tafila governorates, the study revealed that the performance of physicians and dentists is affected more by intrinsic motivation ($r = 0.446$) than extrinsic motivation ($r = 0.310$). This study confirmed Edrak et al. (2013) result in Malaysia, which revealed that intrinsic motivation significantly impacts more on satisfaction and performance of workforces compared with extrinsic motivating factors, the authors justified their result, workforces who intrinsically-motivated, react to challenges with further effort, and tend to work harder, they like their work and perform more productively and effectively than workforces who are extrinsically-motivated.

5.2 Conclusions

Several points were concluded from the results of this study related to the study variables and the relation between them. The level of the whole motivation at health centers in Al-Karak and Al-Tafila governorates was moderate, the intrinsic motivational level at health centers in Al-Karak and Al-Tafila governorates was moderate, and the extrinsic motivation level at health centers in Karak and Tafila governorates was moderate. The study findings concluded that the motivation was not related to socio-demographic characteristics of physicians and dentists, such as governorate, workplace, gender, graduation country, age, marital status, profession, experience in the ministry of health, duration of work in the current position, monthly income, and the number of working days per week, but it is related with the number of actual working hours. Moreover, the level and status of the performance of physicians and dentists in the primary and comprehensive health centers in Al-Karak and Al-Tafila Governorate was moderate. Also, the performance of physicians and dentists was not related to socio-demographic characteristics.

The findings of the study concluded that the performance of physicians and dentists working in health centers at Al-Karak and Al-Tafila governorates is related to the whole motivation, intrinsic motivation factors are positively correlated with performance, as well as extrinsic factors are positively correlated with the performance of physicians and dentists. Intrinsic motivation factors have more impact on the performance of physicians and dentists than the extrinsic motivation factors.

5.3 Recommendations

The study revealed that there is a relationship between the performance of physicians and dentists and the whole motivation (intrinsic and extrinsic motivation) at all chosen health centers in Al-Karak and Al-Tafila Governorates, while the study showed that the level of motivation and performance was moderate. Based on these results, and in order to increase the level of motivation at all health centers in Al-Karak and Al-Tafila Governorates, consequently, attain a high level of performance of physicians and dentists, several recommendations will be presented to administrators, decision-makers, and officials in the ministry of health regarding these results, as follows:

1. Paying more attention to the health sector in southern regions, especially health centers, because of their distance from the capital, and the lack of resources and services compared to other governorates. This attention represented by the necessity of defining a special aspect for the

governorates of the south when setting the annual strategies of the ministry of health and the annual budget.

2. Providing opportunities for advancement through the provision of training programs, scientific and practical workshops, providing opportunities to participate in internal and external scientific conferences, participate in scientific researches.
3. Providing a suitable infrastructure in health centers, and an appropriate comfortable and safe work environment for doctors and dentists.
4. Urging the managers to involve physicians and dentists in administrative decisions, and assigning to them part of the responsibilities, and deal with them as occupational partners, not as just employees.
5. Appreciating the achievements of physicians and dentists, and reward them if they provide services other than the owner tasks.
6. Carrying out social activities and programs for employees in the health sector, in order to strengthen relations between them, and increase respect and cooperation.
7. Carrying out periodic visits to the health centers, and holding meetings with physicians and dentists to discuss obstacles that may affect the quality of their performance.

5.4 Strengths and Limitations of the Study

The strength of this study stems from the fact, that it is the first study to be conducted in the governmental health centers in southern Jordan on motivation and performance for a specific category of health staff (doctors and dentist), In addition, the study was able to determine the relationship between motivation and performance. On the other hand, there are some limitations of this study. Firstly, this study was conducted only in Al-Karak and Al-Tafila governorates, and it did not cover all governorates; therefore in the future, it will be possible to conduct studies on the same topic to include more areas in Jordan. Moreover, this study included only the category of physicians and dentists in the health sector; therefore it will be possible to conduct studies in the future about the motivation and performance of other categories of the health workforce. Also, this study examined the motivation and performance of dentists in the public health sector in the public sector and did not include the private sector; therefore, it will be possible in the future to conduct the same study on health worker (physicians and dentists) in the private sector and compare the results for both sectors.

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Appendix (I)
English version of Questionnaire

Motivation and Performance of Physicians and Dentists Working in The South of Jordan

Dear participant

You are invited to participate in a research study aimed at studying Motivation and Performance of Physicians and Dentists Working in The South of Jordan, in order to fulfill the requirements for the degree of Master in public health management at Mutah University. Please kindly answer the questions asked, knowing that all the questions mentioned in this questionnaire for the purpose of scientific research and that your answers will be surrounded by complete confidentiality.

I have read the above description of this study and understand its purpose, I Agree / disagree to participate in this study.

Signature:
Date:

Thank you for your cooperation

Section A

Socio-demographic information

Please tick (✓) the appropriate box:

1. Governorate in which you work

Al-Karak ☐ Al-Tafila ☐

2. Workplace

Primary health center ☐ Comprehensive health center ☐

3. Gender:

Male ☐ Female ☐

4. Ag:

5. Marital Status

Single ☐ Married ☐ Divorced ☐ Widower ☐

6. Profession

Dentist ☐ General Practitioner ☐

Specialist ☐ , Type of specialty:

5.Graduation country

Jordan ☐ Foreign Country ☐ ,What is the name of the country**:**

7. Experience in the Ministry of Health:

8. Duration of work in the current position:

9. Do you have an administrative position in the health institution?

No ☐ Yes ☐ , What That Position :

10 .How much do you earn (per month)?

11. The number of actual working hours per day :

12.The number of working days per week:

Section B
Motivation

NO	Intrinsic Motivation Factors	Strongly agree	Agree	Fairly Agree	Disagree	Strongly disagree
Responsibility: the degree of freedom an employee has to make their own decisions and implement their own ideas and ability to solve their own work problem.						
1	I enjoy a certain level of autonomy in discharge my duties .					
2	I bear all responsibilities related to my job					
3	I have the willingness to accept and remedy my mistakes					
4	When performing difficult tasks, prefer sharing responsibility with others rather than bearing it alone.					
Achievement: achieving a specific success, such as completing a difficult task on time, making new things and seeing positive results of one's work.						
5	My achievement and personal satisfaction in my work enhances my performance.					
6	Confident that my achievements will be recognized by others.					
7	As a health institution member, it will not be important to make an influence.					
8	To know where I am in terms of achievement in the health sector, it is important for me to compare myself to others					
Advancement: the expected or unexpected possibility of promotion, positive status or position of the employee in the workplace.						
9	I am satisfied with my chance for advancement.					
10	I have training opportunities to learn and enhance my knowledge					
11	The health institution adopts specific strategies to remove obstacles to career advancement					
12	I participate and read regularly scientific publications in my field					

NO	Extrinsic Motivation Factors	Strongly agree	Agree	Fairly Agree	Disagree	Strongly disagree
Work conditions: These factors involve the physical surroundings of the job, and whether there are good or poor facilities. The amount of work, space, tools, and safety.						
13	I have the tools and resources to do my job well					
14	The organization provides a safe and comfortable environment.					
15	I am satisfied With working hours and distribution of work obligations.					
16	The Ministry of Health pays financial incentives for overtime.					
Job security: is the probability that an individual will keep his/her job.						
17	I feel job security in my organization.					
Supervision: Managers ability to guide and train employees on various aspects of the job.						
18	I receive the right amount of support and guidance from my supervisor.					
19	The Health institution allows employees to participate in decision-making.					
20	The manager has good relations with the employees.					
Relation with coworkers: How you feel about your relation with colleagues.						
21	I receive respect from all of my co-workers					
22	Cooperating with other employees reduces the workload.					

Section C
Performance

NO	Performance	Strongly agree	Agree	Fairly Agree	Disagree	Strongly disagree
23	I am committed to functional legislation and organizational values					
24	I am committed to implementing the job description approved by the Ministry of Health					
25	I am committed to implementing the general safety and infection prevention requirements					
26	I am ready to accept the guidance and direction from my manager and colleagues in working					
27	I can withstand the pressure of work and treat as many patients as possible					
28	The number of patients I treat is not considered an indicator for my performance					
29	Patients' complaints are not considered an indicator of my performance as may be due to their personal perceptions.					
30	The completion of your tasks is not related to the number of absences and attendance.					
31	I make sure to provide advance notice when I am unable to come to work.					
32	Bad working conditions force you to take leave.					
33	I fulfill my duties without having to stick to the official working hours					
34	I can do the task given to me accurately and perfectly					
35	I am actually looking for ways to improve my work and the way I handle tasks					

36	I make great efforts and additional responsibilities to fulfill my tasks					
37	I believe that I achieve higher than the targets set by the health organization.					
38	I am able to cope well with difficult situations					
39	I have the full skills and the ability to deal with the emergency cases that I face during my work.					
40	I do not refuse to provide services outside the health center such as health education					
41	I am ready for the night shift and work during public holidays					
42	Exposure to work pressure affects the quality of my performance.					
43	My circumstances (family and personal) negatively affect my performance					

Appendix (II)
Arabic Version of Questionnaire

تحفيز وأداء الأطباء وأطباء الأسنان العاملين في جنوب الأردن

عزيزي المشارك
تمت دعوتك للمشاركة في دراسة بحثية تهدف إلى دراسة تحفيز وأداء الأطباء وأطباء الأسنان العاملين في جنوب الأردن ، من أجل تلبية متطلبات درجة الماجستير في إدارة الصحة العامة في جامعة مؤتة.
أرجو التكرم بالإجابة على الأسئلة المطروحة مع العلم بان جميع الأسئلة المطروحة ضمن هذا الاستبيان لأغراض البحث العلمي وأن إجاباتكم ستكون محاطة بالسرية الكاملة.
لقد قرأت الوصف أعلاه لهذه الدراسة وفهمت الهدف منها، أوافق / لا أوافق على المشاركة في هذه لدراسة
.التوقيع:
التاريخ:

شكرا لتعاونكم

الاستبيان

الجزء الاول

المعلومات الديموغرافية

يرجى وضع علامة (✓)في المربع المناسب:

1.المحافظة التي تعمل بها

الكرك ☐ **الطفيلة** ☐

2. مكان العمل

مركز صحي اولي ☐ **مركز صحي شامل** ☐

3.الجنس

ذكر ☐ **انثى** ☐

4. العمر:

5.الحالة الاجتماعية

اعزب ☐ **متزوج** ☐ **مطلق** ☐ **ارمل** ☐

6. المهنة

طبيب اسنان ☐ **طبيب عام** ☐

اخصائي ☐ **، نوع الاختصاص :**

7. بلد التخرج

الاردن ☐ **بلد اجنبي** ☐ **، ما اسم البلد:**

7. مدة الخبرة في وزارة الصحة :

8. مدة العمل في المركز الحالي:

9.هل لديك منصب اداري في المؤسسة الصحية:

لا ☐ **نعم** ☐ **، ما ذلك المنصب :**

10. الراتب الشهري:

11. عدد ساعات العمل الفعلية في اليوم:

12.عدد ايام الدوام في الاسبوع :

الجزء الثاني
التحفيز

الرقم	عوامل التحفيز الذاتية	اوافق بشدة	اوافق	اوافق بدرجة متدنية	لا اوافق	لا اوافق بشدة
وحل المشاكل المتعلقة **المسؤولية:** درجة الحرية لدى الموظف لاتخاذ قراراته الخاصة وتنفيذ أفكاره الخاصة بالموظف.						
1	اتمتع بمستوى معين من الاستقلال في أداء واجباتي					
2	اتحمل كافة المسؤوليات المتعلقة بوظيفتي					
3	لدي الاستعداد لقبول أخطائي ومعالجتها .					
4	عند القيام بمهام صعبة افضل مشاركة المسؤولية مع الآخرين بدلاً من اتحملها بمفردي					
الإنجاز: تحقيق نجاح محدد، مثل إكمال مهمة صعبة في الوقت المحدد، وصنع أشياء جديدة. ورؤية نتائج إيجابية لعمل المرء						
5	إن إنجازي ورضائي الشخصي في عملي يعزز من أدائي					
6	واثق من أن إنجازاتي سيتم تقديرها من قبل الاخرين					
7	كعضو في المؤسسة الصحية ، لن يكون من المهم أنا أصنع تأثير					
8	لمعرفة مكاني من حيث الإنجاز في القطاع الصحي ،مهم بالنسبة لي أن أقارن نفسي بالآخرين					
التقدم : الاحتمال المتوقع أو غير المتوقع للترقية أو الوضع الإيجابي أو وضع الموظف في مكان العمل						
9	أنا راض عن فرصتي للتقدم					
10	لدي فرص تدريب للتعلم وتعزيز معرفتي					
11	احرص دائما على المشاركة بالدورات والمؤتمرات العلمية					

12	اشارك واقرا بانتظام المنشورات العلميه في مجال عملي					
الرقم	**عوامل التحفيز الخارجية**	**اوافق بشدة**	**اوافق**	**اوافق بدرجة متدنية**	**لا اوافق**	**لا اوافق بشدة**
ظروف العمل: العوامل التي تنطوي على المحيط المادي للوظيفة، وما إذا كانت هنا كمنشآت جيدة أو سيئة ،كمية العمل ،المساحة ،الأدوات ،والسلامة.						
13	لدي الأدوات والموارد للقيام بعملي بشكل جيد.					
14	توفر المؤسسة الصحية بيئة عمل آمنة ومريحة					
15	أن اراض عن ساعات العمل وتوزيع التزامات العمل					
16	تدفع وزارة الصحة حوافز مالية مقابل العمل الإضافي					
الأمن الوظيفي: هو احتمال أن يحافظ الفرد على وظيفته						
17	أشعر بالأمان الوظيفي في مؤسستي					
الإشراف: قدرة المديرين على توجيه وتدريب الموظفين على مختلف جوانب الوظيفة						
18	أتلقى القدر المناسب من الدعم والتوجيه من المشرف المباشر					
19	تسمح المؤسسة الصحية للموظفين بالمشاركة في صنع القرار					
20	لدى المدير علاقات جيدة مع الموظفين					
العلاقة مع زملاء العمل: كيف تشعرحول علاقتك معا لزملاء						
21	أتلقى الاحترام من جميع زملائي في العمل					
22	التعاون مع الموظفين الآخرين يقلل العبء في العمل					

الأداء
الجزء الثالث

الرقم	الاداء	اوافق بشدة	اوافق	اوافق بدرجة متدنية	لا اوافق	لا اوافق بشدة
23	أنا ملتزم بالتشريعات الوظيفية وقيم المنظمة					
24	أنا ملتزم بتنفيذ الوصف الوظيفي المعتمد من قبل وزارة الصحة					
25	انا ملتزم بتنفيذ شروط السلامة العامة والوقاية من العدوى					
26	أنا مستعد لقبول التوجيه والارشاد من مديري وزملائي في العمل					
27	يمكنني تحمل ضغط العمل وعلاج أكبر عدد ممكن من المرضى					
28	لا يعتبر عدد المرضى الذين أعالجهم مؤشرًا لادائي					
29	لا تعتبر شكاوى المرضى مؤشراً لأدائي اذ تكون بسبب تقديراتهم الشخصية					
30	لا يرتبط إنجاز المهام وواجبات العمل بعدد الغياب والحضور					
31	احرص على تقديم إشعار مسبق عندما اكون غير قادر على المجيء إلى العمل.					
32	ظروف العمل السيئة تجبرني على أخذ إجازة					
33	انجز مهامي دون الحاجة للالتزام بعدد ساعات الدوام الرسمية					
34	استطيع تنفيذ المهمة المعطاة لي بدقة وبشكل مثالي					
35	انا ابحث فعليا عن طرق لتحسين عملي وطريقة تعاملي مع المهام.					
36	أنا ابذل جهودًا كبيرة و مسؤوليات إضافية لانجز مهامي					
37	أنا اؤمن بأني احقق أعلى من الأهداف التي حددتها المؤسسة الصحية					
38	أنا قادر على التعامل بشكل جيد مع المواقف الصعبة.					
39	امتلك المهارات الكاملة والقدرة على					

	التعامل مع الحالات الطارئة التي تواجهني اثناء عملي					
40	لا امانع من تقديم خدمات خارج المؤسسة الصحية مثل التثقيف الصحي.					
41	أنا مستعد للدوام الليلي والعمل خلال أيام العطل الرسمية					
42	التعرض لضغط العمل يؤثر على جودة أدائي					
43	الظروف الخاصة بي(العائلية والشخصية) تؤثر سلبا على أدائي					

Appendix (III)
Expert Panel Group

Expert Panel Group

Expert Panel Name	Affiliation
1. Professor Dr. Ibrahim Kharboush	Mutah University
2. Associated Professor Dr. Nedal AlNawaiseh	Mutah University
3. Associated Professor Dr. Ahmed Abu Zaid	Mutah University
4. Associated Professor Dr. Sattam Al-Omar	Al- Balqa' Applied University
5. Associated Professor Dr. Haroon Al-Tarawneh	Al- Balqa' Applied University

Appendix (IV)
The permission for conducting the study in all health centers in Al-Karak and Al-Tafila 2020

MUTAH UNIVERSITY
College ofGraduate Studies

جامعة مؤتة
كلية الدراسات العليا

Re..................
Date:.....................

الرقم ك د ع/١/٢٩/٢١
التاريخ : ....هـ
الموافق ....م

السادة المحترمين

تحية طيبة وبعد،،،

فارجو التكرم بمخاطبة من يلزم لتسهيل مهمة الطالبه شروق سالم الطراونة والتي تدرس في جامعة مؤتة ماجستير /ادارة الصحة العامة الرقم الجامعي(620171502024) ، وذلك من اجل الحصول على المعلومات والبيانات اللازمة لتوزيع استباناتها لاعداد دراستها والموسومة بـ" التحفيزوأداء الاطباء واطباء الاسنان العاملين في جنوب الاردن " استكمالاً لمتطلبات الحصول على درجة الماجستير.

شاكرين لكم اهتمامكم وحرصكم على التعاون مع جامعة مؤتة ، لتحقيق أهدافها في خدمة هذا الوطن في ظل حضرة صاحب الجلالة الهاشمية الملك عبدالله الثاني ابن الحسين المعظم يحفظه الله ويرعاه.

وتفضلوا بقبول فائق الاحترام ،،،،

عميد كلية الدراسات العليا

أ.د. عمر نواف المعايطه

MUTAH-KARAK-JORDAN
Postal Code: 61710
TEL. 03/2372380-99
Ext. 6131-4050
FAX:03/ 2375694
dean_dgs@mutah.edu.jo dgs@mutah.edu.jo

مؤتة - الكرك - الأردن
الرمز البريدي: 61710
تلفون: 03/2372380-99
فرعي: 6131-4050
فاكس: 03/2375694
بريد الالكتروني
موقع الالكتروني http://www.mutah.edu.jo/gradest/derasat.htm

المعلومات الشخصية

الاسم: شروق سالم الطراونة

التخصص: ماجستير إدارة الصحة العامة

الكلية: الطب

سنة التخرج: 2020