

## Article

# Intellectual Capital and Organizational Innovation: Examining the Mediation Role of Knowledge Sharing on the Palestinian Universities during the COVID-19 Pandemic

Amani Yaser Alnatsheh <sup>1,\*</sup>, Ayşe Gözde Karaatmaca <sup>2</sup> and Behiye Çavuşoğlu <sup>3</sup>

<sup>1</sup> Department of Innovation and Knowledge Management, Near East University, Northern Cyprus, Mersin 10, Nicosia 99138, Turkey

<sup>2</sup> Department of International Business, Near East University, Northern Cyprus, Mersin 10, Nicosia 99138, Turkey

<sup>3</sup> Department of Economics, Faculty of Economics and Administrative Sciences, European University of Lefke, Northern Cyprus, Mersin 10, Lefka 99780, Turkey

\* Correspondence: natshehamani@gmail.com

**Abstract:** According to the literature, in traditional business settings, intellectual capital (IC) and knowledge sharing (KS) significantly contribute to increasing organizational innovation (OI) levels. During COVID-19, the environment transformed, which presents numerous obstacles that necessitate creative and innovative thinking. Here, the researchers wondered if the same phenomenon would occur in the university sector and whether the coronavirus pandemic would have an impact on it. Therefore, this paper aimed to conduct an empirical research study to investigate this. The study followed a quantitative research approach to collect data, which was based on an electronic structured questionnaire survey. In addition, a purposive random sampling technique included 407 academics employed by Palestinian universities in the West Bank area. For data analysis, the SPSS v25 program was employed, while a mediation analysis was carried out using the Process Macro v3.5 software. The research results showed that IC significantly contributes to promoting knowledge sharing and raising OI levels, and KS had a beneficial impact on OI. In the end, it was discovered that KS positively mediated the relationship between IC and OI. Despite some limitations, the study's findings offer numerous advantages for academics, researchers, and policymakers in universities.

**Keywords:** intellectual capital; organizational innovation; knowledge sharing; university; West Bank area; Palestine; COVID-19 pandemic



**Citation:** Alnatsheh, A.Y.; Karaatmaca, A.G.; Çavuşoğlu, B. Intellectual Capital and Organizational Innovation: Examining the Mediation Role of Knowledge Sharing on the Palestinian Universities during the COVID-19 Pandemic. *Sustainability* **2023**, *15*, 3673. <https://doi.org/10.3390/su15043673>

Academic Editors: Constantin Bratianu and Ruxandra Bejinaru

Received: 27 December 2022

Revised: 1 February 2023

Accepted: 10 February 2023

Published: 16 February 2023



**Copyright:** © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

If in the previous century debates about economic growth were dominated by physical capital, such as buildings, equipment, cash, investments, and financial instruments, the emergence of knowledge economies has shifted the focus to intellectual capital (IC). The “knowledge economy,” sometimes known as the new economy, has sparked a lot of interest in how companies manage intangible knowledge assets, or intellectual capital [1]. The interest in intangible assets and IC has spread beyond corporations to public organizations such as colleges and research centers, where academics widely adopted it in the 1990s [2,3]. Higher education institutions are an ideal sector for studying IC as they are knowledge-intensive, skill-based, and rich in relationships [4]. Additionally, the significance of IC for academic achievement has been highlighted in the literature [4,5]. Universities are becoming more conscious of the necessity of creating and disseminating scientific knowledge. Universities, being knowledge-based organizations, have been noted to have a major influence on knowledge generation and diffusion via their scientific studies, such as academic research and publishing [6]. Furthermore, Chatterji and Kiran [4] demonstrated the importance and role of databases, support techniques, and communication networking in

academic institutions in creating a collaborative setting via knowledge-sharing platforms. Knowledge sharing (KS) is the act of transferring to others explicit or tacit knowledge [7]. Thus, KS, particularly in academic institutions, has the potential to facilitate curriculum development and accelerate research [6,8,9].

However, due to the COVID-19 outbreak, when a highly contagious virus that originated in Wuhan, China, spread around the world as a result of severe acute respiratory syndrome, social distancing is becoming a critical tool for ensuring safety and reducing disease spread, making regular lessons nearly impossible [10,11]. Because of the disease's effects, academic institutions' teaching techniques have altered, and traditional teaching has been replaced with online education because of the closure of schools, colleges, and universities during that time period [11]. As a result, universities must develop new and successful methodologies, paradigms, practices, and strategies in order to lead the significant environmental and expectation changes that they are currently facing [12]. In other words, to face this disease, universities need innovative techniques. This was highlighted by prominent critics such as Bill Gates [13]: "primarily consider innovation as an answer to the health crisis that will result in innovative solutions for testing, treatment, vaccines, and disease control measures" [14] (p. 126). Additionally, Saedinejad et al. [15] emphasize the significance of academic innovation and the importance of supporting university staff in utilizing and putting those innovations to use in order to make teaching and learning varied and purposeful.

In previous studies, the relationship between IC and OI has been discussed, for instance, in SMEs in the tourism sector [16], in construction firms [3], and in petroleum companies [2].

However, there is a paucity of research on the subject of the influence of IC on organizational innovation (OI) at the university level, such as in Palestinian higher education organizations, and it is believed that this research is the first of its kind in Palestine and has never been conducted previously in this field. Furthermore, this linkage has not been validated as a genuine contribution following the conversion of traditional education to virtual classes during COVID-19.

Therefore, the importance of this research comes from a re-examination of the connection between IC and OI in different institutional contexts and different conditions and places, where it will be applied in Palestinian universities and during the coronavirus pandemic. In this sense, the H1 hypothesis was created.

As past studies have demonstrated, there is a positive impact between IC and KS [1,3]. However, the study of the relationship between them in the pandemic seems crucial. In this regard, we must highlight the impact of the presence of IC on stimulating KS by verifying the H2 hypothesis.

The literature also indicates that KS can improve an organization's capacity for innovation and the accomplishment of organizational objectives (1). In this regard, what methods could universities follow to stimulate KS in order to promote OI, particularly in light of the Corona pandemic? As a result, H3 hypothesis was created.

Despite all of these arguments, no empirical studies that combine the three variables (IC, OI, and KS) and investigate their impact in an educational context with the outbreak of the COVID-19 pandemic have been conducted. The H4 hypothesis was developed in this regard.

Based on the above and with the outbreak of the COVID-19 pandemic and the closure of educational institutions, this study came about in order to enrich and fill the gaps in the literature and to shed light on a very important topic for higher education organizations in Palestine, which is the impact that IC has on OI and KS as a mediator in their link. The current study is unique in that no previous research has addressed the mediating role of KS in the relationship between IC and OI at the university level or in light of the coronavirus pandemic.

To accomplish this, the research aims to provide clear answers to the following questions. In light of COVID-19:

1. Does IC, in its three components (human capital, social capital, and structural capital), negatively or positively influence the OI of universities?
2. Is there a link between IC, KS, and OI? Is it direct or indirect?
3. How much influence does the mediator (KS) have on the relationship between IC and OI in universities?

This study is expected to contribute to increasing awareness of the importance of IC among CEOs and department heads in universities, as well as provide recommendations for the development of IC to support and enhance OI in response to the challenges posed by COVID-19 and highlight the significance of encouraging a KS culture among academics in higher education institutions. Thus, this technique will demonstrably contribute to increasing OI levels and provide institutions with a competitive advantage.

The remainder of this manuscript is structured as follows: First, a literature review is presented, the conceptual framework of the study is discussed, and hypotheses are developed accordingly, followed by the research methodology. Second, the results of the data analysis are presented. Third, a discussion of the findings is offered, followed by the implications of those findings. Finally, the conclusions, limitations, and future research are presented.

## 2. Literature Review

### 2.1. Intellectual Capital (IC)

Over time, the concept of IC has evolved significantly. However, the more formalized concepts of IC and knowledge management really took flight only in the 1990s [2,3]. Previously, IC was considered to be a wholly intangible asset for an organization, but it has since taken on more formal definitions that relate to both the sustainability phenomenon and the idea of value generation [17,18]. Zahedi and Naghdi Khanachah [19] and Chatterji and Kiran [4] also noted that IC is currently at the forefront of economic development and strengthens both competitive advantage and sustainability. Recently, IC has captured the attention of many researchers, as numerous definitions of IC have been presented in the literature. It has been observed that value generation and intangibility are central to all of the concepts. IC is referred to as a group of resources, expertise, competencies, and other intangible assets that help organizations perform better and create value [20]. Sullivan [21], one of the concept's key contributors, defined IC in terms of human skills, knowledge, and relations that give a company a competitive advantage. Others describe it as the accumulation of an institution's knowledge-based resources to achieve a competitive advantage [3]. Li et al. [3] described IC as a set of nonphysical resources, such as company culture, inventiveness, imagination, and experience. However, the most often used definition of IC must be that offered by Obeidat et al. [1] (p. 4): "the possession of knowledge and experience, professional knowledge and skill, good relationships, and technological capabilities, which when applied will give organizations a competitive advantage". IC has various components; according to Subramaniam and Youndt [22], Ali et al. [23], and Zahedi and Naghdi Khanachah [19], three central components must be examined when quantifying IC: "human capital (HC), structural capital (StC), and social capital (SC)". The term HC refers to the set of abilities, qualifications, skills, and know-how possessed by a laborer [3,18]. As stated by Gomezelj Omerzel and Smolčić Jurdana [16], this concept includes not just traditional schooling and academic training but also knowledge and practical experience, most often picked up on the job. Competence, creativity, intuition, and wisdom are also viewed by Patky and Pandey [24] as components of HC, while StC is identified as the codified expertise and institutionalized knowledge included in and applied through databases, structures, systems, patents, publications, and procedures [25]. Employees cannot take these resources with them when they leave the organization because they are the property of the company [3]. As for the third component, SC revolves around relationships and networks. Roberts [26] (p. 54) assumed it to be "ties among individuals, active relations, social networks, and reciprocity and reliability norms that derive from them".

## 2.2. Intellectual Capital in University

The higher education sector is a knowledge-intensive organization, and it has been suggested that identifying and evaluating IC is becoming increasingly important in these organizations [4]. Warden argues that, from the perspective of research universities, the IC of a university is made up of researchers, students, and managers, as well as their organizational procedures and social networks [27]. As several academics have noted, developing a learning organization's IC continuously will result in a distinct, sustainable competitive advantage [20,23,27], in relation to the importance of IC components in universities (HC, StC, and SC). Chahal and Bakshi [20] see HC as an organization's capacity to generate value via the utilization of its people's experience, education, competence, skills, and creativity. In this case, the researchers see that the university's human resources department must play an important role in the IC by hiring employees with experience, skills, knowledge, and competencies, in addition to supporting, training, and retaining the competencies and expertise already existing in the university. Ali et al. [23] stated that a person's intellectual capacity plays a significant role in improving university accomplishments. Additionally, universities need StC since their standing as high-performance centers depends greatly on the accessibility of the wealth of knowledge they hold in the form of archives [4]. SC contributes to enhancing interactive and cooperative skills in the relationships between internal and external universities, an organization's workers, and its stakeholders [20].

## 2.3. Organizational Innovation (OI)

The term "innovation" is derived from the Latin phrase "innovare", which indicates to create a new thing or to improve an already current service or good [20]. In scientific literature, there are numerous concepts of innovation and OI. According to Saki et al. [28], Schumpeter (1934) was the first to offer this notion, which was used in the process of creating new corporate brands, goods, and services. Some scholars see innovation as an organization's ability to effectively apply creative solutions [29]. This point of view contends that creativity, both individual and group, serves as the foundation for innovation. Furthermore, Schumpeter contends that innovation entails designing a completely new product or adding extra characteristics to current ones, as well as developing a new manufacturing process, establishing a brand-new market, and discovering new sources for raw materials or semifinished goods [6]. Innovation is an organizational component that plays a vital role in the growth of an enterprise. It can be described as an organization's ability to apply a variety of ideas, such as inventions that lead to the creation of innovative products or services, and to keep pace with technological advances [20,30]. OI is defined by Ahmad and Khattak [18] as the adoption of a concept, technique, brand, procedure, service, or policy within an organization. OI has been evaluated from a holistic perspective by Sutanto [12] (p. 3): "utilize/execute new ideas, utilize/execute new behaviors, utilize/execute new products, utilize/execute new academic processes, utilize/execute new technologies, and utilize/execute new administrative practices." In fact, in today's complicated and changeable environment, it can be said that innovation is seen as a crucial aspect in companies' efforts to build values and gain competitive advantages [28]. In addition, Saki and others indicated that organizations that prioritize innovation as their first policy tend to be successful.

## 2.4. Organizational Innovation in University

Universities consider innovation to be the most crucial component of their educational system [15,31]. At universities, researchers present new ideas, practices, and discoveries in their publications. In order to put this creative thinking into action, the university consults with the industry, which may be regarded as an important channel for development and implementation. In addition to these research publications, universities benefit from technological innovations or patents [6]. To achieve continuous innovation, administrators of the organization must determine what influences innovations' application, as well as how they affect university educational systems' capabilities, and establish policies that support

those influences and the aims of the institution [15]. The following suggestions were made by Brennan et al. for a higher education institution's innovation: cultivating an innovative organizational culture; looking into employee motivations and rewards; encouraging academics to employ new technologies for learning; embracing interinstitutional cooperation to increase the quality level of students; building up adequate mechanisms for developing the skills of teaching personnel; and encouraging them to share their knowledge [32].

### 2.5. Knowledge Sharing (KS)

Knowledge is defined as knowledge that already exists in relation to a person's beliefs, abilities, and talents [33]. Human knowledge is classified into two forms [33]: "explicit knowledge and tacit knowledge". The term "explicit knowledge" refers to knowledge that has been officially codified using a symbol system or made visible as a physical object and is therefore simple to convey and spread. "Tacit knowledge" refers to knowledge embedded in the human mind (personal knowledge) derived from practice and experience that is hard to formalize or communicate to others. Knowledge management is the systematic administration of a company's tacit and explicit knowledge through investigation, sharing, processing, storing, and utilizing this knowledge [34]. Furthermore, the knowledge management process comprises knowledge acquisition, creating, sharing, and utilizing [3]. For knowledge to have value, it must be shared. Knowledge sharing (KS) is, as can be noticed, a stage in the knowledge management process. KS is an essential mediator for knowledge processes, since it connects the efforts of earlier stages to the subsequent stage. Its significance is heightened when individual expertise and experience are regularly applied inside the business [7]. KS is described as a purposeful method of passing knowledge between people inside an institution [35,36]. Mazorodze and Mkhize [36] also show in their research that employees sharing their knowledge and experiences with other employees is an activity that requires voluntary effort and goes beyond the contractual obligations of employees, and that it is the attitude and desire of employees that determine this sharing. The importance of KS also lies in the exploitation of competencies to achieve a competitive advantage [37]. However, since there is little research on the subject, it is critical to understand how KS affects the link between OI innovation and IC.

### 2.6. Knowledge Sharing in University

The idea of knowledge societies and knowledge-based economies is expanding, so KS is becoming increasingly significant in organizations, including higher education institutions [38]. KS culture is becoming important in evaluating institutional success. The process of knowledge transfers and sharing is crucial in higher education institutions for both the knowledge producers and the knowledge seekers [36]. As a result, they must be encouraged to share their knowledge, skills, and experiences in some way. Thi Chung and Thi Tram Anh [37] pointed out that employees' reluctance to share their knowledge might be detrimental to corporations, notably universities. Therefore, numerous scholars have identified a few elements that promote knowledge sharing, such as rewards, recognition, promotion, and bonuses [36].

## 3. Conceptual Framework and Hypotheses

### 3.1. Intellectual Capital and Organizational Innovation

In light of COVID-19, academic institutions have a responsibility to focus on developing their members' IC and intellectual capabilities so that they are able to generate new ideas and innovative solutions to raise the quality level of educational and scientific systems, thereby raising the performance levels of universities; this demonstrates the value and relevance of universities embracing their IC [4,6]. Anggraini et al. [39] demonstrated that this study investigates the link between IC and university performance, they investigation showed that the significance of IC and its components in raising performance is crucial, whereas building up IC is essential to securing a long-term competitive advantage. In addition, there is agreement among various studies that IC is positively associated

with innovation. For example, Almutirat [2] demonstrated that “dimensions of IC” have affected “OI”. HC is the main driving force of creativity, innovation, and competition. Gomezelj Omerzel and Smolčić Jurdana [16] found that the firm’s IC is a key factor in innovation in the tourism industry. Additionally, they demonstrated the close association between innovation and growth. Patky and Pandey [24] concluded that “human resource practice flexibility” is positively correlated with “innovation performance”. According to the findings of another study conducted by Ali et al. [23], IC and a mediator innovation are key indicators in the increased level of university performance in Pakistan. The findings of the study by Zahedi and Naghdi Khanachah [19] demonstrated that KM processes improve the degree of innovation in Iranian industrial companies by placing a focus on managers’ HC development. According to Ahmed and Khattak [18], one of the primary factors that leads to a competitive advantage for small- and medium-sized businesses is the adoption of corporate social responsibility and the use of IC. The function of these linkages as mediators is also demonstrated through OI. Thus, based on the above literature, the first hypothesis is formulated as

**H1.** *“The presence of intellectual capital has a positive effect on organizational innovation of universities in the light of the coronavirus pandemic”.*

### 3.2. Intellectual Capital and Knowledge Sharing

Academic institutions, particularly universities, place a high value on IC since they serve as platforms for the creation and sharing of knowledge and rely on intellectual capacity [23]. Mazorodze and Mkhize [36] provided an example of the administrative role played by the university of education in encouraging and inspiring its staff to share information through a range of strategies, including awards, recognition, promotion, and bonuses. KS played a significant part in the coronavirus pandemic. Arias Velasquez and Mejia Lara [40] stated that during COVID-19, a new approach of KS and diffusion was developed through communities of practice to gain a competitive advantage; they also stated the lack of verification of the epidemic’s contribution on a real scale of virtual technologies. Obeidat et al. [1] add that IC can facilitate KS and also indicated that firms must have effective human resource management and encourage staff members to use their knowledge to create, share, and apply new ideas. Li et al. [3] also stress the importance of each IC component in terms of KS as follows: the company’s employees are its most significant competitive advantage. Moreover, the presence of a strong organizational framework, effective motivational methods, a knowledge management department, and a knowledge-oriented culture supported KS. Finally, it was argued that if an organization has a network of reciprocal relationships, its members may more easily meet each other’s needs and share their knowledge. According to the above, a review of the literature reveals a clear link between IC in its three components and KS. In this respect, the following hypothesis is proposed:

**H2.** *“The presence of intellectual capital has a positive effect on knowledge sharing in universities in light of the coronavirus pandemic”.*

### 3.3. Knowledge Sharing and Organizational Innovation

KS is viewed as a valuable input for innovation. In educational institutions, knowledge is shared to enhance performance, so it is considered the basis of institutional innovation [36]. According to Qammach [41], businesses must give KS a high priority since it may have a good impact on innovation performance. Numerous researchers have noted that an organization that encourages KS among its employees leads to the creation of new ideas and thus the promotion of innovation [3]. Meanwhile, KS is valuable to companies for a variety of reasons; the most crucial ones are the acquisition of knowledge and value, improving the innovation capacity, and assisting the organization in acquiring a competitive advantage [1]. Employees with talent and expertise may boost the effect of academic knowledge on innovation by specifying, combining, and putting it into practice [42,43].

The development of methods and practices for the generation, exchange, and use of tacit knowledge within organizations is another benefit of knowledge management, which aids the innovation process [3]. Therefore, KS can be considered an effective tool for OI enhancement. Based on the above discussion, the following hypothesis is proposed:

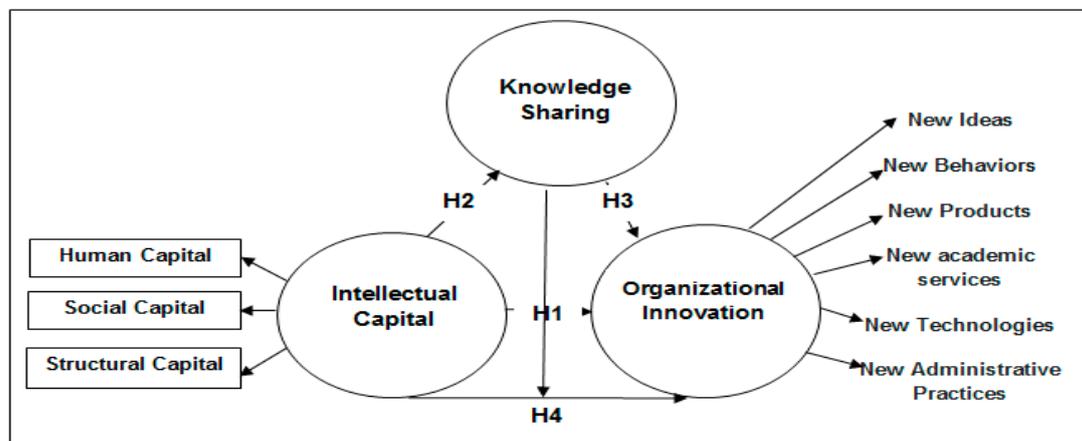
**H3.** *“The presence of knowledge sharing has a positive effect on organizational innovation of universities in the light of the coronavirus pandemic”.*

#### 3.4. The Mediating Role of Knowledge Sharing between Intellectual Capital and Organizational Innovation

Few empirical investigations endeavored to test the beneficial role of KS as a mediator in the association between IC and OI. In research carried out by Obeidat et al. [1], in manufacturing companies in Jordan, the potential beneficial effects of KS on linkage among both variables—IC and organizational performance—were examined. One of the research’s most significant findings was that KS effectively mediated this interaction. Additionally, Li et al. [3] focused on analyzing the connection between IC, KS, and the innovation performance of construction firms. This study shows that IC, in all three of its dimensions, has immediate and significant effects on innovation performance and that KS serves as a mediator between these effects by strengthening them. Within the framework of COVID-19 and the academic community, this survey aims to reinvestigate the moderating impact of KS on dependent and independent variables in Palestinian universities by proposing the following theory:

**H4.** *“Knowledge sharing positively mediates the relationship between intellectual capital and organizational innovation”.*

This study’s aim was to investigate and analyze the linkage between the variables mentioned above and represented by the conceptual framework in Figure 1.



**Figure 1.** Conceptual Framework of the Study. Source: designed by authors.

## 4. Methods

### 4.1. Sample and Data Collection

The research population consists of academic staff (academic teaching, academic research, and academic administration) in Palestinian universities. They were purposefully chosen because, as employees of the universities during COVID-19, their perspectives and professional roles are relevant to this study. They also utilized these inventions—or at least some of them did—in their professional lives. The researchers chose universities because, in addition to being the ideal field for embracing intellectual capital [4] and creating and transferring knowledge through scientific research [6], the COVID-19 pandemic had a significant impact on the global education system, which introduced virtual education into its system and required innovative solutions to combat this pandemic. As a result,

the researchers saw studying the role of IC and KS in OI as a way to introduce a real-scale contribution by applying it in Palestinian universities. No other researcher has ever conducted similar research in Palestinian universities to deal with the challenges and difficulties brought on by the COVID-19 pandemic. According to the Ministry of Higher Education and Scientific Research [44], there are 5859 academics employed by universities in the Palestinian territories that follow a closed educational system (1292 in the Gaza Strip and 4567 in the West Bank Area). The research population in this study is restricted to academic staff operating in the West Bank area (4567 academicians, 1219 female, 26.7 percent, and 3348 male, 73.3 percent) due to the perilous situation in the Gaza Strip resulting from the Israeli occupation and siege and because open education has its own set of laws and regulations. To collect data, the researchers used a quantitative research approach, relying on an electronically structured questionnaire. The survey strategy is one of the most important areas of measurement used in business research since it allows for combined research involving quantitative and qualitative features [45]. A survey is also a practical tool to assess the motivations, attitudes, and behaviors of a large population. Furthermore, electronic and online questionnaires are best suited owing to COVID-19 and Israeli occupation, which limit access to particular places, making personally administered questionnaires difficult. This is an important component of the online survey since it allows communication with respondents who cannot be reached via traditional ways [45]. Furthermore, this method is simple to administer and quick to provide, and responders can respond at their leisure. In addition, the adaptation of this study to the coronavirus epidemic was explained to participants in the introduction and each paragraph of the questionnaire, as well as in the participant information sheet. This study was designed to adhere to the ethical principles of voluntary participation, and the researchers committed to keeping the universities' and informants' exact responses confidential while also respecting participants' rights to privacy and anonymity. Before distributing the questionnaire, the researchers contacted the competent authorities at each university, as well as reputed and reliable institutions with which they collaborate and coordinate, such as the Ministry of Higher Education and Scientific Research, to facilitate obtaining permission and filling out the questionnaire. Collaboration with a reputable research organization is advocated by Sekaran and Bougie [45] to boost response rates. Following that, certain universities distributed the link to the questionnaire to their academic staff, whereas other Palestinian universities gave the researchers their academic staff's e-mail addresses, and the researchers forwarded the link to them. Each university received a survey based on the number of academic staff in the needed sample size divided by the size of the community. Then, this survey with "the participant information sheet" explaining the nature of the study was distributed over a two-month period (March–April) in the spring of 2022 by emailing them via the link. In this manner, the responses were gathered and automatically recorded into a private Google Drive database. According to the National Education Association of the United States' formula, a sample size of 355 is appropriate for a population of 4567 [45,46]. Five hundred academics were chosen at random to participate in the research by using a purposive sampling method with a margin of error of 4.1%, 95% confidence levels, and a response distribution of 50%. Four hundred seven survey respondents filled it out and submitted it. Because completion of the questionnaire was required and incomplete responses would not be accepted, the response rate is quite high. Hence, no polls had any missing data. Mugenda and Mugenda [47] stated that if a survey receives a response rate of 50%, the data are acceptable for analysis; 60% is good, and 70% or more means the data are great for analysis and provides more accurate results. As a result, 407 was deemed sufficient for data processing, generating inferences, and drawing conclusions.

#### 4.2. Variable Measurement

A questionnaire consisting of four sections and 39 items was designed to explore the relationship between the research variables using readily established constructs from the published literature. All IC questions were evaluated on a 7-point Likert scale ranging from

1 “strongly disagree” to 7 “strongly agree” to determine if participants agreed or disagreed with them. In parts C and D, the OI and KS were measured on a 5-point Likert scale, where 5 indicates “strong agreement” and 1 represents “extreme disagreement”. Table 1 represents a summary of variables measures.

**Table 1.** Sources and Description of the Measurement Scales.

| Constructs                     | Scale Sources and Descriptions   |
|--------------------------------|--|
| Intellectual Capital (IC)      | Adapted from Subramaniam and Youndt [6,22], consisting of 14 items   |
| • “Human Capital (HC)”         | Measured by 5 items. These items provide insight into the overall competence, knowledge, and expertise levels of a university’s staff during the COVID-19 pandemic.  |
| • “Social Capital (SC)”        | Measured by 5 items. The items assessed a university’s overall ability during the COVID-19 pandemic to integrate knowledge through its sharing and transfer between individuals through interactions, cooperation, and the organization’s network of relationships.  |
| • “Structural Capital (StC)”   | Measured by 4 items. The questions evaluated a company’s ability to collect, codify, and preserve individual experiences and knowledge in their systems, structures, databases, manuals, and patents, in addition to their procedures, beliefs, and business practices, during the COVID-19 pandemic.  |
| Organizational Innovation (OI) | Adapted from Sutanto [12,48]; developed a set of six indicators. These indicators were used to determine the extent to which OI were used or accomplished during the COVID-19 pandemic, specifically, “using and executing new ideas; using and executing new behaviors; using and executing new products; using and executing new academic services; using and executing new technology; and using and executing new administrative practices”. |
| Knowledge Sharing (KS)         | Adapted from Van den Hooff and de Leeuw van Weenen [1,49], consisting of 14 items. These items evaluated whether employees at Palestinian universities shared their knowledge (inside and outside the department) during the COVID-19 pandemic.  |

Source: designed by authors.

#### 4.3. Statistical Analysis

Using IBM SPSS v. 25, the collected data were subjected to several tests, as illustrated in Table 2.

**Table 2.** Statistical Analysis.

| Statistical Analysis                            | Tools and Test   |
|---|--|
| Process collected data                          | IBM SPSS v. 25 software And PROCESS Macro v3.5 program for SPSS.       |
| Statistical test                                | Participant demographics; descriptive statistics; correlation analysis |
| Goodness of measures                            | Validity and reliability   |
| Diagnostic test                                 | Normality, multicollinearity, independence, and linearity              |
| Hypotheses Testing including mediation analysis | SPSS v.25 with PROCESS Macro v3.5                                      |

## 5. Results of Research

### 5.1. The Research Sample’s Demographics

Table 3 categorizes the sample’s demographic characteristics into four groups. The survey findings revealed that 28.7% of the 407 participants were “female”, and 71.3% were “male”, indicating logic in the distribution based on the gender ratio present in the universities mentioned in the sample selection. Furthermore, 53.3% of the target responders were “>45 years”, 59% held a “PhD”, and 35.6% had “>20 years” experience in this the institution.

**Table 3.** Demographic Information.

| Characteristic                      | Categories  | Frequency | Percentage |
|-------------------------------------|-------------|-----------|------------|
| "Gender"                            | "Male"      | 290       | 71.3       |
|                                     | "Female"    | 117       | 28.7       |
| "Age (years)"                       | "≤25 years" | 4         | 1.0        |
|                                     | "26–35"     | 63        | 15.5       |
|                                     | "36–45"     | 123       | 30.2       |
|                                     | ">45 years" | 217       | 53.3       |
| "Highest Educational Qualification" | "Diploma"   | 1         | 0.2        |
|                                     | "Bachelor"  | 18        | 4.4        |
|                                     | "Master"    | 148       | 36.4       |
|                                     | "Doctorate" | 239       | 58.7       |
| "Years of Experience"               | "≤5 years"  | 57        | 14.0       |
|                                     | "6–10"      | 70        | 17.2       |
|                                     | "11–20"     | 135       | 33.2       |
|                                     | ">20 years" | 145       | 35.6       |

### 5.2. Testing Goodness of Measures (Reliability, Validity) and the Correlation Coefficients

A reliability test was performed to assess the consistency of the results obtained when the test was repeated three or more times under comparable circumstances using a similar measuring instrument [45]. Table 4 displays the reliability findings; the coefficient alpha values for the three variables were 97% (=0.969). According to Sekaran and Bougie [45], Cronbach's alpha is considered good if it is more than 0.8, acceptable if it is in the range of 0.70, and poor if it is less than 0.6. As a result, variables might be regarded as reliable.

**Table 4.** Pearson Correlation, Descriptive Analysis, Reliability Test, and Normality.

|                               | (1)      | (2)      | (3)      | (4)      | (5)      | (6)     |
|-------------------------------|----------|----------|----------|----------|----------|---------|
| (1) Intellectual Capital      | 1        |          |          |          |          |         |
| (2) Organizational Innovation | 0.769 ** | 1.00     |          |          |          |         |
| (3) Knowledge Sharing         | 0.690 ** | 0.646 ** | 1.00     |          |          |         |
| (4) Human Capital             | 0.898 ** | 0.644 ** | 0.627 ** | 1.00     |          |         |
| (5) Social Capital            | 0.825 ** | 0.702 ** | 0.656 ** | 0.749 ** | 1.00     |         |
| (6) Structural Capital        | 0.875 ** | 0.734 ** | 0.573 ** | 0.671 ** | 0.721 ** | 1.00    |
| Mean                          | 5.035    | 3.634    | 3.819    | 5.3106   | 4.8914   | 4.870   |
| Std. Deviation                | 1.140    | 0.824    | 0.6545   | 1.17270  | 1.30505  | 1.331   |
| Cronbach's $\alpha$           | 0.957    | 0.945    | 0.936    | 0.941    | 0.935    | 0.906   |
| "Skewness"                    | −1.011−  | −0.897−  | −0.981−  | −1.250−  | −0.893−  | −0.799− |
| "Kurtosis"                    | 1.266    | 0.981    | 2.419    | 1.928    | 0.499    | 0.287   |

\*\* "Correlation is significant at the 0.01 level". Source: designed by authors.

A validity test was carried out to ascertain how well a measuring instrument worked by adopting the validity of the research questions in a set of scientific studies that verified the study variables' questions and were published in international journals and on the internet. As a result, the questions were used at the universities in Palestine after being approved and validated in another environment. The primary research on which the study variables were based are as follows: [12,22,49]. Sekaran and Bougie [45] contend that rather than creating new instruments, researchers can make use of those that are already reputed to be "good". As a result of the above, the study adopted the validity of the questions.

A correlation coefficient, "Pearson", was utilized to assess the connection between variables. Table 4 indicates that all correlation coefficients were positively correlated with

each other at the significance level  $p < 0.01$  and have medium-to-high power. The findings revealed the following: The correlation coefficients between IC and OI, as well as with KS, are 0.769 and 0.690, respectively;  $p < 0.01$ , which implies a strong positive association. Furthermore, KS and OI have a strong positive correlation (0.646;  $p < 0.01$ ). In regard to IC components, all correlations are statistically significant; however, the correlation coefficient between KS and StC has the weakest association (0.573;  $p < 0.01$ ), whereas the coefficient value of IC has the most positive correlation with HC (0.898;  $p < 0.01$ ).

### 5.3. The Descriptive Statistics

The mean of participants' responses could be used to assess each indication. The class interval's duration was estimated using the following equation: (highest value-lowest value)/number of levels = (5–1) interval:  $3 = 1.33$  was the interval. As a result, the study's arithmetic averages will be treated as follows for the quintile: (3.68 and above: high), (2.34–3.67: intermediate) (2.33- and below: low). In the case of the seven-level:  $(7-1):3 = 2$ ; this value equals the category length. As a result, we established the following: (5.2 and up: high), (3.1–5.1: intermediate), and (3- and below: low).

The mean scores of the research variables during COVID-19 are shown in Table 4. The respondents' mean score for IC was 5.035 on a 7-point Likert scale and for OI was 3.634 on a 5-point Likert scale; this indicates an "intermediate" arithmetic mean of the respondents' perspective on the research study. All KS variable questions during COVID-19 were 3.819 using a 5-point Likert scale. This suggests a "high" arithmetic mean of the respondent's perspective on the research study. Overall, the application of IC by Palestinian universities to promote and enhance OI during COVID-19 was medium, i.e., neither strong nor weak. There was, nevertheless, a high level of KS.

### 5.4. Statistical Assumption

Diagnostic tests are used to see whether the data were adequate for conclusions, which is a critical requirement for researchers [50]. The result was as follows:

#### 5.4.1. Normality

The "Skewness and Kurtosis" tests were used to establish if the data had a normal distribution or not. The findings showed that all of the values were distributed normally and that none of them exceeded the critical value ( $\pm 2.58$ ) [50]. Skewness coefficients ranged between  $-0.799$  and  $-1.250$ , while kurtosis values ranged from 0.287 to 2.419, as shown in Table 4.

#### 5.4.2. Multicollinearity

The results were tested through computing the "variance inflation factors (VIF)" and "tolerance" to ensure that the several independent variables were not related. The findings show that the independent variables of the study do not overlap. Tolerance values range from 0.352 to 0.441 ( $>0.10$ ), and the VIF ranges from 2.269 to 2.840 ( $<10$ ) [45].

#### 5.4.3. Independence

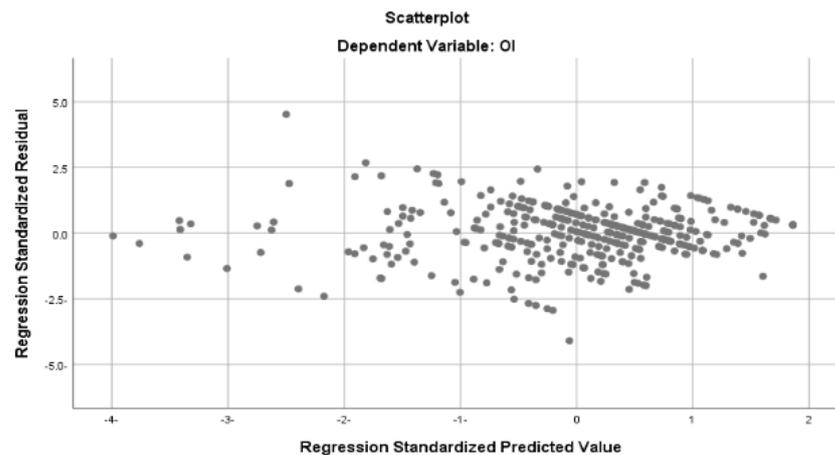
The results were tested by "Durbin–Watson" to determine whether or not the residuals from the models were autocorrelated. The results revealed that there was no autocorrelation in the Durbin–Watson value because  $2.5 \geq D.W$  suggested value  $\geq 1.5$  [51], as seen in Table 5.

**Table 5.** Result of Hypothesis Testing.

| Hypothesis | Path                           | B Coefficient | R2    | LLCI                | ULCI                | Durbin–Watson | Cook’s Distance (Maximum) | Hypotheses Acceptance |
|------------|--------------------------------|---------------|-------|---------------------|---------------------|---------------|---------------------------|-----------------------|
| H1         | IC → OI                        | 0.767         | 0.591 | 0.6629              | 0.8709              | 1.980         | 0.150                     | Accepted              |
| H2         | IC → KS                        | 0.512         | 0.476 | 0.4537              | 0.5721              | 2.088         | 0.074                     | Accepted              |
| H3         | KS → OI                        | 0.577         | 0.417 | 0.4467              | 0.7086              | 2.090         | 0.108                     | Accepted              |
| H4         | IC → KS → OI (indirect effect) | 1.062         | 0.655 | Boot LLCI<br>0.2017 | Boot ULCI<br>0.4051 |               |                           | Accepted              |

#### 5.4.4. Linearity

We tested the data via inspecting “variable scatterplots” to check for outliers [50,51]. There are no scattered data, as seen in Figure 2. They were also examined using “Cook’s Distance” to obtain minimum and maximum values. All the data demonstrated that there are no concerns with possible deviations because the effect ratings are <1, which is the cutoff value [52], as shown in Table 5.

**Figure 2.** Linearity Test Graphs.

#### 5.5. Hypotheses Testing

To test the study hypotheses, the researchers employed the SPSS PROCESS Macro v3.5, which is software designed to aid researchers in analyzing correlations between variables that contain a mediator or moderator [53]. The main objective is to assess the strength and importance of the conceptual framework’s linkages in order to analyze the interactions between various variables in a comprehensive study as well as reveal the direct and indirect impact between them. In this study, “Baron and Kenny’s criteria” were applied to assess the mediating variable’s importance [6,54,55]. This model considers a three-variable system in which two causal pathways influence the result variable. These criteria state that the independent and dependent variables must be positively correlated (like Path c, see Figure 3). Furthermore, independent variables and the mediating variable should have a strong and positive connection (as Path a in Figure 3). The outcome variable has a path that ties it to the mediator variable, and this path should also have a connection between them that is both positive and statistically significant (as Path b in Figure 3). The last criterion for a variable to act as a mediator is that the previous link between the predictor variable and the outcome variable ought to lose some significance or be nonsignificant when the mediator variable and the independent variable are investigated together.

A summary of the hypotheses is discussed further below:

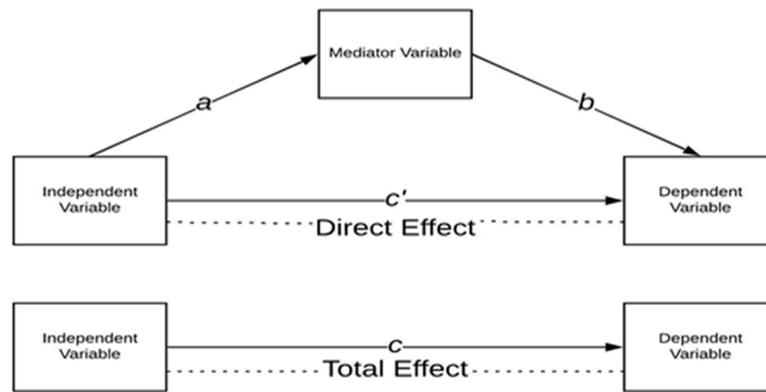
- H1.** *The presence of IC influences OI positively.*
- H2.** *The presence of IC influences KS positively.*

**H3.** The presence of KS influences OI positively.

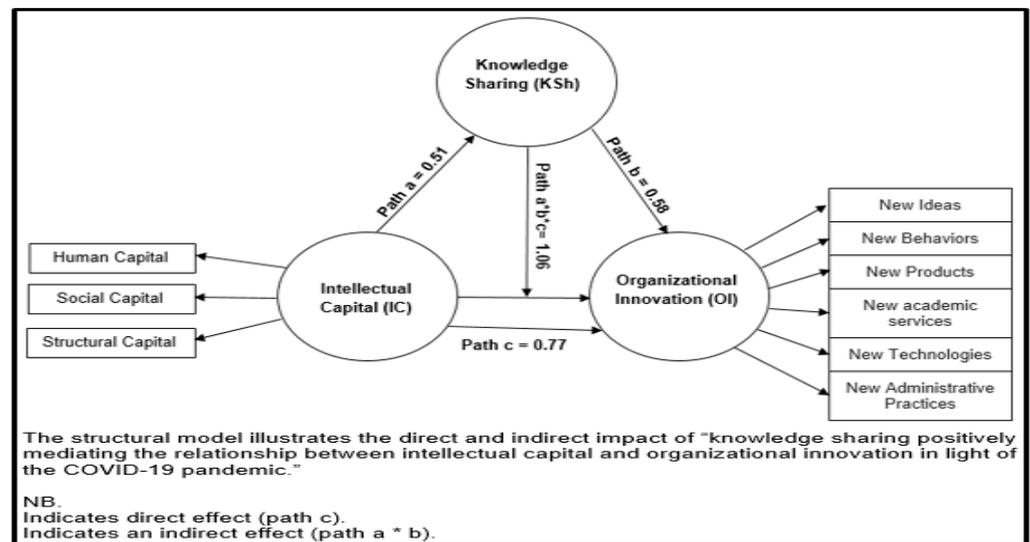
**H4.** KS positively influences the relationship between both variables (IC, OI).

This part’s findings have relied on the regression coefficient, the confidence interval (the default is 95% CIs), and the number of bootstrapped samples. (The default is 5000). No zero value should be included between the upper (ULCI) and lower (LLCI) limits of the confidence interval for direct and indirect effects [53].

Table 5 shows that during COVID-19, the IC scale points predict the OI points in a strong and statistical way. The results support H1 ( $\beta = 0.767$ ;  $p = 0.00$ ,  $p < 0.05$ ). Moreover, LLCI/ULCI is between 0.6629 and 0.8709, so it is significant due to the absence of zero values between them. Thereby, H1 was verified, implying that IC positively impacts the OI. This is a direct impact; see Path (c) in Figure 4.



**Figure 3.** Direct and Indirect Effect. Source: designed by authors.



**Figure 4.** Structural Model of Direct and Indirect Effect. Source: designed by authors.

In Table 5, it is also clear that during COVID-19, the IC scale points predict the KS points in a positive way. The findings confirm H2 ( $\beta = 0.512$ ;  $p = 0.00$ ,  $p < 0.05$ ). Moreover, LLCI/ULCI is between 0.4537 and 0.5721, so it is significant due to the absence of zero values between them. Thus, H2 was confirmed, which indicates that IC positively affects the mediator KS; see Path (a) in Figure 4.

As can be seen in Table 5, in-depth analysis also revealed that KS scale points during COVID predict OI points in a clear and statistical manner. H3 is supported by the findings ( $\beta = 0.577$ ;  $p = 0.00$ ,  $p < 0.05$ ). Moreover, LLCI/ULCI is between 0.4467 and 0.7086, so it is

significant due to the absence of zero values between them. Thus, H3 was approved, which indicates that KS positively affects the OI; see Path (b) in Figure 4.

As well, in light of Figure 4, it is concluded that

$$\text{Indirect effect} = a (0.512) \times b (0.577) = 0.295; \text{ direct effect} = 0.767;$$

$$\text{Total effect} = \text{indirect effect} + \text{direct effect}: 0.295 + 0.767 = 1.062.$$

Since there are no zero values between BootLLCI/BootULCI (0.2017; 0.4051), the outcome and predictor variables are both favorably impacted by the mediating variable. In a deeper sense, the KS is the OI and the ICs' partial mediator. H4 was supported.

To conclude, the significance values were less than 0.05, which equaled 0.00. Furthermore, the LLCI/ULCI values were significant since the confidence interval between the maximum and minimum intervals did not contain a zero value. As a result, the findings demonstrated that new mediators could improve the degree of effect and contribute to future theories.

## 6. Discussion

With the outbreak of the COVID-19 pandemic, the higher education institution in Palestine, like any other institution around the world, has faced various challenges due to this disease. There is a need to implement several policies in the field of education to adapt to this disease and increase the level of quality in education and research systems. Previous research has conducted studies on the relationship between IC and OI. It has proven its usefulness in the tourism sector, in construction, and for petroleum companies. However, few of them have studied its impact on the higher education sector and examined the impact of KS on them. In addition, no research in this field has ever been undertaken in Palestinian universities. As a result, this study makes an important contribution because no previous studies at the university level or in light of the coronavirus pandemic have addressed the mediating role of KS on the relationship between CI and OI. This is especially important because empirical research in this field is rare. As this relationship has not been verified with real data from the virtual technologies during COVID-19, this paper aimed to conduct an empirical research study to investigate the influence of IC on the OI of Palestinian universities during the coronavirus outbreak, and it also looked into KS's potential role as a mediating variable in the link between both IC and OI. It highlights the role of leadership in strengthening and encouraging this relationship.

The findings demonstrated that IC has a positive effect on OI. This finding is similar to that of Ahmad and Khattak [18], Koca and Sağsan [6], Almutirat [2], Li et al. [3], Gomezelj Omerzel and Smolčić Jurdana [16], and Galeitzke et al. [56], who indicated that IC is essential for achieving innovation. Table 5 shows that R<sup>2</sup> was 0.591, which meant that Palestinian universities during COVID-19 exploited their existing IC, which led to an affected OI of as much as 59.1%, while the other 40.9% was influenced by other variables. In universities, IC can be better developed and used by focusing on and exploiting its components: HC as well as StC and SC. Some researchers have pointed out that HC has an important positive impact on OI, implying that high-quality human resources are critical components for both of these processes [3]. Therefore, managers need to focus on the university's human resource practices so that efficiency management can target hiring highly qualified staff and enhance their skill learning to develop the level necessary for innovation. Similarly, SC and StC have a significant impact on OI. Elsetouhi et al. [57] demonstrated that social networks have the potential to support and foster ground-breaking innovations. Chatterji and Kiran [4] and Zahedi and Naghdi Khanachah [19], in contrast, proved the value and significance of knowledge structures and networks.

As a result, the administration of Palestinian universities should seek to develop the organization's intellectual and knowledge resources and maintain a strong organizational infrastructure to facilitate knowledge storage, transfer, and sharing, which contributes

to the organization's ability to develop itself and contribute innovative solutions to the problems caused by the COVID-19 pandemic.

Furthermore, the analysis of the finding revealed that IC significantly influences KS. This result is comparable to that of [1,3], who referred to the role of IC in stimulating KS. Table 5 shows that  $R^2$  was 0.476, which meant that the presence and development of IC in its three components (HC, SC, and StC) in Palestinian universities influenced and enhanced the transfer and sharing of employees' knowledge, experience, and skills inside and outside the department by 47.6% during COVID-19, while the remaining 52.4% was influenced by other variables. This study found empirical evidence that IC can help motivate employees to share their creative ideas and knowledge, i.e., transform tacit knowledge into explicit knowledge, by providing adequate infrastructure, good and mutual social relationships [3,58], and a human resources department that uses positive motivational techniques that promote knowledge sharing [1,36]. Consequently, investing in IC and KS is expected to contribute to long-term improvements in academic and knowledge performance, resulting in a sustainable competitive advantage.

Moreover, the data indicated that KS has a positive impact on OI. The result agreed with the findings of Li et al. [3], Qammach [41], Heffner and Sharif [59], and Lundvall and Nielsen [60], who have shown that KS supported OI. Table 5 shows that  $R^2$  was 0.417, which indicated that increased levels of KS with academic employee in the universities of Palestinian during COVID-19 affected the OI as much as 41.7%, while other variables influenced 58.3%. Numerous studies have demonstrated that fostering KS among staff members within an organization promotes the development of novel ideas and, in consequence, the advancement of innovation [3,59,60]. Therefore, a university administrator or leader should establish procedures and platforms for the generation, dissemination, and application of knowledge that will encourage and support innovation [3]. As a consequence, those with knowledge are encouraged to unleash hidden knowledge and continuously enhance their expertise, which contributes to the organization's capacity to produce new knowledge, hence improving the level of OI.

The outcomes demonstrated that KS positively mediates the relationship between both IC and OI. This outcome is consistent with results from construction institutions [3]. According to Table 5,  $R^2$  was 0.655, implying that KS between academic staff in Palestinian universities significantly contributed to the 65.5% improvement in IC and OI relations during COVID-19. This can be attained by paying more attention to the policies and practices of the human resource department at Palestinian universities, for example, by offering staff members effective training to advance their skills and committing to implementing the compensation and rewards policy, which will affect the level of KS among its employees and help develop new innovative solutions to current or future problems. This can also be achieved by working to instill their trust in the seriousness of the university where they work. Javaid et al. [38] indicated that the factors that stimulate KS come from individual conviction structures or social structures. It can also be accomplished by providing effective training to staff members in order to progress their skills, as well as by committing to a rewards policy that will increase the level of KS among its staff and aid in the development of new innovative solutions to current or future challenges.

## 7. Implications

This study's two key conclusions—that investing in IC will support and enhance the OI of Palestinian universities in the West Bank during COVID-19 and that KS plays a good role as a mediator—have important theoretical and practical implications.

In terms of theoretical implications, this study strives to enrich the literature and contribute to the body of intangible resource-related studies, particularly in developing countries, by enriching the topic with new results that can be added cumulatively to the findings from the previous studies. Furthermore, this study is unique in that it fills a theoretical gap in the literature about the empirical assessment of the KS mediating role between IC and OI in the university sector, notably in Palestine, where this study is

regarded as the first of its kind. Moreover, these results add to the existing body of scientific knowledge by inferring that innovation endures in the organization as an outcome of intellectual capital and KS. Finally, the study's findings might be used by subsequent researchers or students who are interested in conducting further research in this field.

In terms of practical implications, the findings suggest that universities should broaden their functions beyond teaching to include the creation of new knowledge by enhancing intangible sources and abilities such as IC, as well as the exploitation of knowledge for innovation and facing external challenges. Furthermore, this research draws the attention of the university leaders, who have to stimulate an innovation climate in each department by offering opportunities and rewarding all creative and innovative ideas. Thus, this leadership will create a positive learning environment and foster creativity, which are concepts beneficial for boosting innovation at the institution. This research also has practical implications for actors and stakeholders because it encourages Palestinian higher education institutions to build a supportive infrastructure that will allow managers to enhance the most remarkable aspects of IC and KS to support OI to address COVID-19's challenges.

## 8. Conclusions, Limitations, and Future Research

In conclusion, Pearson correlation proved a statistically significant and positive connection between the IC, OI, and KS. Following that, the findings of data analysis using the PROCESS macro program indicated support for hypotheses H1, H2, H3, and H4. These results give a clear indication that the presence of IC in Palestinian universities during the coronavirus pandemic had a positive effect on both OI and KS. Furthermore, the presence of KS as a mediator was critical in raising OI as well as strengthening the link between IC and OI. Thus, for universities to create continuous innovation in their programs, teaching, or learning processes to survive the COVID-19 pandemic, an intellectual capital portfolio must be developed by synergies between competent staff, a knowledge-sharing-oriented culture, organizational infrastructure, and enhanced interactive and cooperative skills in the relationships between internal and external universities. Moreover, to build innovative universities, leaders or policymakers in Palestinian universities must create an educational environment and a creativity-oriented culture among their staff by encouraging them to share their knowledge, ideas, and experiences and put their innovative solutions into practice.

The current research, however, has certain limitations and presents a number of opportunities for future research. Firstly, the study was conducted in the Palestinian territories, which are subject to numerous restrictions and have an unstable political climate due to the Israeli occupation. Moreover, the search was limited to the universities of the West Bank area and the closed system because open education has its own laws and regulations; likewise, the Gaza Strip has a special situation due to the occupation and siege of the Gaza Strip. Therefore, it is not clear whether the relationship between IC, OI, and KS is the same in the Gaza Strip and other countries. As a result, in order to confirm and expand the search results, we hope that future researchers will broaden and apply this research to other countries as well as all university components, such as instructors, students, and graduates. Secondly, this study focused on only one sector within Palestine, which is the Palestinian universities, which raises the question of whether its results will be different for other sectors. Therefore, to answer this question, we recommend future researchers replicate this research in different sectors to enhance these findings and increase their reliability. Thirdly, the researchers advise future researchers to make reference to the OI that occurred in universities during COVID-19, as they were not covered by this study. Finally, future research might include some mediating or moderating variables such as transformational leadership, knowledge management processes, organizational learning, and employee satisfaction in an effort to better clarify the link between IC and OI.

**Author Contributions:** Conceptualization, methodology, formal analysis, investigation, resources, data curation, writing—original draft preparation, A.Y.A.; writing—review and editing, B.Ç. and A.Y.A.; supervision, A.G.K.; All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** Ethical approval to conduct the study was granted by the Scientific Research Ethics Committee of Near East University (NEU/SS/2022/1217), date: 15 February 2022.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** Data sharing is not applicable.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

- Obeidat, B.Y.; Abdallah, A.B.; Aqqad, N.O.; Akhoershedah, A.H. The Effect of Intellectual Capital on Organizational Performance: The Mediating Role of Knowledge Sharing. *Commun. Netw.* **2017**, *9*, 1–27. [CrossRef]
- Almutirat, H.A. The impact of intellectual capital in organizational innovation: Case study at Kuwait Petroleum Corporation (KPC). *Rev. Econ. Political Sci.* **2020**, *7*, 34–55. [CrossRef]
- Li, Y.; Song, Y.; Wang, J.; Li, C. Intellectual Capital, Knowledge Sharing, and Innovation Performance: Evidence from the Chinese Construction Industry. *Sustainability* **2019**, *11*, 2713. [CrossRef]
- Chatterji, N.; Kiran, R. Relationship between University Performance and Dimensions of Intellectual Capital: An Empirical Investigation. *Eurasian J. Educ. Res.* **2017**, *17*, 215–232. [CrossRef]
- Secundo, G.; Elena-Perez, S.; Martinaitis, Ž.; Leitner, K.-H. An intellectual capital maturity model (ICMM) to improve strategic management in European universities. *J. Intellect. Cap.* **2015**, *16*, 419–442. [CrossRef]
- Koca, S.; Sağsan, M. The Mediating Role of Organizational Innovation in the Implementation of Intellectual Capital and Blue Ocean Strategy for Higher Education Sustainability. *Rev. Argent. Clín. Psicol.* **2020**, *29*, 1552–1566. [CrossRef]
- Abdullah, B.; Alqarni, A. Knowledge Sharing in International Business. *Teh. Glas.* **2022**, *16*, 401–411. [CrossRef]
- Fullwood, R.; Rowley, J. An investigation of factors affecting knowledge sharing amongst UK academics. *J. Knowl. Manag.* **2017**, *21*, 1254–1271. [CrossRef]
- Tan, C.N.-L. Enhancing knowledge sharing and research collaboration among academics: The role of knowledge management. *High. Educ.* **2016**, *71*, 525–556. [CrossRef]
- Remuzzi, A.; Remuzzi, G. COVID-19 and Italy: What next? *Lancet* **2020**, *395*, 1225–1228. [CrossRef]
- Mishra, L.; Gupta, T.; Shree, A. Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. *Int. J. Educ. Res. Open* **2020**, *1*, 100012. [CrossRef]
- Sutanto, E.M. The influence of organizational learning capability and organizational creativity on organizational innovation of Universities in East Java, Indonesia. *Asia Pac. Manag. Rev.* **2017**, *22*, 128–135. [CrossRef]
- Gates, B. Pandemic I: The First Modern Pandemic. 2020. Available online: <https://www.gatesnotes.com/Health/Pandemic-Innov> (accessed on 30 April 2020).
- Ebersberger, B.; Kuckertz, A. Hop to it! The impact of organization type on innovation response time to the COVID-19 crisis. *J. Bus. Res.* **2021**, *124*, 126–135. [CrossRef]
- Saeedinejad, S.; Nazafarin, H.; Parvin, R.; Marziyeh, H. Investigating the Relationship between Academic Innovation and Organizational Identity with Higher-Order Thinking Skills among Students at Yasuj University of Medical Sciences. *Middle East J. Fam. Med.* **2018**, *16*, 126–131. [CrossRef]
- Gomezelj Omerzel, D.; Smolčić Jurdana, D. The influence of intellectual capital on innovativeness and growth in tourism SMEs: Empirical evidence from Slovenia and Croatia. *Econ. Res.-Ekon. Istraživanja* **2016**, *29*, 1075–1090. [CrossRef]
- Dabić, M.; Vlačić, B.; Scuotto, V.; Warkentin, M. Two decades of the Journal of Intellectual Capital: A bibliometric overview and an agenda for future research. *J. Intellect. Cap.* **2020**, *22*, 458–477. [CrossRef]
- Ahmad, M.; Wu, Q.; Khattak, M.S. Intellectual capital, corporate social responsibility and sustainable competitive performance of small and medium-sized enterprises: Mediating effects of organizational innovation. *Kybernetes* **2022**. [CrossRef]
- Zahedi, M.R.; Naghdi Khanachah, S. The effect of knowledge management processes on organizational innovation through intellectual capital development in Iranian industrial organizations. *J. Sci. Technol. Policy Manag.* **2020**, *12*, 86–105. [CrossRef]
- Chahal, H.; Bakshi, P. Examining intellectual capital and competitive advantage relationship: Role of innovation and organizational learning. *Int. J. Bank Mark.* **2015**, *33*, 376–399. [CrossRef]
- Sullivan, P.H. Profiting from intellectual capital. *J. Knowl. Manag.* **1999**, *3*, 132–142. [CrossRef]
- Subramaniam, M.; Youndt, M.A. The influence of intellectual capital on the types of innovative capabilities. *Acad. Manag. J.* **2005**, *48*, 450–463. [CrossRef]
- Ali, Q.B.; Bin Mohd Zin, M.L.; bin Ismail, S.A. The Mediating Role of Innovation on The Relationship Between Intellectual Capital and Private Universities Performance of Pakistan. *Int. J. Acad. Res. Bus. Soc. Sci.* **2022**, *12*, 1797–1812. [CrossRef] [PubMed]

24. Patky, J.; Pandey, S.K. Does Flexibility in Human Resource Practices Increase Innovation? Mediating Role of Intellectual Capital. *South Asian J. Hum. Resour. Manag.* **2020**, *7*, 257–275. [[CrossRef](#)]
25. Youndt, M.A.; Subramaniam, M.; Snell, S.A. Intellectual capital profiles: An examination of investments and returns. *J. Manag. Stud.* **2004**, *41*, 335–361. [[CrossRef](#)]
26. Roberts, C. Building social capital through leadership development. *J. Leadersh. Educ.* **2013**, *12*, 54–73. [[CrossRef](#)]
27. Iqbal, A.; Latif, F.; Marimon, F.; Sahibzada, U.F.; Hussain, S. From knowledge management to organizational performance: Modelling the mediating role of innovation and intellectual capital in higher education. *J. Enterp. Inf. Manag.* **2019**, *32*, 36–59. [[CrossRef](#)]
28. Saki, S.; Shakiba, H.; Savari, M. Study of the Relationship between the Organizational Learning and Organizational Innovation at University of Tehran. *E J. Organ. Learn. Leadersh.* **2013**, *11*, 1–18.
29. De Sousa, F.C.; Pellissier, R.; Monteiro, I.P. Creativity, innovation and collaborative organizations. *Int. J. Organ. Innov.* **2012**, *5*, 1–39.
30. María Ruiz-Jiménez, J.; del Mar Fuentes-Fuentes, M. Knowledge combination, innovation, organizational performance in technology firms. *Ind. Manag. Data Syst.* **2013**, *113*, 523–540. [[CrossRef](#)]
31. Falch, T.; Mang, C. Innovations in education for better skills and higher employability. *Eur. Expert Netw. Econ. Educ. (EENEE) Anal. Rep.* **2015**, *23*, 1–44.
32. Ngoc-Tan, N. Innovation and Its Impacts on Public University Performance: An Empirical Study from Vietnam. *J. Inf. Knowl. Manag.* **2020**, *19*, 2050001–20500027. [[CrossRef](#)]
33. Nonaka, I.; Takeuchi, H. *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*; Oxford University Press: New York, NY, USA, 1995.
34. Alnatsheh, A.; Sağsan, M.; Çavuşoğlu, B. The Role of Knowledge Management (KM) Strategies in Enhancing Non-Governmental Organizations' (NGOs') Performance: A Case Study in Palestine. *Turk. Librariansh.* **2020**, *34*, 723–743. [[CrossRef](#)]
35. Ling, T.N.; San, L.Y.; Hock, N.T. Trust: Facilitator of knowledge-sharing culture. *Commun. IBIMA* **2009**, *7*, 137–142.
36. Mazorodze, A.H.; Mkhize, P. Factors and variables to promote a knowledge-sharing culture change in higher education institutions of developing countries. *SA J. Inf. Manag.* **2022**, *24*, 1491. [[CrossRef](#)]
37. Thi Chung, D.; Thi Tram Anh, P. Factors affecting knowledge sharing behaviour in public higher education institutions: An empirical study of Vietnam. *Cogent Bus. Manag.* **2022**, *9*, 2155002. [[CrossRef](#)]
38. Javaid, J.; Soroya, S.; Mahmood, K. Impact of personal and organizational factors on knowledge sharing attitude of university teachers in Pakistan. *Electron. Libr.* **2020**, *38*, 317–336. [[CrossRef](#)]
39. Anggraini, F.; Abdul-Hamid, M.A.; Azlina, M.K.D. Competitive advantage as mediating role of intellectual capital and university performance: An empirical study in Indonesia. *Int. J. Econ. Manag.* **2018**, *12*, 351–363.
40. Arias Velasquez, R.M.; Mejia Lara, J.V. Knowledge management in two universities before and during the COVID-19 effect in Peru. *Technol. Soc.* **2021**, *64*, 101479. [[CrossRef](#)]
41. Qammach, N.I.J. The Mediating Role of Knowledge Sharing on Relationship between IT Capability and IT Support as Predictors of Innovation Performance: An Empirical Study on Mobile Companies in Iraq. *Procedia Econ. Financ.* **2016**, *39*, 562–570. [[CrossRef](#)]
42. Aboelmaged, M.G. Linking operations performance to knowledge management capability: The mediating role of innovation performance. *Prod. Plan. Control* **2014**, *25*, 44–58. [[CrossRef](#)]
43. Maietta, O.W. Determinants of university–firm R&D collaboration and its impact on innovation: A perspective from a low-tech industry. *Res. Policy* **2015**, *44*, 1341–1359. [[CrossRef](#)]
44. Ministry of Higher Education & Scientific Research, Statistical. *Yearbook 2020/2021*; Ministry of Higher Education & Scientific Research, Statistical: Ramallah, Palestine, 2021.
45. Sekaran, U.; Bougie, R. *Research Methods for Business: A Skill Building Approach*, 7th ed.; John Wiley & Sons.: Chichester, UK, 2016.
46. Krejcie, R.V.; Morgan, D.W. Determining sample size for research activities. *Educ. Psychol. Meas.* **1970**, *30*, 607–610. [[CrossRef](#)]
47. Mugenda, A.; Mugenda, O. *Research Methods: Quantitative and Qualitative Approaches*; African Centre for Technology Studies (ACTS): Nairobi, Kenya, 2003.
48. Hilmiyanti, N.D. The Influence of Organizational Learning Capability and Organizational Creativity on Organizational Innovation (Study at PT XYZ). *Hasanuddin Econ. Bus. Rev.* **2021**, *4*, 13–19. [[CrossRef](#)]
49. Van den Hooff, B.; de Leeuw van Weenen, F. Committed to share: Commitment and CMC use as antecedents of knowledge sharing. *Knowl. Process Manag.* **2004**, *11*, 13–24. [[CrossRef](#)]
50. Hair, J.F.; Black, W.C.; Babin, B.J.; Anderson, R.E.; Tatham, R.L. *Multivariate Data Analysis*, 7th ed.; Pearson New International Edition; Pearson Education Limited: Harlow, UK, 2014.
51. Garson, G.D. *Testing Statistical Assumptions*; Statistical Associates Publishing: Asheboro, NC, USA, 2012; pp. 1–54.
52. Tabachnick, B.; Fidell, L. *Using Multivariate Statistics*, 6th ed.; Pearson New International Edition; Pearson Education: London, UK, 2013.
53. Hayes, A.F. An Index and Test of Linear Moderated Mediation. *Multivar. Behav Res* **2015**, *50*, 1–22. [[CrossRef](#)]
54. Baron, R.M.; Kenny, D.A. The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *J. Personal. Soc. Psychol.* **1986**, *51*, 1173–1182. [[CrossRef](#)]
55. Alfawaire, F.; Atan, T. The Effect of Strategic Human Resource and Knowledge Management on Sustainable Competitive Advantages at Jordanian Universities: The Mediating Role of Organizational Innovation. *Sustainability* **2021**, *13*, 8445. [[CrossRef](#)]

56. Galeitzke, M.; Steinhöfel, E.; Orth, R.; Kohl, H. Strategic intellectual capital management as a driver of organisational innovation. *Int. J. Knowl. Learn.* **2015**, *10*, 164–181. [[CrossRef](#)]
57. Elsetouhi, A.; Elbeltagi, I.; Haddoud, M.Y. Intellectual Capital and Innovations: Is Organisational Capital a Missing Link in the Service Sector? *Int. J. Innov. Manag.* **2015**, *19*, 15500206. [[CrossRef](#)]
58. Mu, J.; Di Benedetto, C.A. Strategic orientations and new product commercialization: Mediator, moderator, and interplay. *RD Manag.* **2011**, *41*, 337–359. [[CrossRef](#)]
59. Heffner, M.; Sharif, N. Knowledge fusion for technological innovation in organizations. *J. Knowl. Manag.* **2008**, *12*, 79–93. [[CrossRef](#)]
60. Lundvall, B.Å.; Nielsen, P. Knowledge management and innovation performance. *Int. J. Manpow.* **2007**, *28*, 207–223. [[CrossRef](#)]

**Disclaimer/Publisher’s Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.