Societal Barriers that Hinder Maldivian Women from Succeeding in Information Technology Sector Jobs

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Abstract

The under-representation of women in Information Technology (IT) sector in the Maldives reflects in the overall under-representation of women in Science, Technology, Engineering and Mathematics (STEM) and in paid employment in general. Despite the challenges, a significant number of Maldivian women complete higher education in IT, but very few succeed to make a life-long career in IT. Hence, the purpose of the research presented in this paper was to analyze the societal barriers that impact Maldivian women pursuing IT-related careers. The findings of this correlational study revealed that antiquated thinking, gender discrimination, and marital status were perceived to have a higher significant negative impact on Maldivian women pursuing IT-related careers, while work-home conflict or the double burden of domestic work and work demands, and age discrimination had a lesser perceived correlation. The findings have implications for policy on promoting gender equality in the workforce in the Maldives.

keywords: Maldivian women, discrimination, stereotyping, marriage, work-life conflict, ageism and age discrimination, IT-related career.

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Introduction

Information technology (IT) involves anything related to technology, such as networking, hardware, software, the Internet, or the people that work with these technologies (Nwakanma, Oguzie, Nwokonkwo, & Njoku, 2017). IT-related career paths comprise a range of jobs from software development and programming for businesses to developing next-generation video games, robotics and cyber security.

Gender disparity is seen in the Maldivian employment in general with labour force participation by women at 42% in comparison to men's participation at 75%. The higher up the career ladder, the fewer are the women, especially in management level and in politics where they can influence, advocate and enable for women's recruitment and retention in the workforce. Only 6% of local council members and 5% of parliament members are women (National Bureau of Statistics, 2020). Seeing women in powerful positions decrease women's negative perceptions of themselves and increases their leadership aspirations (Simon & Hoyt, 2013).

Adnan (2019) describes the reality of recruitment of women in IT sector in the Maldives as follows: "Sidelined by male developers, women in the Maldives are forced to endure invasive questions in interviews such as "Can you work late hours?" or "Would you be able to handle pressure by men" or just blunt rejections because "This is work that is only fitting for a man". Everyday sexism and discrimination not only disadvantage women from entry into the IT sector, but continue to experience disrespectful and demeaning behaviour at work irrespective of their position and status at work. Women have to provide more evidence of their competence, have their views dismissed and their judgements questioned in their own areas of expertise, are made subject to demeaning comments such as asked to take notes in meetings, expected to make tea or assumed to be in a more junior position than they are at, simply because they are women (McKinsey & Company and Lean In, 2018).

However, international research points out the benefits of making IT sector more inclusive and not only for nerdy intellectuals (Jung, Clark, Patterson, & Pence, 2017). Companies with high gender diversity are comparatively more profitable, successful and less volatile (Houser, 2018). The huge gap in information technology skills available in the country can be addressed by recruiting and training women. A diverse workforce can find solutions for everyone's needs including women, families and children, and can help fuel the digital economy (McKinsey & Company and Lean In, 2018).

Recruiting more women to the IT sector, training them, providing them with the right skills and networks to succeed and giving opportunities to excel, can help break the cycle of male-dominated industry, fill the tech talent demand, and help to make the tech industry relevant, attractive and interesting to women. This paper addresses the gap in knowledge about why women fail to pursue careers in the IT sector in the Maldives by exploring societal barriers to women's progression and retention in IT-related careers. Societal barriers are the most difficult to remove as they are caused by societal and cultural cues and messages which reinforce the way men and women think and behave (Peake, 2019).

Literature review

Paid work gives women decision making power, a greater degree of personal freedom, higher social status, widening of social networks, friendships and respect in society. They use the skills gained from work and income to change their and their families' socio-economic circumstances, and they experience less domestic violence (Kabeer, 2007). Those who are working can access work health insurance schemes and pay for private health care as well as spend on leisure activities and for networking with family and friends, contributing to improved health outcomes (Vlassof, 2007). However, entry into work and navigating a successful career as a woman in the IT sector has several challenges at individual, family, institutional and societal levels. In this section, literature on societal barriers that impact women pursuing IT-related career, are reviewed. Societal barriers have been grouped as (1) antiquated thinking/ gender stereotyping, (2) gender discrimination, (3) negative influences of marriage and caregiving, (4) work-family and work-life conflict and, (5) age discrimination (Peake, 2019).

Antiquated thinking

Genilo et al. (2013) state that the main barrier for female involvement in IT sector is the mindset of the families and of older men in the IT sector that IT sector is not a suitable job for women, that women who pursue IT careers, are being men. Their study respondents suggested that women must learn negotiation skills and to take professional risks in order to climb up the career ladder, traits that are considered male traits. It is also often wrongly perceived that women lack the skills and enthusiasm to be successful in IT (Tastad, Azzarelli, & Bass, 2018).

Meyer, et al., (2015) posits that women are under-represented in fields which require brilliance, that gender stereotyping begins early in life and continues at work places. Negative gender stereotyping which depicts women as intellectually less capable (Glick, et al, 2000); IT sector jobs as incompatible with family roles and women's aspirations, and IT as a male dominated field with geeky, nerdy, socially awkward loners may put off girls and young women from pursuing IT related education and careers (Malik & Al-Emran, 2018).

Gender stereotyping also influences parents' and teachers' judgement and perceptions about girls' ability, rating girls' confidence and ability to be lower than boys even when girls perform equally in STEM subjects (Tenenbaum & Leaper, 2003; Cimpian, Lubienski, Timmer, Makowski, & Miller, 2016). This affects girls' self-rating of their own ability and skills, and their sense of belonging and desire to succeed in STEM fields (Malik & Al-Emran, 2018; Jung, Clark, Patterson, & Pence, 2017). Negative beliefs about own performance and ability can damage aspirations for career advancement (Dickerson & Taylor, 2000).

Gender discrimination at work

Despite women's significant contribution to IT field in its earlier stages of development and in its continuing transformation into a household necessity, IT continues to be considered as a masculine domain and gender disparity has continued to persist. Gender hierarchies at work and in the wider economy means women often work in exploitative work conditions in IT sector. They are in jobs with low wages, monotonous repetitive work requiring long hours spent sitting in one place, long hours of work, insecurity of jobs when they return after maternal leave, stress of meeting deadlines, lack of respect shown by managers and supervisors, and gender discrimination in hiring, promotions, and in allocation of challenging and more rewarding work (Kabeer, 2007; Adnan, 2019). Women are hired at entry level and promoted at lower rates than men. The main driver for the gender gap in employment is in hiring and promotions (McKinsey & Company and Lean In, 2018).

Lack of female role models and mentors, male dominated organizational culture, and glass ceiling which prevents promotion of women to management level posts further compounds gender inequality. Women have less access to their managers and socialize with them outside of work much less than their

male colleagues and they have fewer opportunities to showcase their work to the top leadership, as their male counterparts (McKinsey & Company and Lean In, 2018). Myths about gender have a huge influence of power shaping the IT workplace, that women are too emotional, and irrational to be in leadership positions, that they lack desire and ambition to overcome obstacles; that women's technical competencies are insufficient; that they can invest fewer hours than men at work (Major, Davis, Janis, Downey, & Germano, 2007; Ogden, 2019; Adnan, 2019).

Marital Status

Women who are married often encounter resistance from husbands more than by other authority figures in their families to go out and earn an income. Marriage requires greater female dependence where some men refuse to give their wives permission to go to work despite household poverty or their own unemployment. Married women's working is seen by some men as a threat to sexual fidelity, to their masculinity, that they and their children will get neglected and an independent income will destabilize their authority. Convincing husbands to give permission to work requires that paid employment does not disrupt the fulfilment of household responsibilities. This means that meals are put on the table on time, clothes are washed and ironed and the house is kept clean. This can lead to exhaustion and ill health, the woman choosing to seek a divorce or to accept the husband's decision and stay at home as a housewife (Kabeer, 2007).

Women often earn less than men irrespective of job level, age and education level (Ahuja, 2002; National Bureau of Statistics, 2020, 2021). Even when the spouse is supportive towards working, women often have to sacrifice their job and career aspirations when they have a child, because of the income differential between men and women and the cultural stereotyping that men are the breadwinners for the family and women are more suitable for caregiving and nurturing roles (Peake, 2019). When women leave because of caregiving responsibilities, the posts are filled by men (Hicks, 2018). Flexible start and finish times, working from home, working for reduced hours are solutions offered by innovative work institutions for those with young children and for elderly care, though uncommon in the Maldives. However, flexible working and part time working are perceived as career killers, staff who work flexible work hours or part time are continuously denied of promotions, trainings and developments, since they are perceived to be lacking in commitment, capability and ambition (Ogden, 2019). Employment policies and legal reform that take into account men and women's caregiving responsibilities and promotion of

sharing domestic responsibilities are meagre in the Maldives.

Work-family and work-life conflict

Maintaining family responsibilities, volunteering, pursuing leadership roles in community organizations, having time for friends, for exercise, down time for self and recovery are valued by women (Kossek, 2016). Aydin (2016) suggested that each working woman has work responsibilities, family and social responsibilities as separate domains and very often these domains cause conflict due to inflexible working schedules, stress of meeting deadlines and long hours of work in IT workplaces. Exhaustion and anxiety from work can cause strain in family roles and performance and vice versa. Whilst promotions, higher pay, work autonomy, social support, supervisor feedback and work recognition can reduce work to family conflict, a supportive spouse, free time for self and recovery, personal good health, self-discipline, tangible family help, and financial assets (e.g. to pay for domestic help) can reduce family to work conflict (Voydanoff, 2005). Work-family balance is defined as "accomplishment of role-related expectations that are negotiated and shared between an individual and his or her role-related partners in the work and family domains" (Grzywacz & Carlson, 2007, p. 458). This can lead to equal satisfaction in both work and family roles, with a perceived degree of success in both roles (Greenhaus & Powell, 2006).

In the Maldives, women work on average 7 hours at main job compared to men who work for 9 hours at main job (National Bureau of Statistics, 2021) indicating that work-family balance is a higher priority for women. However, the fewer hours of work by women are accompanied by significantly longer time spent on domestic chores. A Maldivian woman spends 4 hours a day on unpaid domestic work compared to 2 hours by a man (National Bureau of Statistics, 2021). Adnan (2019) states that as IT field in the Maldives requires long hours of commitment, it is assumed that women are incapable of long hours of work commitment due to pregnancy, child and elderly care responsibilities. This does not challenge the fact that long hours at work can equally prevent men from having fulfilling lives that include family life, leisure and citizenship functions (Padavic, Ely & Reid, 2019).

Age discrimination

Globally, the ratio of women to men in the ICT sector is one in four with a predominance of young male workers. It is difficult for people over a certain

age to get a job in IT sector (Fottrell, 2017) with mean age of workers globally in the IT sector been 38, compared to 43 years old for non-tech workers. An Australian study (Bandias & Sharma, 2016) showed that while young women may get promoted in the first three years of their employment, it becomes progressively more difficult for older women in non-managerial roles to get career advancement. The same study also showed that women over 54 have a tendency to move out of full time employment to self-employment. Messe (2012) and Jyrkinen (2013) suggest that both ageism and gender discrimination contribute to women becoming disengaged with work, changing their career, or going for early retirement. In the IT workplace, women face greater age discrimination than men by pay inequality, lack of promotion opportunities and lack of access to training and development (Kenner, 2018). Lack of advancement opportunities is a major contributing factor why women leave IT sector employment (Moss, Salzman, & Tilly, 2008). Extensive age discrimination has become a dominant issue that is affecting many people who are working and seeking work in IT industry while it is difficult to prove if the person is not hired based on the age even though there are laws that prohibit age discrimination in hiring, firing, pay benefits, or any other conditions of employment (Violino, 2017).

Hypothesis Development

The following five hypotheses were tested to investigate the correlation between the five identified societal barriers and their perceived impact on Maldivian women pursuing IT-related careers.

$H1_1$: Gender Discrimination has a negative impact on Maldivian women pursuing IT-related career

$H1_0$: Gender Discrimination does not have a negative impact on Maldivian women pursuing IT-related career

$H2_1$: Age Discrimination has a negative impact on Maldivian women pursuing IT-related career

$H2_0$: Age Discrimination does not have a negative impact on Maldivian women pursuing IT-related career

$H3_1$: Antiquated thinking has a negative impact on Maldivian women pursuing IT-related career

$H3_0$: Antiquated thinking does not have a negative impact on Maldivian women pursuing IT-related career

$H4_1$: Work-Life Conflict has a negative impact on Maldivian women pursuing IT-related career

$H4_0$: Work-Life Conflict does not have a negative impact on Maldivian women pursuing IT-related career

$H5_1$: Marital Status has a negative impact on Maldivian women pursuing IT-related career

$H5_0$: Marital Status does not have a negative impact on Maldivian women pursuing IT-related career

Research Methodology

The data was collected using an online survey, distributed through email, Viber, Facebook and Telegram. 286 Maldivians aged 14 and above completed the survey questionnaire. A stratified random sampling procedure was used in the selection of participants.

The survey questionnaire consisted of 37 questions and was structured in three different sections. The first section consisted of 8 demographic type questions that included questions on employment in an IT related field, gender, age, marital status, highest level of education completed, and if the participant was studying, was it an IT related course or not.

The second section on the dependent variables had 6 questions. The third section consisted of 23 questions on the five independent variables: the societal barrier attributes of gender discrimination, age discrimination, antiquated thinking, work-life conflict and marital status. The second section and third section incorporated 5-point Likert style questions in ascending order ranging from “Strongly Disagree” to “Strongly Agree”. Further, Cronbach’s Alpha reliability coefficient was used to measure the internal consistency of the questions in each section. Pearson Correlation test was used to check to which extent the variables were linearly related. Cronbach’s Alpha or reliability score for all the variables was above 0.6.

The questions that were asked were on parents, teachers, friends and peers' influence in pursuing IT education and IT careers, impact of gender discrimination in recruitment and hiring, having to prove themselves all the time at work, lack of attention to improve gender diversity at work places, fewer opportunities for promotion, professional development and career advancement compared to men, male dominance and unequal pay for same level of skills; work-life conflict including perceptions of family responsibility effects on work performance, level of flexibility in work schedules, perceptions of stress, and strain of long hours in work on family roles; age discrimination including difficulty for older women to get employment, older women becoming laid off more frequently than older men, and reduced opportunities for older women to get promoted, trained and for career advancement; antiquated thinking including IT is a male oriented job, women earning more make men feel inferior, career oriented women do not take family responsibilities, careers in IT are not suitable for women, women should stay at home and care for children and family; and marital status including single women in IT are given more responsibilities than married women, perceived difficulty to get job due to long hours, difficulties in achieving work life balance by married women, and if divorced mothers are viewed negatively in IT workplaces.

For the respondents aged below 18, questionnaires were sent to their parents so the respondents could fill it with parental consent. To ensure anonymity and privacy of data, personal data such as names and contact details were disaggregated from the survey data and stored separately. Data was collected in the last two weeks of December 2019.

The statistical software package SPSS version 16.0 was used to analyze the survey data. Graphical techniques and multiple regression analysis were used to find the correlation between the chosen societal barriers and Maldivian women pursuing IT-related careers.

Results

Survey Respondent Demographics

74% of the respondents were female and 27 percent were male. Majority of the respondents were young people aged 17 to 27 years with 49% of the respondents aged between 28 and 38 years and 40% aged 17 to 27 years. 6.3% of the respondents were aged between 39-49 years. 2.8% of the respondents were above 50 years and 1 percent were children between 14 to 16 years

of age. 69% of the respondents were married and 27% of respondents were single. 4% of respondents were divorced. 52.8 percent respondents were from Male' and 47.2 percent were from other islands of the Maldives. Only 3% of participants had not completed secondary school, 33% had only secondary school level education, 22% had a diploma and 42% of participants had a first degree or above. 66.8% of the respondents answered that they were studying and 33.2% were not. Out of those studying, 16.8% respondents were studying in IT-related courses. Altogether 26.6% were working in IT-related fields. 53.4 percent of respondents were working in other fields.

Correlation Analysis

A scatterplot was generated for each of the dimensions to check whether there existed any linear relationship between societal barriers with the Maldivian women pursuing IT-related career. Next, correlation analysis was done to determine the correlation between the variables. The analysis is presented in Table 1.

Table 1: Pearson's Correlation Coefficient and the significance [Sig. (2-tailed)] of the test for 268 samples

		Gender discrimination	Work-Life Balance	Age discrimination	Antiquated Thinking	Marital Status	Societal barriers	Women in IT Sector
Gender Discrimination	Pearson Correlation	1	.446**	.548**	.458**	.407**	.741**	.502**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	286	286	286	286	286	286	286
Work/Life Conflict	Pearson Correlation	.446**	1	.503**	.467**	.525**	.763**	.377**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	286	286	286	286	286	286	286
Age Discrimination	Pearson Correlation	.548**	.503**	1	.487**	.567**	.803**	.424**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	286	286	286	286	286	286	286
Antiquated Thinking	Pearson Correlation	.458**	.467**	.487**	1	.547**	.770**	.509**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	286	286	286	286	286	286	286

Marital Status	Pearson Correlation	.407**	.525**	.567**	.547**	1	.785**	.438**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	286	286	286	286	286	286	286
Societal Barriers	Pearson Correlation	.741**	.763**	.803**	.770**	.785**	1	.583**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	286	286	286	286	286	286	286
Maldivian Women Pursuing IT-Related Career	Pearson Correlation	.502**	.377**	.424**	.509**	.438**	.583**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	286	286	286	286	286	286	286

The societal barriers variable that represents the total societal barrier dimensions, is correlated with the dependent variable that is Maldivian Women Pursuing IT-Related Career variable with a value of r = .583. It means that the societal barriers are moderately correlated with the dependent variable. Therefore, the societal barrier dimensions are moderately correlated with the Maldivian Women Pursuing IT-Related Career variable. Societal barriers have a moderate relationship with the Maldivian Women Pursuing IT-Related Career.

The output result showed that Gender Discrimination, Work-Life Conflict, Age Discrimination, Antiquated Thinking and Marital Status dimensions were correlated with Maldivian Women Pursuing IT-Related Career with positive values of 0.502, 0.377, 0.424, 0.509, and 0.438 respectively. From this correlation test result, it was concluded that Work-Life Conflict has the least correlation with the lowest correlation value of r=0.377. A low Pearson correlation coefficient does not mean that there is no relationship between these variables. The variables may have a nonlinear relationship. Antiquated Thinking accounted for the highest value indicating this dimension as the most dominant societal barrier dimension among the five societal barriers that were explored which has the highest effect on the Maldivian Women Pursuing IT-Related Career.

The Pearson's Correlation Coefficient results indicated that there is sufficient evidence to conclude that there is a significant linear relationship between societal barriers and Maldivian women pursuing IT-related career because the correlation coefficient is significantly different from 0. Moreover, the direction of the relationship is positive indicating those variables tend to increase together.

Regression analysis

A Multiple Linear Regression Analysis was the next step after correlation. Regression analysis is given in Table 2: The Model Summary. The table shows the R and R^2 values.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.608[a]	.370	.359	.79187	1.920

a. Predictors: (Constant), Marital Status, Gender Discrimination, Work-Life Conflict, Antiquated Thinking, Age Discrimination
b. Dependent Variable: Maldivian Women Pursuing IT-Related Career

The R value represents the simple correlation value of 0.608 which indicates a moderate degree of correlation. The adjusted R^2 of the model is 0.359 with the R^2 = .370 which means that the linear regression explains 37% of the variance in the data. R^2 represents how much of the total variation in the dependent variable can be explained by the independent variables. In other words, it is the percentage change in the Maldivian women pursuing IT-related career variable that can be predicted by the dimensions of societal barriers.

The Durbin Watson Statistic was used to measure the autocorrelation in residuals from the regression analysis and gave a value of 1.920 which is between the two critical values of $1.5 < d < 2.5$ and therefore it can be assumed that there is no first order linear auto-correlation in the data.

An ANOVA F-Test was done to find out the significance of the data to accept or reject the hypotheses developed.

Table 3: ANOVA F-Test results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	103.115	5	20.623	32.889	.000[a]
	Residual	175.575	280	.627		
	Total	278.690	285			

a. Predictors: (Constant), Marital Status, Gender Discrimination, Work-Life Conflict, Antiquated Thinking, Age Discrimination

b. Dependent Variable: Maldivian Women Pursuing IT-Related Career

Table 3 shows the ANOVA F-Test results. This table represents how well the regression equation fits the data. F-test of the linear regression has the null hypothesis that explains zero variance in the dependent variable where $R^2 = 0$. The significance level in the table p<.000 indicates that the regression predicts the dependent variable significantly well. This indicates that all of the societal barrier dimensions that were studied have a significant effect on the Maldivian women pursuing IT-related career. The table shows that the independent variables statistically significantly predict the dependent variable, F (5, 280) = 32.889, p (.000) < .05. This indicates that the regression model is a good fit of the data.

Table 4: Coefficients[a]

Model B		Unstandardized Coefficients		Standardized Coefficients	t	Sig. Tolerance	Collinearity Statistics	
		Std. Error	Beta	Beta			VIF	
1	(Constant)	.331	.204		1.622	.106		
	Gender Discrimination	.289	.060	.287	4.804	.000	.632	1.581
	Work-Life Conflict	.030	.060	.031	.508	.612	.620	1.612
	Age Discrimination	.046	.066	.046	.704	.482	.530	1.887
	Antiquated Thinking	.263	.060	.269	4.417	.000	.606	1.650
	Marital Status	.137	.067	.132	2.056	.041	.544	1.838

a. Dependent Variable: Maldivian Women Pursuing IT-Related Career

Table 4 shows the multiple linear regression estimates that includes the constant, significance levels and collinearity statistics. In this linear regression

analysis, the result of the Coefficients table shows that all of the societal barrier dimensions are significant predictors of the Maldivian women pursuing IT-related career, where p<.05, except the Work-Life Conflict dimension with the value p=.612 and Age Discrimination with the value p=.482 that is p>.05. The beta coefficients of Gender Discrimination .287, Antiquated Thinking .269 and Marital Status .132 indicates these societal barrier dimensions have a positive significant impact on the Maldivian women pursuing IT-related career. This means that these societal barriers are contributing negatively to Maldivian women pursuing IT-related career. Even though from the analysis, results are positive values which indicates negative impact as the questions of the questionnaire are negative. Furthermore, Gender Discrimination has the highest impact on the Maldivian women pursuing IT-related career followed by Antiquated Thinking and Marital Status dimensions.

Based on the Coefficients output, collinearity statistics, obtained VIF value of 1.581, 1.612, 1.887, 1.650, 1.838 for Gender Discrimination, Work-Life Conflict, Age Discrimination, Antiquated Thinking, Marital Status respectively. This represents that the VIF value obtained is from 1 to 10 that indicates that there are no multicollinearity symptoms.

The purpose of this research was to gather data related to societal barriers that impacts Maldivian women pursuing IT-related career. The results obtained are presented below in Table 5.

Table 5: Hypothesis Decisions

Hypothesis	Beta Coefficient	Significant @ (p<.05)	Decision
$H1_1$: Gender Discrimination has a negative impact on Maldivian women pursuing IT-related career	.287	.000 Significant	Accept
$H1_0$: Gender Discrimination does not have a negative impact on Maldivian women pursuing IT-related career		.000 Not Significant	Reject

$H2_1$: Age Discrimination has a negative impact on Maldivian women pursuing IT-related career	.046	.482 Significant	Accept
$H2_0$: Age Discrimination does not have a negative impact on Maldivian women pursuing IT-related career		.482 Not Significant	Reject
$H3_1$: Antiquated thinking has a negative impact on Maldivian women pursuing IT-related career	.269	.000 Significant	Accept
$H3_0$: Antiquated thinking does not have a negative impact on Maldivian women pursuing IT-related career		.000 Not Significant	Reject
$H4_1$: Work-Life Conflict has a negative impact on Maldivian women pursuing IT-related career	.031	.612 Significant	Accept
$H4_0$: Work-Life Conflict does not have a negative impact on Maldivian women pursuing IT-related career		.612 Not Significant	Reject
$H5_1$: Marital Status has a negative impact on Maldivian women pursuing IT-related career	.132	.041 Significant	Accept
$H5_0$: Marital Status does not have a negative impact on Maldivian women pursuing IT-related career		.041 Not Significant	Reject

The above hypothesis test represented indicates that all of the societal barrier dimensions that were studied have a positive significant relationship with Maldivian women pursuing IT-related career variable except for the Age Discrimination and Work-Life Conflict dimensions. However, looking at the impact of the societal barriers on the Maldivian women pursuing IT-related variable, all dimensions have a positive effect on the Maldivian women pursuing IT-related career. This indicates that all of the societal barrier dimensions have a negative impact on Maldivian women pursuing IT-related career.

Conclusion

Lack of women in IT sector can have serious implications for women's participation in the sector, national economic growth and future of IT field. The gender gap in training, recruitment, hiring and retention of women in IT

sector needs to be addressed at national, community and individual levels. The findings of this study showed that among the societal barriers that were studied, antiquated thinking, gender discrimination and marital status had the most dominant and influential negative relationship with Maldivian women pursuing IT-related careers.

Antiquated thinking can come from what people have been taught in primary grades, and at home about what women's roles in society are and about women's capabilities in STEM subjects, as well as from media projections of the IT sector and the male dominant organizational structure at workplaces. This can be challenged by training girls to have a growth mindset, to believe that effort, effective study strategies and seeking help from teachers and mentors can improve their inherent or perceived ability in IT field (Yeager, et al, 2016). Gender equity in school curriculum and textbooks also can improve girls' stereotypical perceptions of their abilities, interest and the cultural expectations of them. Jung, Clark, Patterson and Pence (2017) suggest that to attract women to IT sector, technology can be introduced to girls at an early age, introducing beginner programming courses from upper primary grades onwards, provide one to one tutoring to develop girls' confidence, promote computer science in secondary school as a valuable subject for future careers with good salaries and by introducing female technology role models on media and in marketing depicting IT professionals working in multiple roles in IT and not been nerdy, intellectual or working alone.

Parents, teachers, counselors and mentors play a huge role in influencing the way young girls choose their study subjects at school and in their choice of careers. Hence training parents and teachers to challenge inherent gender stereotyping in their own thinking and to support girls to excel in STEM subjects can play a significant role in breaking the educational barriers for women's participation in the IT sector. Adequate mentoring and support are also required by women during their higher education programmes and at work to successfully work in male dominated organizations or to create their own IT enterprises which promote gender equality and equity.

Women are used to juggle work and family life together and may not perceive over working in both home and at work as a contributing factor to burnout, dis-satisfaction and early exits from IT career. However, increasing workloads at home create stress. Work to home conflict cause women in patriarchal societies to quit work. Policy level support and structural changes are required to ensure equal participation of women to men in the IT sector. Examples include care policies and funding to support with elderly and child care, adequate support

from employers for accessible facilities for pregnant women, lactating mothers and young children, flexible working, health and well-being policies designed for young mothers and older workers, and lifelong learning policies, promoting of equal sharing of domestic chores and care work between spouses and revision of employment and family legislation to ensure women have equal rights.

Limitation

Whilst the participants rated work-life conflict and age discrimination lower than other types of discrimination, it should be noted that only 2.8% of the survey population were older than 50.

REFERENCES

Adnan, Y. (2019). ***Women in Tech Maldives, An Inspiring Initiative.*** https://mbr.mv/4692/

Ahuja, M. (2002). Women in the Information Technology Profession: A Literature Review, Synthesis and Research Agenda. ***European Journal of Information Systems***. 11, 20-34.

Aydin, D. L. (2016). The impact of career success on work life balance for millennium generation. ***Journal of Management, Marketing and Logistics***. doi:10.17261/Pressacademia.2016219938

Bandias, S. & Sharma, R. (2016). The Workplace Implications of Ageism for Women in the Australian ICT Sector. ***International Journal of Business, Humanities and Technology***, 6(4).

Cimpian, J., Lubienski, S., Timmer, J., Makowski, M. & Miller, E. (2016). Have Gender Gaps in Math Closed? Achievement, Teacher Perceptions, and Learning Behaviors Across Two ECLS-K Cohorts. AERA Open. 2 (4). doi: 10.1177/2332858416673617.

Dickerson, A., & Taylor, M. A. (2000). Self-limiting behaviour in women self-esteem and self-efficacy as predictors. ***Group & Organization Management***, 25(2), 191–210.

Fottrell, Q. (2017). ***Silicon Valley has an age problem.*** https://www.marketwatch.com/story/silicon-valley-has-an-age-problem-2017-09-26

Funk, C., & Parker, K. (2018). ***Women and Men in STEM Often at Odds Over Workplace Equity.*** https://www.pewsocialtrends.org/2018/01/09/women-and-men-in-stem-often-at-odds-over-workplace-equity/

Genilo, J. W., Akther, M., & Haque, M. (2013). Attracting and Keeping Bangladeshi Women in the ICT Profession. ***ICT for development Working Paper Series***.

Glick, P., Fiske, S.T., Mladinic, A., Saiz, J., Abrams, D., Masser, B., López, W.L. (2000). Beyond prejudice as simple antipathy: Hostile and benevolent sexism across cultures. ***Journal of Personality and Social Psychology***, 79 (2000), pp. 763-775. doi:10.1037/0022-3514.79.5.763

Greenhaus, J. H., & Powell, G. N. (2006). When work and family are allies: A theory of work-family enrichment. ***Academy of Management Review***, 31(1), 72–92.

Grzywacz, J. G., & Carlson, D. S. (2007). Conceptualizing work–family balance: Implications for practice and research. ***Advances in Developing Human Resources***, 9(4), 455–471.

Hicks, M. (2018). ***Why tech's gender problem is nothing new.*** https://www.theguardian.com/technology/2018/oct/11/tech-gender-problem-amazon-facebook-bias-women

Houser, K. (2018). ***The Tech Industry's Gender Problem Isn't Just Hurting Women.*** https://futurism.com/tech-industrys-gender-problem-hurting-women

Jung, L., Clark, U., Patterson, L. & Pence, T. (2017). Closing the Gender Gap in the Technology Major. ***Information Systems Education Journal***, 15(1)

Jyrkinen, M. (2013). Women managers, careers and gendered ageism. ***Scandinavian Journal of Management***, 30(2), 175-185.

Kabeer, N. (2007). Marriage, motherhood and masculinity in the global economy. Institute of Development Studies Working Paper No 290, 2007)

Kenner, M. (2018). ***Women 'impacted more than men by age discrimination' in the workplace.*** https://www.peoplemanagement.co.uk/news/articles/women-impacted-more-than-men-by-age-discrimination

Kossek, E. (2016). Managing work life boundaries in the digital age. ***Organizational Dynamics***, 45, 258–270.

Major, D., Davis, D., Janis, S.-H., Downey, H., & Germano, L. (2007). ***Myths and realities in the IT workplace: gender differences and similarities in climate perceptions.*** https://zodml.org/sites/default/files/Women_and_Minorities_in_Science%2C_Technology%2C_Engineering_and_Mathematics_Upping_the_Numbers.pdf#page=89

Malik, S. I., & Al-Emran, M. (2018). Societal barriers Influence on Career Choices for Female. ***International Journal of Emerging Technologies in Learning***. doi:10.3991/ijet.v13i05.8231

McKinsey & Company and Lean In. (2018). Women in the Workplace 2018. https://leanin.org/women-in-the-workplace-report-2018

Meyer, M., Cimpian, A., & Leslie, S.-J. (2015). Women are underrepresented in fields where success is believed to require brilliance. ***Frontiers in Psychology***. 6:235 doi:10.3389/fpsyg.2015.00235

Messe, P. (2012). Do discriminatory attitudes to older workers at work affect their retirement intentions? ***International Journal of Manpower***, 33(4), 405-423.

Moss, P., Salzman, H., & Tilly, C. (2008). Under Construction: The Continuing Evolution of Job Structures in Call Centers. ***Industrial Relations***, 47(2), 173-208.

National Bureau of Statistics. (8th March 2021). International Women's Day (Infographic). http://statisticsmaldives.gov.mv/nbs/wp-content/uploads/2021/03/International-Womens-Day-2021-ammended.pdf

National Bureau of Statistics. (8th March 2020). International Women's Day 2020 (Infographic). http://statisticsmaldives.gov.mv/nbs/wp-content/uploads/2020/03/Womens-Day-2020.pdf

Nwakanma, I. C., Njoku, C. E., Oguzie, C. J., Nwokonkwo, O. C., & Njoku, P. C. (2017). Factors Influencing The Involvement Of Women In Technology Programmes In Nigerian Universities (Case Study Federal Federal University of Technology Owerri) Conference Presentation at: International Conference on Gender Responsiveness for Capacity Building in a Depressed Economy. Organized by the Gender Studies Association of Nigeria (GSAN). Alvan Ikoku Federal College of Education Owerri, April 2017

Ogden, L. E. (2019). ***Working mothers face a 'wall' of bias—but there are ways to push back.*** https://www.sciencemag.org/careers/2019/04/working-mothers-face-wall-bias-there-are-ways-push-back

Padavic, I., Ely, R. J. Reid, E.M. (2020) Explaining the Persistence of Gender Inequality: The Work–family Narrative as a Social Defense against the 24/7 Work Culture. ***Administrative Science Quarterly***, 65(1), 61–111.

Parker, K., & Funk, C. (2017). ***Gender discrimination comes in many forms for today's working women.*** https://www.pewresearch.org/fact-tank/2017/12/14/gender-discrimination-comes-in-many-forms-for-todays-working-women/

Peake, S. (2019). The 3 Barriers to Women's Progression And what organisations can do about them. Shape Talent.

Simon, S. & Hoyt, C. (2013). Exploring the effect of media images on women's leadership self-perceptions and aspirations. ***Group Processes & Intergroup Relations***. 16. 232-245.

Tastad, C., Azzarelli, K., & Bass, D. (2018). ***These myths are holding women back in the workplace.*** Retrieved from https://www.weforum.org/agenda/2018/01/myths-holding-back-women-workplace/

Tenenbaum, H. & Leaper, C. (2003). Parent-Child Conversations about Science: The Socialization of Gender Inequities? ***Developmental Psychology***. 39. 34-47. 10.1037/0012-1649.39.1.34.

Violino, B. (2017). ***The hard truths of navigating ageism in IT.*** https://www.cio.com/article/3198472/the-hard-truths-of-navigating-ageism-in-it.html

Vlassoff C. (2007). Gender differences in determinants and consequences of health and illness. ***Journal of health, population, and nutrition***, 25(1), 47–61.

Voydanoff, P. (2005). Toward a conceptualization of perceived work-family fit and balance: A demands and resources approach. ***Journal of Marriage and Family***, 67(4), 822–836.

Yeager, D. S., Romero, C. and Dave Paunesku, D. Hulleman, C. S. Schneider, B., Hinojosa, C., Lee, H.Y., O'Brien, J. Flint, K. Roberts, A., Trott, J., Greene, D., Walton, G.M., & Dweck, C. S. (2016). Design Thinking to Improve Psychological Interventions: The Case of the Growth Mindset During the Transition to High School. ***Journal of Educational Psychology***, 108 (3), 374–391.