

SBE, Vol.22, No.1, 2019

ISSN 1818-1228

DOI: <https://doi.org/10.29117/sbe.2019.0114>

## INFLUENCE OF MICROFINANCE AND EMPOWERMENT ON SATISFACTION: CASE STUDY OF PAKISTAN

Kausar Yasmeen

yasmeen@unizwa.edu.om

Department of Economics and Finance, Nizwa University, Oman

Naif Mutlaq J Alruways

nalrowais@su.sdu.sa

Department of Business management, Shaqra University, KSA

Kashifa Yasmeen

Kashifa.psy@gmail.com

Department of Psychology, University of Sahiwal

Swadhin Mondal

swadhin@unizwa.edu.om

Department of Economics and Finance, Nizwa University, Oman

### Abstract

The purpose of this study is to evaluate the influence of women empowerment, microfinance involvement, and loan size on women satisfaction. To achieve the objectives through simple random sampling technique the cross-sectional was collected from 372 borrowers' and 372 non-borrowers' women's through questionnaire and later multinomial logistic regression was applied. The findings revealed and support the theory of adoption, which demonstrates that income increases satisfaction. Microfinance is a kind of money, which involves borrowers in small business and enables them to have money through doing businesses that increase borrowers' women satisfaction compare to non-borrower's women. More empowered women is more satisfied with life. Present study also found that the effect of microfinance involvement on women's satisfaction depends on their empowerment In the light of findings this study recommends that future researchers can examine the same model in the different culture. This study contributes theoretically, practically and politically.

**Keywords** – Women empowerment, Microfinance, Satisfaction, Economic activities

## 1. Introduction

In the past twenty-five years, the issue of happiness has become once again the center of interest among economists and psychologists. Satisfaction, quality of life and well-being are the dimensions of happiness (Becchetti, Castriota, and Conzo, 2017). Introduction discusses the influence of two variables name income and empowerment influence empowerment. However, the studies on the relationship between income and happiness are mixed while most of the studies found empowerment positively influence happiness (Jachimowicz, *et al* (2019); Kelley and Evans (2017); Sadiq (2014)) found empowerment and finance has link with satisfaction. Easterlin, Switek, Zweig (2010) discusses about the happiness-income paradox they found in developed countries income cannot influence happiness. Li and Shi, (2019) found income can increase the level of happiness in under developing countries. Economist believe that higher income leads to higher happiness overall in the world (Antinyan, Horvath and Jia (2019); Hill, Cheung, Kube, and Burrow, 2019; Huang, Chu and Cheng (2019)). Therefore, it is important to examine whether income and empowerment influence Happiness.

There are several studies (Banerjee, Breza, Duflo and Kinnan (2017); Devaraiiah (2013); Dolan and Fujiwara (2016); Hassan and Saleem (2017); Islam, Perumal and Hussin (2017); Lybbert and Wydick (2017); Rukumnuaykit (2016); Putu, *et al* (2016); Zahra and Wright, (2016)) that evaluate the impact of microfinance on women empowerment but there is lack of such studies that examine the influence of microfinance on happiness. Researcher failed

to find a study that examines the influence of empowerment on satisfaction.

As previous studies states impact of income on satisfaction is mix across the countries. Does income and empowerment influence Pakistani women? As Pakistan is one among the developing countries. Pakistani women are reported less empowered (Akhtar, Ayub (2019); Ferdous, Kabir, Khan and Chowdhury (2017); Khan, Zaheer and Shafique (2017); Memon and Idris (2019); Mitroi, Sahak, Sherzai and Sherzai (2016); Mmtaz, (2005), Murshid and Critelli (2017); Sathar and Kazi (1997); Ul-Hameed, Mohammad and Shahar (2018); Zahra, Zakar, and Abbas (2016)). In the light of literature, it is important to examine whether less empower will make women less happy. However, this researcher did not find any study on the effect of overall women empowerment on women's satisfaction. Therefore, by examining the direct influence of income and empowerment on satisfaction and indirect influence of empowerment through income on satisfaction on Pakistani women, present study contributes theoretically and practically.

## 2. Literature Review

According to the existing empirical research and theories on happiness there is happiness-income paradox (Abdel-Khalek, and Korayem (2018); Barrington-Leigh and Galbraith (2019); Fanning and O'Neill (2019); Han, Jung and Xiong (2019); Hastings (2019); Jacob, Rothmann, and Stander, (2019); Li, and Shi (2019); Ng, and Diener (2018); Okulicz-Kozaryn, and Golden (2018); Wang, Cheng and Smyth (2019). Clark, Senik, and Yamada (2017) and Easterlin, Switek, Zweig (2010)) discusses

that the striking thing about the happiness-income paradox is that over the long-term usually a period of 10 years or more happiness does not increase as a country's income rises. Recent critiques of the paradox, claiming the time series relationship between happiness and income is positive, are the result of either a statistical artifact or a confusion of the short-term relationship with the long-term one. However, most of the studies found that more money brings more happiness. Aknin *et al*, (2013) examined the correlation between charitable giving and happiness in 136 countries. In 120 out of 136 countries, there was a positive relationship between income and happiness. Hence, we cannot say that high level of income necessarily shows a high level of happiness (Gere and Schimmack, 2017).

This happiness paradox can be explained by various theories. According to the **adoption theory**, high level of income can increase happiness on a temporary basis. **The theory of social comparison argues human's** live in communities and have social network so, they compare their achievements with others, living in their surroundings known as peer group (Aknin, Wiwad, and Hanniball (2018); Amendola, Dell'Anno and Parisi (2018); Chae (2018); Kislev (2018)).

Hence, the happiness paradox can be questioned whether it also happens in the under developing countries (Selten, 1998). In the case of developing country, Shabbir and Gregorio (1996) found in Pakistan, freedom seekers were mostly women, who had some kind of dissatisfaction in their paid work and who wanted to start their own business in order to choose the type of work, hours of work, work environment and the people they

worked with but most of the women faced the financial barriers in starting their own business. The problem of dissatisfaction and starting personal business cannot be resolved without money, as money generates money or services generate money. Now, women are being supported globally. Various programs serve women by providing them with financing.

There is need to check empirically whether women involvement in microfinance leads them to happiness as there is conflict between the findings on women living standard as Shabbier and Gregorio (1996) found Pakistani women demand for loan to start business and want to enjoy high living standard. In addition, Ali and Haq (2006), Yasmeen, and Zaini (2015) recommend that future researchers should focus on women's life satisfaction. So on the basis of previous studies on Pakistani women, this study chooses only one dimension (one satisfaction) among the various dimensions of happiness.

*H1: There is impact of microcredit on women's life satisfaction in Pakistan.*

*H2: There is impact of loan size on women's life satisfaction in Pakistan.*

Empowerment means, "To give power to the powerless" or "giving the authority to somebody". (Shetty and Vasanthi (2019); Mukhuti, Mukhuti and Chakraborty (2019); Nwokoro and Ogba (2019)). Economic decision making empowerment, household decision making empowerment, freedom of movement empowerment, ownership of property empowerment and political and social empowerment are the five dimensions

which are used commonly to measure the women empowerment (Malhotra, Schuler and Boender (2002); Yasmeen and Zaini (2015)). Sathar and Kazi (1997) found that Pakistani women are less empowered in regards to economic decision-making and freedom of movement. Asim (2009) Memon, M. F. A., and Idris, N. (2019) Shareef, (2014) indicated that women in Pakistan can make household decision but not major or economic decision. In Pakistan, majority of the women are not even allowed to avail the health facilities independently especially in tribal areas. (Bukhari, M. A. H. S., Gaho, M. G. M., and Soomro, 2019; Harisree, H. G. 2019; Pasha and Palanivel, 2003; Zia, A. S. 2019). A woman can survive without having ownership and participation in political party but it is difficult for her to survive without physical mobility. So this study determines the freedom of movement rather than property ownership and political empowerment. Ali and Haq (2006) and Yasmeen, (2015) recommend that further research should examine the impact of decision making empowerment and freedom of movement empowerment on Pakistani women's satisfaction to life.

*H3: There is impact of decision-making empowerment and freedom of movement empowerment on Pakistani women's satisfaction.*

### **3. Instrument and measurement of Variables**

To measure the women satisfaction (WS) this study adopted questionnaire of Michael Pennock, (2009), it consists of 5 items. The measurement scale is "0" for not satisfied,

"1" for some time satisfied and "2" for fully satisfied. We include five items as a measure of women's satisfaction. Besides that, we also include a single question that inquires in general, the overall level of women's satisfaction. We also found that the result of the satisfaction level is similar between the two. However, this study measures the satisfaction as it is measured by Stevenson and Wolfers (2009). For women empowerment, we adopted the questionnaire of Pitt, Khandker and Cartwright (2006). We take the two dimensions of women empowerment (economic decision-making consist on 14 items and freedom of movement consist on 10 items). The measurement scale is "0" for no ability, "1" for sometimes ability and "2" for full ability. Freedom of movement empowerment (WFE) measure the women's freedom of movement ability indoor and outdoor. The measurement scale is "0" for no freedom "1" for sometimes freedom and "2" for full freedom. In the analysis, we include several items as a measure of women's empowerment (for both WEDE and WM). Besides that, we also include a single question that asks in general, the overall level of women's empowerment. We made comparison between the average value of several items and the overall level of women's empowerment. We found that the result of the empowerment level is similar between the two.

Marital status (MS) is measured as either married or unmarried. This study used a dummy variable for the marital status of respondents (MS =1 if married, 0 if unmarried). Microfinance involvement (MFI) is measured as either involved or not involved. This study used a dummy variable

for the MFI of respondents (MFI =1 involve in microfinance, 0 if not involve in microfinance) the measurement of MFI and MS is as Becchetti (2009) measure the marital status. The majority of them have involved in microfinance between 1-3 years while 36 percent have engaged in microfinance for more than 4 years.

Loan size (LSize) is measured through the loan amount which was taken by the woman respondent (expressed in rupee, 1USD = PKR 99) from Khushhali Bank and National Rural Support program working in Punjab province of Pakistan. Age is measured in years; education is measured in level of education while family size is measured in numbers.

### 3.1 Research Methodology

This study is conducted on Pakistan as considering other countries was not possible because of financial and time constrain. Pakistan has four Provinces and three deserts namely Cholistan, Thal and The Indus Valley Desert are located in Pakistan (Socio-economic and Development Profile of Pakistan, 2012). This study targets only Punjab and selects Cholistan Desert of Punjab. In Cholistan, data was collected from two microfinance institutions National Rural Support Program and Khushhali Bank. This study utilized the random sampling technique and used sample size was based on the criteria suggested by Roscoe's rule of thumb (Uma, S., and Roger, B. 2003) i.e. a sample that is larger than 30 and less than 500 is appropriate. This study selected 372 women who were involve in microfinance and 372 women who were not involve in microfinance. The sampling frame of women who were involved with MFIs was collected

from the local offices of the concerned MFIs. Later a list of 100 to 150 women was selected randomly from each selected districts of Cholistan Bahawalpur. Tasquran (2011) also used the same random sampling technique for conducting the research on influence of microcredit on empowerment.

### 3.2 Model Estimation

The dependent variable women satisfaction is nominal and has three categories so, this study applies multinomial logit model to analyze the hypothesis. Age, education (edu), Family Size (Fsize) marital status (MS) and income (Inc) are taken as a control variable. While Microfinance involvement (MFI) women economic decision making empowerment (WEDE) and women freedom of movement empowerment (WFE) are taken as an independent variable. Women economic decision-making empowerment and women freedom of women was computed as a single variable to examine its impact on women satisfaction that is donated women empowerment (Wemp). LSize represent to loan size. Hence, the econometric model of this study is as follows:

$$WS = \beta_0 + \beta_1 Age_i + \beta_2 Edu_i + \beta_3 FSize_i + \beta_4 Inc_i + \beta_5 MFI_i + \beta_6 LSize + \beta_7 WEDE_i + \beta_8 WFE_i + \beta_9 MS_i + \beta_{10}(MFI * Wemp)_i + e_i \dots (1)$$

Multinomial logit is popular for multinomial choice models. McFadden and Train (2000) explained that a multinomial logit (MMNL) model is for discrete response. Hedeker (2003) stated that multinomial logistic regression model is described for analysis of nominal and ordinal response data. However,

the multinomial probit can be applied only when there is a small number, usually three (Maddala, 1983; McFadden 1984; Park and Kerr, 1990). Ali and Haq (2006) applied the multinomial logit model to examine the impact of education on happiness. In the light of previous studies, this study addresses women's happiness is measured in subjective measurement, the responses are divided into three categories and are in discrete values. We applied multinomial logit model to achieve the objective of the study.

#### 4.1 Results and Discussion

The Hausman test result all the categories (no satisfaction, sometimes satisfaction and full satisfaction) fulfill the requirement of IIA assumption. Table 1 shows that overall the model is statistically significant as the  $\text{Prob} > \chi^2 = 0.0000$ . The result shows that control variables age is negatively significant in full satisfied relative to not satisfied, education, family size and income are significant in sometimes satisfied relative to not satisfy and in full satisfied relative to not satisfy. The findings are consistent with the (Asim, 2009; Yasmeen 2015).

In full satisfaction relative to no satisfaction, the variable microfinance involvement (MFI) is positive and significant at 1 percent indicating a positive effect on women's satisfaction. In sometimes satisfied relative to not satisfy, the coefficient of variable microfinance involvement is not significant. Based on the results, by involving in business through microfinance business, women can make money and can enjoy life with satisfaction along with contributing to their household.

The coefficient of the loan size (LSize) variable is positive and significant indicating that loan size positively affects women's satisfaction it is significant in both sometimes satisfied relative to not satisfy and in full satisfied relative to not satisfy. This can be explained as follows: With small loan size, female borrowers do small size businesses, but with a large amount of loan, the women can do larger size businesses. Behti (2009) and Bandyopadhyay (2011) also found the positive impact on women satisfaction. In the context of income-happiness paradox, it is stated that in under developing countries like Pakistan there is influence of credit on women happiness.

The coefficient of women economic decision-making empowerment (WEDE) variable is positive and significant in full satisfied compared to not satisfied at five percent. The coefficient of freedom of movement empowerment (WFE) is significant in both cases sometime satisfied and fully satisfied relative to not satisfied condition at 1 and 5 percent respectively. The finding of the study is in line with Yasmeen (2015).

Table 1: Results of Multinomial Logit Estimation (Full Sample 744)

Model	Sometimes satisfied relative to Not satisfied		Fully satisfied relative to Not satisfied	
	Coef.	Std. Err.	Coef.	Std. Err.
Cons	-1.069	.960	2.993	.797
Age	.012	.014	-.029	.012**
Edu	498	.403**	.049	.091**
FSize	.209	.079***	.159	.071**
Inc	9.15	2.81***	.000	2.626***
MFI	.676	.589	1.540	.517***
LSize	.000	.000	.000	.000***
WEDE	.209	.080	.159	.071**
WFM	.135	.051***	.107	.047**
MS	-.5804	.509	-.965	.405**
MFI *Wemp	.727	.327	.880	.278***

Probe > chi2 = 0.0000 Log likelihood = -333.32845 Pseudo R2 = 0.1418

*Note:* \*\*\*, \*\* and \* denote that the corresponding coefficient is significant at the 1%, 5% and 10% level, respectively. Not satisfied is the base outcome.

We also hypothesized that the effect of microfinance involvement on women's satisfaction depends on their empowerment. Hence, we also include the interaction term between microfinance and empowerment as one of the independent variable. The coefficient of this interaction term is significant in the case of fully satisfied compare to those not satisfied. The coefficient of the interaction term between education and microfinance is significant, indicating that the effect of microfinance and empowerment on women satisfaction does depend on empowerment. This result indicates that the success of the micro business depends on the empowerment. If a

woman will have loan she can start business and can be empowered and satisfied with her life.

#### 4.2 Impact of Change in the Explanatory Variable on Women's Satisfaction

The marginal effect of a given variable on the probability of having satisfaction (not satisfied, sometimes satisfied and fully satisfied) is a function of all of the estimated coefficients. Hence, we proceed by calculating the marginal effect of each explanatory variable on the probability of being satisfied. As documented in the Table 2, we find the following results.

If the age (Age) of a respondent increase by one year, the probability of getting full satisfaction is expected to fall by 0.3 percent, while the probability of sometimes satisfied is expected to rise by 0.2 percent. The

probability of not satisfied is expected to rise by 0.08 percent. If the education of a respondent increases by one year, the probability of getting full satisfaction is expected to rise by 1.4 percent. If the number of family size (FSize) increases by one from its mean value, the probability of getting full satisfaction is expected to rise by 0.1 percent. Probability of getting sometimes satisfaction is expected to rise by 0.3 percent and the probability of getting no satisfaction is expected to fall by 0.4 percent. If the amount of annual income (Inc) of respondent increases by PKR 1000 from its mean value of income, the probability of getting full satisfaction is expected to rise by 44.9 percent. The coefficient of income in the probability of getting sometimes satisfaction is expected to fall by 99.8 percent. The probability of getting no satisfaction is expected to rise by 54.9 percent. if the respondent gets married, the probability of getting full satisfaction is expected to fall by 4.9 percent. The marginal effect of marital status on the probability of getting sometimes satisfaction and dissatisfaction is expected to rise by 20.3 percent and 2.9 percent, respectively.

In particular, if a woman involves in microfinance, the probability of being fully satisfied is expected to rise by 9.4 percent, while the probability of being sometimes satisfied is expected to fall by 4.5 percent. The probability of not satisfied is expected to fall by 4.8 percent. These results suggest that by involving in microfinance, women can increase their full satisfaction while reducing less satisfaction. The coefficient of the marginal effect of loan size (LSize) on the probability of full satisfaction is significant

and positive. In particular, if a woman gets loan, the probability of being fully satisfied is expected to rise by 60.3 percent. On the other hand, the probability of not satisfied and sometimes satisfied is expected to fall by 31.6 percent and 28.7 percent, respectively. the marginal effect of women's empowerment (Wemp) on the probability of fully satisfied is significant. In particular, if a woman is empowered the probability of fully satisfied is expected to rise by 2 percent while the probability of sometimes satisfied is expected to fall by 0.7 percent. The probability of not satisfied is expected to fall by 2.6 percent. These results suggest that by empowerment women can increase their full satisfaction while reducing less satisfaction.

Table 2: Marginal Effect of the MNLM (Full Sample)

Variable (Model 5)	Not satisfied	Sometimes satisfied	Fully satisfied
Age	.0008** (0.035)	0.002*** (0.001)	-.003*** (0.000)
Edu	.002 (0.227)	-.017** (0.030)	.014** (0.067)
FSize	-.004** (0.029)	.003 (0.214)	.001 (0.606)
Inc	0.549 (0.652)	-.998 (0.640)	0.449** (0.853)
MS	.0290** (0.031)	0.203 (0.367)	-.049** (0.068)
MFI	-.048*** (0.002)	-.045** (0.020)	.094*** (0.000)
LSize	-.316*** (0.000)	-.287** (0.021)	.603*** (0.000)
Wemp	-.026*** (0.002)	-.007 (0.543)	.033** (0.020)



*Note:* \*\*\*, \*\* and \* denote that the corresponding coefficient is significant at the 1%, 5% and 10% level, respectively. The figures in parenthesis are p-values. Not satisfied is the base outcome.

## 5. Conclusion

There are lack of the study that examine the influence of women empowerment on their satisfaction. To achieve the objective, cross sectional data is collected from 744 Pakistani household. The results of the multinomial logit model estimation show that the women borrowers are more satisfied than women non-borrowers. In addition, loan size has a

significant impact on satisfaction. These findings are in line with the theory of adoption, which demonstrates that income increases satisfaction. So, having income raises up their happiness. The coefficient of age, education, family size and annual income are increase satisfaction while marital status negatively affect satisfaction. It is recommended that the government and other development organizations should work together in addressing this empowerment issue with a better implementation of strategies such as providing more funds for microfinance. This study recommends that organizations should make policies and strategies to promote women's empowerment programs to boost up women's happiness.

**Bibliography**

- Abdel-Khalek, A. M. and Korayem, A. S. (2018). The Relationship between Happiness, Income, and Unemployment Rate in Arab and Western Countries. *Mankind Quarterly*, 59(2), 242-254.
- Akhtar, M. S., Ayub, A. and Anwar, M. S. M. (2019). An Analytical Study on Women's Empowerment Regarding Decision Making: A Case Study of Pakistan. *The Government-Annual Research Journal of Political Science*, 7(7).
- Aknin, L. B., Wiwad, D. and Hanniball, K. B. (2018). Buying well-being: Spending behavior and happiness. *Social and Personality Psychology Compass*, 12(5), e12386.
- Ali, S. M. and U Haq, R. (2006). Women's autonomy and happiness: the case of Pakistan. *The Pakistan Development Review*, 121-136.
- Amendola, A., Dell'Anno, R. and Parisi, L. (2018). Happiness and inequality in European countries: is it a matter of peer group comparisons? *Economia Politica*, 1-36.
- Antinyan, A., Horvath, G. and Jia, M. (2019). Social status competition and the impact of income inequality in evolving social networks: An agent-based model. *Journal of Behavioral and Experimental Economics*.
- Asim, S. (2009). Evaluating the impact of microcredit on women's empowerment in Pakistan.
- Bandyopadhyay. (2011). *Microfinance in improvement of living standard and GNH* Assets Reconstruction Company (India) Limited, India.
- Banerjee, A. V., Breza, E., Duflo, E. and Kinnan, C. (2017). Do credit constraints limit entrepreneurship? Heterogeneity in the returns to microfinance.
- Barrington-Leigh, C. and Galbraith, E. (2019). Feasible future global scenarios for human life evaluations. *Nature communications*, 10(1), 161.
- Becchetti (2009). *Microfinance and happiness*, Working Paper No.69, Gennaio 2010
- Becchetti and Pierluigi Conzo, (2013). Credit access and life satisfaction: evaluating the nonmonetary effects of micro finance, *Journal of Applied Economics*, Volume 45, Issue 9, pp.1201-1217.
- Becchetti, L., Castriota, S. and Conzo, P. (2017). Disaster, Aid, and Preferences: The Long-run Impact of the Tsunami on Giving in Sri Lanka. *World Development*, 94, 157-173.
- Bukhari, M. A. H. S., Gaho, M. G. M. and Soomro, M. K. H. (2019). Gender Inequality: Problems and Its Solutions in Pakistan. *The Government-Annual Research Journal of Political Science*, 7(7).
- Chae, J. (2018). Reexamining the relationship between social media and happiness: The effects of various social media platforms on re-conceptualized happiness. *Telematics and Informatics*.
- Clark, A. E., Senik, C. and Yamada, K. (2017). When Experienced and Decision Utility Concur: The case of income comparisons. *Journal of Behavioral and Experimental Economics*, 70, 1-9.
- Devaraiiah, D. B., Basha, K. and Thirumalesha Babu, T. R (2013). Origin of Micro Finance and Women Empowerment in Bangladesh. *Human Rights International Research Journal: ISSN, 2320-6942*.
- Dolan, P. and Fujiwara, D. (2016). Happiness-based policy analysis. In *The Oxford Handbook of Well-Being and Public Policy*.
- Easterlin, R. A., McVey, L. A., Switek, M., Sawangfa, O. and Zweig, J. S. (2010). The happiness-income paradox revisited. *Proceedings of the National Academy of Sciences*, 201015962.

- Fanning, A. L. and O'Neill, D. W. (2019). The Wellbeing–Consumption paradox: Happiness, health, income, and carbon emissions in growing versus non-growing economies. *Journal of Cleaner Production*, 212, 810-821.
- Ferdous, N., Kabir, R., Khan, H. T., and Chowdhury, M. R. K. (2017). Exploring the relationship of Domestic violence on Health Seeking behavior and Empowerment of Women in Pakistan. *Epidemiology, biostatistics and public health*, 14(1).
- Gere, J. and Schimmack, U. (2017). Benefits of income: Associations with life satisfaction among earners and homemakers. *Personality and Individual Differences*, 119, 92-95.
- Han, H., Jung, Y. M. and Xiong, X. (2019). Life Satisfaction and Quality of Life. In *The Ageing of Australian Ethnic Minorities* (pp. 89-99). Palgrave Pivot, Singapore.
- Harisree, H. G. (2019). Women Victims of The Code: A Study of Bapsi Sidhwa's *The Pakistani Bride*. *IJELLH (International Journal of English Language, Literature in Humanities)*, 7(1), 11-11.
- Hassan, A. and Saleem, S. (2017). An Islamic microfinance business model in Bangladesh: Its role in alleviation of poverty and socio-economic well-being of women. *Humanomics*, 33(1), 15-37.
- Hastings, O. P. (2019). Who Feels It? Income Inequality, Relative Deprivation, and Financial Satisfaction in US States, 1973–2012. *Research in Social Stratification and Mobility*.
- Hedeker, D. (2003). A mixed-effects multinomial logistic regression model. *Statistics in medicine*, 22(9), 1433-1446.
- Hill, P. L., Cheung, F., Kube, A. and Burrow, A. L. (2019). Life engagement is associated with higher GDP among societies. *Journal of Research in Personality*, 78, 210-214.
- Huang, Y., Chu, R. and Cheng, J. (2019). Exploring Life Satisfaction Among Subsistence Migrant Consumers: A Case in China. *Journal of Public Policy and Marketing*.
- Islam, S. R., Perumal, S. and Hussin, Z. (2017). Relational norms, happiness and customer satisfaction in Micro Finance Institution's (MFI's): A Conceptual framework. *Journal of Advanced Research in Business and Management Studies*, 9(1), 1-9.
- Jachimowicz, J., Frey, E., Matz, S., Jeronimus, B. F. and Galinsky, A. (2019). Financial Scarcity is Linked to Higher Negative Affect Variability and Reduced Well-Being.
- Jacob, A., Rothmann, S. and Stander, M. W. (2019). Do wage and wage satisfaction compensate for the effects of a dissatisfying job on life satisfaction?. *SA Journal of Industrial Psychology*, 45, 11.
- Kelley, J. and Evans, M. D. R. (2017). The new income inequality and well-being paradigm: Inequality has no effect on happiness in rich nations and normal times, varied effects in extraordinary circumstances, increases happiness in poor nations, and interacts with individuals' perceptions, attitudes, politics, and expectations for the future. *Social Science Research*, 62, 39-74.
- Khan, M. T., Zaheer, S. and Shafique, K. (2017). Maternal education, empowerment, economic status and child polio vaccination uptake in Pakistan: a population based cross sectional study. *BMJ open*, 7(3), e013853.
- Kislev, E. (2018). Happiness, Post-materialist Values, and the Unmarried. *Journal of Happiness Studies*, 19(8), 2243-2265.
- Li, L. and Shi, L. (2019). Economic growth and subjective well-being: analyzing the formative mechanism of Easterlin Paradox. *The Journal of Chinese Sociology*, 6(1), 1.

- Lybbert, T. J. and Wydick, B. (2017). Hope as aspirations, agency, and pathways: poverty dynamics and microfinance in Oaxaca, Mexico. In *The Economics of Poverty Traps*. University of Chicago Press.
- Maddala, G. S. (1983). *Limited dependent and qualitative variables in econometrics*. Cambridge: Cambridge Univ. Press.
- Malhotra, A., Schuler, S. R., and Boender, C. (2002). Measuring women's empowerment as a variable in international development, background paper prepared for the World Bank workshop on poverty and gender: New perspectives, June 28, 2002.
- McFadden, D. 1984. Econometric analysis of qualitative response models. In *Hand-book of econometrics*, ed. Z. Griliches and M. Intriligator, 2:1395-1457. Amster-dam: North-Holland.
- McFadden, D. and Train, K. (2000). Mixed MNL models for discrete response. *Journal of applied Econometrics*, 15(5), 447-470.
- Memon, M. F. A. and Idris, N. (2019). Women Empowerment and Its Role in Pakistan Politics (A Case Study of Sindh). *The Government-Annual Research Journal of Political Science*, 7(7).
- Michael Pennock. (2006). *The Gross National Happiness Abridged Survey*, Population Health Epidemiologist, Vancouver Island Health Authority, Victoria, BC. Canada
- Mitroi, L. R., Sahak, M., Sherzai, A. Z. and Sherzai, D. (2016). The women's health care empowerment model as a catalyst for change in developing countries. *Health care for women international*, 37(3), 275-289.
- Mukhuti, S., Mukhuti, A. and Chakraborty, S. (2019). Development and Growth of Women Empowerment of Selected Indicators in West Bengal-An Empirical Study. *IJAME*, 113-131.
- Murshid, N. S. and Critelli, F. M. (2017). Empowerment and intimate partner violence in Pakistan: results from a nationally representative survey. *Journal of interpersonal violence*, 0886260517690873.
- Ng, W. and Diener, E. (2018). Affluence and Subjective Well-Being: Does Income Inequality Moderate their Associations? *Applied Research in Quality of Life*, 1-16.
- Nwokoro, C. V. and Ogba, F. (2019, January). Widows: Moving from vulnerability to empowerment in Southeast Nigeria. In *Women's Studies International Forum* (Vol. 72, pp. 56-64)
- Okulicz-Kozaryn, A. and Golden, L. (2018). Happiness is flextime. *Applied Research in Quality of Life*, 13(2), 355-369.
- Pasha, Hafiz A. and T. Palanivel (2003) 'Macroeconomics of Poverty Reduction: An Analysis of the Experience in 11 Asian Countries', Discussion Paper No. 3 UNDP Asia-Pacific Regional Programme on Macroeconomics of Poverty Reduction.
- Rukumnuaykit, P. and Pholphirul, P. (2016). Happiness from social capital: An investigation from micro data in rural Thailand. *Community Development*, 47(4), 562-573.
- Sathar, Zeba A. and Shahnaz Kazi (1997) *Women's Autonomy, Livelihood and Fertility; A study of rural Punjab*, Islamabad: PIDE.
- Selten, R. (1998). Aspiration adaptation theory. *Journal of mathematical psychology*, 42(2), 191-214.
- Shabbir, A. and Di Gregorio, S. (1996). An examination of the relationship between women's personal goals and structural factors influencing their decision to start a business: The case of Pakistan. *Journal of Business Venturing*, 11(6), 507-529.

- Shetty, A. J. K. and Vasanthi, M. K. (2019). Entrepreneurship Development Paves Way for Women Empowerment. *Social Science and Humanities Journal*, 809-814.
- Tasquran (2011). Women's empowerment in Bangladesh (Doctoral dissertation, University Utara Malaysia).
- Ul-Hameed, W., Mohammad, H. and Shahar, H. (2018). Microfinance institute's non-financial services and women-empowerment: The role of vulnerability. *Management Science Letters*, 8(10), 1103-1116.
- Wang, H., Cheng, Z. and Smyth, R. (2019). Consumption and happiness. *The Journal of Development Studies*, 55(1), 120-136.
- Yasmeen, K. (2015). The impact of microfinance loan on women's empowerment and happiness in Pakistan (Doctoral dissertation, Universiti Utara Malaysia).
- Zahra, S. A. and Wright, M. (2016). Understanding the social role of entrepreneurship. *Journal of Management Studies*, 53(4), 610-629.
- Zakar, R., Zakar, M. Z. and Abbas, S. (2016). Domestic violence against rural women in Pakistan: an issue of health and human rights. *Journal of family violence*, 31(1), 15-25.
- Zia, A. S. (2019). Can Rescue Narratives Save Lives? Honor Killing in Pakistan. *Signs: Journal of Women in Culture and Society*, 44(2), 355-378.

**Swadhin Mondal** is a Health Economist. Presently he is working as an assistant professor of Economics at the department of Economics, University of Nizwa, Oman. He completed his PhD in Health Economics from Vidyasagar University, India. His current research area of interests includes health financing, health equity, health system research, economics of ageing, pharmaceutical economics, economic aspect of clinical trials and related fields. Dr. Mondal has published/presented several papers on health economics and policy in international journals / conferences.

**Kawsar. Yasmeen** is a PhD and Postdoctoral in Economics. Her specialization is in entrepreneurship policies and trade. She is an active researcher and involved in research activities (Like she conducts workshops on research) and working in projects on a national and international level like GEM. She has worked as reviewers in many journals like *World Development*, Elsevier. Currently, she is working at the University of Nizwa.