

## Critical Success Factors for Applying Flexible working Time Arrangements in Egypt: An Applied Study

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### Abstract

The researcher's goal for completing this study was to figure out the main critical success factors (CSFs) for applying Flexible Work Arrangements (FWAs) in Egypt on Academic Staff members at some Egyptian Universities (Public & Private). The researcher grouped the CSFs into two main groups which are: (1) Organizational Factors (Manager Support, Co-worker Cooperation, Organizational Culture and Technology Availability) and (2) Employee Factors (Employee Needs and Employee Commitment). The research also covers their relationship with FWAs implementation, including three main types (Flex-time, Telework and Part-time work) being used extensively in the higher education sector following COVID 19 Pandemic.

This is a descriptive quantitative study, and data was collected through a questionnaire. Its validity and reliability were verified, distributed to (n=343) academic staff members, and the study of the hypotheses were tested using simple linear regression and Pearson Correlation via SPSS software version 20.

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The hypothesis testing sought to establish a relationship between the aforementioned factors and the implementation of FWAs.

The researcher discovered that there is a significant positive relationship between Organizational Factors and FWAs implementation, but no significant relationship between Employee Factors and FWAs implementation, indicating that manager support is the most significant factor in implementing FWAs. Before and during the implementation of FWAs, universities must ensure that managers support the system by providing training, raising awareness of its importance and highlighting its benefits to employees and the entire organization.

### **عوامل النجاح الحرجة الرئيسية لتطبيق ترتيبات العمل المرنة في مصر ملخص**

إن هدف الباحثة لإكمال هذه الدراسة هو معرفة عوامل النجاح الحرجة الرئيسية لتطبيق ترتيبات العمل المرنة في مصر على أعضاء هيئة التدريس في بعض الجامعات المصرية (العامة و الخاصة). هذه دراسة كمية وصفية، و تم جمع البيانات من خلال استبيان تم توزيعه على 343 من أعضاء هيئة التدريس، و تم إختبار فرضيات الدراسة باستخدام الانحدار الخطى البسيط في الاصدار العشرون من برنامج SPSS

اكتشفت الباحثة أن هناك علاقة معنوية إيجابية بين العوامل التنظيمية و تطبيق ترتيبات العمل المرنة، و لكن لا توجد علاقة معنوية بين العوامل الخاصة بالموظفين و تطبيق ترتيبات العمل المرنة، مشيرة أن دعم المديرين هو العامل الأكثر أهمية في تطبيق ترتيبات العمل المرنة.

## 1) Introduction:

Workplace is a place that some people dislike because they have grown accustomed to it, caring only about their salaries and attempting to ignore the sources of stress and dissatisfaction that the workplace causes them, and their lives are severely impacted as a result. They see their work as a routine time every day with no room for flexibility. This point of view also has a negative impact on the workplace because employees who are in a routine mood are less productive and creative.

As we enter the twenty-first century and everything around us changes, one of the most important things to change is the environment of our workplace in order to be more flexible and cope with the changing environment around us. As a result, the **concept of Flexible Work Arrangements (FWAs)** was developed, which is defined as a human resource plan that employees choose to register in to gain flexibility in the amount, time, location or continuity of their work. (Younis 2016) and one of the types of FWAs is flex-time, which were first created in Germany in 1967 at Messerschmitt Corporation and focuses on flexibility in terms of time of work (Brickey 2002). FWAs give employees more flexibility in dealing with their work in order to reduce stress at work, strike a balance, achieve a high level of satisfaction with their work, and be more creative.

As the motivation for the researcher to conduct this research, she discovered that many Egyptian employees use flexible working time arrangements but do not receive all of the benefits that they desire as a result of this flexibility. This motivated the

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researcher to conduct her research on searching for the critical success factors for applying flexible working time arrangements on a sample of some Academic Staff in some Egyptian Universities.

Flexible work Arrangements can be categorized in flexibility in the **place, amount and time of work**. Telecommuting, virtual teams, and other arrangements provide **flexibility in the workplace**, Part-time work, job sharing, and contingent workers are all examples for the **amount of work flexibility**. The final category is **work time flexibility**, which addresses three major arrangements: flexible working hours, shift work, and compressed workweek (Younis 2016). So the researcher wants to demonstrate the main critical success factors for implementing these arrangements in the chosen sample to ensure that the educational staff at the universities benefit from implementing these arrangements. The researcher will select three types to study: teleworking, part-time work, and flex-time, which are the three most commonly used types in the sample.

As a result of the COVID 19 Pandemic, there is an urgent need to implement these flexible working time arrangements in order to stay safe while also working and progressing. So there was a need for searching for the critical success factors for applying Flexible working time arrangements, concentrating heavily on applying these arrangements in the educational sector after COVID 19 as this sector, in particular, had not been heavily applying these arrangements prior to the Pandemic, so the researcher will concentrate on searching for the critical success factors for applying Flex-time, Telework, and Part-time work especially after COVID 19 in her chosen Sample.

## 2) Research Importance:

The **researcher's main motivation** for starting this study was her own Professional career as a Part-time assisting teacher in a private Egyptian university and how this type of Flexibility in contracting allows her to find more time for her family and study, so she came up with the idea of finding the main critical success factors for applying some Flexible working time arrangements (FWAs) like Part-time, telework, and Flex-time and applied her study on a sample of academic staff members in some Egyptian universities (Public and Private).

**The theoretical significance** of that study is that it attempts to demonstrate the main critical success factors for implementing FWAs by presenting the relationship between some organisational factors (manager support, co-worker cooperation, organisational culture, and technology availability) and some employee factors (employee needs and employee commitment) and its relationship with FWAs implementation.

**The Empirical Significance** of that study is that the researcher chose the higher education sector to apply in, especially after the COVID 19 Pandemic, many academic staff members began to use FWAs for the first time, such as telework (giving lectures from home), having more flexibility in the time of lectures, and some Academic staff members had shifted their work from full-time to part-time, all as a reaction to that crisis.

So there was a need to study what are the main critical success factors for applying FWAs for academic staff members to

continue working effectively and without stress after COVID 19, especially since (Song et al. 2022) suggested using critical success factors in the field of emergency management, such as what happened in the COVID 19 Pandemic.

### **3) Problem Statement:**

In order to apply any new concept we need to know exactly the main critical success factors for applying that concept in order to gain the benefits of its application or even if we need to make any changes in the applied system. so in this research we are going to show some basic critical success factors the universities must have in order to apply the flexible work arrangements, particularly Flex-time, Teleworking, and Part-time. And knowing the exact success factors will benefit both the employer and the employee in order to achieve a high level of satisfaction for the employees and reduce the stress employees feel (Ferreira 2018) because the methods used by the firm to make work easier for employees will benefit the customer in the end because when the employee is happy and wants to work more for his employer, the more satisfied the customers will be. While using this system incorrectly makes flexible work arrangements a problem rather than a way to make work easier.

Our research will attempt to demonstrate the relationship between employer and employee in applying flexible working time arrangements and will discuss what challenges and threats that can be raised by applying flexible working time arrangements in order to achieve the best critical success factors

and conditions that suit applying flexible working time arrangements, particularly the three chosen types of arrangements.in Egyptian Universities.

As some flexible working arrangements Time arrangements can be used in one organization but not in another because it depends on the type of good or service delivered, Also, organizational factors in terms of (Manager Support, Co-worker Cooperation, Organizational Culture, and Technology Availability) and employee factors in terms of (Employee Needs and Employee Commitment) can facilitate the implementation of flexible time arrangements, as we will demonstrate by conducting a questionnaire distributed to academic staff at some Egyptian universities (Public and Private).

**The Problem Statement can be summarized as follows “the Ambiguity of the relationship between the efficient Flexible Working Time Arrangements application especially (Flex-time, Teleworking and Part-time) and the availability of their critical success factors for applying it on some Academic Staff at certain Egyptian Universities especially after COVID 19 Pandemic as the educational staff was not implementing a lot these arrangements before COVID 19 Pandemic”.**

**So the Research Problem can be summarized into an important Main Research question “To what extent does critical success factors for applying FWAs affect the implementation process?”**

#### **4) Research Questions and Objectives**

<b>Research Questions</b>	<b>Research Objectives</b>
<p>1) What is the relationship between the Organizational Factors (Support of Managers, Cooperation of co-workers, Organizational Culture and Technology Availability) and the implementation of Flexible Working Time Arrangements? This is in terms of The three chosen forms, which are Flex-time, Telework and Part-time, applied on the Academic Staff at some Egyptian Universities (Private and Public).</p>	<p>1) Identifying the relationship between the Organizational Factors (Support of Managers, Cooperation of co-workers, Organizational Culture and Technology Availability) and the implementation of Flexible Working Time Arrangements in terms of The three chosen forms, which are Flex-time, Telework and Part-time, applied on the Academic Staff at some Egyptian Universities (Private and Public).</p>
<p>2) What is the relationship between the Employee Factors (Employee Needs and Employee Commitment) and the implementation of Flexible Working Time arrangements? This is in terms of the three chosen forms, which are Flex-time, Telework and Part-time applied on the Academic Staff at some Egyptian Universities</p>	<p>2) Investigating the relationship between the Employee Factors (Employee Needs and Employee Commitment) and the implementation of Flexible Working Time Arrangements in terms of the three chosen forms, which are Flex-time, Telework and Part-time applied on the Academic Staff</p>



(Private and Public).	at some Egyptian Universities (Private and Public).
3) What is the most significant critical success factor For applying Flexible Working Time Arrangements for an Academic Staff member according to the chosen Sample?	3) Discovering the most significant critical success factor for applying Flexible Working Time Arrangements for an Academic Staff member according to the chosen Sample.
4) Did Academic Staff members use Flexible working Time arrangements before COVID-19 Pandemic according to the chosen sample?	4) Showing if the Academic Staff members use Flexible Working Time Arrangements before COVID-19 Pandemic according to the chosen sample.

**5) Research Hypothesis: the Hypothesis can be summarized into this two main null Hypothesis:**

**H1) There is no significant relationship between the Organizational Factors (Support of Managers, Cooperation of Co-workers, Organizational Culture and Technology Availability) and the implementation of Flexible Working Time Arrangements in terms of The three chosen forms, which are Flex-time, Telework and Part-time, applied on the Academic Staff at some Egyptian Universities (Private and Public). (Main Hypothesis).**

**Sub Hypothesis:**

H1.A: There is no significant relationship between the support of managers and the implementation of Flexible working time arrangements (The three chosen forms).

H1.B: There is no significant relationship between the cooperation of co-workers and the implementation of Flexible working time arrangements (The three chosen forms).

H1.C: There is no significant relationship between the organizational Culture and the implementation of Flexible working time arrangements (The three chosen forms).

H1.D: There is no significant relationship between the availability of Technology and the implementation of Flexible working time arrangements (The three chosen forms).

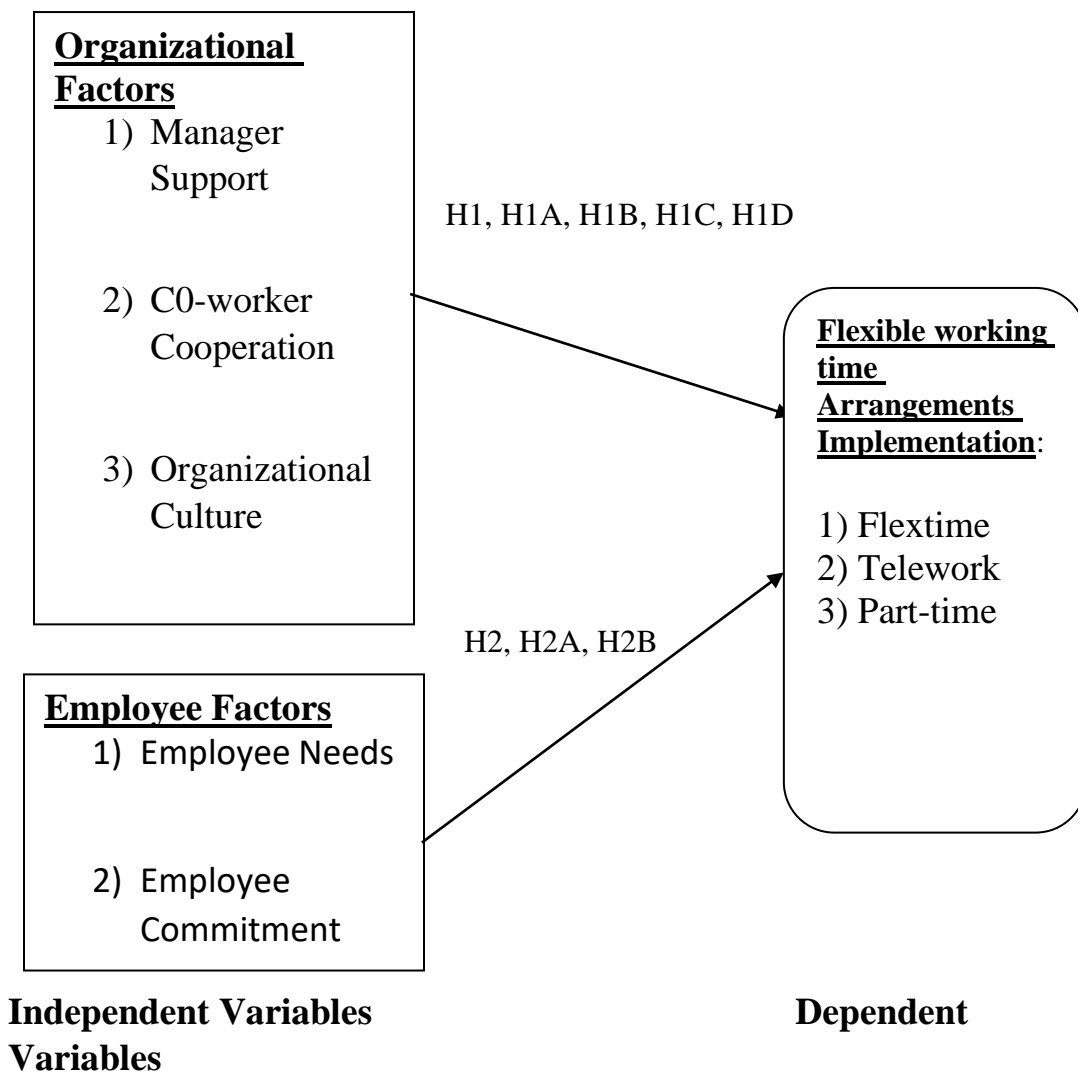
**H2) There is no significant relationship between the Employee Factors (Employee Needs and Employee Commitment) and the implementation of Flexible Working Time Arrangements in terms of the three chosen forms, which are Flex-time, Telework and Part-time, applied on the Academic Staff at some Egyptian Universities (Private and Public).(Main Hypothesis)**

**Sub Hypothesis**

H2.A: There is no Significant relationship between the employee needs and the implementation of Flexible working time arrangements (The three chosen forms).

H2.B: There is no Significant relationship between the employee Commitment and the implementation of Flexible working time arrangements (The three chosen forms).

Figure (1.1)



**Figure (1-1) :Hypothesis Model Relationship between Organizational Factors and Employee Factors as (Independent Variables) and the three chosen Flexible working time arrangements Implementation (Flex-time, Telecommuting and Part-time) as (Dependent Variables)**

Prepared by the researcher according to the Previous Studies

**6) Literature Review:**

**6-1) Studies Related to Flexible working time (FWAs) arrangements Implementation:**

**A) Historical Background**

**1) Origins:** (Brickey 2002) As the concept of Flexible work hours was first introduced in **1967** in the firm of Messerschmidt Bolkow Blohm in Germany, As many researchers noticed that in a busy industrial area, the two-lane road to planet was heavily travelled, which may cause some production problems, So here comes the introduction of Flextime or gliding time theory that describes the core operational hours giving the worker the freedom within limits for departure and arrival to work. (Bird & Brown 2018) **Christel Kaemmerer** was the external consultant on whom the above firm relied to solve their problem. Kaemmerer was a political economist, and the formula she introduced was simple: there are core period hours throughout the day, with flexibility in the morning and afternoon coming and leaving as giving employees the option to leave without supervisory approval, and they can make their hours some other time unless they fulfilled the eight-hour per day and forty-hour per week requirements.

(Brickey 2002) Following the introduction of Flextime in Germany, many European companies adopted the concept. Many researchers attributed the establishment of flexible work hours in the United States in 1972 to **Hewlett Packard (HP)**, the first company in the United States to implement the concept of flex-time. (Al-Rajudi 2012)

Clerical or clerk typing was one of the occupations that made extensive use of Flextime hours in the 1970s. (Brickey 2002)

Cooke (2005) defined the distinction between **standard and nonstandard work arrangements in four ways**. First, in standard work arrangements, the term is permanent (open ended), whereas in non-standard work arrangements, the term is non-permanent. Second, for Standard work arrangements (SWAs), there is no home-based work component, whereas for Non-Standard Work arrangements (NSWAs), there is a home-based work component. The third varying schedule for NSWAs and the non-varying schedule for SWAs, Fourth, the weekly hours of work are within the full-time norm, which is from 30 to 48 hours per week; however, NSWAs will fall outside of the full-time norm.

2) The need for Flexible hours development:

(Brickey 2002) Call centres emerged in the 1980s as a result of computers, communication network services, and the need for companies to operate 24 hours a day, seven days a week to support a global customer base. At the turn of the last century, technological advancements increased the number of items available to Americans dramatically.

(Al-Rajudi 2012) The need for workplace flexibility has increased in the latter part of the twenty-first century as many women entered the workforce and continued working after having children, needing to work from home to be able to have more time for their children, and seniors who continue to work after retirement age, needing to have a part-time job. All of these sources of flexibility attempt to manage work-family conflict (WFC) and to achieve the concept of organizations being family friendly.

(Čiarnienė et al. 2018) When applied with care and preparedness, FWAs have a positive impact on sustainability at multiple levels of abstraction: personal, business, and societal. The advantages of flexible work practices can be found in three interconnected contexts: economic, environmental, and social.

According to the BNET dictionary (Grobler & De Bruyn 2011), **Flexible work Practices** are a generic term for employment practices that differ from Traditional Practices in terms of contract length, hours worked, and place of work.

Lewis (2003) **Flexible work arrangements (FWAs)** are Organizational Practices and Policies that allow employees to work differently than traditional working hours by allowing them to work when and where they want. Some of the types of FWAs are Flex-time, Part-time, Job Sharing, reduced hours, compressed workweek, Telecommuting, and others, which we will discuss in the following Parts of the research.

## **B) Alternative Flexible work arrangements or Schedules:**

A number of alternative arrangements for people to schedule their work Time (Schermerhorn Jr 2007) flexibly either this flexibility to be in the amount, Place or Time of work.

As the flexible work arrangements can be classified into **three categories:**

### **1) Flexibility in the amount of work:**

**A) Part-time work :**(Schermerhorn Jr 2007) is employment that lasts less than 40 hours per week and does not qualify the employee as a full-time employee.

According to the Ministry of Local Development in 2005 (Younis 2016), the Labour Law and Egyptian Cabinet stated some regulations concerning part-time employees within Egyptian organisations:

A) If the organisation works five days per week, the employee will receive 75 percent of his wage if he worked three days, and 60 percent if he worked two days

B) If the organisation works six days per week, the employee will receive 65 percent of his wage if he worked three days, and 50 percent if he worked two days.

Part-time Option (Kropf 1998) is a critical tool used primarily by women who see it as a necessary and desirable option for maintaining their careers, particularly during life stages when

they need to devote more time and attention to their personal and family responsibilities when their children are young.

(Schermerhorn Jr 2007) Although part-time work has **many advantages** for the employer in that employees can be easily hired, terminated in response to needs, and labour costs can be reduced, the employer may face lower commitment from employees and lower productivity, and the employee **may be affected by part-time work** in that he may not receive all of the benefits of a full-time employee such as life insurance, health care, Pension Plans, and Paid Vacations.(Okla 2015) also employee may miss some employment Benefits such as the additional prizes that could be given to employees.

(Watters & Weeks 1999) The increase in **part-time academic personnel** reflects the strain on universities in hard financial times to preserve the advantaged and sheltered full-time academic jobs. When faced with financial constraints, administrators consider hiring part-time employees, a practise that may be supported by many full-time employees. Part-time employment allows full-time employees to keep higher wages because it is less expensive. However, unions argue that part-time work in general endangers the working conditions of full-time employees.

**B) Job Sharing :** (Schermerhorn Jr 2007)Two or more employees (part-timers) share the work of a single full-time employee, as this splitting of work between two persons may be working half day for each or divided weekly or monthly as the



two employees arranged with each other , as this type of arrangement may be useful for qualified talented employees. Parents who were unable to be away from their children for an extended period of time.(Dessler 2013) Also useful for retirees who have grown old but still need to work but are unable to do so full-time. (Johns & Saks 2005) Job sharing is also an effective tool for avoiding layoffs, and there is **work sharing**, which is a temporary reduction in the number of hours worked by a group of employees in order to avoid layoffs during economic downturns. For example, 400 employees agree to be paid and work for 35 hours per week instead of 40 hours per week in order to avoid 30 layoffs.

**C) Contingency workers:** (Schermerhorn Jr 2007) hired on a temporary or part-time basis to supplement a full-time workforce. (Younis 2016) according to Egyptian labour law no 12 for 2003 that regulates these types of contracts for contingent work, we discovered

A) If it is a fixed-term work contract: according to Article 106, if the contract's duration has expired, the duration may be renewed with the agreement of the two parties.

B) A contract to perform specific work: if the work is completed in accordance with articles 107 and 109, the contract can be renewed between the two parties.

D) **Other types** include **reduced work time/hours or load** (Younis 2016) to reduce work hours per week or the amount of work assigned, all in response to a wage decrease (Families and

Work Institute 2017) to devote more time to personal and family responsibilities, (Younis 2016) **voluntary reduced work time** is Working reduced hours than that of the official working hours, so working hours will be 40 or 45, with less or more hours in other weeks, **Time off and vacations** is Reducing total work time through options such as allowing leave during work as well as vacations, allowing half a day off, or taking time out during the day to deal with family or personal issues.

## **2) Flexibility in the place of work:**

**A) Teleworking or Telecommuting:** (Johns and Saks 2005) a system in which employees can work from home while remaining in touch with their offices via communications technology such as a computer system, voice mail, and electronic communications.

(Vega 2015) There are two types for Telecommuting **Full-time** Telecommuting and **Part-time** telecommuting, Employees who use full-time telecommuting programmes work away from a highly centralised working place as their main working place, and they only arrive into the workplace for emergencies that cannot be managed from anywhere. While Part-time telecommuting includes a wide range of teleworking time, from once for each month to many times per week. Part-time telecommuting will be defined as telecommuting one or two days a week.

(Abdel-Wahab 2007) From the **benefits of Telecommuting to employees** that it save commute time and cost, making good

balance between work and family, allow disabled people to have jobs, allow women who are having young children to perform their job without compromising to spend valuable time with their children. Employee can save their time more.

From the **benefits of Telecommuting to employers** turning the work depending on networks instead of going to the building this will increase job satisfaction, productivity and reduce the costs of real state as all the overhead costs will decrease.

(Palmeri 2013) From the **disadvantages of Telecommuting** the stress employees feel in high stress jobs will affect their life at home, may lead to work overload if employees didn't arrange their time in the most efficient way between work and life at home for instance the borders between life and work will removed which will affect the employee psychological status.

(Hrobowski-Culbreath 2010) From the companies that best apply working from Home is **Sun Microsystems** a leading company in software manufacturing when it offered its employees more open work programmes the employees became more productive and satisfied as employees who were allowed to work from home achieved the highest scores.

Telecommuting tool (Forris 2015) was the ideal tool for achieving work life balance and has positive effects on employees thus lower stress felt, fatigue so as a result lower absenteeism

(Heiden et al. 2021) When academic teleworkers and non-teleworkers members were compared, teleworkers felt more

productive, more satisfied with the job, and reported lower stress levels, tiredness, and anger.

**B) Virtual Office or virtual Teams:**(George & Jones 2011) A team whose members rarely or never meet face to face but instead interact via numerous forms of information technology like e-mail, computer networks, telephone, Fax, and videoconference while also solving problems via computer-based interactions.

**Virtual Space** (Schermerhorn Jr 2007) where People can hold meetings, access shared databases, share files and information, make a plan, and solve problems virtually without ever meeting in person.

And other types such as (Younis 2016) **satellite office, neighbourhood work centre**, where work is done in another place rather than home or work where employees are gathered on and this place is suitable for the owner of the company and the employees as satellite office is a place where employees from one organisation are gathered on, while neighbourhood work centre gathers employees from different companies in the same place.

(Scheibe et al. 2022) Teleworking is not a novel concept or method of operation. Telecommuting, Home-based Telework, Virtual Office, distance work and remote work are all terms for the same thing: performing work tasks away from the employer's place in the sense of an employment relationship, typically using information technology.

### **3) Flexibility in the time of work:**

**A) Flexible working hours :( Flex-time):** A work schedule in which employees' working days are organised around a care of midday hours, and employees make a decision, within constraints, what other hours they work, as it provides employees a few choices in daily work hours, as flex-time is a work schedule in which arrival and departure times are flexible..(Dessler 2013)

**For Example:** if an employee is required to work 8 hours per day, he or she must choose when to begin work; if the employee begins at 9 a.m., he or she will finish at 5 p.m.; if the employee begins at 10 a.m., he or she will finish at 6 p.m.; the important thing is that the employee works 8 hours per day. (Hrobowski-Culbreath 2010) Flex-time benefits include better member relationships, more loyal and engaged employees, better communication across organisations, and higher employee retention.(Barney & Elias 2010) Giving employees more control at work, particularly through flex-time, will reduce the negative effects of job stress and an increase in external motivation explaining the moderator role of Flex-time between reducing job stress and achieving motivation.

**B) Compressed Workweek:** Employees work less than five days a week but still work 40 hours a week because instead of working five days a week and working eight hours each day, they work four days a week and work ten hours each day as this system is known as the 4-40 system four days and still 40 hours (Johns and Saks 2005) as employee works fewer but longer days each week (Schermerhorn Jr 2007) and it is still a full-time

job in order to avoid having a lower wage,(Dessler 2013) Airlines pilots are suitable for compressed workweeks because they do not normally work 5 days 40 hours and also nurses and doctors in hospitals because they cannot leave their patients in some hospitals nurses and doctors work three days 12 hour each **as a shift** which is another type of Flexible work arrangements will be discussed in the coming Point ,from its benefits that it offers an extra day for leisure time with family and decreases commuting costs but It has the disadvantage of increasing employee fatigue due to longer working days.

(BBC 2021; Sky news 2021) United Arab Emirates changed its vacation system in 2022 to be four days and a half work and two days and a half vacation to begin work from Monday until Friday, taking Friday as a half day work only until Goma Prayer as this new system's main purpose is to engage the United Arab Emirates' economy with the International Economy to take the same vacation which is Saturday and Sunday, enhancing the Financial Sector as it will cope with the Foreign Stock Market. According to our research, it will strengthen family cohesion and community cohesion, as well as improve the quality of life of employees as Employee Parents will devote more time to sitting with their children.

**C) Shift Work:** takes place on a daily basis from 9 a.m. to 5 p.m., outside of traditional working hours. Early morning shifts, evening or night shifts, and rotating shifts are all possibilities. (Pacheco & Rehman 2019;Younis 2016) could work double shifts for 16 hours a day, similar to what happens in hospitals and prisons.

#### 4) Other Flexible work arrangements

**Unplanned leave or Unanticipated Time Off:** Informal access to leave from work for any unforeseen events that occur to the employee, such as attending an urgent doctor appointment (Families and Work Institute 2017)

**Self-Scheduling:** (Families and Work Institute 2017) To manage our own shifts without the intervention of your supervisor, and to set it according to what suits you as it gives you more control over your own time.

**Gradual Return to Work:** (Families and Work Institute 2017) when an employee returns from leave his manager may give him a chance to work less than full-time in order to gradually get back into the swing of things until he returns with his full efforts as before taking his leave.

#### C) The need for Flexibility in Online learning at university level after COVID 19 Pandemic:

As the educational sector was one of the sectors that was severely impacted by the COVID 19 Pandemic, UNESCO (2020) reported on April 6th (Armoed 2021) that 1,576,021,818 billion students were affected at all levels of teaching and learning across 188 countries around the world, so it was critical to implement online learning to maintain teaching and learning that meets the needs of students and academic staff so come working from home for University staff or Part-time work.

So, according to the core of our empirical study, which includes the determination of the impact of the COVID 19

pandemic on faculty staff members (Afrianty et al. 2021), the ministry of education and culture in Indonesia stated that physical presence is not a measure of performance, and the most important thing is that learning continues and continues only by turning it online.

(Afrianty et al. 2021) Found up that digital orientation must be an important tool in selecting University staff As Individuals' digital orientation had a great impact on the digital capabilities of employees and had a positive impact on their productivity in the time of working from home during the COVID 19 Pandemic. It was also suggested to offer more online courses giving the staff more flexible arrangements and as increasing the off campus course will increase the students enrolled in these universities. So Staff must be well-trained and have access to cutting-edge technology in order to deliver these courses effectively.

## **6-2) Studies Related to Critical success Factors for Applying FWAs:**

### **A) History and Definition of Critical Success Factors (CSFs):**

According to Morisson (2012), the concept of Critical Success Factors (CSFs) was first developed by D. Ronald Daniel in 1961, but it was popularized by John F Rockart in 1979. According to Rockart, if the results of a limited number of areas are satisfactory, this will ensure and achieve success in the competitive performance of the organization, department, and individual, and if the results are not satisfactory, the organization's performance will fall short. In other words, He



defines CSFs as things that must go right in key areas for the entire business in order for the business to thrive.

(Song et al. 2022) The American Scholar Rockart proposed the term Critical Success Factors in 1979 because they are critical factors for certain activities and when the organization accurately identifies them, it will help the organization achieve its goals, This concept was first used in project management studies and has since expanded to be used in a variety of fields such as supply chain management, business operations and administration, and most recently in emergency management as what happened after the COVID 19 Pandemic and how to use CSFs in times of crisis.

According to Sanvido, Parfitt, Grobler, Guvenis, and Coyle (1992), critical success factors are those that predict the success of specific events or projects and require managers' special attention. (Amponsah 2010)

(Song et al. 2022) identified the main critical factors for emergence management in COVID 19 Pandemic Prevention and Control in Colleges and Universities in China Pre, During, and After Pandemic and discovered the main Five Factors which are Maintaining Coordination Capabilities, Establishing a Leadership Team Concerned with Controlling and Preventing Epidemic, Building Responsibility Awareness, Regulating Online Public Opinions, and Giving Training For Emergency Management. Critical Success Factors differ depending on social stage and field, universities must always update and coordinate their critical success factors in order to face any

public emergency with an emergency management that is adaptable enough to deal with any changes and challenges.

## **B) Some Critical Success Factors for Applying FWAs:**

### **1) Manager Support:**

(Travaglione et al. 2017) Perceived organizational support (POS) is the belief of employees that their organization values their contribution and cares more about their well-being, and management support is related to perceived organizational support, which means that managers give their employees enough support to face any challenges around them. Ogbonnaya (2019) Managerial support can take many forms, including assisting employees with difficult tasks, maintaining open lines of communication between employees and managers, increasing employee involvement in important decisions, and providing clear feedback on performance.

### **Importance of Manager Support during COVID 19 Pandemic:**

Vinberg and Danielsson (2021) Manager support after the COVID 19 Pandemic revealed that managers of micro-sized enterprises shifted their leadership roles toward supporting their employees more, finding ways to keep their business afloat during the crisis and, in turn, supporting their government, and they attempted to find creative solutions for their employees as the style of manager support changed following the crisis in order to cope with that unexpected event.

(Bajaba et al. 2021) Having an effective leader is especially important in times of great resource loss and high demand, such as the COVID 19 Pandemic, because that crisis was unexpected, so there is a great need for flexible managers who are ready to change and cope with any unexpected events, so the manager must have an **adaptive personality** in order to achieve adaptive performance. Having an adaptable personality means that the employee is willing to change himself in response to changes in the environment's needs and demands, will remain calm during stressful events, and will try to make the best use of the available resources. And the adaptive personality is the polar opposite of the passive or change resistance personality, which is not required, particularly during a crisis. Adaptive managers are more confident in themselves, for example, they are more motivated to lead during a crisis, such as the COVID 19 Pandemic, because these managers can handle stress and emergency efficiently, find creative solutions to problems, devote more time and effort to adapt to changes, and always keep learning because these managers are of great value to the organization, and as a result will have an adaptive performance that will be made in response to changes. Motivation and self-efficacy to lead as a crisis leader explain the relationship between adaptive personality and manager performance.

(Ertel 2021) Leaders should be aware of environmental truths as well as the consequences of recent system instability. One should not be shocked and return to old habits. Now that new truths have been woven into the fabric of our current reality, it is time to stand up and become a part of that change.

## **2) Co-worker Cooperation:**

Desrosiers (2001) Perceived coworker support is defined as an employee's overall perception of how their coworkers treat them, as well as whether their coworkers value their efforts and care about their well-being.

**Social Support** (Johns & Saks 2005) is to have close relationships with other people, and these relationships can help reduce stress by providing needed humor and comfort, providing needed resources, increasing your self-esteem, and providing useful information. Lilius (2006) there are **two types of social support. Psychological and instrumental support**, with the former focusing on listening and providing care to others in various forms such as social companionship to spend more leisure time with your colleagues, emotional support to provide positive vibes to your team, and motivational support to encourage your colleagues to continue working even when faced with obstacles, and the latter focusing on completing tasks and problem solving. It can take many forms, such as material support to help supplement the material needed, task support to assist colleagues in any problems that may arise while completing the tasks, and information support to provide guidance for any informational problems that colleagues may encounter.

Importance of Co-worker Cooperation after COVID 19 Pandemic for university staff members:

(Usman et al. 2021) Employees may be anxious about their own situation and emotionally drained as a result of the

COVID-19 pandemic, which has triggered several unexpected trends that have altered the educational and operating methods of staff members working in academic establishments. As Employees are working from home during the COVID-19 crisis, so it seems more pertinent to investigate coworker support like believing in colleagues' willingness to assist in conducting workplace commitments.

Coworker assistance entails inspiring and wanting to share specialized experiences and knowledge with colleagues. As there are some important positive effects of coworker support in the workplace, such as work satisfaction, reduced job strain, and reduced the intention to leave. Demonstrating that colleague and family support are critical during COVID-19 pandemic. These study results are equally critical for companies and society in reducing the adverse impact of COVID-19 pandemic on worker well-being. So recommends that Organizations must foster a work environment that promotes coworker support during a crisis and thus protects staff members from becoming emotionally deeply affected.

### 3) Organizational Culture:

(Johns & Saks 2005) **Organizational culture** is made up of shared values, assumptions, and beliefs that exist within the organization and contribute to the development of norms and patterns of behavior that emerge from the norms.

(Lacatus 2013) **Benefits of organisational culture** are taught, transferred, and communicated to members; it helps the organisation to integrate internally, face and adapt to any

external environmental circumstances that may occur around it; it works as a tool to solve problems, enhance the functioning of the organisation, and a decision making tool for helping in Performance; and it also helps in achieving a competitive position. **Organizational Culture for Universities** aids in analysing and comprehending the motivation for an educational organisation, such as a university or school, to perform, develop, and have a structure. It also enables schools and universities to reform strategies, improve management, and build enhancement.

(Lorincová et al. 2021) As there are **four types of corporate culture**, first **Clan Culture** emphasises employee engagement options and teamwork, employees are free to say their recommendations and suggestions for the benefit of the organisation, so leaders for this type of culture must be like a mentor who encourages employees to bring up new ideas and knowledge. Second, **Adhocracy culture** is defined by a dynamic, creative workplace where employees are open to change. Leaders in that culture must be innovative, risk-taking, and capable of producing unique and trustworthy products. Third **Market Culture**: This culture is focused on productivity, profitability, competitiveness, and results. Market culture leaders place an emphasis on achieving measurable goals, expect high performance, and are highly motivated. Fourth **Hierarchy Culture** refers to the controlling style of management, in which leaders organise and monitor tasks with well-defined responsibilities, strict and standardised rules and

procedures, strict control, and a clear corporate culture, but it provides overall stability to the organisation.

(Rahman et al. 2021) discovered that adhocracy culture is the **best culture design for universities** because it refers to a creative and dynamic group of people who rely on flexible norms to encourage innovation, taking risks, easily adapting to any events, promoting growth for the organisation, and acquiring new resources as especially after COVID 19 Pandemic many organisations, not just universities, must adopt the **Adhocracy culture** to face any changes happen quickly and easily in order to keep the organisation growing.

#### **4) Technology Availability:**

Johns and Saks (2005) **Technology** refers to the equipment, activities, and knowledge required to convert organizational inputs into desired outputs.

**Technology interdependence** increases when it is used in conjunction with an effective coordination and integration mechanism, which can be accomplished through standardized regulations, rules, and procedures, and intensive coordination is accomplished by constructing organic structures that allow the flow of information among all departments and units of the organization (Johns & Saks 2005).

(Bice 2021) **The factors that positively affect teachers when integrating technology in their classrooms are** ,First Teachers' knowledge of technology and prior experience have a positive impact on their ability to integrate technology in their classrooms; the more efficiently teachers use technology tools,

the higher the level of technology integration they will achieve; and **second**, their attitudes toward technology. The greater the level of technological integration, the more favorable the attitude toward technology. The level of technology integration is also increased by **the third** teacher's self-efficacy and internal positive belief in using technology to deliver learning.

While **From the barriers that hinder the implementation of technology for Teachers are** (Bice 2021) **The first order barriers** for implementing technology are any external factors that hinder teachers from using technology, such as a lack of resources due to a lack of devices, a lack of technology trainings, a lack of leadership while using technology, and so on. **Second**, there are second-order barriers, such as teachers' internal beliefs about technology, such as the knowledge and skills that they must have when using technology. **Third**, there are third-order barriers, such as teachers' knowledge and skills that they must have when using technology suggested that teachers must overcome the barriers they face when using technology by having a technology integration Plan, shared vision, appropriate trainings for teachers, monitored communications, to know how teachers integrated technology in their classroom overcome the barriers for implementing especially that we faced change resistance from teachers so by presenting good models for teachers that didn't cancel their classrooms if their technology didn't work, and overcome these barriers this will be a good model for other teachers that are having great resistance to change to use technology in their classrooms.



## 5) Employee Needs:

(Pitek 2015) **Needs** are defined as psychological and physiological factors that influence an individual's survival and well-being (Johns and Saks 2005) and People Satisfy these needs by obtaining certain incentives or accomplish certain goals.

Employees have many demands and needs from their organisations, and from the employee needs that is related to our study are work-life Balance needs, retirement needs, motivational needs and academic staff need.

### Academic Staff Needs:

(Mabalane 2001) Academic staff development is very important nowadays because it is the policies, programmes, and procedures that support and facilitate the work of academic staff, allowing them to meet their own and the institution's needs. Also, universities must provide their employees with adequate training and professional development programmes in order to face and adapt to any changes, particularly what happened in COVID 19 and how universities tried to quickly adapt to changes and what aid some universities had from technological infrastructure before the crisis, so coping with the changes was much easier.

(Mabalane 2001) As there are two opposing strategies for addressing the needs of academic staff, the first is a **top-down approach** in which those with authority design developmental programmes for their staff without the involvement and participation of the staff itself., And the second is a **bottom-up**

**approach** in which those with authority design developmental programmes for their staff with the involvement and participation of the staff itself. By giving them the opportunity to inform their supervisors about their required skills and the difficulties they face in order for their supervisor to take special care when designing their needs assessment.

#### **6) Employee Commitment:**

(Saks & Johns 2005) **Organizational Commitment** is a mindset that demonstrates the strength of the bond or link between the organisation and its employees. Desrosiers (2001) A psychological state that describes an employee's relationship with the company and has a significant impact on the employee's intention to continue or discontinue employment. Reproduced with permission from the organisation.

#### **Organizational Commitment in higher education:**

(Amtu et al. 2021) It was discovered that organisational commitment is interfering with the relationship between leadership and the organization's commitment to implement international quality assurance in universities in Indonesia because both leadership and organisational culture require organisational commitment in order to build motivation and communication through academic values and expectations that are built in an innovative, creative, and dynamic manner that encourages synergy and collaboration of all stakeholders. As Organizational commitment acts as a basis for colleges to create

a new framework for balancing societal demands and needs for higher education quality in competing professionally.

### **6-3) Studies Related to The relationship between FWAs and its critical success factors for implementing it:**

#### **A) Managerial Support and FWAs:**

Giving Managers **appropriate training** is an important component for assisting them in implementing workplace Flexibility programs (Nwoseh-Streeter 2018). And, just as managers will receive training on how to use and implement FWAs, so will their employees., (Okla 2015) so Managers must ensure that their employees have received appropriate training on how to communicate remotely with them, such as having a training on using online webinars, video conferencing/WebEx, Skype, E-mails, Coordinating workflow and assignments in specific hours and Calendars.

(Vega 2015) Despite the presence of FWAs policies, it is not enough to achieve work-life balance for employees. Manager support as a moderator variable influences positively the relationship between FWAs policies availability and achieving work-life balance for employees because supervisor support is one of the most important factors that influence employees' decision to enroll in FWAs.as proving that Manager Support is the most important predictor for implementing FWAs.

#### **B) C0-worker Cooperation and FWAs:**

(Al-Rajudi 2012) Employees who have positive relationships with their coworkers may have a greater positive impact and job satisfaction. Employees who believe that their coworkers support their use of FWAs are more likely to use FWAs than employees who do not believe their coworkers support the use of FWAs.

Desrosiers (2001) Negative effects of telework on teamwork and coworker perceptions, because telecommuters spend so much time away from the office and their tasks are so interdependent, it is possible that perceived coworker support would decrease for telecommuters.

### **C) Organizational Culture and FWAs:**

Nwoseh-Streeter (2018) Building a trusting and accepting culture aids in the effective implementation of workplace flexibility. (Ogren 2016) emphasizes the importance of developing communication protocols, standards, and expectations in order to increase trust within the organization.

(Doerr 2015) Organizational culture is a major contributor to employees choosing work-life balance options; the more supportive the culture, the more use of work-life balance options; organizations can also market themselves by declaring that they have a supportive culture for work-life options.

(Peretz et al. 2018) The application of FWAs must be compatible with the organization's characteristics and national culture values, as misalignment will increase turnover and absenteeism rates, as well as reduce employee use of FWAs.

Suggested that before implementing FWAs, organizations should consider national cultural aspects.

#### **D) Technology Availability and FWAs:**

(Abdullah 2012) demonstrated the **positive effect of technology infrastructure on telework implementation**, demonstrating the importance of technology infrastructure for any organization and modern technological tools that aid in information delivery between teleworkers and their colleagues, as well as an evaluation by their managers. According to the researcher, technology infrastructure is the most important variable in telework implementation, even more important than internal trust and top management support, proving the spiritual impact of technological infrastructure implementation on telework.

(Webster 2018) **As technology advances**, it becomes a facilitator of flexible models, allowing participants to work day and night from anywhere.

#### **E) Employee Needs and FWAs:**

(Okla 2015) Employees must tailor their work schedules to their **personal life needs**, such as choosing the time when they are most productive, especially for work that requires creativity, as their peak productivity can occur at any time of day or night, for example. They will not be more productive if they are restricted by rigid schedules. For example, one participant in that study who had been a newspaper columnist stated that he or she found it much easier to write at night, so this employee may favor a later schedule to adapt this job preference.

(Younis 2016) proposed a model for using FWAs for the first time, ensuring that one of the most important steps, in addition to identifying work-related needs related to FWAs application, is to identify employee needs and can be achieved by managers, who must consider providing their employees a trusting environment for information sharing and ensuring that expressing freely their opinions and needs will not negatively affect their position at work.

#### **F) Employee Commitment and FWAs:**

(Huckle 2019) introduced how to be competitive in the retail industry by attracting more talents to the industry and attracting more talented workers by introducing Flexible working Policies to employees that can assist in achieving employee engagement and commitment to the organization, which will lead to attract and retain more talented workers. As Employees will be loyal to their employer if their employer appreciates and values them. Employees with a high level of commitment tend to work for organizations that are dedicated to their development, well-being, and need for self-actualization.

(Hashmi et al. 2021) FWAs has a positive and significant relationship with work quality, employees' perceived productivity and organizational commitment. It was established that happiness acts as a moderator in the relationship between FWAs and employee outcomes. Recommending that Employees and managers worldwide should see FWAs as a positive tool for increasing Organizational Commitment

and employee productivity, especially in an emergency like the Covid-19 pandemic.

### **7) Research Methodology:**

The Purpose of this study is to present a description for the critical success factors for applying FWAs for University Academic Staff in order to demonstrate how significant the relationship between the critical success factors and FWA implementation is. (**Descriptive Study**), as well as to test our two main hypotheses (**Hypothesis Testing Study**).

The Population for this study is all the academic staff members in the chosen universities as we will explain it more and our sample is n=343 academic staff members using snowball technique which is non-probability Sampling.

## University

	Frequency	Percent	Valid Percent	Cumulative Percent
AASTMT	117	34.1	34.1	34.1
Cairo University	56	16.3	16.3	50.4
others	46	13.4	13.4	63.8
Helwan University	25	7.3	7.3	71.1
Ain Shams University	20	5.8	5.8	77.0
MSA University	16	4.7	4.7	81.6
Sadat Academy High Institute	15	4.4	4.4	86.0
For Architecture	7	2.0	2.0	88.0
Valid Engineering				
MUST University	6	1.7	1.7	89.8
Al-Azhar University	6	1.7	1.7	91.5
6 October University	5	1.5	1.5	93.0
Alexandria University	5	1.5	1.5	94.5
Fayoum University	4	1.2	1.2	95.6
Banha University	3	.9	.9	96.5
Minia University	3	.9	.9	97.4



Zagazig University	3	.9	.9	98.3
AUC	2	.6	.6	98.8
Police Academy	2	.6	.6	99.4
Tanta University	2	.6	.6	100.0
Total	343	100.0	100.0	

Sample according to the chosen Universities:

Our Population will be all academic staff members working on the chosen Universities and our sample as presented above.

### Sample's academic Positions:

	Frequency	Percent	Valid Percent	Cumulative Percent
Associate Professor	35	10.2	10.2	10.2
Professor	48	14.0	14.0	24.2
Teaching Assistant	49	14.3	14.3	38.5
Assistant Lecturer	83	24.2	24.2	62.7
Doctor (Teacher)	128	37.3	37.3	100.0
Total	343	100.0	100.0	

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**Descriptive Statistics results for the respondents` answers concerning the study variables:**

	N	Mean		Std. Deviation
	Statistic	Statistic	Std. Error	Statistic
Manager Support	343	3.57	.047	.873
Employee Factors	343	3.91	.047	.870
Co-worker Cooperation	343	3.82	.047	.870
Employee Needs	343	3.78	.054	1.000
Employee Commitment	343	4.18	.047	.877
Implementation of Flexible Working Time Arrangement	343	.59	.011	.212
Organizational Factors_	343	3.5769	.03862	.71530
Organizational Culture_	343	3.1798	.04489	.83133
Technology Availability_	343	3.5646	.05310	.98343
Valid N (listwise)	343			

Based on the above table, which represents the sample`s answers concerning the research variables, the results showed that, the mean for the whole construct of organizational factors= 3.57 which is high. The means of the construct`s

dimensions are: 3.57 for manager support (high), 3.82 for co-worker cooperation (high), 3.17 for organizational culture (moderate), 3.56 for technology availability (high).

Concerning the mean for the whole construct of employee factors is 3.91 which is high. Further, the means for the construct's dimensions are: 3.78 for employee needs (high), and 4.18 for employee commitment (very high).

Regarding the mean for the construct of Implementation of Flexible Working Time Arrangement is 0.59, which is relatively high.

**the correlation among the research variables**

		Employee Factors	Organizational Factors	Implementation of Flexible Working Time Arrangement
Employee Factors	Pearson Correlation	1	.461**	.028
	Sig. (2-tailed)		.000	.603
	N	343	343	343
Organizational Factors	Pearson Correlation	.461**	1	.496**
	Sig. (2-tailed)	.000		.000
	N	343	343	343
Implementation of Flexible Working	Pearson Correlation	.028	.496**	1

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Time Arrangement	Sig. (2-tailed)	.603	.000	
	N	343	343	343

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Concerning the correlation among the main research variables, the correlation values are represented in the above table show an average correlation between organizational factors and Implementation of Flexible Working Time Arrangement at correlation= .496 and significant at a confidence interval of 0.99 and a significant level of 0.01. However, the correlation between employee factors and Implementation of Flexible Working Time Arrangement is very weak and not significant at a confidence interval of 0.99 and a significant level of 0.01.

Moreover, the correlation between the two independent variables are less than 0.7, which indicates that, the study independent variables are free from multicollinearity (Montgomery, Peck & Vining 2012).

The following paragraphs represent **testing the research hypotheses**, as follows:

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.496 <sup>a</sup>	.107	.101	.204

a. Predictors: (Constant), Organizational Factors\_

**Table Model Summary between organizational factors as a whole construct and FWAs Implementation**

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.136	1	1.136	27.212	.000 <sup>b</sup>
	Residual	14.241	341	.042		
	Total	15.377	342			

= a. Dependent Variable: Implementation of Flexible Working Time Arrangement

b. Predictors: (Constant), Organizational Factors

**Table ANOVA test between organizational Factors as a whole construct and FWAs Implementation**

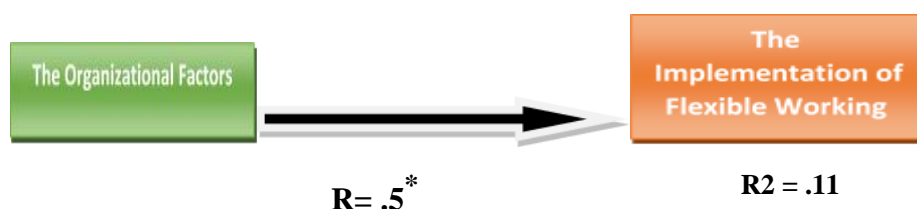
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

## Critical Success Factors for Applying Flexible working Time Arrangements in Egypt: An Applied Study

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	.299	.056		5.301	.000	.188	.410
1 Organizational Factors	.081	.015	.496	5.216	.000	.050	.111

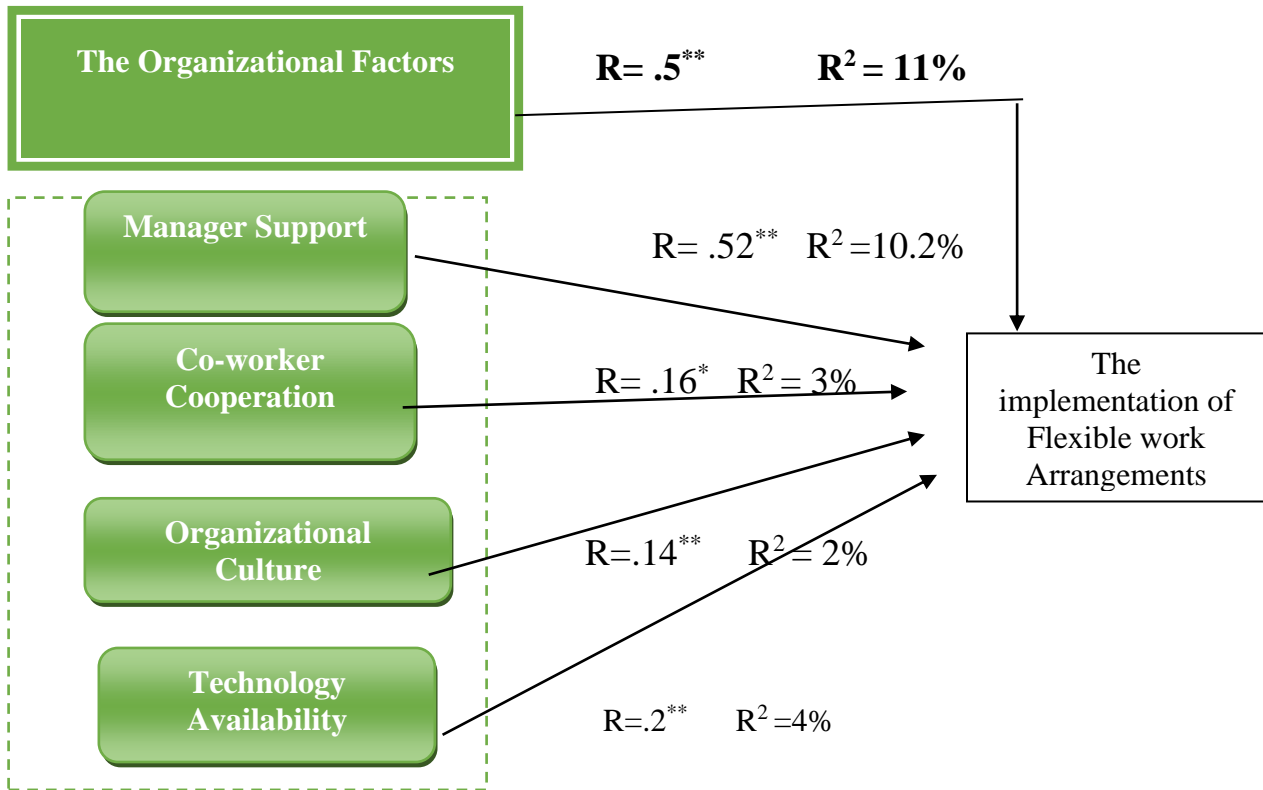
a. Dependent Variable: Implementation of Flexible Working Time Arrangement



Based on the above result concerning the relationship between the organizational factors and the implementation of flexible working time arrangements, the statistical results via SPSS show that, the correlation  $R$  between them is = 0.5 which is average. The value of Beta for the relationship is positive at  $p$ -value = 0.000, which is significant at significant level  $< 0.001$ . Moreover,  $t$ -value is significant and greater than the cut-off value 1.645 (Jöreskog & Sörbom 1996). The coefficient of

determination  $R^2$  for the analysis = .11, which means that the variance in the organizational factors (as a whole construct) explain 11% of the variance in the implementation of flexible working time arrangements. Although, the effect of the independent variable on the dependent variable is low, the researcher can't ignore this relationship, due to the significant level that is achieved in this hypothesis. Thus, the null hypothesis is not supported. However, the alternative hypothesis which indicates that, there is a positive significant relationship between the two variables is confirmed.

The following figure (3-11) illustrates the 1<sup>st</sup> main hypothesis and sub-hypotheses, as follows:



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Based on the above results, the alternative hypotheses for: (the 1<sup>st</sup> main null hypothesis and the null sub-hypotheses) are confirmed. Thus, the null hypotheses are rejected.

The relationship between The Employee Factors and The Implementation of Flexible Working Time Arrangements

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.028 <sup>a</sup>	.001	-.002	.212

a. Predictors: (Constant), Employee Factors

### Table Model Summary for the relationship between Employee Factors and Implementation of FWAs

#### ANOVA<sup>a</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.012	1	.012	.271	.603 <sup>b</sup>
1 Residual	15.365	341	.045		
Total	15.377	342			

a. Dependent Variable: Implementation of Flexible Working Time Arrangement



a. Predictors: (Constant), Employee Factors

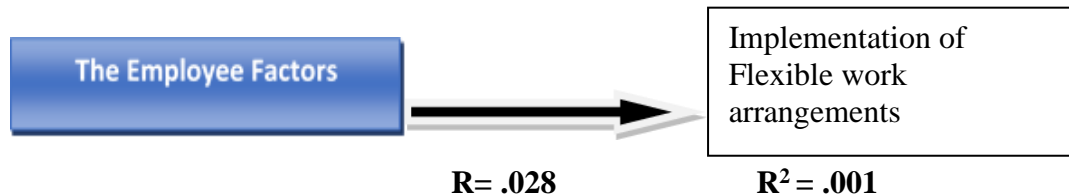
**Table ANOVA test for the relationship between Employee Factors and Implementation of FWAs**

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	.560	.053		10.599	.000	.456	.664
<sup>1</sup> Employee Factors	.007	.013	.028	.521	.603	-.019	.033

a. Dependent Variable: Implementation of Flexible Working Time Arrangement

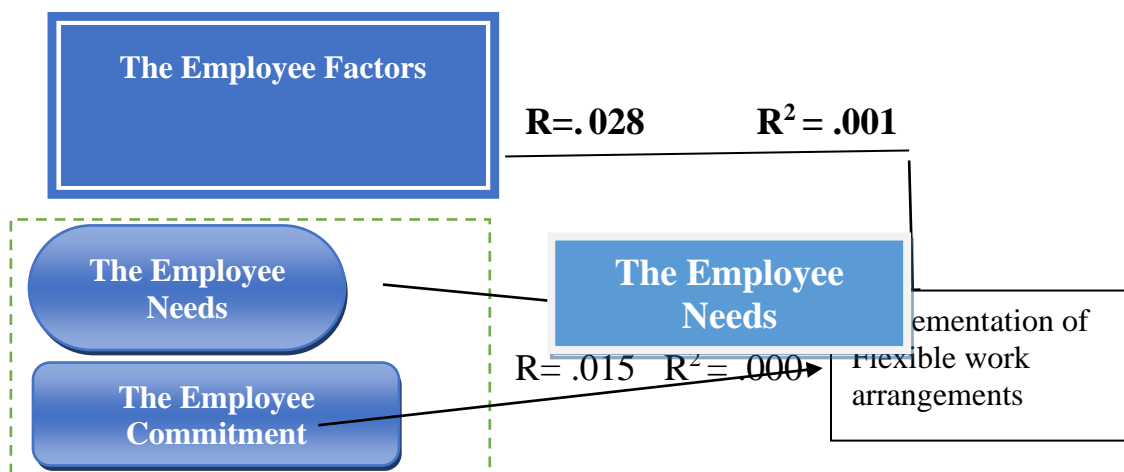
Table Coefficients for the relationship between Employee Factors and Implementation of FWAs



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Based on the above result concerning the relationship between the employee factors (as a whole construct) and the implementation of flexible working time arrangements, the statistical results via SPSS show that, the correlation  $R$  between them is  $= 0.028$  which is very weak. And the coefficient of determination  $R^2$  for the analysis  $= .001$  which is very low. The value of Beta for the relationship is positive at  $p$ - value  $= 0.603$ , which is not significant at significant level  $< 0.05$ . Moreover,  $t$ -value is not significant which is lower than the cut-off value 1.645 (Jöreskog & Sörbom 1996). Accordingly, there is no significant relationship between the whole construct of the employee factors and the implementation of flexible working time arrangements. Thus, the null hypothesis is confirmed. However, the alternative hypothesis concerning this relationship is rejected.

The following figure illustrates the 2<sup>nd</sup> main hypothesis and sub- hypotheses, as follows:



**Note:** All the relationships are not significant at p- value < 0.05

**Figure (3-14) the relationship between the employee factors (the whole construct) and their dimensions**

### **8) Findings:**

Hypothesis testing with simple linear regression in our chosen sample yields some results:

**1) Findings of the first Hypothesis:** There is a positive significant relationship between Organizational Factors (Manager Support, Co-worker Cooperation, Organizational Culture, and Technology Availability) as a whole Construct and the implementation of FWAs (Flex-time, Telework, and Part-time) (Main Hypothesis).

#### **Sub-Hypothesis for the first main Hypothesis's results:**

A) There is a positive significant relationship between Manager Support and Implementation of FWAs (Flex-time, telework and Part-time work).

B) There is a positive significant relationship between Co-worker Cooperation and Implementation of FWAs (Flex-time, telework and Part-time work).

C) There is a positive significant relationship between Organizational Culture and Implementation of FWAs (Flex-time, telework and Part-time work).

D) There is a positive significant relationship between Technology Availability and Implementation of FWAs (Flex-time, telework and Part-time work).

## **2) Findings of the Second Hypothesis:**

There is no significant relationship between Employee Factors (Employee Needs and Employee Commitment) as a whole Construct and the implementation of FWAs (Flex-time, Telework and Part-time work) (**Main Hypothesis**).

### **Sub-Hypothesis for the Second main Hypothesis's results:**

A) There is no significant relationship between Employee Needs and the Implementation of FWAs (Flex-time, Telework and Part-time work)

B) There is no significant relationship between Employee Commitment and the Implementation of FWAs (Flex-time, Telework and Part-time work).

### **Findings Related to the rest of Research Questions:**

**A) The Manager Support** factor has the highest effect and the highest correlation with the Implementation of FWAs (Flex-time, Telework and Part-time work)

B) 75.8% of respondents didn't use the Flexible Working Time Arrangements in their work before COVID-19 Pandemic. However, 24.2% of respondents used them. This means that the Pandemic forced many Academic Staff members to use FWAs for the first time in their work.

## 9) Recommendations:

Based on the above Findings the researcher recommends

First Manger Support regarding FWAs Implementation:

- 1) To provide adequate training to managers to assist them in using various forms of flexibility and to raise their awareness of the importance of flexibility for both employees and the organization.
- 2) Without the support of managers during the last COVID 19 Pandemic, many employees may not have been able to cope with their work, so manager support must be clear at all times, whether in crisis or in ordinary times, as manager support is a great motivator for employees to show more and efficient work.
- 3) Universities may hire external consultants from multinational corporations to assist them in developing customized policies for academic staff members who use FWAs in order to benefit from their long experience in using Flexibility for a longer period of time, even before the COVID- 19 Pandemic.

Second Technology Availability regarding FWAs Implementation:

- 1) Universities, particularly public universities, must devote a significant portion of their funds to improve technology because dealing with change like what occurred during COVID- 19 will be difficult without it.

## **Critical Success Factors for Applying Flexible working Time Arrangements in Egypt: An Applied Study**

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2) Managers at universities suggested that working from home for lecturers was a suitable solution for dealing with COVID 19, but during the Pandemic recovery period, managers saw that lecturers can use technology as an aid, such as making recorded lectures available to students at any time in addition to face-to-face lectures, thus using technology to facilitate lecturers' work.

3) Try to adopt the most recent technology used by global universities in dealing with FWAs.

Third Organizational Culture regarding FWAs Implementation:

1) Incorporate the concept of flexibility into the university's mission statement, as nowadays flexibility is one of the most important factors that applicants consider when applying for a new job.

2) To establish fair policies for providing employees with flexibility based on their needs.

Fourth Co-worker Cooperation regarding FWAs Implementation:

1) Universities have to create a workplace friendship such as mutual commitment and trust, as well as shared interests, preferences, and values. It is advised that business managers encourage the employees to interact with one another, establish a good communication environment, and assist employees in developing workplace friendships (Zhang & Wang 2021), as this will ease many issues regarding dealing with any difficulties or problems at work or concerning applying FWAs.

2) Universities may hold regular meetings for all professors, teachers, and teacher assistants to show what is new in their fields as well as their experiences in using forms of flexibility.

Fifth Employee Needs and Employee Commitment Regarding FWAs Implementation:

Universities must use FWAs to best serve Professors, Teachers, and Teacher Assistants' needs such as continuing their research, balancing family and work as a kind of motivation for them, as a result of which they will be more satisfied and committed to their work.

## References

- 1) Abdel-Wahab, A.G., 2007. Employees' attitudes towards Telecommuting. An empirical investigation in the Egyptian Governorate of Dakahlia. *Behaviour & Information Technology*, 26(5), pp.367-375.
- 2) Abdullah, Y.M.A., 2012. *Requirements of Implementing Telecommuting Techniques and its Impact on the Employees' Outcomes (An empirical study on smart village companies)*. (Master's Degree, Mansoura University). Unpublished
- 3) Afrianty, T.W., Artatanaya, I.G. and Burgess, J., 2022. Working from home effectiveness during COVID-19: Evidence from university staff in Indonesia. *Asia Pacific Management Review*, 27(1), pp.50-57.
- 4) Al-Rajudi, K.O., 2013. *Impact of Flexible Work Arrangements on Workers' Productivity in Information and Communication Technology Sector an Empirical Study of the Gaza Strip ICT Firms*, Master of science thesis, Islamic University, Gaza.
- 5) Amponsah, C.T., 2010. *Public-private partnerships: Critical success factors for procurements of capital projects*. Capella University.
- 6) Amtu, O., Aralaha, R. and Pattiruhu, C.M., 2021, May. Creating higher education quality through leadership, organizational culture and organizational commitment. In *IOP Conference Series: Earth and Environmental Science* (Vol. 747, No. 1, p. 012037). IOP Publishing.
- 7) Armoed, Z., 2021, February. The COVID-19 pandemic: Online teaching and learning at higher education institutes. In *IOP Conference Series: Earth and Environmental Science* (Vol. 654, No. 1, p. 012026). IOP Publishing.
- 8) Bajaba, A., Bajaba, S., Algarni, M., Basahal, A. and Basahel, S., 2021. Adaptive managers as emerging leaders during the COVID-19 crisis. *Frontiers in Psychology*, 12, p.1062.



- 9) Barney, C.E. and Elias, S.M., 2010. Flex-time as a moderator of the job stress-work motivation relationship: A three nation investigation. *Personnel Review*.
- 10) BBC News., 2021. UAE weekend: *Why did the Gulf State decide to change it and how did the tweets receive it?* December 2021 via <https://www.bbc.com/arabic/trending-59570062> accessed April 2022.
- 11) Bice, H., 2021. *Teachers' Beliefs, Barriers, and Classroom Practices: A Mixed Methods Study of Technology Integration at a School for Students with Dyslexia* (Doctoral dissertation, University of South Carolina).
- 12) Bird, R.C. and Brown, L., 2018. The United Kingdom right to request as a model for flexible work in the European Union. *American Business Law Journal*, 55(1), pp.53-115.
- 13) Brickey, J. 2002, *Flexible work arrangements in the United States: A historical analysis applying a systems model*, PhD thesis, Tennessee University, Knoxville.
- 14) Čiarnienė, R., Vienažindienė, M. and Adamonienė, R., 2018. Implementation of flexible work arrangements for sustainable development. *European Journal of Sustainable Development*, 7(4), pp.11-11.
- 15) Cooke, G.B., 2005. *The Nature and Incidence of Non-standard Work Arrangements* (Doctoral dissertation).
- 16) Desrosiers, E.I., 2001. *Telework and work attitudes: The relationship between telecommuting and employee job satisfaction, organizational commitment, perceived organizational support, and perceived co-worker support*. Purdue University.
- 17) Dessler, G., 2013. *Human Resource Management*. Thirteenth Edition, Pearson, United States of America.
- 18) Doerr, K., 2015. *Supervisor and coworker barriers to employees' use of flexible work arrangements and extended leaves of absence in*

## **Critical Success Factors for Applying Flexible working Time Arrangements in Egypt: An Applied Study**

---

*consulting firms* (Doctoral dissertation, Middle Tennessee State University).

19) Ertel, S., 2021. Small Business Post-COVID-19: Motivational Needs through Uncertain Times. *Compensation & Benefits Review*, 53(1), pp.8-15.

20) Families and Work Institute, 2017. *Work flex Employee Toolkit*, from Online Course related to catalyst Organization.

21) Ferreira, S., 2018. *3 Reasons Employers Will (Finally) Offer Flexible Work in 2018* <https://www.inc.com/stacey-ferreira/3-reasons-employers-will-finally-offer-flexible-work-in-2018.html> accessed on December 2018.

22) Forris, S., 2015. *The quest for work and family balance using flexible work arrangements* (Doctoral dissertation, Walden University, Minnesota).

23) Grobler, P.A. and De Bruyn, A.J., 2012. Flexible Work Practices (FWP)-an effective instrument in the retention of talent: a survey of selected JSE-listed companies, South African Journal of Business Management, 42 (4) December 2011: pp. 63-78. *South African Journal of Business Management*, 43(1), p.93.

24) Hashmi, M.A., Al Ghaithi, A. and Sartawi, K., 2021. Impact of flexible work arrangements on employees' perceived productivity, organisational commitment and perceived work quality: a United Arab Emirates case-study. *Competitiveness Review: An International Business Journal*.

25) Heiden, M., Widar, L., Wiitavaara, B. and Boman, E., 2021. Telework in academia: associations with health and well-being among staff. *Higher Education*, 81(4), pp.707-722.

26) Hrobowski-Culbreath, G., 2010. *Flexible work arrangements: An evaluation of job satisfaction and work-life balance*. Capella University.

- 27) Huckle, R.J., 2019. The relationship between flexible working hours, organisational commitment and employment engagement at a South African retailer (Master's Degree, University of the Western Cape).
- 28) Johns, G. & Saks, A.M., 2005. *Organizational Behaviour: understanding and Managing life at work*. Sixth Edition, Pearson, United States of America.
- 29) Jöreskog, K.G. and Sörbom, D., 1996. LISREL 8: *User's reference guide*. Scientific Software International.
- 30) Kropf, M.B., 1998. Women's Career Development and Part-Time Arrangements. *New Directions for Adult and Continuing Education*, 1998(80), pp.43-51.
- 31) Lacatus, M.L., 2013. Organizational culture in contemporary university. *Procedia-Social and Behavioral Sciences*, 76, pp.421-425.
- 32) Lewis, S., 2003. Flexible working arrangements: Implementation, outcomes, and management. *International review of industrial and organizational psychology*, 18, pp.1-28.
- 33) Lilius, J.M., 2006. *Being there or being competent? How co-worker support contributes to unit performance* (Doctoral dissertation).
- 34) Lorincová, S., Miklošik, A. and Hitka, M., 2022. The role of corporate culture in economic development of small and medium-sized enterprises. *Technological and Economic Development of Economy*, 28(1), pp.220-238.
- 35) Mabalane, V.T., 2012. *Academic staff development needs at a South African institution of higher education* (Doctoral dissertation, University of Johannesburg (South Africa)).
- 36) Montgomery, D.C., Peck, E.A. and Vining, G.G., 2012. *Introduction to linear regression analysis* (Vol. 821). John Wiley and Sons.

## Critical Success Factors for Applying Flexible working Time Arrangements in Egypt: An Applied Study

---

---

37) Morrison, M., 2012. How to write a Critical Success Factor CSF. RapidBI, September, 11, p.2012. via <https://rapidbi.com/how-to-write-a-critical-success-factor-csf/> accessed December 2021.

38) Nwoseh-Streeter, E. 2018, *Strategies for Reducing Corporate Accountants' Turnover through Implementing Workplace Flexibility*, PHD thesis, Walden University, Minnesota.

39) Ogonnaya, C., 2019. Managerial support is key to success, British Safety Council. Accessed via <https://www.britsafe.org/publications/safety-management-magazine/safety-management-magazine/2018/managerial-support-is-key-to-success/#:~:text=Managerial%20support%20can%20take%20many,helpin%20them%20with%20difficult%20tasks>. accessed January 2022.

40) Ogren, T.A., 2016. *A qualitative multi-case study of leadership and inter-team collaboration among higher education distributed employees* (Doctoral dissertation, Northcentral University).

41) Okla, E. 2015, A case study to explore ways flexible work arrangements hinder or increase an employee's job satisfaction, PHD Thesis, Capella University, Florida.

42) Pacheco, D., Rehman, A., 2019. What Is Shift Work?, Sleep Foundation <https://www.sleepfoundation.org/shift-work/content/what-shift-work> accessed on January 2019.

43) Palmeri, S., 2013. *Surviving a reduction in force: The impact of flexible work arrangements on employee job satisfaction and work/life balance following the 2008 recession* (Doctoral dissertation, Capella University).

- 44) Peretz, H., Fried, Y. and Levi, A., 2018. Flexible work arrangements, national culture, organisational characteristics, and organisational outcomes: A study across 21 countries. *Human Resource Management Journal*, 28(1), pp.182-200.
- 45) Pitek, J.M., 2015. *Flexible work arrangements and co-worker perceptions: The relationship between values, job satisfaction and organizational commitment*. University of Toronto (Canada).
- 46) Rahman, A., Partiwi, S.G. and Theopilus, D.S., 2021, February. University organizational culture mapping using Organizational Culture Assessment Instrument. In *IOP Conference Series: Materials Science and Engineering* (Vol. 1072, No. 1, p. 012069). IOP Publishing.
- 47) Scheibe, S., De Bloom, J. and Modderman, T., 2022. Resilience during Crisis and the Role of Age: Involuntary Telework during the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*, 19(3), p.1762.
- 48) Schermerhorn Jr, J.R., 2007 *Management 9e*.wiley, United States of America.
- 49) Sky News. 2021. *UAE adopts new weekly work system*. December 2021 via <https://www.skynewsarabia.com/middle-east/1485037-%D8%A7%D9%84%D8%A7%D9%95%D9%85%D8%A7%D8%B1%D8%A7%D8%AA-%D8%AA%D8%B9%D8%AA%D9%85%D8%AF-%D9%86%D8%B8%D8%A7%D9%85%D8%A7-%D8%AC%D8%AF%D9%8A%D8%AF%D8%A7-%D9%84%D9%84%D8%B9%D9%85%D9%84-%D8%A7%D9%84%D8%A7%D9%94%D8%B3%D8%A8%D9%88%D8%B9%D9%8A> accessed April 2022.
- 50) Song, P., Zhao, J., Mubarak, S.M. and Taresh, S.M., 2022. Critical success factors for epidemic emergency management in colleges and universities during COVID-19: A study based on DEMATEL method. *Safety science*, 145, p.105498.

## Critical Success Factors for Applying Flexible working Time Arrangements in Egypt: An Applied Study

---

- 51) Travaglione, A., Scott-Ladd, B., Hancock, J. and Chang, J., 2017. Managerial support: Renewing the role of managers amidst declining union support for employees. *Journal of General Management*, 43(1), pp.24-32.
- 52) Usman, M., Cheng, J., Ghani, U., Gul, H. and Shah, W.U., 2021. Social support and perceived uncertainties during COVID-19: Consequences for employees' wellbeing. *Current Psychology*, pp.1-12.
- 53) Vega, R.P., 2015. *Why use flexible work arrangements? A policy capturing study examining the factors related to flexible work arrangement utilization* (Doctoral dissertation, George Mason University).
- 54) Vinberg, S. and Danielsson, P., 2021. Managers of micro-sized enterprises and Covid-19: impact on business operations, work-life balance and well-being. *International journal of circumpolar health*, 80(1), p.1959700.
- 55) Watters, J.J. and Weeks, P., 1999. Professional Development of Part-Time or Casual Academic Staff in Universities: A Model for Empowerment.
- 56) Webster, S., 2018. *Flexible work arrangements: Technology enabling emerging populations of Millennials and Baby Boomers*. Temple University.
- 57) Younis ,R,A.,2016. *Flexible work arrangements: implementation approach*. Part of unpublished Doctoral dissertation, faculty of commerce, Cairo University  
[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2815053](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2815053) accessed on February 2022.
- 58) Younis,R., 2016.*The role of flexible work arrangements in overcoming the problems resulting from work - family unbalance : Empirical study* (Doctoral dissertation, Cairo University).