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SELF-MANAGEMENT SKILLS AND WOMEN IN PSTO; STRATEGY TO AMELIORATE 21ST CENTURY SKILLS UPGRADE CHALLENGES

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Abstract

The study aimed at determining self-management challenges that inhibit 21st-century skills upgrade of women in professional skilled technical occupations. The study was a descriptive survey guided by two research questions and two hypotheses. The instrument used for data collection was a 12 items researcher developed structured questionnaire of a 5-point Likert scale which was validated by three experts, one from the department of measurement and evaluation and two from the Technology and Vocational Education department, all from Nnamdi Azikiwe University, Awka. The reliability was established using the split half method and the coefficient of 0.9 was determined using the Pearson Product Moment Correlation Coefficient. SPSS 0.9 was used in analyzing the data. The research question was answered using mean and standard deviation while t-test analysis was employed to test the hypothesis at a 0.05 level of significance. Among others, the findings of the study revealed ways in which women can implement self-management skills for skills upgrade in the 21st-century workplace including; accepting failure as a corrective measure, seeing everyone as equal, practicing patience and perseverance, and thinking before a speech. It was however recommended among others that stakeholders should prioritize the improvement of girls' access to basic education; and strive to meet the training needs of women re-entering the labour market and of older women who have not had equal access to opportunities for lifelong learning

Keywords: *Career Progression, Self-Management skills, Skills-Upgrade challenges, Women in professional skilled technical occupations..*

INTRODUCTION

The rising roles of technology, urbanization, and globalization of the value chain have continued to change the nature of work in Nigeria. Workforce requirement in terms of efficiency and productivity keeps demanding new skills, thus, necessitating a shift in the job market (Marsh, 2018). Organization for Economic Co-operation and Development (OECD), noted that there is a widely held common opinion by several interest groups – educational

researchers, policymakers, politicians, teachers, and employers – that for people to function effectively at work in the current century, they should possess a very different set of skills and competencies, hence the origin of 21st-century skills (Ananiadou and Claro, 2009). With the preceding initiatives of several outfits such as the Cisco/Intel/Microsoft assessment and teaching of 21st-century skills project (www.atc21s.org), and Partnership for 21st skills (www.21stcenturyskills.org), 21st-century skills have been emphasized to be of great importance. As such, workplaces continue to invest heavily in developing and adopting these skills in their work activities (Dery and Sabastain, 2017), transforming the workers' engagements into 21st-century experiences (Weill and Woerner, 2017). 21st-century skills have, therefore, become critical to workers' career progression and relevance in today's workplaces.

Perceiving skills development as strategic, countries, enterprises and persons consequently seek to step up investments in skills (Assi & Marcati, 2020). Hence, workers particularly those in professional skilled technical occupations (PSTO) keep acquiring, updating, and transforming to the 21st-century experience to remain relevant in the workforce. Professional skilled technical occupations (PSTO) according to Rothwell, (2015) refer to those occupations that require a high level of knowledge in the technical domain with at least a bachelor's degree qualification. As the workforce transition to a knowledge economy, information age and 21st-century technologies, a literate workforce, including women practicing in PSTO is vital (Aderemi, Hassan, Siyanbola & Taiwo, 2009). While National Bureau of Statistics (2016) revealed that women made up 70.2% of the total workforce in Anambra state, in 2015, Okeke, Osuachala & Umeakuana (2022) noted that in Nigeria as a whole, there is increase in number of women in the workforce. Though this is on a positive trajectory, a recent study shows that generally, women's participation in the technical professions is significantly low and baffling when compared to their male counterparts, (Akor, Bakar, Hamzah, and Rashid, 2015; Jones, 2019). A survey carried out by the ONE Campaign and the Center for Global Development, on technical firms, that employ a workforce in PSTO in Nigeria, revealed that out of 93 technical firms surveyed; only six had a woman in the top positions, (Ramachandran & Omakwu, 2019). This suggests a high degree of low progression and relevance of women in PSTO.

The above claims clarify the reason why Jones (2019) noted that, women are generally viewed as less productive, poor performers as well as not being able to achieve professional goals. In line with this assertion, Ashcraft, McLain, & Eger, (2016) had earlier observed that more frequently, women are packed to execution roles while men occupy creative and innovative roles. If women and men received similar education and experience in preparation for roles in PSTO, it becomes worrisome why there is the existence of a wide gap in their career progression and relevance. May be this is precedence of women's perceived backwardness in moving with the trend and upgrading to the seamless 21st-century occupational experience and skills needed in the present workforce. As noted by World Bank (2021), one will hardly succeed in this present labor market without the possession of 21st-century skills, among which includes digital skills.

Assi and Marcati, (2020) asserted that advancing women's role in the "professional and technical jobs can turbo-charge economic growth in a region that will be significantly impacted by the Fourth Industrial Revolution—making their participation all the more critical". Improving women's roles and boosting their career progression in PSTO will enhance women's societal and economic participation. Recently, the International Labour Organization made a centenary declaration for future work emphasizing that all members should ensure continued relevance in an employment relationship (International Labour Organizations, ILO, 2019). Thus, for women in PSTO to remain relevant in employment it is imperative for them to link their skills development to productivity needs. The literature revealed that men in technical occupations are viewed to be more adaptive in the manipulative implementation of digital skills for different purposes. On this ground, international experience noted that helping workers and enterprises adjust to change is one of the targets of development policies of countries that have succeeded in linking skills development to gains in productivity, employment, and development, (ILO, 2010). This suggests the paramount need to help women in PSTO to adjust in linking their skill development to 21st-century workforce productivity requirements. UNESCO, on the other hand, pointed out that to prosper in the connected economy and society, digital skills must be combined with other competencies (UNESCO, 2018), and thus, the paramount need to develop digital skills.

World Bank (2021) defines digital skills as "the ability to access, manage, understand, integrate, communicate, evaluate, and create information safely and appropriately". These skills are of four types; information, critical thinking, creativity, and problem-solving skills (Ester et al, 2020). The 21st-century workforce requires workers to upgrade to these skills (Şendağ & Odabaşı, 2009; Yang, 2015). Unfortunately, women in PSTO in Anambra state seem not to have developed in line with these skills. Nizam et al, (2018) pointed out that "an uninterrupted career trajectory is an asset to career advancement". Women's career trajectory in PSTO may be interrupted by the conflicts that occur between their careers and home responsibilities. Jones, (2019) confirmed that the greatest

barrier to the career progression of women continued to arise from conflict between workplace responsibility and home responsibility. This negatively affects their disposition to move in pace with the ever-changing occupational skills demand. Therefore, practicing effective self-management skills may enhance the disposition and personalities of women in PSTO which may enable them to overcome conflict and upgrade to the skills change needs.

Self-management is a natural tendency in every human being. According to Omisakin & Ncama (2011), self-management refers to techniques, abilities, and tactics by which individuals can effectively direct their activities toward the achievement of objectives. Proper implementation of self-management skills would uphold women in PSTO to their maximum control to achieve their potential and effectively utilize their potential for self-actualization. Management of one's self occurs in terms of health, behavior modification, adaptation to a new environment, experience or skills, and self-awareness, (Wilkinson and Whitehead, 2009). This entails the infusion of a personal mode of thought that functions through proper planning, realistic logistics, and delay in gratification. Self-management skills are inert abilities that enable individuals to control their actions feelings and thoughts. These skills include stress management, organization, goal setting, self-motivation, time management, accountability, reliability, trustworthiness, adaptability, and conscientiousness.

In the view of Davis, (2021), implementation of self-management skills maximize employees' productivity and improve workplace performance in various fields of work. Improved self-management skills increase the perception of control over a career (King, 2004) and lead to career satisfaction and progression opportunities. Strong self-management skills would allow women to independently set goals and achieve them. When self-management is purposeful in women in PSTO, they can direct the trajectory of their career and ensure to seek opportunities that get them close to mastering the needful skills for occupational relevance and progression in the 21st century. Glassdoor Team, (2021), however, opined that some challenges may impose inhibition on the proper disposition of an individual for skills upgrade and performance in the workplace faces. These challenges may have been consequential to the ineffective and improper disposal of women in PSTO for skills upgrade in their workplaces hence their minimal progression and less relevance. According to Engels (2016), these challenges could be classified as emotional and social, among others. This study thus identifies ways in which these challenges could be handled by women in PSTO to enhance their disposition for skills upgrade for career progression and relevance 21st century.

Research Questions

1. What are the ways in which self-management skills would be implemented to ameliorate emotional challenges of women in PSTO for skills upgrade in the 21st-century workforce?
2. What are the ways in which self-management skills would be implemented to ameliorate social challenges of women in PSTO for skills upgrade in the 21st-century workforce?

Hypothesis

HO₁. There is no statistically significant difference in mean responses of male and female respondents on the ways in which self-management skills will be implemented to ameliorate social challenges of women in PSTO for skills upgrade in the 21st-century workforce

HO₂. There is no significant statistical difference in the mean responses of the respondents on the ways in which self-management skills would be implemented to ameliorate social challenges of women in PSTO for skills upgrade in the 21st-century workforce based on work experience.

LITERATURE REVIEW

Career Women and Self-Management Skills

Self-management abilities are, according to Daniel (2011), "those capabilities that enable an individual to feel more productive when performing daily duties regardless of the working environment." He insisted that having strong self-management abilities will enable one to effectively interact with coworkers, senior management, and clients, as well as to make wise judgments, balance work and personal obligations, and maintain physical and mental health. Such a disposition makes it possible to engage with coworkers positively, which can be used to get insight into the talents held by various coworkers while doing duties. Howe-Walsh and Turnbull (2016) pointed out that women may choose a specific path for career advancement, and that this may be due to a number of factors, including a lack of knowledge about the promotion system, a lack of confidence, gender-based socialization, a fear of failure, a lack of competitiveness, and a lack of necessary aspirations.

The fundamental assumption of the theory is that people will adopt attitudes and act in ways that will keep their level of self-esteem. According to Assi & Marcati (2020), women's job advancement is hampered by cultural hurdles, organizational policy barriers, and self-imposed barriers. They further asserted that women frequently give up too quickly once they have defeated themselves. They underlined that in order for women to advance in their careers, all of these issues must be resolved. Additionally, according to Bajaj et al. (2016), self-esteem is a construct that expresses one's global relationships with oneself. This opinion is supported by Komalasari et al. (2017), who proposed that factors contributing to women not realizing their job potential include individual inadequacies, low self-esteem, reluctance, and fear of rejection. Women's self-belief, for instance, or women's views about what is expected of them, may act as a barrier to acquiring the digital skills necessary for women to advance in the workplace in the twenty-first century.

Ng and Sears (2017) claim that business culture is a key factor in the lack of women in management and leadership roles. According to Wilkins et al. (2018), "attitudes," specifically discrimination and "bias" on the part of the dominant group (males), are what lead to individuals being treated differently when it comes to access to jobs and rewards, and women do report experiencing more discrimination in male-dominated firms than in female-dominated firms (Parker and Funk 2017). According to Kübler et al. (2018), definitions of competence, dedication, and leadership are only a few examples of cultural norms and work practices that have gender discrimination built into them. Even while it produces a subtle pattern of disadvantage that excludes all women, no one even questions this prejudice. Mate et al (2019) 's research revealed that a high importance is placed on autonomy within the historically male-dominated professional culture, which hinders the development of mentorship networks and a welcoming environment for female professional employees. Mate et al. (2019) also claim that because men have historically occupied the highest-ranking and most privileged positions in technical occupations, it is challenging for these men to relate to their female employees. Men are still the biggest barrier to women in management, according to Einarsdottir et al. (2018), who contextualize the topic of discrimination against women. Women can overcome these inhibitions, managing their male colleagues flawlessly to provide them a reason for a change in their practices, by possessing and using the proper self-management abilities.

Career Progression Challenges of Women

The OECD's Bridging report on the digital gender gap noted that women suffer the highest amount of difficulties due to their limited interactions with senior citizens, poor support from coworkers, and scant exposure to devoted role models (Assi & Marcati, 2020). According to Nizam and Shama (2019), a gender imbalance that affects women's jobs has existed for generations. The implementation of a life-cycle approach is necessary, according to the ILO (2010), to overcome the obstacles women face in accessing education and training and in applying this training to find better employment. Among other things, this entails expanding girls' access to primary and secondary education and removing logistical, financial, and cultural obstacles to apprenticeships and secondary and vocational education for young women- particularly in non-traditional occupations; taking into account women's home and care responsibilities when scheduling workplace-based learning and entrepreneurship training; and meeting the training needs of older women who haven't had equal access to opportunities for lifelong learning as well as those who are reentering the workforce.

Aderemi, Hassan, Siyanbola, and Taiwo (2009) noted that women are frequently "not allowed" to exhibit the same personality qualities that are thought to be crucial for male success in the workplace. For instance, while competition, aggression, and a certain amount of self-promotion are seen as desirable qualities in a successful guy, they are viewed as 'pushy' and unsuitable in women. Women's career advancement is hampered by the conflict between their domestic and professional commitments. Inhibition to digital upgrade is founded in education and skills, technical literacy, innate gender biases, and socio-cultural norms, according to OCED (2018).

METHODS

The study adopted a descriptive survey design. This is because the study gathered information on the self-management challenges that inhibit 21st-century skills upgrade of women in PSTO. The population of the study is 83. This comprised all the women technologists and teaching staff in the technology education section in all the tertiary institutions in Anambra state. These institutions include Nnamdi Azikiwe University Awka, Nwafor Orizu College of Education Nsugbe, Chukwuemeka Odumegwu Ojukwu University Igbariam, and Federal College of Education (Technical) Umuoze. The researchers designed a structured 5-point Likert scale questionnaire that was used. Three experts validated the instrument, two from technical education and one from guidance and counseling. The reliability of the instrument was established using a split-half method and the Pearson product-moment correlation coefficient was used to determine the correlation coefficient which yielded 0.9. The

researchers personally distributed and collected the instrument. 83 instruments were distributed but 79 were collected. The data collected for the two research questions were analyzed using mean and standard deviation; while the hypotheses were tested using the t-test statistical tool at a 0.05 level of significance. A mean of 3.50 which is the lower limit of "Agree" and above were regarded as an agreement with the item statement under consideration. Thus, any item statement with a mean ≥ 3.50 was regarded as Agree.

RESULT AND DISCUSSION

Research Question One

What are the ways in which self-management skills would be implemented to ameliorate emotional challenges of women in PSTO for skills upgrade in the 21st-century workforce?

Table 1: Self-management skills for emotional challenges of women

S/N	Items	Mean	SD	Decision
1.	Receiving proper medical attention during pregnancy to reduce interference of pregnancy-related moods to career activities.	3.73	0.85	Agree
2.	Being sensitive to engaging male superiors in dialogue when sexual assault is suspected to inhibit one's skill upgrade.	3.89	0.94	Agree
3.	Accepting that failure could ignite success to reduce anxiety and panicking personality during skills upgrade.	4.05	0.68	Agree
4.	Writing out a daily schedule to allot time for resting to enhance stress management for enhanced skills upgrade disposition.	3.84	0.80	Agree
5.	Often listening to motivational talks or read such books that will offer ideas on managing trauma caused by spouses.	4.20	0.60	Agree
6	Setting goals and determined to achieve the goal no matter the challenges.	3.60	0.76	Agree

Table i shows that the respondents agree that all the items listed are ways in which self-management skills can be implemented to ameliorate emotional challenges of women in PSTO for skills upgrade in the 21st-century workforce. This is because the mean values of the responses of the respondents to each of the items were above the cutoff point of 3.50. The SD range of 0.60 to 0.94 also implied that the respondents did not differ much in their responses.

Research question two

What are the ways in which self-management skills would be implemented to ameliorate social challenges of women in PSTO for skills Upgrade in the 21st-century workforce?

Table 2: Self-management Skills and Social Challenges of women

S/N	Items	MEAN	SD	Remark
1.	Seeing everyone as equal and freely interacting without a low self-esteem attitude	4.39	0.70	Agree
2.	Sharing house chores to all members of the family to reduce the high rate of unpaid jobs (homemaker and caregiver)	3.88	0.69	Agree
3.	Engaging male colleagues in friendly dialogues to change the gender stereotype mentality	4.48	0.57	Agree
4.	Engaging spouses in dialogue to reduce spouse-imposed restrictions to workplace involvement.	4.30	0.81	Agree
5.	Being open to interaction to increase networking and exposure	4.12	0.72	Agree
6.	Thinking before speaking as to offer truly valuable insights in meetings as this	4.25	0.64	Agree

	could make one relevant and a considerable figure for professional training opportunities.			
7.	Practicing patience and perseverance especially when assigned tasks requiring difficult skills for execution.	4.02	0.87	Agree

In table ii, there was agreement among the respondents that all the items raised were ways in which self-management skills can be implemented to ameliorate social challenges of women in PSTO for skills upgrade in the 21st-century workforce. This is based on the fact that the mean values of the responses of the respondents to each of the items were above the cutoff point of 3.50. The SD range of 0.57 to 0.87 also implied that the respondents did not differ much in their responses.

Test of Hypotheses

H₀₁: There is no statistically significant difference in mean responses of the respondents on the ways in which self-management skills can be implemented to ameliorate emotional challenges of women in PSTO for skills Upgrade in the 21st-century workforce based on years of experience.

Table 3: Summary oft-Test analysis on the ways in which self-management skills can be implemented to ameliorate emotional challenges based on years of experience

Emotional Challenges	N	Mean	SD	DF	T	Sig 2-tailed (P-value)	Decision
0-5yrs	42	3.87	0.82	81	-0.16	0.60	Accepted
Above 5yrs	41	3.82	0.75				

H₀₂: There is no statistically significant difference in the mean responses of the respondents on the ways in which self-management skills can be implemented to ameliorate social challenges of women in PSTO for skills upgrade in the 21st-century workforce based on age.

Table : Summary of t-Test analysis on the ways in which self-management skills can be implemented to ameliorate social challenges based on age

Social Challenges	N	Mean	SD	DF	T	Sig 2-tailed (P-value)	Decision
Below 30yrs	49	4.15	0.74	81	-0.83	0.37	Accepted
Above 30yrs	34	4.29	0.66				

In the analysis, “sig (2-tailed)” are the figures showing the probability/significance level in which the t-value was significant. From table iii and table iv above, the significance levels of the clusters are greater than the stated 0.05 which shows that the null hypotheses for the two clusters are accepted.

DISCUSSION

The findings of this study identified ways in which self-management skills would be implemented to ameliorate emotional challenges of women in PSTO for skills upgrade in the 21st-century workforce. Some of these ways of implementing self-management skills identified are receiving proper medical attention during pregnancy, being sensitive to engaging male superiors in dialogue when sexual assault is suspected, and accepting that failure could ignite success to reduce anxiety and panic. The findings of this study regarding ways of implementing self-management skills to solve emotional challenges of women agree with Glasdoor Team (2021). Glasdoor Team posited that to practice self-management skills in the workplace, one needs to be conscientious of one’s actions. Specifically, they posited that one needs to set goals, think before talking, plan each day’s work, and prepare for meetings. Also, Muluk et al (2021) opined that motivational strategy comprises fundamental conduct of setting goals and managing emotion and effort. This practice of these leads to emotional stability. This position supports the findings of this study in which listening to motivational talks, setting goals, and achieving them are ways in which self-

management skills can be implemented to ameliorate emotional challenges. The implementation strategies found in this study place the individual woman at the center of the action. This means that the self-management skills that solve emotional challenges found in this study must be acted upon by the individual woman. Several studies on self-management skills and emotions agree with this (Muluk et al, 2021; Glassdoor Team, 2021).

The findings of this study regarding ways of implementing self-management skills to solve emotional challenges imply that when women in a PSTO career practice them, it will make them emotionally stable and thus expedite their skills upgrade in the 21st-century workforce irrespective of years of experience. This means that years of experience are not significant to implementing self-management skills to solve emotional problems. This study also revealed ways in which self-management skills can be implemented to ameliorate social challenges of women in PSTO for skills upgrade in the 21st-century workforce. Based on the findings of this study, seeing everyone as equal and freely interacting without a low self-esteem attitude, practicing patience and perseverance, and thinking before speaking are some of the ways in which self-management skills can be implemented to ameliorate social challenges. This opinion is supported by Komalasari et al. (2017), who proposed that factors contributing to women not realizing their job potential include individual inadequacies, low self-esteem, reluctance, and fear of rejection. Women's self-belief, for instance, or women's views about what is expected of them, may act as a barrier to acquiring the digital skills necessary for women to advance in the workplace in the twenty-first century.

The social structure is changing and so men are to cooperate with their spouses, to give women flexibility in maintaining a work-life balance, (Whiting, 2008). This supports the finding that sharing house chores will ameliorate social challenges. It takes an understanding husband to share house chores with his wife; such reduces social issues.

Furthermore, it was discovered that while some self-management skills that solve social challenges could be implemented irrespective of one's years of experience, practicing patience and perseverance especially when assigned task requiring difficult skills for execution depends on one's years of experience. This agrees with the findings of Debra and Leslie (2014) that patience is developed. The authors opined that self-management is a path to developing patience. Thus, they opined that self-management in the path to patience commences when a person decides to develop this virtue and establishes a standard for behaving with greater patience. Then, reflection can promote action that is congruent with the goal of patience. This implies that one will increasingly exhibit patience and perseverance, if one decides, as one's years of experience increase.

CONCLUSION

Based on the findings of this study, it can be concluded that adequate implementation of self-management skills ameliorates the emotional and social challenges of women in PSTO. Some of the ways in which these self-management skills can be implemented are listening to motivational talks or read such books that will offer ideas on managing trauma caused by spouses, seeing everyone as equal as to freely interact without a low self-esteem attitude, engaging spouse in dialogue to reduce spouse-imposed restrictions to workplace involvement, and practicing patience and perseverance. This will aid their career progression and engender good participation and involvement in the workplace. It is therefore recommended that stakeholders should prioritize the improvement of girls' access to basic education; strategize ways to overcome logistic, economic, and cultural barriers to apprenticeships, secondary as well as vocational training for young women – especially in non-traditional occupations; take into account women's home and care responsibilities when scheduling workplace-based learning and entrepreneurship training; and strive to meet the training needs of women re-entering the labour market and of older women who have not had equal access to opportunities for lifelong learning.

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