


Journalists' Satisfaction with Telecommuting Post-COVID-19: A Case Study of ISNA News Agency

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Article Info	Abstract
<p>Original Article</p> <p>Main Object: Humanities & Social Sciences, Media</p> <p>Received: 10 November 2024 Revised: 21 November 2024 Accepted: 27 December 2024 Published online: 01 January 2025</p> <p>Keywords: ISNA News Agency, COVID-19, Media management, News, Telecommuting.</p>	<p>Background: Due to the changes brought about by the COVID-19 pandemic, telecommuting has emerged as a new work method in the media, enabling journalists to adapt to digital technologies.</p> <p>Aims: This study aims to assess journalists' satisfaction with telecommuting in the post-COVID era among journalists at ISNA news agency.</p> <p>Methodology: The theoretical foundation of this research is based on the ideas of Daniel Bell and Manuel Castells. The statistical population includes 123 journalists, managers, senior editors, and news editors. Data was collected using a survey method and a researcher-designed questionnaire. The questionnaire's validity was evaluated through face validity, and its reliability was determined by a Cronbach's alpha coefficient of 0.956.</p> <p>Results: The results of this study indicate that telecommuting has had positive effects on journalists' productivity, focus, topic discovery, and job enthusiasm. Among the factors assessed on a 5-point Likert scale, "improved output during telecommuting" ranked highest with an average of 4.35, followed by "no issues in communication with colleagues" with an average of 4.29, "feeling of enthusiasm and vitality" with an average of 4.19, "better focus on work" with an average of 4.18, "more time for work" with an average of 4.07, "topic discovery and development" with an average of 3.87, and finally, "ease of communication with relevant organizations and individuals" with an average of 3.74.</p> <p>Conclusions: Environmental, family, and individual factors (such as number of children or marital status) have no effect on job satisfaction in telecommuting, but journalists' job position does influence their satisfaction with telecommuting.</p>

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1. Introduction

We live in a turbulent world where we encounter both pleasant and unpleasant events daily, even hourly. These events impact our lives, necessitating management and adaptation. A significant part of this management involves information dissemination, primarily carried out by journalists in mass media. Journalists, as the main arms of the media and pioneers of raising awareness, bear a critical and heavy responsibility. In news agencies, they collect and edit news, playing a significant role in managing and controlling the flow of information at various stages of any event (Ghorbani, 2020: 10). New developments like introduction of AI into different aspects of our lives have even created a more complicated environment (Soroori Sarabi et al., 2020).

One of the most significant challenges of our time is the outbreak of COVID-19, which has caused profound changes in everyday life, including news activities. The pandemic's effects are still evident in the post-COVID era, impacting various job sectors, including journalism.

Before the COVID-19 pandemic, telecommuting was considered impractical for many industries, including media outlets and newsrooms. Journalists, editors, and content production teams traditionally worked in offices and newsrooms, closely guiding the flow of news. However, the global crisis of COVID-19, accompanied by physical restrictions and the need for social distancing, forced the media to rethink their working methods. During this period, telecommuting became the only practical option to continue media activities. Environmental conditions and the context of news production play a crucial role in shaping different types of journalism and content production. The pandemic, by altering lifestyles in various individual and collective dimensions, has garnered significant attention, particularly in its impact on work behavior across many sectors of society. Telecommuting, as a method of economic activity related to earning a livelihood or performing job-related tasks, has been particularly notable for managers in various organizations and social institutions.

New communication ecology needs new communication skills (Sakhaei et al., 2024). In recent years, due to the COVID-19 pandemic, many offices and organizations adopted new approaches to continue their activities. One common method during this period was telecommuting. However, telecommuting conditions were not uniform across all professions, and employee performance varied significantly based on the nature of the job and the level of dependence on the physical workplace and interactions with clients. This situation was also prevalent in the media sector, where mandatory conditions pushed journalists and media managers to adapt to new technologies and management models. Over time, they developed the necessary skills to produce and manage content outside the physical newsroom. Now, after several years since the crisis, telecommuting has evolved from a social

necessity to a conscious and strategic choice for many media outlets. The successful experience of this work model during the pandemic has now positioned telecommuting as a viable option for many media organizations, which can be adopted as a continuous model during holidays or in future crises.

In the past, telecommuting was synonymous with home-based businesses. However, with the advancement of technology, the central element in the concept of telecommuting is no longer necessarily the home or physical environment but rather reliance on computer technologies and remote communications (Sarfi et al., 2021). This indicates that not only the way of working, but also its scope and range have transformed. In the age of communications, journalists can produce news from anywhere. At the beginning of the COVID-19 pandemic, journalists were forced to experience a new type of journalism from home, something they had never encountered before, and they lacked the necessary skills to navigate this phase.

According to data from previous international studies, a report on workplace conditions in the U.S. and Europe showed that between 2012 and 2016, the number of employees engaged in full-time telecommuting increased by 39% to 42%, and those who engaged in partial telecommuting experienced a 7% increase (Kook, 2023: 12).

Given the importance of news in informing the public and guiding them in various social situations, it can be said that news is the most valuable commodity today. It serves, through the media, to justify various aspects of public life, such as culture, economy, and politics, based on the importance and mission of conveying these messages. In the information age, the role of news dissemination has become increasingly significant. News coverage involves a series of activities that work on the news itself to either enhance or diminish its value relative to other topics, sometimes making the value of that news close to zero when compared to other materials (Ahmadi, 2019: 60).

The author of the book *International Flow of Information*, co-authored in 1985 by several communication scholars from renowned universities worldwide, believes that the definition of news lacks comprehensive global acceptance in many studies. However, in most definitions, news is considered the regular dissemination of events, knowledge, human understanding, and the transmission of opinions and public thoughts (Abbasi, 2020: 27).

In addition to these news activities, the outbreak of disease and public health, alongside raising awareness and providing information, is of great significance. Moreover, the concerns and tensions caused by the COVID-19 pandemic had a significant impact on the mental health of society. From that time, there were whispers about the permanence of telecommuting in the media. In 2020, according to a *BBC* report, a survey conducted by the British organization "Institute of Directors" involving about 1,000 companies revealed that 74% of companies

intended to maintain recent telecommuting practices.

Today, hiring individuals with the right skills, knowledge, and experience has become more important for the long-term success of organizations. Employers predict that up to one-third of their full-time employees will telecommute in the coming decade. They report that hiring highly skilled individuals is more important than hiring those who can work on-site. One reason for the popularity of telecommuting is that it is equally attractive to both young and older employees (Taban, 2022: 33).

Elizabeth Grace Saunders, in her views on telecommuting, believes that there is no commuting, sudden meetings, or dress codes. Telecommuting can seem like a dream unless personal obligations come into play. It is easy to ignore distractions in the office, but at home, distinguishing between personal and work time can be difficult (ibid: 56).

Roger Baker (2020), the policy director at the Institute of Directors, stated: "Telecommuting will remain permanent for many jobs." Although telecommuting may not have become permanent for Post-COVID-19, telecommuting has emerged as a flexible and convenient solution for media organizations. News agencies are increasingly adopting remote work strategies, allowing journalists to work from anywhere with an internet connection, particularly during holidays or periods of reduced workload. However, the appeal of remote work varies across different editorial roles. While many journalists have embraced the flexibility, senior positions like editor-in-chief and section editors may still prefer the traditional in-office setting, emphasizing physical oversight and team collaboration.

This study aims to evaluate the satisfaction levels of journalists at ISNA news agency regarding remote work in the post-COVID era. Specifically, it seeks to answer the following question: To what extent has telecommuting contributed to the satisfaction of journalists in the post-COVID period?

2. Literature review

In direct relation to the main topic of this paper, few writings have been produced, but revisiting and studying the available texts has helped the author in developing hypotheses and using related studies in the field of survey-based research methods. These studies have also been utilized in offering suggestions and designing research tools.

Shoja-Nouri et al. (2015) analyzed the effects of telecommuting on work-life balance among employed and married women. The main objective of this research was to examine the impact of telecommuting on creating balance between work and family life among employed women. This study was conducted using a qualitative method and employed two approaches: a systematic review of existing research and in-depth semi-structured interviews. The findings indicate that

telecommuting helps reduce work-family conflicts and improves the balance between the professional and family lives of employed women. The results also show a general willingness among working women to accept telecommuting, while managers did not support this method.

Hosseini and Salajegheh Pour (2014) conducted a case study on the Iran Oil Pipeline and Telecommunications Company, developing a model to evaluate the feasibility of a telecommuting system. The study found a strong positive correlation between employees' inclination toward telecommuting and factors such as computer skills, family circumstances, and culture. Additionally, employees with more work experience demonstrated a higher level of organizational commitment. Notably, interest in telecommuting was greater among female employees than male employees. Finally, the study identified and prioritized the key factors contributing to a lack of interest in telecommuting.

Barghi (2021) conducted a study on the municipalities of Gilan province, Iran to examine the impact of telecommuting on employee satisfaction and organizational commitment during the COVID-19 pandemic. Focusing on a statistical population of 560 technical staff from these municipalities, the study found that telecommuting had a positive and significant effect on both employee satisfaction and organizational commitment throughout the pandemic.

Simunjak (2022) examined the experiences of journalists during the COVID-19 pandemic, finding that many faced stress, frustration, anxiety, and burnout. Her research focused on British journalists and revealed that digital adaptations, such as virtual newsrooms and digital news gathering, had the most significant impact on journalists' well-being and job satisfaction, rather than their coverage of tragic events. Middlesex University, with support from the Arts and Humanities Research Council, conducted in-depth interviews with over 30 journalists across England, highlighting that pandemic-era journalism was largely marked by negative emotions, including anxiety and frustration. These feelings frequently resulted in stress and burnout, as shown by initial survey results in the UK and beyond. Many journalists expressed fears of contracting the virus while working in the field, though it was remote work itself that was seen as a primary contributor to the emotional strain involved in managing these challenges.

Martin et al. (2022) explored changes in news environments and telecommuting after the COVID-19 pandemic, focusing on the impact of digital communication and collaboration tools (such as groupware, workflow software, instant messaging, and web conferencing) on the mental well-being and productivity of remote workers. Their study compared these effects before and during the initial quarantine period in 2020, using a sample of 438 employees from companies in Luxembourg. The analysis first identified distinct profiles of remote workers based on changes in tool usage during quarantine versus pre-

quarantine levels, and the extent of use during the quarantine period. It then examined the relationship between these profiles and variations in job satisfaction, stress, and productivity. Findings indicated that frequent, combined use of digital tools improved job productivity but came at the expense of reduced job satisfaction. Increased use of these tools during quarantine led to information overload, higher stress, and a drop in job satisfaction and productivity. However, regular use of these tools before quarantine helped alleviate some negative impacts, though job stress still increased.

Scire (2021), writing for the Nieman Lab at Harvard University, examines how around one-third of news organizations have transitioned to hybrid or remote working models. The article highlights how the COVID-19 pandemic prompted significant shifts in the work environments of media outlets. Building on the success of remote work during the crisis, many news organizations have reduced office space and restructured toward hybrid models, combining in-office and remote work. Focusing on global media, particularly in developed countries like the United States, Canada, Germany, and the United Kingdom, the article notes that news organizations in these regions have widely adopted remote or hybrid models following their positive experiences during the pandemic. For instance, RTL in Germany has embraced flexible work arrangements, while *The Globe and Mail* in Canada has downsized its office space. A key insight from the article is that many experienced journalists and staff are reluctant to return fully to office environments, increasing the appeal of remote and hybrid models. Additionally, these changes have reduced costs for news organizations by decreasing their office space requirements. Among other reported benefits are higher participation in online meetings and a reduction in workplace hierarchy.

A study titled "Organization of Remote Work of Employees in Modern Conditions", presented at a research-oriented conference by Zakharov (2022), examines the specific features of organizing and registering remote work for employees fulfilling the functional roles of managers, specialists, and staff of various types of organizations. The author defines the concepts of remote work, outlines the general provisions of the registration stages and features for employees under the specified work form, and explains the organizational forms of interaction between an employee and an organization that emerged during a crisis. This contribution also considers practical guidelines for organizing the management of electronic documents using different forms of verification to ensure organizational and legal security in performing functional tasks. The characteristics of using various forms of electronic signatures are demonstrated. Additionally, the specific features of document management using postal communications (courier) are described, depending on the types and forms of documents being sent. The topics of organizational ownership verification for the

intellectual property results of employees' activities are considered. The author provides guidelines for addressing issues related to the possibility and legality of compensating employees for necessary office equipment and supplies in remote or hybrid work settings, and defines recommended rules for effectively managing the organization of employees' work in cases of telecommuting.

3. Explanation of concepts

News. American author Matthew Lyle Spencer, in his book *News Writing*, defines news as any real action or thought that is of interest to a large number of readers. W. J. Blair, another American journalist, in his book *Newspaper News*, considers news to be any current topic of the day that, due to its interesting nature and the attention it receives from readers, is published in the press (Masoudi, 2023: 21). News is the regular dissemination of events, awareness, human knowledge, and the transmission of opinions and public thoughts. On the other hand, it is the announcement and expression of interesting events in social life and the transmission of public opinions and thoughts. News is an impartial, accurate, and truthful report of an event and an objective account of facts, which contains one or more news values and is likely influenced by internal and external organizational factors (Mohsenian Rad, 2017: 13).

News agency. A news agency is a news organization, often a website, staffed by journalists dedicated to producing news reports for publication in newspapers, online platforms, magazines, and other outlets, including virtual spaces (Samimi, 2019: 12). The *Encyclopedia Britannica* defines a news agency as an organization responsible for gathering, writing, and distributing news from around the country or world to newspapers, magazines, radio and television stations, government agencies, and other users. Typically, news agencies do not publish news directly but provide it to subscribers who share costs to access services they might not otherwise afford. Most mass media, even those with extensive resources, rely heavily on news agencies for content. In *Dehkhoda's Dictionary*, Dr. Moein offers a broad definition of a news agency as an organization that gathers and distributes news, without differentiating it from other news institutions. The *Amid Dictionary* provides a more specific definition, describing a news agency as an office or organization that collects global news and distributes it to newspapers and other outlets (Naderi Gisour, 2012: 399). This study focuses on major news agencies with established histories, including *Fars*, *ILNA*, and *Tasnim*.

Journalist. A journalist is a type of reporter who works in newspapers, radio, television, or online, focusing specifically on news reporting, unlike other media professionals who may not be involved in direct reporting (Babakhani, 2014: 40). Journalism is a creative and demanding profession that requires strong motivation and commitment.

A journalist represents the public opinion of a nation and should uphold this responsibility, avoiding any compromise for short-term gains. Journalism is not merely a profession but a mission entrusted by society to its responsible representatives. Essential qualities for a journalist include courage, confidence, an engaging presence, strong communication skills, expertise in news writing, a background in journalism, proficiency in foreign languages, high intelligence and discernment, a healthy body and mind, and the ability to use news-gathering equipment (Abbasi, 2020: 64). In this study, "journalists" refers to those actively engaged in news reporting at the ISNA news agency.

Telecommuting. The concept of telecommuting refers to the organization of work using information and communication technologies, enabling employees and managers to access work activities from remote locations (Perez, 2014, p: 23). Telecommuting is not a job itself, but a method of organizing tasks based on information processing.

As an emerging phenomenon, telecommuting has attracted the attention of many organizations, universities, and professional institutions worldwide. This work method, which allows employees to perform their duties without the need for physical presence at the workplace, has seen significant growth in recent years due to technological advancements and changes in work practices. In Iran, too, telecommuting has gradually been accepted as an effective and efficient method in many organizations and companies.

According to the International Telework Association and Council, telecommuting is a flexible work arrangement in terms of time (part-time or full-time) and place (home, remote centers, or mobile), allowing employees to fulfill their duties remotely (Shoja-Nouri et al., 2015). The central element in the concept of telecommuting is not necessarily the home or physical environment but rather the reliance on computer technologies and remote communications. This shows that not only has the way of working changed, but its scope and range have also transformed, allowing individuals to perform their tasks from any place and at any time, without being limited to a specific location. Telecommuting refers to activities that involve remote connections from locations other than the workplace (Hartman et al., 1992).

The concept of telecommuting was first introduced during the oil crisis of the early 1970s when the world faced a sharp increase in oil prices and the need to conserve fuel and reduce economic costs. During this period, Jack Nilles (1976), an American researcher and expert in management and economics, along with his colleagues, came up with the idea that one solution to the economic crisis was to reduce unnecessary commuting of employees to the workplace. Through precise calculations and studies, they concluded that reducing daily commutes to work could significantly lower energy costs and urban

traffic while also improving employee productivity.

With the expansion of virtual spaces and new communication technologies, major changes have occurred in jobs and professional activities. One such change is the ability to work without being tied to a specific time or place. This transformation has been particularly noticeable in the field of journalism, where reporters can now use information infrastructures and virtual spaces to publish news remotely at any time. This flexibility has led to greater adaptability in work activities and changes in traditional news structures. In his book *The Third Wave*, Toffler (2017) refers to this very issue and believes that the new system of production, in addition to downsizing production units, decentralizing, and separating production from the city, and transforming the real nature of work, can free millions of people from the prison-like factories and offices of the Second Wave, returning them to their original sanctuary—the home, to which they have always belonged. If such an event is to occur, all institutions and organizations, from families to schools and organizations, must be transformed.

Telecommuting in media can be analyzed from the perspective of Castells' theories on the network society. Manuel Castells (2006a), by introducing the concept of the "network society," has made a fundamental shift in analyzing social systems. He believes that a new global society has emerged that is significantly different from past eras. One of the main factors of this difference is the information explosion, made possible by the development of electronic and software technologies. Castells (2006b) argues that networks are open structures that can expand indefinitely and incorporate new nodes as long as these nodes have the ability to connect within the network. Communication technologies allow journalists to collect and disseminate information remotely without being physically present in newsrooms. This enhances work flexibility and allows journalists to better accommodate their individual needs, which can lead to increased job satisfaction. Castells (2006b) believes that this world emerged around the late 1960s and mid-1970s, due to the historical convergence of three independent processes: the information technology revolution; the economic crises of capitalism and state bureaucracies, and their subsequent restructuring; and the rise of cultural social movements. By referring to the "information technology revolution" as one of the pillars of the network society, he demonstrates how the development of these technologies has changed work and communication methods. In the telecommuting of journalists, information and communication technology (ICT) infrastructures such as the internet, digital platforms, and multimedia play a key role. These infrastructures enable journalists to produce and publish news from any geographical location, facilitating the process of telecommuting.

News coverage. It is one of the most critical duties of journalists in the newsroom, which is directly related to telecommuting, as

telecommuting enables journalists and media outlets to collect, produce, and publish news without the need for physical presence in the office or at the event scene. News coverage involves a series of activities that shape the value and status of news, determining whether its significance increases or decreases when placed alongside other content (Soltani-Far & Hashemi, 2003: 14). One of the main advantages of telecommuting for journalists is the ability to work from any location and at any time. Using digital tools such as the internet, mobile phones, video conferencing, and social media, journalists can quickly gather information from various sources and complete their news coverage remotely. Telecommuting for news coverage has not only increased the flexibility and productivity of journalists but also reduced costs and enhanced their safety. This work method, supported by modern technology and digital tools, allows journalists to prepare and publish news from any place, at any time, which can lead to greater satisfaction.

To better understand the growth of news agencies in Iran, it is essential to consider the process of their establishment. Two major waves of news agency formation can be noted: the first wave began with the activation of *ISNA* (Iranian Students' News Agency) and continued until the adoption of regulations prohibiting the establishment of news agencies by government institutions (1999-2010), during which 15 news agencies received licenses at different times. The second wave began in 2009 (Mehdi-Pour, 2013).

ISNA was founded on November 4, 1999, as the first non-governmental and student-run news agency in Iran. Initially, *ISNA*'s reporters were mainly students from various academic disciplines who volunteered their time. Over time, although the number of student journalists decreased, *ISNA* has continued to serve as a platform for training young and inexperienced journalists. *ISNA*'s main slogans, "Every student is a journalist" and "Every idea is a piece of news," emphasized the central role of students and innovation in news production.

For the first time in 2000, *ISNA* began publishing its news for free and without intermediaries on the internet, providing the public with direct access to news. The initial idea to establish this news agency was conceived by Abolfazl Fateh in 1999. Originally, the plan was for the Iranian Students Organization of Academic Center for Education, Culture and Research (ACECR) to have a paper, but ultimately, the proposal to establish a news agency was put forward. Due to the lack of specific regulations for private or semi-governmental news agencies, *ISNA*'s license was issued under the title of a cultural-news institution. *ISNA* emerged not only as a student-run news agency, but also as a new model of media ethics and news gatekeeping. Supported by government funding and the backing of ACECR, *ISNA* has grown into one of the primary news sources in Iran.

Within the internal structure of *ISNA* (Figure 1), there are multiple

layers between a journalist and the agency's CEO. These layers, from bottom to top, include service editor, senior editor, service manager, and news deputy. For example, in the political section, the political manager oversees the work of political journalists, senior editors, and editors, and is ultimately responsible for supervising the content produced by this section. Under the political manager, there is the role of the senior editor, who is responsible for overseeing one of the political sub-sections (such as foreign policy, parliament, government, etc.), while the editor collaborates with the senior editor in fulfilling these duties. The editor works under the supervision of the senior editor. In other words, aside from the journalist, most of the other job titles have supervisory functions and are not directly responsible for content production, although they must supervise the output produced by the journalists. However, depending on the circumstances and necessity, editors and senior editors may also participate in news production.

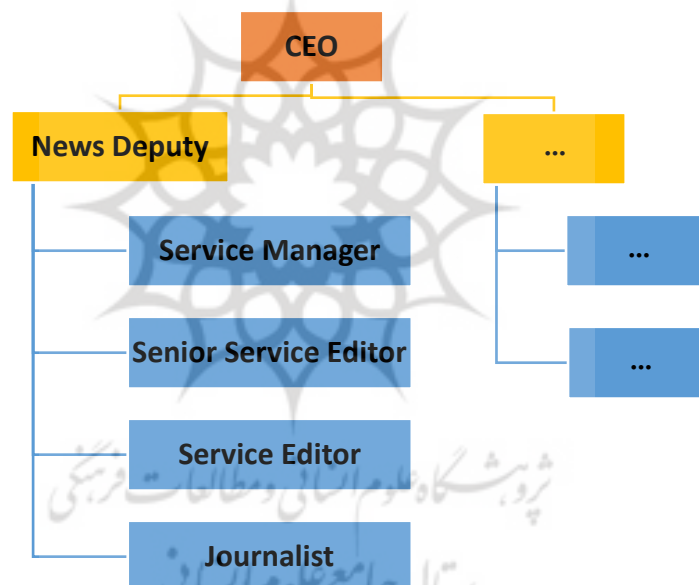


Figure 1. The organizational structure of ISNA news agency's editorial department

4. Theoretical Foundations

Castells' Theory of the Network Society. Castells (2006a), in introducing the concept of the network society, argues that a new global society has emerged—one fundamentally distinct from past structures. A key factor in this transformation is the exponential increase in information, fueled by advances in electronics and software. Castells highlights that today's audiences encounter a growing diversity of information sources, which significantly shape their worldviews. He contrasts this with McLuhan's "galaxy" model, where communication was predominantly one-way, suggesting that the rise of an interactive

society is driven by the shift to multimedia—a new communication system grounded in digital network interaction. The internet, as a universal but non-holistic medium, establishes a unique domain of knowledge and cognition, often referred to as cyberspace (Holmes, 2005: 8).

Castells (2006a) argues that networks are open structures that can expand indefinitely and incorporate new nodes as long as these nodes have the capacity to connect within the network. Networks are suitable tools for various activities (Mehdi Zadeh, 2014: 337).

4.1. Daniel Bell's post-industrial society

Daniel Bell's initial approach to the post-industrial society is one of inevitability and desirability, containing elements of both liberalism and socialism, which emphasize limited government intervention and reducing inequalities. Unlike his rival theorist Alain Touraine, who also focuses on the post-industrial society, Bell does not pay much attention to conflicts in the future of the post-industrial society. However, over time, he lost some of his optimism about this issue, and in his later works, he emphasizes that the future is neither as certain nor as desirable as initially thought. Instead, we are entering an uncertain and unstable era—quite the opposite of Marx's beliefs in an inevitable revolution and a hopeful outlook for the future (Mehdi Zadeh, 2014: 237).

Criticisms of Bell's theory largely center on his limited attention to social conflicts and an overly optimistic perspective, which some attribute to his conservative American background. Others argue that Bell's focus on American society, where material industries were indeed declining and shifting abroad, does not reflect a universal reality. Additionally, Bell's ideas were influenced by the young Hegelians, who believed that thought alone could transform material conditions and that changes in social consciousness were sufficient to drive material shifts in the world (Firoozi, 2006).

In any case, Daniel Bell is one of the influential contemporary thinkers and sociologists who has had a significant impact on today's social thought and postmodern thinkers, particularly Lyotard. He is an idea generator, yet he speaks of the end of ideologies. He accurately predicts the emergence of a post-industrial society but maintains a high level of optimism about it, advocating for the reduction of inequalities. He desires a new, utopian world for which he lacks a precise understanding. Undoubtedly, his theories and contradictions symbolize this new world—one that is newer than modernity, where information, communication, and advertising play a colossal role. In this world, everything is relative, scientific sociology has come to an end, grand narratives have become obsolete, new ideas and ideologies are spreading, yet this is labeled as the end of ideologies—a world that is proclaimed to be the end of history, where the triumph of capitalism is celebrated, but fundamentalism and traditionalism are also abundantly

present. It is a world that is neither modern nor postmodern; we can only describe it as new, and its thinkers, like Daniel Bell, are also new (Mehdi Zadeh, 2014: 237). The idea of telecommuting in the news sector among journalists and media professionals can be seen as parallel to today's advanced society, reflecting a new post-industrial and even post-postmodern world where human routines have taken on a new form.

5. Methodology

This research is categorized as descriptive in terms of approach, applied in terms of purpose, and quantitative in terms of method. The statistical population of the present study includes journalists, editors, senior editors, and managers of the *ISNA* news agency, totaling 190 individuals. Using the Morgan, Cohen, and Krejcie table, a sample size of 123 was determined, selected through simple random sampling and studied. Data was collected through a survey method and a researcher-designed questionnaire. To determine the validity of this tool, face validity was employed, and to determine its reliability, Cronbach's alpha coefficient was used. Given that this coefficient (0.956) was greater than 0.7, the tool's reliability was confirmed. Statistical methods were used to analyze the data; for this purpose, frequency distribution tables and central measures were used to describe the findings, and correlation coefficients were used to test the hypotheses.

6. Findings

In this section, we first describe some of the personal and job-related characteristics of the journalists studied and then refer to their level of satisfaction with telecommuting. The results of the research hypothesis tests are presented at the end of this section.

6.1. Personal and Job characteristics of *ISNA* News Agency Journalists

Out of 123 respondents, 37.4% are male and 62.6% are female. Regarding marital status, 54.5% are single and 45.5% are married. Among them (both single and married), 72.4% have no children, and 22% have one child. By job position, 60.2% are journalists, 34.1% are editors or deputy editors, and 5.7% are managers.

Table 1. Personal and Job characteristics of *ISNA*

Option	Frequency	Percentage
Journalist	74	60.2
Editor/Deputy	42	34
Manager	7	5.7
Total	123	100

Among the surveyed job roles, 74 respondents (60.2%) are journalists, while 7 (5.7%) have the lowest frequency as managers.

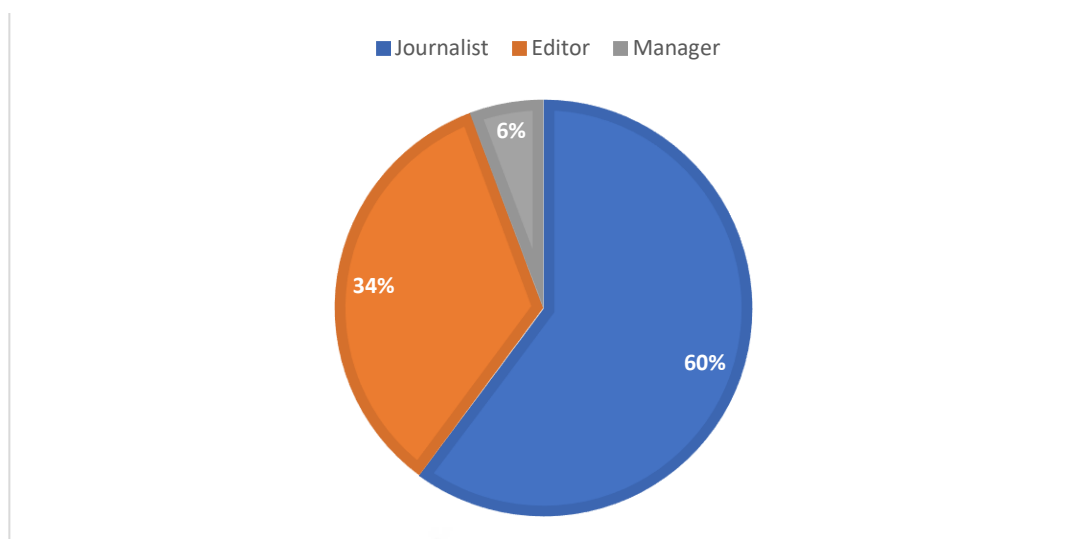


Figure 2. Distribution of respondents by job position (frequency and percentage)

Table 2. Job satisfaction levels of studied journalists with telecommuting indicators

Indicators	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Frequency	Average
Better productivity	3.3	0.8	16.3	16.3	63.4	123	4.35
No communication issues with colleagues	4.2	5.0	7.6	23.5	59.7	123	4.29
Better organizational communication	5.0	8.4	32.8	14.3	39.5	123	3.74
More time for related tasks	5.0	6.7	15.1	21.8	51.3	123	4.07
Increased focus	3.3	8.1	9.8	24.4	54.5	123	4.18
Easier subject discovery	4.2	8.4	27.7	15.1	44.5	123	3.87
Feeling of vitality	6.5	4.9	11.4	14.6	62.6	123	4.19

Based on the Likert scale ranking, "Better output during telecommuting" holds the highest rank with an average score of 4.35, followed by "No issues in communication with colleagues" with an average score of 4.29, "Sense of enthusiasm and vitality" with an average of 4.19, "Increased focus on work" with an average of 4.18, "More time for work" with an average of 4.07, "Easier subject discovery and coverage" with an average of 3.87, and finally, "Improved communication with organizations and related figures" with an average of 3.74. Additionally, 63.4% believe that telecommuting leads to better output, 59.3% strongly agree that it causes no issues in communicating with colleagues, 39.8% strongly agree that it enhances communication with organizations and related figures, 39.8% report having more time for work, 54.5% strongly agree that it helps them focus more on tasks,

43.9% strongly agree that it facilitates subject discovery and coverage, and 62.6% strongly agree that telecommuting fosters a sense of enthusiasm and vitality. Following this, several frequency tables for key variables have been presented.

6.2. Hypothesis testing

In this section, the research hypotheses are tested. First, the assumed relationships between personal and job characteristics with the level of satisfaction from telecommuting are evaluated. Following this, the significance of differences in each of the satisfaction indicators compared to the expected benchmark is examined.

Table 3. Testing the assumed relationships between personal and job characteristics and satisfaction with telecommuting

Test	Value	Significance Level	Degrees of freedom	Cramer's V
Chi-square	3.801	0.545	4	0.343

It appears there may be a significant difference in satisfaction with telecommuting between single and married individuals. Findings show a Chi-square value of 38.1 with a significance level of 0.545. Therefore, with a 5% margin of error, we conclude that there is no significant difference in satisfaction with telecommuting between single and married individuals.

It is hypothesized that there may be a significant relationship between telecommuting and the number of children journalists have.

Table 4. Testing the assumed relationships between telecommuting and the number of children journalists

Test	Value	Significance Level	Degrees of Freedom	Cramer's V
Chi-square	4.970	0.761	8	0.234

The test results show a Chi-square value of 4.970 and a significance level greater than 0.05, with 8 degrees of freedom, indicating weak correlation strength. Thus, there is no significant relationship between telecommuting and the number of children.

It is hypothesized that there is a significant relationship between telecommuting and the job position of journalists.

Table 5. Testing the assumed relationships between telecommuting and the job position of journalists

Test	Value	Significance Level	Degrees of Freedom	Cramer's V
Chi-square	9.445	0.000	8	0.199

The results show a Chi-square value of 9.445 with a significance

level of 0.000, degrees of freedom of 8, and a Cramer's V of 0.199. This confirms a significant relationship between telecommuting and journalists' job positions.

As significance testing for telecommuting satisfaction components compared to the expected benchmark, based on Table 6, it can be observed that the t-statistic ($t= 47.723$) with 118 degrees of freedom and a significance level (sig) of less than 0.001 indicates that there is a significant difference between the mean of the "Better Productivity" index and the expected index value (3), with a 5% margin of error. This comparison shows that the observed mean is higher than the expected index.

Table 6. Results of the one-sample t-test between telecommuting satisfaction components and the expected index (value 3)

	t	df	Sig. (2-tailed)	Mean difference	95% Confidence interval of the difference	
					Lower	Upper
Better productivity	47.723	118	0.000	4.36975	4.1884	4.5511
No communication issues	43.206	118	0.000	4.29412	4.0973	4.4909
Better organizational communication	33.821	118	0.000	3.74790	3.5285	3.9673
More time for related tasks	37.676	118	0.000	4.07563	3.8614	4.2898
Increased focus	40.499	118	0.000	4.18487	3.9802	4.3895
Easier subject discovery	35.301	118	0.000	3.87395	3.6566	4.0913
Feeling of vitality	37.186	118	0.000	4.19328	3.9700	4.4166

Similarly, regarding the second index, "No Issues in Colleague Communication", the t-statistic ($t = 43.206$) with 118 degrees of freedom and a significance level (sig) of less than 0.001 indicates a significant difference from the expected index (3) with a 5% margin of error. This comparison reveals that the observed mean is higher than the expected index.

The t-statistic ($t= 33.821$) with 118 degrees of freedom and a significance level (sig) of less than 0.001 for the "Better Communication with Organizations" index also shows a significant difference from the expected index value (3) with a 5% margin of error. This comparison indicates that the observed mean is higher than the expected index. Similarly, for the "More Time for Related Tasks" index, the t-statistic ($t= 37.676$) with 118 degrees of freedom and a significance level (sig) of less than 0.001 indicates a significant difference from the expected index, with the observed mean higher than

the expected index.

For the "Increased Focus" index, the t-statistic ($t= 40.499$) with 118 degrees of freedom and a significance level (sig) of less than 0.001 shows a significant difference from the expected index value (3), again with the observed mean higher than expected. Similarly, the t-statistic ($t= 35.301$) with 118 degrees of freedom and a significance level (sig) of less than 0.001 for the "Easier Topic Discovery" index indicates a significant difference from the expected index value (3), confirming that the observed mean is higher than the expected index.

Finally, for the "Feeling of Vitality" index, the t-statistic ($t= 37.186$) with 118 degrees of freedom and a significance level (sig) of less than 0.001 indicates a significant difference from the expected index value (3), showing that the observed mean is higher than the expected index.

7. Conclusion

Based on the findings, this study indicates that telecommuting has positively impacted *ISNA* journalists, leading to increased productivity, improved focus, easier topic discovery, and a renewed sense of vitality and enthusiasm. Interestingly, individual and family characteristics, such as the number of children or marital status, did not significantly influence satisfaction levels. However, the specific job role within the organization did have a notable impact on journalists' overall satisfaction with remote work.

The role of individual and demographic factors in telecommuting satisfaction aligns with findings by Shoja-Nouri et al. (2015), which highlighted a positive work environment and reduced colleague-related challenges, as well as by Martin et al. (2022) in their study, "Transformations in the News Environment and Telecommuting After COVID". These studies reinforce the positive impact of telecommuting on job satisfaction among *ISNA* journalists.

The conclusions about journalists' telecommuting satisfaction mirror global shifts in communication technologies as noted by Castells (2006), observable worldwide. Additionally, Daniel Bell's post-industrial perspective—viewing technological progress as inevitable—emphasizes how the rapid acceleration of technology has influenced fields like journalism. While personal and demographic characteristics, such as marital status or the number of children, can impact telecommuting satisfaction, this study found no significant effect from marital status or number of children on satisfaction, though job position and role did have a notable influence.

Furthermore, considering that work-life and family-life balance, along with job burnout, significantly affect job performance, and with ongoing advancements in information and communication technology (ICT), it is recommended that programs be developed to support telecommuting while enhancing work-life and family-life balance to achieve organizational and national goals. Strengthening

communication and monitoring tools for telecommuting is also advised to improve managerial satisfaction with telecommuting arrangements and increase satisfaction among roles such as editors, senior editors, and managers. By adopting a strategic approach to telecommuting for media professionals, along with managerial adjustments and improved telecommunication and communication infrastructure to facilitate coordination and interaction, the focus and attentiveness of journalists and media professionals can be heightened. This approach ultimately enhances the quality and productivity of public awareness efforts driven by news agencies.

Conflict of interest

The authors declared no conflicts of interest.

Authors' contributions

All authors contributed to the original idea, study design.

Ethical considerations

The authors have completely considered ethical issues, including informed consent, plagiarism, data fabrication, misconduct, and/or falsification, double publication and/or redundancy, submission, etc. This article was not authored by artificial intelligence.

Data availability

The dataset generated and analyzed during the current study is available from the corresponding author on reasonable request.

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