Studying the Effect of Employees' Environment Awareness as an Intermediate Variable for the Relationship Between Institutional Pressures and Intentions of Human Resources for Adoption of Green Information Techniques: An Exploratory Study of Micro-Companies

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ABSTRACT

Purpose: The aim of the present research paper is to study the impact of institutional pressures derived from institutional theory on the intentions of human resources in micro companies to adopt green information technology. Besides, it aims at explaining the reasons why human resources in companies and research sample, are heterogeneous in their adoption of green information technology, even though they are under institutional pressures.

Theoretical Framework: The carbon footprint for micro-companies enlarges continuously for due to its an increasing use of information techniques in its all activities. Institutional pressures have increased on micro-companies pushing it toward letting human resources adopt green information techniques for mitigating negative impacts hit environment.

Design/Methodology/Approach: The quantitative design was adopted to collect data from employees working in micro-companies' in southern Iraq for a sample of 181 employees through the questionnaire. The study sample was requested to give an answer to its items in accordance with 7 point Likert scale. As per data statistical analysis, through the use of Partial Least Squares.

Findings: that institutional pressures (forced, imitated & standard) collectively impact positively on intents of the study's sample for adoption of a green information technique. Also, it was found that institutional pressures (forced, imitated & standard) impact positively employees' environmental awareness. Then diagnosing the role of employees' environmental awareness as a variable intermediating the relation between institutional pressures and intents for letting human resources adopt a green information technique.

Research, Practical & Social implications: Future studies can understandable that green information technology is an open arena for all researchers interested in the environment. Researchers can enter this field by raising study questions and employing and applying its variables to micro companies, or public sector organizations. They can expand the organizational theory by adding other intermediate or interactive variables and their effects on human resources' intentions to adopt green information technology.

Originality/value: Human resources in micro companies play a significant role in shaping the company's legitimacy in its institutional field. Because micro companies appreciate the commencement time to adopt green information technology, and the place of practice. This requires enriching their knowledge of the challenges facing the environment by developing mandatory and voluntary programs to increase human environmental awareness and to get them engaged and directing their behavior towards this objective.

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ESTUDO DO EFEITO DA CONSCIENTIZAÇÃO AMBIENTAL DOS FUNCIONÁRIOS COMO VARIÁVEL INTERMEDIÁRIA PARA A RELAÇÃO ENTRE PRESSÕES INSTITUCIONAIS E

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INTENÇÕES DE RECURSOS HUMANOS PARA A ADOÇÃO DE TÉCNICAS DE INFORMAÇÃO VERDE: UM ESTUDO EXPLORATÓRIO DE MICRO-EMPRESA

RESUMO

Objetivo: O objetivo do presente trabalho de pesquisa é estudar o impacto das pressões institucionais derivadas da teoria institucional sobre as intenções dos recursos humanos nas microempresas para adotar a tecnologia da informação verde. Além disso, pretende explicar as razões pelas quais os recursos humanos nas empresas e a amostra de pesquisa são heterogêneos na adoção de tecnologia da informação verde, ainda que estejam sob pressões institucionais.

Estrutura teórica: A pegada de carbono das microempresas aumenta continuamente devido ao seu crescente uso de técnicas de informação em todas as suas atividades. As pressões institucionais têm aumentado nas microempresas empurrando-as para que deixem os recursos humanos adotarem técnicas de informação verde para mitigar os impactos negativos sobre o meio ambiente.

Projeto/Metodologia/Proteção: O projeto quantitativo foi adotado para coletar dados dos funcionários que trabalham em microempresas no sul do Iraque para uma amostra de 181 funcionários através do questionário. A amostra do estudo foi solicitada a dar uma resposta a seus itens de acordo com a escala de 7 pontos Likert. De acordo com a análise estatística dos dados, através do uso de quadrados mínimos parciais.

Constatações: que as pressões institucionais (forçadas, imitadas e padronizadas) têm um impacto coletivo positivo sobre as intenções da amostra do estudo para a adoção de uma técnica de informação verde. Também foi constatado que as pressões institucionais (forçadas, imitadas & padrão) têm um impacto positivo na consciência ambiental dos funcionários. Em seguida, diagnosticando o papel da consciência ambiental dos funcionários como uma variável intermediando a relação entre as pressões institucionais e as intenções de deixar os recursos humanos adotarem uma técnica de informação verde.

Pesquisa, implicações práticas e sociais: Estudos futuros podem compreender que a tecnologia da informação verde é uma arena aberta para todos os pesquisadores interessados no meio ambiente. Os pesquisadores podem entrar neste campo levantando questões de estudo e empregando e aplicando suas variáveis a microempresas, ou organizações do setor público. Eles podem expandir a teoria organizacional adicionando outras variáveis intermediárias ou interativas e seus efeitos nas intenções dos recursos humanos de adotar a tecnologia da informação verde.

Originalidade/valor: Os recursos humanos nas microempresas desempenham um papel significativo na formação da legitimidade da empresa em seu campo institucional. Porque as microempresas apreciam o tempo inicial para adotar a tecnologia da informação verde, e o lugar da prática. Isto requer o enriquecimento de seu conhecimento sobre os desafios que o meio ambiente enfrenta, desenvolvendo programas obrigatórios e voluntários para aumentar a consciência ambiental humana e para envolvê-los e direcionar seu comportamento em direção a este objetivo.

Palavras-chave: Pressões Institucionais, Intenção dos Recursos Humanos para a Adoção de uma Técnica de Informação Verde e Conscientização Ambiental dos Funcionários.

ESTUDIO DEL EFECTO DE LA CONCIENCIA MEDIOAMBIENTAL DE LOS EMPLEADOS COMO VARIABLE INTERMEDIA DE LA RELACIÓN ENTRE LAS PRESIONES INSTITUCIONALES Y LA INTENCIÓN DE LOS RECURSOS HUMANOS DE ADOPTAR TÉCNICAS DE INFORMACIÓN ECOLÓGICAS: UN ESTUDIO EXPLORATORIO DE MICROEMPRESAS

ABSTRACT

Objetivo: El objetivo del presente trabajo de investigación es estudiar el impacto de las presiones institucionales derivadas de la teoría institucional sobre las intenciones de los recursos humanos de las microempresas de adoptar tecnologías de la información ecológicas. Además, pretende explicar las razones por las que los recursos humanos de las empresas y la muestra de la investigación, son heterogéneos en su adopción de la tecnología de la información verde, a pesar de estar sometidos a presiones institucionales.

Marco teórico: La huella de carbono de las microempresas aumenta continuamente debido a su creciente uso de técnicas de información en todas sus actividades. Las presiones institucionales han aumentado sobre las microempresas, empujándolas a que los recursos humanos adopten técnicas de información ecológicas para mitigar los impactos negativos sobre el medio ambiente.

Diseño/Metodología/Enfoque: Se adoptó el diseño cuantitativo para recoger datos de los empleados que trabajan en microempresas del sur de Irak para una muestra de 181 empleados a través del cuestionario. Se pidió a la muestra del estudio que respondiera a sus ítems de acuerdo con una escala de Likert de 7 puntos. Según el análisis estadístico de los datos, mediante el uso de mínimos cuadrados parciales.

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Conclusiones: que las presiones institucionales (forzadas, imitadas y estándar) impactan colectivamente de forma positiva en las intenciones de la muestra del estudio para la adopción de una técnica de información verde. Asimismo, se comprobó que las presiones institucionales (forzadas, imitadas y estándar) influyen positivamente en la conciencia medioambiental de los empleados. A continuación, se diagnostica el papel de la conciencia medioambiental de los empleados como variable que intermedia la relación entre las presiones institucionales y la intención de que los recursos humanos adopten una técnica de información ecológica.

Investigación, implicaciones prácticas y sociales: Los estudios futuros pueden comprender que la técnica de información verde es un campo abierto para todos los investigadores interesados en el medio ambiente. Los investigadores pueden entrar en este campo planteando preguntas de estudio y empleando y aplicando sus variables a las microempresas, o a las organizaciones del sector público. Pueden ampliar la teoría organizativa añadiendo otras variables intermedias o interactivas y sus efectos sobre las intenciones de los recursos humanos de adoptar la tecnología de la información ecológica.

Originalidad/valor: Los recursos humanos de las microempresas desempeñan un papel importante en la configuración de la legitimidad de la empresa en su ámbito institucional. Porque las microempresas valoran el momento de inicio de la adopción de la tecnología de la información verde, y el lugar de la práctica. Para ello es necesario enriquecer sus conocimientos sobre los retos que afronta el medio ambiente, desarrollando programas obligatorios y voluntarios para aumentar la conciencia ambiental de los seres humanos y conseguir que se comprometan y orienten su comportamiento hacia este objetivo.

Palabras clave: Presiones Institucionales, Intenciones de los Recursos Humanos para la Adopción de una Técnica de Información Verde y Conciencia Medioambiental de los Empleados.

INTRODUCTION

First of all, people concerned with environmental affairs affirmed that humanity is on the verge of losing the battle of its existence if it does not take bold and urgent steps to curb the unprecedented climate changes caused by the excessive increase in the volume of greenhouse gases generated by various activities, which reached 1.43 metric tons in 2020, after it was 0.53 metric tons in 2002, with carbon dioxide at the fore, whose quantity in the atmosphere is increasing at an alarming rate, reaching 4190 parts per million in 2020, after it was 320 parts per million in 1960. They stressed the need to reduce it to below its levels in 1990 by 20% in order to reach the target carbon neutrality. However, the winds are not going as the ships want, because greenhouse gases in the atmosphere are increasing faster than hoped. It is expected to rise this year as the world recovers from the COVID-19 pandemic after humanity released 31 billion tons of carbon dioxide in the past year (Maudre et al., 2021). It will increase by about 14% by 2030 than it was in 2010.

Second, for long time, criticism has been directed at the management of small-sized companies in many countries of the world, as they stand by and watch in the face of the imminent danger. They are indifferent to their negative contribution to environmental sustainability, and pressures have increased on them in recent times from governments, competitors, customers, and the public with the aim of pushing them to adopt a behavior Loyal to the environment, and initiating practices that involve implementing mechanisms, and taking actions on the ground to mitigate the damage they cause to the environment. After realizing that

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the danger threatens everyone, there is an increasing need for decision-makers to look rationally at the carbon footprint of information technology in their companies, and hope to break it outside the acceptable limits, and bring it under control. Without doubt, this becomes possible when they have awareness and knowledge of the practices that lead to achieving the desired goal and transforming their thinking and actions into what promotes pro-environmental behavior, amending some personal and professional practices, adopting environmentally sound practices and making them among the new priority items on the agenda of its management.

Also, according to the principles of institutional theory, whose philosophical visions were derived from ideas in the field of social analysis of organizational behavior, and in which it emphasized the cognitive explanations of the company's behavior, looking beyond its important performance and financial performance in explaining its survival. Its emphasis on the fact that the attainment of the legitimate company that is prepared according to the opinion of Scott (2001) as a perception or assumption that the company's actions are desirable, acceptable, or appropriate within the institutional sphere, obligating it to respond to socially defined standards that dictate what it should do. This commitment reduces uncertainty, especially as it operates within a social framework of standards, values, and accepted assumptions that constitute appropriate or acceptable economic behavior (Oliver, 1997).

Besides, in light of this understanding, the interest of those concerned with the institutional theory has increased, which is often used to explain the external factors that compel any company to adopt new practices. In this study, what is meant is the adoption of human resources and green information technology. It stresses that institutional pressures, which are similar mechanisms through which organizations affect companies and spread behavior among them, and companies adapt to institutional change by being exposed to three types of pressures (compulsory pressures, imitation pressures, and standard pressures). By coping with these pressures, the company gains legitimacy as well as resources and viability (DiMaggio and Powell, 1983). As indicated by Saeed et al. (2018) institutional theory appears useful for understanding how the concept of environmental sustainability is developed, accepted, and propagated.

The current paper and in line with a study conducted by Edmondson and McManus (2007) when it uses a mature theory that presented advanced dimensions and models that have been studied over time, as is the case with institutional theory as a theoretical framework, its contribution lies in testing the theory in a new environment. According to this perception, this paper aims to rely on the institutional theory to read the impact of the pressures that fall under its misleading on the intentions of human resources to adopt green information technology in a

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new environment, to bridge a knowledge gap stemming from the limited employment of the theory at the center of the discussion. If there is a study here and there, it did not reach the degree of maturity, hence we need to do more. In addition, the studies that dealt with the point of view of small-sized companies are almost non-existent in our environment, and suggesting an extension of the institutional theory may be unfamiliar in Arab studies. Given the scope of the current paper that covers small-sized companies, it is expected to contribute to the formation of knowledge about institutional pressures, human resource intentions to adopt green information technology, and the importance of environmental awareness for workers in companies.

To sum up, based on the foregoing, the current study aims to test the effect of institutional pressures in their three forms on human resources intentions to adopt green information technology in a sample of small-sized companies, and then read the mediating role played by environmental awareness for employees as a variable mediating the relationship between institutional pressures and human resources intentions. To adopt green information technology, in an attempt to broaden the perceptions of those involved in managing small-sized companies, urging them to open windows for contemplation, reading, understanding its impact and responding to it, working to turn it in their favor, and avoiding the harmful effects it produces.

LITERATURE REVIEW

Institutional Pressures

It is important to shed light on the fact that rapid economic growth has led to economic activities that have caused extensive environmental damage to the green planet (Xia et al., 2021). This in turn has brought about the emergence of many government economic policies and environmental regulations to implement and regulate activities that cause adverse environmental impacts (Du et al., 2021). Consumer movements calling for more laws to address climate change increased and turned into consumer preferences in many countries (Zhou et al: 2021). As stated by Wang et al. in a study conducted in 2021 that international and domestic pressures also increased on governments to adapt their economic practices to mitigate or neutralize their adverse impact on the environment.

Also, this thinking was reflected in the rush of companies of all kinds to adapt their working methods to reduce carbon emissions to meet government regulations and customer preferences, and to keep pace with societal expectations to maintain their legitimacy (Zhou et al., 2021). Researchers came up with the notion that in the institutional theory and its

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philosophy, as illustrated by Mignerat and Rivard (2009), that organizations and organizational actors seek to obtain legitimacy in their environment in order to ensure their acceptance and guarantee their long-term survival. It is a fact that we cannot explain everything that happens to the organization by looking only for the rational actions of managers. However, we have to look for means that take into account the lack of rationality that arises within the institutional environment that surrounds the actors in the organization, and that the structural and behavioral changes derive from the organizational needs of legitimacy and not only considerations of competitive advantage and expected efficiency. Organizations' objective is to explain the reasons for the rush of companies towards green information technology.

In this study, it is assumed that the pressures of institutions lead to the companies' response by creating a sense of the necessity of submitting to these pressures by adopting green information technology and according to the type of pressure placed on it, and in a more precise sense that the pressures come from the government, competitors, customers and the public affect decisions to implement organizational and technical actions. The objective of mitigating the negative effects generated by information technology is embodied in the company's carbon footprint resulting from its various operations. Institutional pressures consist of three types, as follows:

Forced Pressure

First, companies generally indulge in environmental initiatives to gain advantages, or to avoid penalties for non-compliance with specific government laws and regulations. Government institutions can compel these companies to comply with corporate expectations through command and control tools and economic incentives tools (Juárez-Luis et al., 2018). Saeed et al. (2018) made it clear that command and control tools refer to mandatory regulations that allow organizations to impose restrictions through authoritative orders and rules, and failure to comply may involve penalties. As far as economic incentives are concerned, they are voluntary programs that allow companies to obtain subsidies, and other privileges (Zhu and Feng, 2013). While a group of researchers stressed that mandatory regulations have a greater impact on green information technology, another group argues the opposite. They propose that it provides companies with a greater amount of resources. Another group emphasizes the necessity of merging the two policies in order to complete the strengths and weaknesses between them. Forced pressure arises from political influence and the problem of legitimacy. It refers to the government's requirement for companies to comply with environmental laws and regulations, or to participate in environmental management programmers. As to forced

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pressures that a company is exposed to, these pressures derive from legal orders, government regulations, and the influence of the companies on which the company depends (DiMaggio and Powell, 1983). Institutional pressures may be in the form of a competitive necessity.

Besides, in a study conducted by Oliver (1991), it was pointed out that forced pressure represents the empowered force that is naturally, but not exclusively, implemented by government compensation and agencies. It is the clear factor affecting the adoption of green practices by companies through the enforcement of rules and regulations. For example, in the case of the current research, failure to adopt practices that fall under the banner of green information technology to reduce the increase in the company's carbon footprint may lead to the company being exposed to legal penalties or withholding assistance from it. Companies committed to submitting to forced pressures obtain double benefits. On the other hand, they are trying to get rid of exposure to penalties resulting from non-compliance with specific governmental laws and regulations (Saeed et al., 2018). As long as the adoption of human resources for green information technology is one of the strategies available to the companies of a research sample to confront the malicious damage caused by the use of information technology, compliance with expectations and institutional standards is critical for companies to maintain their legitimacy in this field. Then this leads to ensure access to important scarce resources.

For the above-made discussion, companies are obligated to choose safer technologies that can adhere to social pressures rather than economic benefits. Institutional rationale provides theoretical perspectives for analyzing the compliance process for the legitimacy of organizations. Studies implemented by Alziady and Enayah et al., (2019), Chen et al. (2010), Abdul Azize et al. (2017) and Al-Ziyadi (2018) agreed on the impact of forced pressures on the adoption of green practices in general, and information technology and its various practices in particular.

Standard Pressure

First of all, standard pressures are the result of rules and standards formulated by the environment out of a cultural expectation of that environment. Standard pressures arise from adopting the approaches and trends of groups, associations, unions, and professional and commercial ties that are brought to the company by members of that group who seek to define their working methods to legitimize their professional independence. It is worth mentioning that professionalism here is a cooperative effort of group members to renew the conditions and methods of work, and to control the quantity and quality of new members who enter their

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specialization. It is significant to take into consideration that a part of professionalism is the formal learning and legitimacy that education and educational institutions, training centers, and bodies necessary to enrich the organizational regulations. These organizations create a group of professional employees occupying similar positions across a wide range of companies. Because of their training, individuals become more similar and create companies that in turn establish a group of interchangeable employees (Abdul Azize et al., 2017). In their study, Zheng et al. conducted in 2013 noted that the standard pressures on pivotal companies are the pressures caused by professionalism. Within each industry, a group of interchangeable employees is formed through formal learning and professional networks. Standard pressures act as a motivation for the adoption of information systems that tend to similarities between companies. In order to avoid being barred from collaborative relationships and to ensure access to resources, companies keep up with standard pressures and tend to adopt innovative technologies if pressures become true (Liu et al., 2010).

The adoption of green information technology is followed to undermine the negative damage caused by information technology to the environment. This is at the heart of the concerns of human resources in micro companies at the local and global level. They usually formulate guidelines, and develop methods for employing green information technology practices that in turn affect standards and corporate values. These standards, values, and beliefs spread through their advent in professional societies, associations, and forums that bring them together. Two important sources of similarity come from formal education and the legitimization of the knowledge base produced by university professionals. The second is the growth and expansion of professional networks that extend between companies through which new models are rapidly spreading (Maudre et al., 2021).

Imitation Pressures

Imitation pressures arise as a result of the uncertainty that encourages imitation among firms. Imitation pressures push companies to imitate other ones to avoid risk and uncertainty by copying or duplicating successful company processes or structures. Besides, when the environment creates a state of uncertainty, certain companies can become a model for other companies in their field that they see as more legitimate or successful. These models may be published unintentionally or directly through the movement of employees between companies, or through consulting companies, or professional associations (Maudre et al., 2021). A company may imitate the behavior of other companies, and this is called similarity. It is a restrictive process that forces a company to imitate other companies in light of the same

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environmental conditions. Similarity can occur consciously or without awareness. Moreover, companies usually look for, in the event of any significant change in the external environment, that creates a threat, for a role model succeeded in facing external challenges in an attempt to adjust itself according to that company or model companies (Saeed et al., 2018).

Based on the above, a company is surrounded by institutions that put a certain degree of pressure on it. The company must subject to these pressures if it is to receive a support and obtain legitimacy (Scott, 2001). In their study Xia et al. conducted in 2021 concluded three phases of corporate behavior, including social commitment, social responsibility, and social responsiveness. This inspires us about the company's green behavior. When the company's behavior deviates from the regulations and societal values, its legitimacy is weakened and threatened. In other words, the behavior of human resources to adopt green information technology is shaped by the pressure of regulations and the value system that a particular society adheres to. Now, the first research hypothesis is formulated as follows:

H1: There is a significant impact of institutional pressures on the intentions of human resources in the research sample companies to adopt green information technology at (α≤ 0.05).

The following sub-hypotheses are derived:

H1a: There is a significant impact of forced pressures on the intentions of human resources in the research sample companies to adopt green information technology at (α≤ 0.05).

H1b: There is a significant impact of standard pressures on the intentions of human resources in the research sample companies to adopt green information technology at (α≤ 0.05).

H1c: There is a significant impact of imitation pressures on the intentions of human resources in the research sample companies to adopt green information technology at (α≤ 0.05).

Environmental Awareness of Employees

According to Asadi et al. (2021) the green information technology has emerged as a path that secures the reduction of environmental degradation and the rapid depletion of natural resources that occurred over the previous years. Also, it is a reasonable attempt to enhance the sustainability and economic performance of their companies. Similarly, Xia et al. (2021) made it clear that adopting green information technology initiatives is one of the ways in which companies can deal with environmental pressures. While at the same time adoption of green information technology improves their economic and environmental performance. Those

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researchers concerned with this adoption stressed that the availability of environmental awareness for employees and being in its true extent, leads to a smooth interpretation of the pressures faced by human resources compelling them to adopt green information technology. Therefore, the environmental awareness of employees, which carries within it a sense of responsibility towards the environment, and the implementation of practices that help reduce the damage that cause harm to the environment, and awareness of others about the dangers facing them have become hot topics at all levels. Despite being matured in developed countries, but it remained stagnant for a long period of time in developing countries (Elziady and Enayah, 2019).

The environmental awareness of workers according to Lui et al. (2014) is part of environmental literacy, which involves lack of knowledge of the danger of global warming, and ignorance of the effects of heat emissions. Also, it is depicted as a mixture of knowledge, motivation, and skills. According to Ham et al. (2016) the environmental awareness is the individual's ability to understand the relationship between environmental activities, and his/her desire to participate in environmental activities. Environmental awareness is defined as the awareness of employees of environmental problems. In other words, if individuals are aware of different types of environmental pollution problems, and understand their meaning, they may dare to pay attention to environmental concerns, collect information on how to protect the environment, and adopt practices that then put them into practice to protect the environment. This may lead to enhance his/her company's role in protecting the environment with friends and peers. Employees, who are environmentally conscious, or who are aware of the impact of environmental problems on society and them, are expected to act pro-environmentally in every activity of their daily life (Murageson, 2021).

In the current study, the understanding of the research sample of the problem caused by the excessive use of information technology and the resulting damage to the environment is emphasized. Therefore, there is an attempt to use the promotion of green information technology as part of the solution despite being the cause of the problem. In other words, increasing the environmental awareness of employees led by institutional forces brings about the adoption of human resources technologies of green information. In light of the aforementioned discussion, the second research hypothesis is:

H2: There is a significant impact of institutional pressures on the environmental awareness of employees in companies in the research sample at (α≤ 0.05).

The third research hypothesis is:

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H3: The environmental awareness of employees mediates the relationship between institutional pressures and human resource intentions in the research sample companies for the adoption of green information technology.

Intentions of Human Resources for Adoption of Green Information Technology

Information technology plays a powerful and unique role in the growth and development of the performance of micro companies, enabling them to become more innovative and efficient. Also, it is helping micro companies rationalize the needs of transportation, logistics, building management, and energy distribution. Accordingly, as Asadi et al. (2021) pinpointed, it seems necessary to focus attention on the adoption of information technology by the organization, which is a reasonable approach that allows organizations to address environmental concerns and improve their economic performance. Teo et al. (2003) described information technology adoption as the process by which information technology is communicated through specific channels over time between members of an organization.

Studies related to the adoption of green information technology emphasized that intentions to act are the best predictor of a behavior compared to just evaluating the technology. The direct predictor of actual behavior is behavioral intentions. The causative action theory has postulated intentions as a function of behavior performance. Fishbein and Ajzen (1975) described intentions as the probability that an individual will perform any behavior. Intentions are affected by personal norms, which are the effects associated with the effort that one is willing to make to carry out the behavior. Intentions consist of motivational or behavioral factors that describe whether the individual is likely to perform the target behavior and determine the relative strength of the individual to implement the target behavior (Ajzen, 1991). In the present paper, the intentions of human resources readiness represent the research sample to adopt green information technology within their organization, and limits of intentions of the employees of the organization under discussion towards adopting green information technology. According to the opinion of Zhang et al. (2013), intentions can be viewed as an indicator of the company's behavior to adopt information technology. Therefore, the relationship of environmental awareness of employees and the intentions of human resources to adopt green information technology is being studied in the current paper instead of adopting green information technology. Because it provides information about intentions of the employees of the research sample in order to modify their companies' strategies in this regard in a timely manner, especially after being had environmental awareness derived from their reading of the reality of their environment burdened with environmental concerns. Then the

green information technology practice signal throughout the company is launched. Building on this point, it seems significant to investigate the behavior related to the adoption of green information technology by human resources. Therefore, the fourth hypothesis is as follows:

H4: There is a significant impact of the environmental awareness of employees in the research sample companies on the intentions of human resources to adopt green information technology at (α≤ 0.05).

Based on previous studies from which the research hypotheses have been developed, it appears from Figure (1) that institutional pressures is an independent variable that includes three dimensions (compulsion, imitation, normative). Besides, an environmental awareness of employees is a mediator variable, and the intentions of human resources to adopt green information technology is a dependent variable.

The Proposed Research Model:

Figure 1. The Proposed Research Model
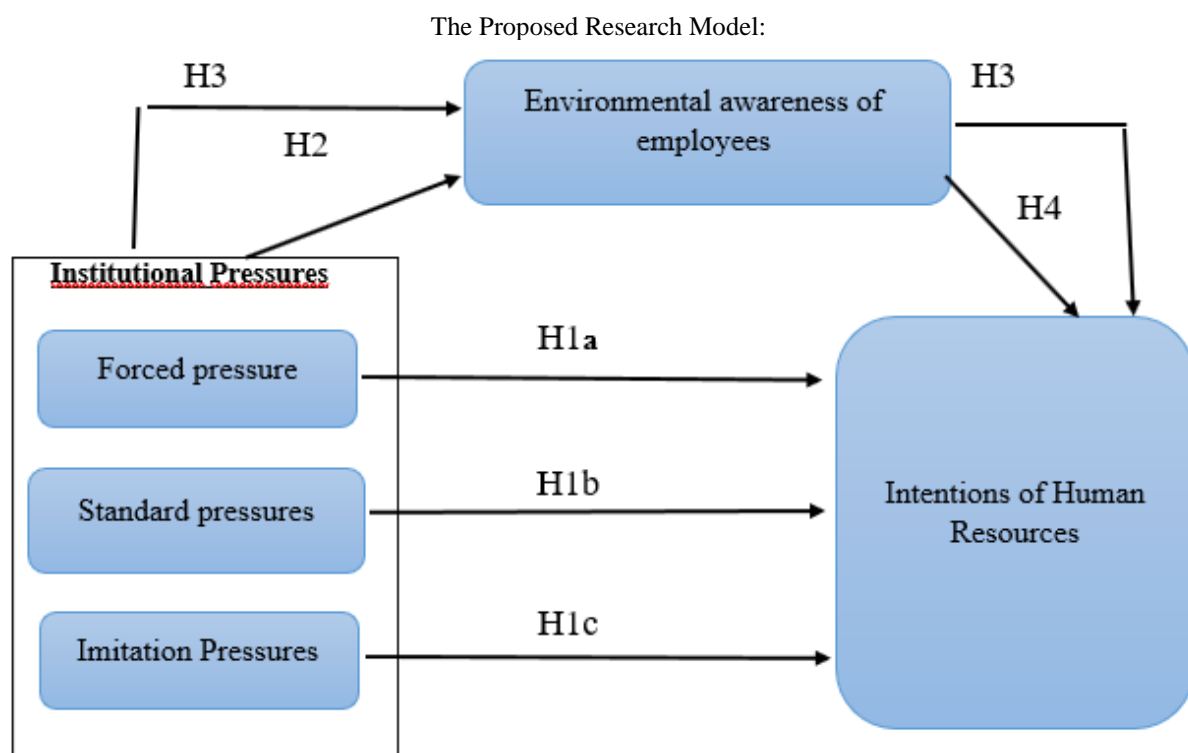
RESEARCH METHODOLOGY

First: Research Questions

Based on the aforementioned research problem, the current paper desires to answer the following questions:

1. Is there a relationship between institutional pressures and human resource intentions to adopt green information technology?

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2. Does the environmental awareness of employees have a mediating role in the relationship between institutional pressures and the intentions of human resources to adopt green information technology?

Second: Research Objectives

This research is designed to study the relationship between (institutional pressures, environmental awareness of employees and the intentions of human resources to adopt green information technology) in micro companies. Exactly, this paper aims to achieve the following research objectives:

1. Test the impact of institutional pressures (forced, imitation, standard), separately and collectively on human resources intentions to adopt green information technology.

2. Recognize the mediating role played by the environmental awareness of employees between institutional pressures collectively, and the intentions of human resources to adopt green information technology.

Third: Research Measurement

In this study, the Seven-Point Likert Scale was used in the questionnaire to measure the level of response among individuals of the research sample. The importance ranged from disagree (1) to completely agree (7) to measure all variables. The institutional stress variable was measured by adopting the scale (Alziady and Enayah, 2019), which consists of (15) items. Paragraphs (6-1) were devoted to measuring forced pressures, and paragraphs (7-11) to measure imitation pressures, and items (12-15) to measure normative pressures. The aforementioned paragraphs measure the perceptions of the research sample to the extent of the impact of institutional pressures on their companies to adopt human resources for green information technology. As to paragraphs (16-18), they were devoted to measuring the environmental awareness of the employees of the research sample based on the Geng and He's scale created in 2020. Paragraphs (19-21) were designed to measure the intentions of human resources to adopt green information technology based on (Xia et al, 2021).

Fourth: Research Population and Sample Size

In order to achieve the objectives of this study, the present survey was carried out in all micro companies in the province of Thi Qar in southern Iraq. The survey consists of (772) items, according to the statistics published by the Central Bureau of Statistics in the Ministry of Planning, considering the research community in line with the mention made by (Pandey and

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Pandey, 2015). The method of distributing the questionnaire was adopted because it is the most common approach in studies evaluating the relationship between employees and their work in organizations (Cooper & Schindler, 2014; Zikmund,2014). The questionnaire forms were distributed with the assistance of the Human Resources Management Department and the Research and Development Department. The simple random sampling method was used to select the sample. The sample was from the functional categories (administrative and technical). Employees were selected from the list provided by the human resources department in the company. According to Sekaran and Bougie (2010), it is a method used when adopting the method of selecting simple random samples in order to equalize opportunities for all members of the surveyed community.

In the context of determining the optimal size of the sample size, many researchers placed a set of requirements, and drew general lines that those who conduct particular research should abide by. For example, Sekaran and Bougie (2010) proposes that a sample size which is greater than (30) and less than (500) is suitable for most research papers. As far as Guy et al.'s carried out in 1987, the sample size less than (30) is very small, while the sample size which is greater than (500) is rarely necessary. Also, a research sample must be more than (100) items in order for the results to be generalizable. The sample size of the present paper is of (264), determined using the *Slovin formula*, which allows the researcher to take a sample from the community with the required accuracy (Stephanie, 2003).

It stipulates that:

$$n=N/1=Ne^2$$

Whereas, n= sample size   N= targeted community   e= margin of error

Assuming that the margin error is (0.05), thus, the size of the present paper sample is calculated as follows:

$$n=772/1+772\,(0.05)^2 = 264$$

In order to implement this paper practically, (300) questionnaires were distributed to employees for avoidance of the problem of low responses to meet the above mentioned criteria. Exactly, (198) were collected and after checking the forms, it appeared that (17) questionnaires were not valid for analysis due to the presence of errors and deficiencies. Therefore, only (181) questionnaires were adopted, which resulted in an answer rate of 60%.

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Statistical Tools and Methods

First: Testing Accuracy of Study Instrument Data

The search model was tested using the Structural Equation Modeling analysis. This model uses partial least squares to estimate the search model and the parameters associated with it, leading to maximizing the explained variance. Moreover, non-parametric estimation procedures were adopted to obtain the significance of the routes between the dimensions of the study with a frequency of (5000). The analysis includes two stages; the first is to test the measurement model, and second is to evaluate the structural model. Upon this perception, the research first evaluates the characteristics of the scale, which includes verifying the stability and validity of the scale. According to the available data for the research variables and its interpreted paragraphs, the analysis tests its research hypotheses. The research paper data was analyzed using the two statistical program (AMOS, V.23) and (SPSS, V.24). In order to make the outputs of the factorial analysis matrix, on which there is much reliance on extracting indicators that establish the validity and stability of the study tool. It is necessary to verify the quality of the data of the research tool, and to ensure the sufficiency of the sample size as it is appropriate and the results that will be obtained.

The research adopted the recommendation made by Hinton et al. (2014), which considers that the *Kaiser-Mayer-Olkin*'s test called the sampling suitability test, referred to in short (KMO), is suitable for verifying the quality of the study tool data. The closeness of the test value to zero indicates that the sum of the squares of the correlation coefficients between the variables is smaller relative to the squares of the partial correlation coefficients, and vice versa. The values of this test exceeded the threshold of (0.60) for the dimensions of the research. This confirms the adequacy of the sample size, and indicates that the route has become clear to move to the factorial analysis procedure. By taking a quick look at the values of this test presented in Table (1), they ranged between (0.57) and (0.82). Thus, it can be concluded that the sample size is sufficient to perform the factor analysis of the research dimensions. Kolmogorov-Simirnov test can be useful to check whether the data follow a normal distribution or not. According to this method, the data are normally distributed if the calculated Kolmogorov-Simirnov test value is greater than the standard D. Because the size of the research sample (N) reached (180), and the level of significance adopted in the current research is (0.05). According to the following equation $D = 1.36 \div \sqrt{N}$, the standard D value is (0.10). This is less than the value of the relevant test for the variables included in the research, which ranged between (0.53 and 0.79). Consequently, as disclosed by Cooper and Schindle (2014), it can be

said that the data are normally distributed. This gives indications of the possibility of using statistical parametric test.

Table 1: Standards for Research Tool Tests and Data Quality

Variable	VIF	Allowable variance rate	variance rate calculated	The square root of the calculated mean of variance	skewness	kurtosis	K-O-M	Kolmogorov-Smirnov	
								Statistical value	Statistical significance
Forced	3.24	0.31	0.64	0.80	1.10	1.18	0.73	0.63	0.34
Standard	2.18	0.46	0.79	0.88	0.78	0.67	0.76	0.53	0.43
imitation	2.90	0.34	0.63	0.79	-1.23	-1.21	0.64	0.79	0.31
Environmental awareness	3.07	0.33	0.71	0.84	-0.55	0.74	0.82	0.67	0.52
Intentions	2.14	0.47	0.67	0.82	1.17	-0.59	0.57	0.55	0.23

Although the aforementioned test provides only limited information when the data are very far from a normal distribution, a research must study two data distributions, namely skewness and kurtosis. This is to ensure the appropriateness of the maximum likelihood method in estimating the matching indicators, and judging the results of the test, where both depend on the value of Z. The Z value can be obtained by dividing the value of skewness or kurtosis of the variables concerned by the standard error. Here, the rule of the decision is that the value of the statistic Z should not fall outside the limits of (1 ± 1.96). The data were consistent with the standard, as the indicated value ranged between (-1.23) and (1.17) for skewness. Similarly, the Z value related to kurtosis went as shown in Table (1) and ranged between (-1.21) and (1.18). This presents an acceptable basis for judging, as brought about by Hair et al. (2017), that the data are close to a normal distribution. For disclosing the independence of the research variables and their non-interference with each other, this paper used the inflation rate variation, whose value ranged between (2.96 and 3.01). This did not exceed the recognized breakpoint in this regard, which amounted to (3.3). In addition, by reading the matrix determinant whose value is (0.003301), which is more than the acceptable minimum. This confirms that the data is free of linear correlation. Thus, it can be said that the problem of linear interference does not constitute an obstacle to moving to the next step of the analysis.

Second: Validity Test of the Study Tool

- **Factorial Validity**

Hewitt et al. (2004) emphasized that confirmatory factor analysis, in contrast to exploratory, provides an opportunity to determine the validity of certain measurement models

that were built in the light of previous theoretical frameworks that enjoyed validity and stability. Therefore, this research paper used a confirmatory factor analysis to judge the validity of the measurement tool. The maximum likelihood method was adopted to overcome a statistical problem not being overcome in the other methods. Because this requires an estimate of the factorial ramifications, and the use of one valid criterion as a minimum for accepting the factor, as the extraction stops at the root of one true object or more, and 70% is a saturation indication. The presence of saturation rates closes to the correct one as explained by Hair et al. (2017) indicates that there is a common variance between the dimension and its indicators, which is greater than the variance error. It is clear from reading the data shown in the factor analysis matrix in Table (2) that all the items are saturated on the five factors that they measure as per the sequence of the items in the factor analysis matrix. The value of the latent root was (2.29,2.34,2.79,3.36,4.02), respectively. The percentage variance ranged between (0.15 and 0.27). The value of the explained variance was 71%. The lowest value of the socialism values and (indicating the percentage of variance in the total variables that can be explained by the seven factors) that appear under the title of socialism opposite item number (14) in the factor analysis matrix (0.65). The summary of the research paper results shows the strength of the influence of the different aspects of the research paper factors on the levels of saturation and significance rates.

Table 2. Factor Analysis Matrix

	Factor	Item	Forced	imitation	Standard	Environmental awareness	Intentions	saturation
1	Forced	Forced 1	0.79	0.12	0.17	0.08	0.11	0.68
2		Forced 2	0.78	0.13	0.18	0.10	0.10	0.67
3		Forced 3	0.81	0.15	0.14	0.13	0.14	0.73
4		Forced 4	0.77	0.10	0.16	0.14	0.16	0.66
5		Forced 5	0.83	0.09	0.11	0.17	0.15	0.75
6		Forced 6	0.81	0.13	0.08	0.09	0.15	0.70
7	Imitation	Imitation 1	0.10	0.80	0.19	0.08	0.13	0.70
8		imitation 2	0.12	0.81	0.10	0.10	0.10	0.69
9		Imitation 3	0.08	0.78	0.12	0.10	0.10	0.66
10		Imitation 4	0.14	0.79	0.11	0.11	0.08	0.69
11		Imitation 5	0.16	0.80	0.18	0.09	0.09	0.70
12	Standard	Standard 1	0.14	0.16	0.82	0.11	0.08	0.71
13		Standard 2	0.10	0.15	0.81	0.13	0.06	0.70
14		Standard 3	0.09	0.11	0.77	0.14	0.13	0.65
15		Standard 4	0.17	0.14	0.79	0.18	0.13	0.70
16	Environmental awareness	Environmental awareness 1	0.13	0.09	0.13	0.85	0.10	0.77
17		Environmental awareness 2	0.15	0.07	0.15	0.84	0.08	0.79
18		Environmental awareness 3	0.11	0.10	0.11	0.84	0.21	0.77
19	Intentions H.R	Intents 1	0.10	0.08	0.14	0.16	0.82	0.73
20		Intents 2	0.08	0.12	0.16	0.17	0.83	0.75
21		Intents 3	0.09	0.13	0.11	0.15	0.80	0.70
	latent root		4.02	3.36	2.79	2.43	2.29	14.89
	Contrast percentage		0.27	0.23	0.19	0.16	0.15	1
	variance ratio		0.19	0.16	0.13	0.12	0.11	0.71

- **Convergent Validity**

The convergent validity is confirmed for us according to what was mentioned in a study carried out by Anderson and Gerbing (1988) stating when the saturation of the items on their factors is high, and by looking at Table (2), it can be seen that the loading of all the items on their factors exceeded the threshold of (70%). In addition, according to Gefen and Straub (2005), when the loading coefficients of the items on their assumed dimensions are greater than their loadings on the other dimensions by an amount greater than (0.10), this gives an indication of the validity of convergence.

The factor analysis matrix showed the fulfillment of this condition. In a related context, the calculated variance rate when it exceeds the threshold (0.50) confirms that the performance measurement indicators converge or share a large amount of variance. This enhances the validity of the convergence as indicated in a study executed by (Bagozzi and Phillips, 1991). For factual claiming that the scale is characterized by convergence validity, there must be an adherence to three criteria recommended by (Bagozzi and Fornell, 1982). The first criterion is that the loading rates should be more than (0.50). Second, the reliability coefficient should be

greater than (0.70). Third, it is assumed that the calculated variance rate exceeds (0.60) These criteria are fulfilled in the present research paper. Building upon the aforementioned data, it can be concluded that the research paper tool is characterized by the validity of convergence. In addition, the results of the present study showed that the indicated percentage did not exceed the threshold (0.85), confirming the validity of the differentiation of the research variables according to the opinion held by (Henseler et al., 2016). The value of the correlation coefficient with a degree of freedom of (179), and a significance level of (0.05) was approximately (0.132). This makes the correlation between the research variables presented in Table (3) positive, and goes in one direction.

Third: Test Validity of the Instrument

At this stage, the research has to diagnose the stability coefficient of its scale. In consistent with the opinion of Hair et al. (2017), and for the purpose of verifying the stability of the scale, the researchers used the reliability coefficient index (to ascertain the extent of the coherence of the statements of each scale) instead of the Cronbach's alpha coefficient (focusing on the internal consistency between the contents of each test scale). Because the first presented, in line with Werts' study carried out in 1974 better estimates of the covariance. Because it takes into account indicators that have different loading coefficients unlike the second one, which assumes that all indicators are equally reliable.

Because, as in the opinion of Raykov (2007), it uses the saturations of the items obtained from within the network that covers the topic. It provides better estimates of the common variance that we obtain by means of the indicators estimated accordingly. It takes into account the external loadings of the variable indicators as mentioned in a study conducted by Hair et al. in 2017. As far as Garver and Mentzer are concerned, they added that it is stronger for stability assessment compared with the Alpha Cronbach equation. Moreover, it is described as a conservative test of stability. The values of the stability coefficient, which range from 0.60-0.70, are satisfactory, as determined by Hair et al. (2017). If stability values are more than (0.90), it is not desirable because it indicates that all the indicator variables measure the same phenomenon, and therefore they may not be valid for measuring the dimension. By reading Table (3), it is noted that the values of the stability coefficient exceeded the threshold of (0.70), which is the required minimum, and did not reach the limits of (0.90). Moreover, the extracted mean variance values exceed the (0.50) threshold suggested by Bagozzi and Yi (1988). This provides an additional support to the research tool having an acceptable degree of stability that qualifies it to be a reliable measure.

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Table 3. Correlation Matrix and Stability Coefficient

variable	Forced	Standard	imitation	Environmental awareness	Intentions	coefficient of stability.
Forced	**1**					**0.73**
Standard	**0.35**	**1**				**0.78**
imitation	**0.33**	**0.29**	**1**			**0.81**
Environmental awareness	**0.42**	**0.34**	**0.39**	**1**		**0.76**
Intentions	**0.49**	**0.42**	**0.45**	**0.55**	**1**	**0.79**

In light of the foregoing, it can be said that the research paper scale showed stability, convergent validity and an acceptable discriminatory honesty allowing researchers to move to the second phase of the analysis.

Study Results and Discussion
## First: Presenting Direct Impact Results and Discussion

The aim of this research paper is to conduct further investigations on the impact of institutional pressures on the intentions of human resources to adopt green information technology. These investigations are to be added to the arguments presented by previous theoretical and empirical studies in this regard. Also, the paper another aim is to clarify the role of environmental awareness for employees in companies. Others refuse to do the same, despite the similar pressures they are exposed to in the same regulatory field. Looking at the post-test route coefficients plotted on the research scheme. Figures (2 and 3) disclose the direct effect of the independent variable on the dependent variable according to the hypothesis described in the hypothetical research scheme. In addition, it depicts the value of the route parameter (β) and its associated T-value calculated that exceeded its tabular value of 1.96, which determines the significance of the effect.

It is noted:

1. There is a positive and significant effect of collective institutional pressures on the intentions of human resources to adopt green information technology in the research sample companies. The value of the route coefficient parameter was (0.31), which is significant at the significance level of 0.05. This means that an increase in the levels of institutional pressures by one unit will lead to an increase in the level of human resource intentions of the research paper sample to adopt green information technology at percentage of (0.31). It means that the validity of the first main research hypothesis becomes clear, according to which there is a significant effect of institutional pressures on the intentions of human resources in the research sample companies.

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Similarly, it is transparent that there is a positive and significant effect of the combined institutional pressures on the environmental awareness of the employees, as the value of the route coefficient parameter was (0.39), which is significant at the significance level of (0.05). In view of the above, the second main research hypothesis is realized. There is a significant effect of institutional pressures on the environmental awareness of employees in the sample companies at the level of significance applied in the present research paper. Also, it made clear that there was a positive and significant effect of the environmental awareness of the employees who acted as the independent variable at this stage of the analysis with respect to the dependent variable. As depicted in Figure (2), the value of the route coefficient was (0.42), which is significant at the significance level of (0.05).

Figure 2. Route Analysis Results for Dimensions on the Total Level
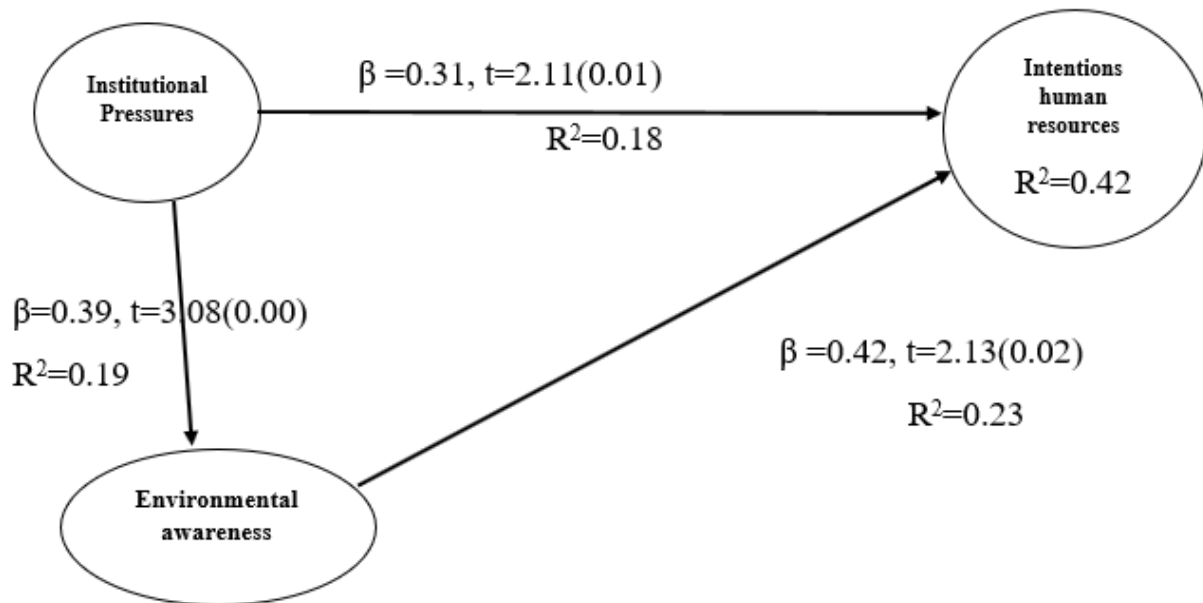

It is made clear here that increasing the levels of institutional pressures by one unit will lead to an increase in the environmental awareness of employees by the value of the route parameter. The research paper can declare the verification of the third main research hypothesis, according to which there is a significant effect of environmental awareness of workers in companies, the research sample, on the intentions of human resources to adopt green information technology during the period of the research, according to the value of the coefficient of determination.

2. There is a direct positive and significant effect of forced pressures on the intentions of human resources in the research sample companies towards adopting green information technology, according to the data derived from the statistical analysis. The values of a route factor reached

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(0,47), and are significant at the level of significance adopted in the present research paper. Hence, the research first sub-hypothesis is accomplished declaring that there is a significant effect of forced pressures on the intentions of human resources in companies, at (0.05). Likewise, results showed a significant impact of imitation pressures and standard pressures, as the values of the route coefficient were (0.44 and 0.41), respectively. They are significant below the level of significance (0.05). It is made clear here that an increase in the levels of institutional pressures individually by one unit will lead to an increase in the levels of human resources intentions in the research sample at the time of conducting the research to adopt green information technology as much as the value of the route factor parameter.

Forced pressures explained (0.23) of the variance of intentions, and the impact of imitation pressures depicted the same image to explain (0.20) of the variance of intentions. As to standard pressures, they explained (0.17) of the variance of the dependent variable. The independent variables (forced, imitation, and standard) explained (%60) of the changes that occur in the variable of human resource intentions in the research sample to adopt green information technology. The value of (%40) remains explained by other variables outside the subject of the research or due to measurement errors. Therefore, the validity of the second sub-hypothesis is approved. The second sub-hypothesis content is that there is a significant influence relationship of standard pressures on the intentions of human resources in the companies in application to adopt green information technology. As to the third sub-hypothesis of research, its validity is approved. Its content reads there is a significant influence relationship of imitation pressures on the intentions of human resources in companies of the research sample for the adoption of green information technology.

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Figure (3): Direct Impact of Institutional Pressures (Individually) on Intentions of Human Resources to Adoption of Green Information Technology
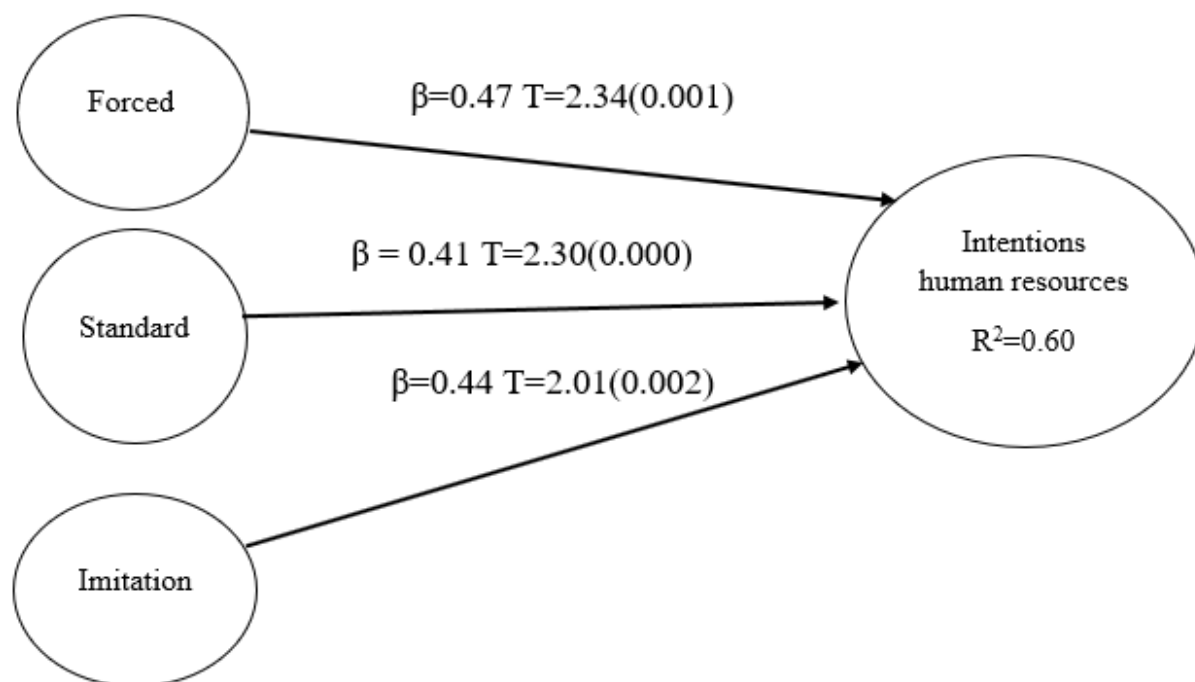
This contemplates that the environmental policies and regulations drawn up by the relevant governmental bodies, and offering the companies in practice to abide by them as a main determinant to push the human resources in the research sample companies to adopt green information technology practices.

Second: Presentation and Analysis of Results of Mediating Role

As a result of an opinion summarizing that the adoption of human resources and acceptance of the introduction of green information technology in the company is associated with the awareness of the human resource of the importance of this practice. It is useful and has a positive impact on the environment in general. It is tried to explore the mediating role of environmental awareness of employees as one of the main drivers of environmental behavior in the relationship between institutional pressures and human resources intentions to adopt green information technology in the paper sample companies. This brought about a suggestion of an extension of the institutional theory by including the role of human resources in the legitimacy processes. The two researchers came up with a set of conclusions matched by recommendations to encourage the intentions of human resources to adopt green information technology.

By reading the routes between the research variables shown on Figure (2), it is perceived that the route from the independent variable to the dependent variable is statistically significant,

and the route between the independent variable and the mediating variable, as well as the route between the mediating variable and the dependent variable is also statistically significant. They all go in one direction, which makes mediation of the supplement type, which is consistent with a description pinpointed by (Hair et al, 2017). The direct impact of the independent variable on the dependent variable that appears on the chart (2) amounted to (0.31) seems small. However, it attained an average strength of (0.47) with the presence of the indirect effect, which indicates the appropriateness of the independent variable in the interpretation of the dependent variable. Therefore, the type of impact must be determined, in whole or in part. It depends on the size of the indirect effect relative to the total effect, and the researcher will follow the steps identified by Preacher and Hayes (2008), which is to calculate the variance accounted for (VAF). It determines the value of the proportion of the indirect effect from the total effect. According to the following equation:

$$P2*P3/P2*P3+P1$$

Whereas:
Where:
P1 is a coefficient of the direct route from the independent variable to the dependent variable = 0.31
P2 is a route parameter from the independent variable to the median variable 0.39=
P3 is a route parameter from the intermediate variable to the dependent variable 0.42
0.39*0.42/0.39*0.42+0.31=0.34

This means that 34% of the total impact of institutional pressures on human resources' intentions to adopt green information technology is explained by the direct impact of the independent variable on the dependent variable. While the rest is explained by the indirect impact that comes from passing the impact through the mediating variable. As long as the value of (VAF) has fallen between 20% and 80%, the environmental awareness of the employees is described as a variable that partially mediates the relationship between the independent variable and the dependent variable. Table 4 brings the mediation analysis results.

Table *4.* Mediation analysis results

Path	The independent variable - mediator	The mediator variable - dependent	The independent variable - mediator * mediator - dependent	VAF	Power
value	0.39	0.42	0.16	0.34	partial

To summarize, the environmental awareness of employees mediates in part the relationship between institutional pressures and human resources intentions to adopt green information technology. In other words, it shows that institutional symmetry leads to the formation of human resources intentions to adopt green information technology directly.

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However, it also increases the environmental awareness of employees, which in turn guides to an increase in the intentions of human resources in the research sample to adopt green information technology. Therefore, some of the impact of institutional pressures on the intentions of human resources to adopt green information technology is justified by the environmental awareness of employees.

CONCLUSIONS & RECOMMENDATIONS

First, the aim of the present research paper is to study the impact of institutional pressures derived from institutional theory on the intentions of human resources in micro companies to adopt green information technology. Besides, it aims at explaining the reasons why human resources in companies and research sample, are heterogeneous in their adoption of green information technology, even though they are under institutional pressures.

As a result of an opinion summarizing that the adoption of human resources and acceptance of the introduction of green information technology in the company is associated with the awareness of the human resource of the importance of this practice. It is useful and has a positive impact on the environment in general. It is tried to explore the mediating role of environmental awareness of employees as one of the main drivers of environmental behavior in the relationship between institutional pressures and human resources intentions to adopt green information technology in the research sample companies. This made us suggest an extension of the institutional theory by including the role of human resources in the legitimacy processes. The two researchers concluded a set of conclusions matched by recommendations to encourage the intentions of human resources to adopt green information technology. These recommendations are accompanied by a reference to the determinants of the study, and the proposed areas for studying the subject in the future, to be presented as follows:

First: Conclusions

1. Green information technology is a crucial topic in the administrative literature. Research in green information technology witnessed a transition from measuring the readiness of human resources in companies and their willingness to be introduced, adopted and placed in practice. The adoption of green information technology can help reduce the carbon footprint of micro companies, leading to support endeavors to move towards sustainability.

2. Harmful impacts of information technology on the environment. Its birth is local, and its effects are global. It is wise to take a comprehensive approach with the

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cooperation of all based on the adoption of green information technology by human resources to confront such harmful impacts.

3. Results disclosed that the forced pressures are more successful in motivating the intentions of human resources in the research sample companies to adopt green information technology. Those concerned with the management of human resources in question desire to imitate and simulate the behavior of human resources in other companies that have adopted green information technology. Companies that adopted green information technology have achieved success and distinguished rank in the market. Standard pressures drive the intentions of employees of the companies under consideration to adopt green information technology for human resources as a social commitment.

4. Environmental awareness of employees derived from human resources' awareness and knowledge of the danger that threatens our planet played a mediating role in the relationship between human resources' intentions to adopt green information technology and the institutional pressures collectively. Mediation was partial.

Second: Recommendations

1. As long as forced pressure comes first in terms of its power as a determinant of human resource intentions to adopt green information technology, environmental policy authorities can enhance human resource intentions. This can be done through providing more financial rewards, technical resources, government subsidies, and taxation exemptions, and training to push them towards the desired behavior.

2. Governmental and non-governmental associations, societies and unions can furnish dedicated funding to micro companies. This move could encourage companies to acquire their human resources in environmentally friendly information technology, in cooperation with banks and insurance companies, in a way that ensures that these companies draw an inexpensive road map for the short term to start introducing green information technology practices and bear the burden.

3. Sharing business with specialized experts to spread, in general, environmental awareness for employees in the audio, print and visual media. Also, it is desired to define the role of information technology in reducing the carbon footprint at the company level, and to promote the idea that these procedures would ensure success when dealing with suppliers and customers who care about the issue of climate change at home and abroad.

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4. Human resources in micro companies play a significant role in shaping the company's legitimacy in its institutional field. Because micro companies appreciate the commencement time to adopt green information technology, and the place of practice. This requires enriching their knowledge of the challenges facing the environment by developing mandatory and voluntary programs to increase human environmental awareness and to get them engaged and directing their behavior towards this objective.

Limitation of the Study & Recommendations for Future Research

1. Although the study approached its desired objectives, the two researchers believe it is necessary to draw attention to its limitations. These limitations are manifested in the fact that its results were based on data collected from a sample that appears to be small in size, at a certain moment in time. Therefore, it may provide us with a single snapshot of a scene depicting intentions of human resources for green information technology adoption. The analysis was based on data collected by the questionnaire. Nothing was ruled out that the answers are subject to hindsight, or possible bias. This limits our understanding of the relationship between study dimensions. In addition, the study questions dealt with the impact of institutional pressures from the perspective of Iraqi culture. This may not make responses generalizable in the broader environment.

2. It is understandable that green information technology is an open arena for all researchers interested in the environment. Researchers can enter this field by raising study questions and employing and applying its variables to micro companies, or public sector organizations. They can expand the organizational theory by adding other intermediate or interactive variables and their effects on human resources' intentions to adopt green information technology. Longitudinal studies that delve into the understanding of human resources' intentions for green information technology adoption may be a justified route to obtaining new results.

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