A Summary of Recent Studies Published by DIU Researchers

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GENDER
EQUALITY

The researchers of Daffodil International University (Faculty, Students, Alumni) have conducted a number of research projects related to SDG 5 (Gender Equality) and results of the projects have also been published as research papers in various international reputed peer reviewed and Scopus indexed journals. The summary of the research publications related to SDG 5 are given below:

1. Exploring Factors Associated with Women's Willingness to Provide Digital Fingerprints in Accessing Healthcare Services: A Cross-Sectional Study in Urban Slums of Bangladesh

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Abstract

Digital fingerprints are increasingly used for patient care and treatment delivery, health system monitoring and evaluation, and maintaining data integrity during health research. Yet, no evidence exists about the use of fingerprinting technologies in maternal healthcare services in urban slum contexts, globally. The present study aimed to explore the recently delivered women's willingness to give digital fingerprints to community health workers to access healthcare services in the urban slums of Bangladesh and identify the associated factors. Employing a two-stage cluster random sampling procedure, we chose 458 recently delivered women from eight randomly selected urban slums of Dhaka city, Bangladesh. Chi-square tests were performed for descriptive analyses, and binary logistic regression analyses were performed to explore the factors associated with willingness to provide fingerprints. Overall, 78% of the participants reported that they were willing to provide digital fingerprints if that eased access to healthcare services. After adjusting for

potential confounders, the sex of the household head, family type, and household wealth status were significantly associated with the willingness to provide fingerprints to access healthcare services. The study highlighted the potentials of using fingerprints for making healthcare services accessible. Focus is needed for female-headed households, women from poor families, and engaging husbands and in-laws in mobile health programs.

2. Do women on boards affect employee benefits? Evidence from the global microfinance industry

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Highlights

- We investigate the relationship between female board members and average employee benefits of MFIs.

- Gender diversity in the boardroom increases employees' average financial benefits.

- The size of MFIs has a beneficial impact on average employee benefits.

- Higher operational self-sufficiency of MFIs does not necessarily imply better average employee benefits.

Abstract

By utilizing data of 2,964 microfinance institutions (MFIs), our study investigated the nexus between female board members and employee benefits. The findings showed that a higher proportion of female board members has a significant positive effect on the employee

JEL classification

Keywords

Data availability statement

The data related to the study can be freely accessed from the World Bank catalogue, https://datacatalog.worldbank.org/dataset/mix-market.

3. Sentiment Analysis of User-Generated Reviews of Women Safety Mobile Applications

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Abstract:
Google play store is an application store from where people get various kinds of applications for android certified devices which makes life a lot easier and faster through the diverse functionalities the apps contain. Numerous users are using applications as per their needs and putting their experience, thoughts of using that application via reviews in form of ratings and texts. As the safety

of women is threatened, whether applications like women's safety apps are appreciated, can be detected through text reviews and ratings by the users. This paper analyzes the positive, negative, neutral polarity of the sentences or text reviews that are given by the users of the women's safety app through the google play store. To detect the emotions of the users through the given text reviews and star ratings, the machine learning (ML) algorithms using natural language processing (NLP) are conducted to analyze the sentiments of the review given by the users. For this study, the data was collected from the app reviews and star ratings provided by the users of the women's safety related applications whose main purpose is to provide necessary functionality that can keep women safe in any dangerous and unwanted situation. The purpose of this paper is to mine the opinion of the users and get their viewpoint about those apps of specific polarity levels. As the current user's ratings, reviews, or their viewpoint helps the new user understand the performance of the applications and insights in advance, so the mining of their opinion is helpful for both parties - developers and general users. To detect the level of the sentiment, several machine learning algorithms were applied, namely Multinomial Naive Bayes (MNB), Logistic Regression (LR), Support Vector Machine (SVM), and k-nearest neighbor (k-NN). Among these algorithms, the MNB has outperformed all other algorithms in terms of accuracy (85.42%).

4. How Does Green Innovation Strategy Influence Corporate Financing? Corporate Social Responsibility and Gender Diversity Play a Moderating Role

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Abstract

Global warming is becoming more and more of a concern, leading authorities to take action. The industrial sector is a key contributor to environmental and social problems. Based on stakeholder theory and agency theory, this research proposes that green innovation strategies at the firm level can overcome the industry's negative environmental impact. As a result, the focus of this research is on green innovation strategies for corporate financing. In addition, this research suggests that corporate social responsibility and gender diversity directly affect corporate financing and their interaction. This study used Chinese 301 manufacturing firms (3010 observations) for the period 2010-2019 for this purpose. This study looks into panel data issues in depth by using approaches such as the fixed effect and generalized method of moment. The feasible generalized least square was employed to increase robustness. Furthermore, green innovation strategies were used for corporate financing. Second, the study discovered that corporate social responsibility aided firm financing. Our findings also imply that corporate social responsibility helps to attenuate the association amid green innovative strategies and corporate financing. Finally, these findings revealed that gender diversity had a favorable effect on corporate financing. Furthermore, this study confirmed that the moderating role of gender diversity is beneficial to green innovative strategies and corporate financing. These findings add to the literature by providing policymakers and regulatory bodies with useful information for advancing sustainable development.

Keywords: corporate financing; corporate social responsibility; environmental pollution; gender diversity; green innovation strategy.

5. Antenatal depression among women with gestational diabetes mellitus: a pilot study

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Abstract

Background

Gestational diabetes mellitus (GDM) is quite prevalent in low- and middle-income countries, and has been proposed to increase the risk of depression. There is only a prior study assessing antenatal depression among the subjects with GDM in the Bangladesh, which leads this study to be investigated.

Objective

To determine the prevalence of depressive symptoms and potential associations among pregnant women diagnosed with GDM.

Methods

A cross-sectional study was carried out among 105 pregnant women diagnosed with GDM over the period of January to December 2017 in 4- hospitals located in two different cities (Dhaka and Barisal). A semi-structured questionnaire was developed consisting of items related to socio-demographics, reproductive health history, diabetes, anthropometrics, and depression.

Results

Mild to severe antenatal depression was present in 36.2% of the subjects (i.e., 14.3%, 19% and 2.9% for mild, moderate and severe depression, respectively). None of the socio-demographic factors were associated with depression, but the history of reproductive health-related issues (i.e., abortion, neonatal death) and uncontrolled glycemic status were associated with the increased risk of depressive disorders.

Conclusions

GDM is associated with a high prevalence of depressive symptoms, which is enhanced by poor diabetes control. Thus, in women presenting with GDM, screening for depression should be pursued and treated as needed.