Publications at Port Said University
SDG 1

Publication Type		
Authors	Selim, T; Eltarabily, MG	Allam, NM; Ebrahim, HA; Ibrahim, AM; Elneblawi, NH; El-Sherbiny, M; Fouda, KZ
Book Authors		
Book Editors		
Book Group Authors		
Author Full Names	Selim, Tarek; Eltarabily, Mohamed Galal	Allam, Nesma M.; Ebrahim, Hasnaa Ali; Ibrahim, Ateya Megahed; Elneblawi, Nora Helmi; El-Sherbiny, Mohamed; Fouda, Khaled Zaki
Book Author Full Names		
Group Authors		
Article Title	Impact of COVID-19 lockdown on small-scale farming in Northeastern Nile Delta of Egypt and learned lessons for water conservation potentials	The association of hamstring tightness with lumbar lordosis and trunk flexibility in healthy individuals: gender analysis
Source Title	AIN SHAMS ENGINEERING JOURNAL	FRONTIERS IN BIOENGINEERING AND BIOTECHNOLOGY
Book Series Title		
Book Series Subtitle		
Language	English	English
Document Type	Article	Article
Conference Title		
Conference Date		
Conference Location		
Conference Sponsor		
Conference Host		
Author Keywords	COVID-19; Agricultural extensions; Small-scale farms; Questionnaire-based assessment; Remote irrigation	hamstring tightness; lumbar lordosis; trunk flexibility; flexible ruler; healthy individuals
Keywords Plus		SAGITTAL SPINAL CURVATURES; LOW-BACK-PAIN; SIT-AND-REACH; MUSCLE LENGTH; PELVIC TILT; EXTENSIBILITY; VALIDITY; RANGE; KNEE; HIP

Abstract	The coronavirus disease-2019 (COVID-19) pandemic had a great impact on the agricultural sector, espe-cially in developing countries. In particular, it caused exceptional challenges to small and local-scale farmers. Field questionnaires and interviews were used to investigate the effects of COVID-19 on small-scale farmers in the Northern Nile Delta of Egypt. Agricultural farms in Southern Port Said City rep-resent emerging agricultural communities on newly reclaimed land, while those in Damietta are stable agricultural communities (old land of the Nile Delta). The questionnaire was divided into four questions groups to identify and analyze the different reasons that contributed to the disruption of farming systems and the agricultural sector. These groups were farmers' data, the effect of COVID-19 on agriculture inputs, infection rates and precautionary measures against COVID-19, and potential measures and governmental policies for controlling the negative impacts of COVID-19 and achieving agricultural sustainability. Results showed that the effect of lockdown was slightly lower in Damietta as compared to Port Said. Although fertilizers and labors costs, as well as water availability near Port Said, was not considerably affected during the lockdown, the total income of the small-scale farmers' notability decreased. The reluctance of major traders to buy crop production and keep the required balance of cash during the pan-demic dramatically affected the crop production selling prices. Results showed that in the absence of agricultural extensions possibilities, there is a lack of awareness toward improving agricultural practices and switching to smart irrigation systems as a way of saving water and increasing crop productivity. The resistance against applying new agricultural practices and switching to smart irrigation systems depends mainly on farmers' financial capability and the nature of agricultural land either old or new. Activating the agricultural extensions roles is considered a keystone for enhancing agricultural sustainability in small-scale farming not only in developing regions of Egypt but also in other similar agricultural commu-nities worldwide. (c) 2021 THE AUTHORS. Published by Elsevier BV on behalf of Faculty of Engineering, Ain Shams Uni-versity. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/ by-nc-nd/4.0/).	Objectives: The purpose of this study was to investigate if there is a relation between hamstring tightness and lumbar lordosis as well as trunk flexibility based on gender differences and to analyze the differences in hamstring tightness, lumber lordosis and trunk flexibility in healthy adults.Methods: One hundred young healthy adults were recruited and distributed into 2 equal groups according to gender: group A (female group) and group B (male group). Hamstring tightness (HT) was measured by Active Knee Extension (AKE) test and Straight Leg Raise (SLR) test, the angle of lumbar lordosis was measured with a flexible ruler from standing position and trunk flexion flexibility (TFF) was measured by Fingertip-to-Floor Test.Results: There was a significant correlation between TFF and both measures of HT (SLR, $p = 0.001$; AKE, $p = 0.001$) in females. While, there was a non-significant correlation in males (SLR, $p = 0.900$; AKE, $p = 0.717$). Moreover, there was a non-significant correlation between lumbar lordosis and HT measures in both groups as ($p > 0.05$). Furthermore, there were significant differences between males and females in hamstring flexibility, TFF and lumbar lordosis as ($p < 0.05$).Conclusion: Gender differences in the relationship between hamstring tightness and trunk flexion flexibility are significant. However, there was no significant difference between males and females in the relationship between hamstring tightness and lumbar lordosis.
Addresses	[Selim, Tarek; Eltarabily, Mohamed Galal] Port Said Univ, Fac Engn, Civil Engn Dept, Port Said 42523, Egypt	[Allam, Nesma M.] Jouf Univ, Coll Appl Med Sci, Phys Therapy & Hlth Rehabil Dept, Sakaka, Saudi Arabia; [Allam, Nesma M.] Cairo Univ, Fac Phys Therapy, Phys Therapy Dept Surg, Giza, Egypt; [Ebrahim, Hasnaa Ali] Princess Nourah bint Abdulrahman Univ, Coll Med, Dept Basic Med Sci, Riyadh, Saudi Arabia; [Ibrahim, Ateya Megahed] Prince Sattam bin Abdulaziz Univ, Coll Appl Med Sci, Dept Nursing, Al Kharj, Saudi Arabia; [Ibrahim, Ateya Megahed] Port Said Univ, Fac Nursing, Dept Family & Community Hlth Nursing, Port Said, Egypt; [Elneblawi, Nora Helmi] Taibah Univ, Coll Nursing, Dept Med Surg Nursing, Madinah, Saudi Arabia; [El-Sherbiny, Mohamed] Almaarefa Univ, Coll Med, Dept Basic Med Sci, Riyadh, Saudi Arabia; [Fouda, Khaled Zaki] Cairo Univ, Fac Phys Therapy, Dept Basic Sci Phys Therapy, Giza, Egypt
Affiliations	Egyptian Knowledge Bank (EKB); Port Said University	Al Jouf University; Egyptian Knowledge Bank (EKB); Cairo University; Princess Nourah bint Abdulrahman University; Prince Sattam Bin Abdulaziz University; Egyptian Knowledge Bank (EKB); Port Said University; Taibah University; Almaarefa University; Egyptian Knowledge Bank (EKB); Cairo University
Reprint Addresses	Eltarabily, MG (corresponding author), Port Said Univ, Fac Engn, Civil Engn Dept, Port Said 42523, Egypt.	El-Sherbiny, M (corresponding author), Almaarefa Univ, Coll Med, Dept Basic Med Sci, Riyadh, Saudi Arabia.
Email Addresses	tarek.selim@eng.psu.edu.eg; eng_m_trabily@eng.psu.edu.eg	msharbini@mcst.edu.sa
Researcher Ids	Eltarabily, Mohamed/ABE-9986-2020	Allam, Nesma/AAX-1055-2020; Fouda, Khaled/ISU-0618-2023; ELNEBLAWI, NORA/KZU-1525-2024; Ibrahim, Ateya/HPF-6878-2023; Ebrahim, Hasnaa/JAC-7872-2023

ORCIDs		Megahed Ibrahim, Ateya/0000-0001-8192-0017; Allam, Nesma/0000-0002-2478-4474; Fouda, khaled/0000-0001-6121-9127; ELNEBLAWI, NORA/0009-0001-5534-069X; Ebrahim, Hasnaa/0000-0001-9194-9649
Funding Orgs		The work was supported Almaarefa University, Riyadh, Saudi Arabia; and by Princess Nourah bint Abdulrahman University Researchers Supporting Project number (PNURSP 2023R171), Princess Nourah bint Abdulrahman University, Riyadh, Saudi Arabia and from Prince; Almaarefa University, Riyadh, Saudi Arabia [PNURSP 2023R171]; Princess Nourah bint Abdulrahman University Researchers Supporting Project; Prince Sattam bin Abulaziz University [PSAU/2023/R/1444]; Al-Kharj, Saudi Arabia
Funding Name Preferred		The work was supported Almaarefa University, Riyadh, Saudi Arabia; and by Princess Nourah bint Abdulrahman University Researchers Supporting Project number (PNURSP 2023R171), Princess Nourah bint Abdulrahman University, Riyadh, Saudi Arabia and from Prince; Almaarefa University, Riyadh, Saudi Arabia; Princess Nourah bint Abdulrahman University Researchers Supporting Project(Princess Nourah bint Abdulrahman University); Prince Sattam bin Abulaziz University; Al-Kharj, Saudi Arabia
Funding Text		The work was supported Almaarefa University, Riyadh, Saudi Arabia; and by Princess Nourah bint Abdulrahman University Researchers Supporting Project number (PNURSP 2023R171), Princess Nourah bint Abdulrahman University, Riyadh, Saudi Arabia and from Prince Sattam bin Abulaziz University project number (PSAU/2023/R/1444), Al-Kharj, Saudi Arabia.
Cited References		
Cited Reference Count	40	50
Times Cited, WoS Core	16	3
Times Cited, All Databases	16	3
180 Day Usage Count	0	0
Since 2013 Usage Count	6	5
Publisher	ELSEVIER	FRONTIERS MEDIA SA
Publisher City	AMSTERDAM	LAUSANNE
Publisher Address	RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS	AVENUE DU TRIBUNAL FEDERAL 34, LAUSANNE, CH-1015, SWITZERLAND
ISSN	2090-4479	2296-4185
eISSN	2090-4495	
ISBN		
Journal Abbreviation	AIN SHAMS ENG J	FRONT BIOENG BIOTECH
Journal ISO Abbreviation	Ain Shams Eng. J.	Front. Bioeng. Biotechnol.
Publication Date	JUN	SEP 14
Publication Year	2022	2023
Volume	13	11
Issue	4	

Part Number		
Supplement		
Special Issue		
Meeting Abstract		
Start Page		
End Page		
Article Number	101649	1225973
DOI	10.1016/j.asej.2021.11.018	10.3389/fbioe.2023.1225973
DOI Link	=HYPERLINK("http://dx.doi.org/10.1016/j.asej.2021.11.018","http://dx.doi.org/10.1016/j.asej.2021.11.018")	=HYPERLINK("http://dx.doi.org/10.3389/fbioe.2023.1225973","http://dx.doi.org/10.3389/fbioe.2023.1225973")
Book DOI		
Early Access Date		
Number of Pages	9	8
WoS Categories	Engineering, Multidisciplinary	Biotechnology & Applied Microbiology; Engineering, Biomedical
Web of Science Index	Science Citation Index Expanded (SCI-EXPANDED)	Science Citation Index Expanded (SCI-EXPANDED)
Research Areas	Engineering	Biotechnology & Applied Microbiology; Engineering
IDS Number	1M1CS	T0AJ0
Pubmed Id		37781540
Open Access Designations	gold	gold, Green Published
Highly Cited Status		
Hot Paper Status		
Date of Export	2025-01-11	2025-01-11
UT (Unique WOS ID)	WOS:000799714600011	WOS:001074698400001
Web of Science Record	=HYPERLINK("https%3A%2F%2Fwww.webofscience.com%2Fwos%2Fwoscc%2Ffull-record%2FWOS:000799714600011","View Full Record in Web of Science")	=HYPERLINK("https%3A%2F%2Fwww.webofscience.com%2Fwos%2Fwoscc%2Ffull-record%2FWOS:001074698400001","View Full Record in Web of Science")