ADULT EDUCATION AND SELF-EFFICACY: A TRANSFORMATIVE LEARNING PERSPECTIVE

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ABSTRACT

This study sought to find out the relationship between adult education and women’s self-efficacy. It was part of a wider study examining 3 elements of psychological empowerment: self-esteem, self-efficacy and awareness of women rights. It focused on one adult education center in Starehe Constituency, Nairobi County. Transformative learning was used as the theoretical framework within which the relationship between the acquisition of literacy skills and psychological transformation were discussed. Data was collected and analyzed from 43 participants; 10 from primary basic, 12 from secondary basic, 8 from primary advanced and 13 from secondary advanced. The relationship between adult education and self-efficacy, was assessed using linear regression, while the differences between the four groups were tested using independent samples Kruskal-Wallis and median tests. The relationship between participation and self-efficacy was found to be slight and insignificant and no notable differences were seen among the groups examined.

INTRODUCTION

For decades now, aggressive efforts by women, and on behalf of women have been put forward worldwide towards their empowerment. In Kenya, these efforts have assumed many faces, from conferences and conventions like the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), which was hailed as an international bill of women rights in 1979 and the third World Conference on women, to celebrate the UN decade for women, in 1985 in Nairobi which acted as a precursor for the Beijing conference in 1995, and was hailed as one of the most comprehensive forums in the articulation of women’s desired action for equality (Kanyi, 2016), to the newest effort in town in the shape of a women friendly constitution, which builds on affirmative action and is meant to enable them to jumpstart their desired projects. It was established through Legal Notice No. 21 of 2014 for management of public finance regulations. The last three years have therefore been years of opportunity for women by ensuring that 30% of all contracts by the government are allocated to women, and the disabled (Mahia, 2014). Women have also been offered opportunities for economic advancement through micro-financing efforts. The Uwezo Fund specifically targets women, youth and the disabled and is meant to enable them to jumpstart their desired projects. It was established through Legal Notice No. 21 of 2014 for management of public finance regulations. The last three years have therefore been years of opportunity for women empowerment through interest free loans under this fund and free training on financial management and capacity building from both the government and nongovernmental organizations (Kenya Gazette Supplement No. 193). All these efforts notwithstanding, women continue to suffer poverty and alienation in Kenya today, with only 3% of them owning land (The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW, 2011), Only 34.6%, according to the 2016 financial access household survey, compared to 50.4% of men use formal prudential services, (KNBS, 2016), and according to the 2010 demographic and health survey, only 42% of those who had a cash income...
decided what to do with their earnings; the rest made this decision jointly with a male partner or gave up that decision entirely to the male partner, (DHS 2010). Their representation in leadership positions in Kenya’s public service is barely 30% and barely 10% in legislative ones (Ponge, 2013). In studying this phenomenon, individual barriers have been cited as a cause. Proponents of this idea point to women’s lack of confidence as the cause for this alienation. Lack of assertiveness and confidence necessary to propel them into seeking positions of authority, are specifically pointed out as the reason women have not benefited from opportunities available to them (Grove and Montgomery, 1999, cited in Osumbah, 2011). Women are also said to avoid situations where they might receive negative feedback and that they tend to indulge more in self-doubt (Cubillo, 1999 cited in Osumbah, 2011). This necessary confidence was studied extensively by Bandura in his theory of self-efficacy. Self-efficacy, He defined as one's belief in one's ability to succeed in specific situations or accomplish a task (Bandura, 1986). It consists of self-efficacy expectancy which is a belief about one's ability to successfully perform a behavior and outcome expectations, which refers to a belief about the likelihood of the behavior leading to a specific outcome. In this study no distinction was made between self-efficacy expectations and outcome expectations. The study focused instead on generalized perceived self-efficacy which measured optimistic global beliefs in one’s ability to cope with a wide range of situations that one finds demanding (Schwarzer, & Jerusalem, 1995).

Personal efficacy is said to stem from four main sources; personal accomplishments; which are perhaps the most important source, where performance outcomes or past experiences, influence the ability of an individual to perform a given task. Previous success in the performance of a task, makes one more likely to feel competent and perform well at a similarly associated task. The second is vicarious experiences or watching others perform successfully. Watching someone in a similar position perform successfully or unsuccessfully can increase or decrease one’s self-efficacy respectively. The third is verbal persuasion that one is able to perform a certain task, which may be characterized by positive remarks or encouragement pertaining to one’s performance or ability to perform. The last of these, and the least influential is situational anxiety, based on which an individual may judge their vulnerability to stress and their ability to perform (Bandura, 1977). This study sought to find out whether adult education as offered, contributes in any way to the development of self-efficacy in women participants. This was done in view of the transformative learning theory. The theory of transformative learning conceptualizes the transformation process as having three dimensions; psychological, which involves a change in the understanding of self, convictional, which requires a revision of one’s belief systems, and behavioral, which encompasses changes in lifestyle. It emphasizes a change in perspective, and in order for that change to occur, a critical reflection of one’s assumptions and beliefs and a conscious making and implementation of plans that change the definition of one’s world must take place. The convictional aspect which requires a revision of one’s belief systems is examined in this study under self-efficacy beliefs (Bandura, 1986). The study examined whether participation in adult literacy led women to reexamine their beliefs about their ability to perform successfully and lead to greater self-efficacy.

In order for transformation to occur, three things are said to be essential in that process; a disorienting dilemma, which is anything that causes a disruption in a person’s life, critical reflection and dialogue or rational discourse. One of these; dialogue or rational discourse is also essential in the development of self-efficacy and the study also examined whether adult education provides the necessary environment for participants to experience these components and consequently a transformation of their beliefs about their abilities. In evaluating the relationship between participation in adult programs and self-esteem, other studies have recorded varying results. Some studies found an increase in the self-efficacy of women participants in adult literacy programs (Farah, 2002), while others reported women expressing doubts on their ability to compete effectively with men on the political arena (Yusuf, 2013). Deshpande & Ksoll (2015) noted a decrease in confidence among the women who had participated in a literacy and numeracy program as opposed to those who hadn’t, while Burchfield, Hua, Baral, & Roche (2002) found a decrease in both confidence and interest in political participation among women who had gone through a literacy program for an average of three years.

**MATERIALS AND METHODS**

The study used a case study design, focusing on one literacy center, in which both quantitative and qualitative data was collected. Quantitative data was collected through questionnaires while qualitative data was obtained through interviews. By focusing on one adult education center, the researcher hoped to discover the unique transformative experiences of the women learners in it, in terms of their challenges and the perceived benefits participation has had in their lives primarily as individuals and as a population of female adult learners. The participants were sampled using stratified random sampling procedure and the resulting data processed both qualitatively and quantitatively.

**Participants**

The case program studied is in Starehe, Nairobi County. The center offers basic literacy programs, the Kenya certificate of primary education and Kenya Certificate of Secondary Education classes, all of which are coordinated by the Department of adult Education (DAE), which offers accelerated programs to adult learners. Those in the basic program have 3 levels which cover literacy skills up to standard four work, then up to class six work for level two and class 8 work for level three. The secondary level takes about two years to complete. An estimated 170 learners frequent the center for the various adult education programs. More than half of these are women. A total of 46 women availed themselves for the study. Table 2.1 shows the distribution of these learners. The 46 women were selected using stratified random sampling from those participating in the program. Participants were picked from four levels of participation in the adult education program; those acquiring basic literacy skills (primary basic), those covering advanced primary school syllabus (primary advanced), those in the first level of the secondary program (secondary basic) and those in their final year of their secondary program (secondary advanced). 13 were taken from primary basic, 12 from secondary basic, 8 from primary advanced and 13 from secondary advanced. The participants from each level were picked randomly. When the
questionnaires were given, only 43 were fully completed and the 3 that were not were excluded from the analysis. Purposive sampling was used to get the women participants for the in-depth interviews. They included women from any of the levels who had attended the program regularly and had shown considerable progress in their academic activities. A total of 9 women were picked for the focus group discussion and individual interviews.

**Measures**

A questionnaire and a semi-structured interview guide were the chief instruments. The questionnaire was administered to individuals and consisted of two parts. The first part was a factual survey collecting demographic data. The second consisted of the Schwarzer & Jerusalem General self-efficacy scale. The Schwarzer & Jerusalem General self-efficacy scale consists of ten items and is scored out of 40. In this study Scores of 35 and above in the self-efficacy scale were classified as high self-efficacy, while 18-34 were classified as medium self-efficacy, any scores below 18 were classified as low self-efficacy. The focus discussion guide consisted of 5 items assessing participants' aim of joining the program, their experiences in it as adult learners, how they felt about themselves and their own assessment of their gains as a result of participating. In seeking to find out the participants experiences in the program, questions about a possible personal crisis and dialogue among the participants were asked.

**Table 2.1. Participants' level of participation in Adult Education**

<table>
<thead>
<tr>
<th>Level</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Basic</td>
<td>10</td>
<td>23.3</td>
</tr>
<tr>
<td>Secondary Basic</td>
<td>12</td>
<td>27.9</td>
</tr>
<tr>
<td>Primary Advanced</td>
<td>8</td>
<td>18.6</td>
</tr>
<tr>
<td>Secondary Advanced</td>
<td>13</td>
<td>30.2</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: The researcher 2017

**Table 2.2. Classification of participants according to age**

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young</td>
<td>19</td>
<td>44.2</td>
</tr>
<tr>
<td>Middle</td>
<td>21</td>
<td>48.8</td>
</tr>
<tr>
<td>Older</td>
<td>3</td>
<td>7.0</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: The researcher 2017

**Socio-demographic variables**

The demographic data of the respondents who took part in the survey included their age, Social economic status, religious affiliation and ethnicity. On age, the participants were divided into 3 groups; those in the 15-25 years’ age bracket were classified as young, 26-40 years as middle aged and 40 years and above as older. Most of the participants (48.8%) fell in the middle category. Table 2.2 shows their age classifications. Three indicators were initially chosen to determine the socioeconomic status of the participants; income, occupation and residential area. The latter was however dropped after it became evident from the data that a large number of respondents, who were mostly in domestic service indicated their employers’ residence as their own. Income and occupation were therefore used for classification, with those earning less than 10,000 and working as either casual laborers or running a small scale enterprise being classified in the low socioeconomic status category while those earning between 10,000-18,000 from either employment or their own enterprises were classified in the upper lower category, all the respondents fell into these two categories. These categories are shown in Figure 2.2. The religious affiliation of the respondents was noted under the broad categories of Christian Muslim and others. The Christian category was further divided into Catholic and Protestant with 53.5% of the respondents being Protestants, 39.5%, Catholics and 7% Muslims. There were no respondents who indicated any other religious affiliation. Figure 2.3 shows that distribution. More than half of the participants identified themselves as either Kikuyu or Luo. The ethnic groups that had less than 3 respondents were grouped together and classified as others. These ethnic distributions are displayed in Figure 2.1.

**Figure 2.1. Distribution of Respondents according to their Ethnic groups**

**Figure 2.2. Distribution of Respondents according to socioeconomic status**

**Figure 2.3. Respondents' Religious affiliations**

**Procedure**

Data for this study was collected in the course of five days. A total of four days, the first three days and the fifth day were used to administer questionnaires to the women in primary basic and a few from primary advanced who needed assisted-
filling of the questionnaires. The researcher read each item in the questionnaire, explained the options in each in the language the participants were most conversant with before guiding them to fill or filling in the options the participant chose. Interviews with individual participants and facilitators were conducted during this period. The fourth day was used to administer questionnaires to the participants in secondary basic and secondary advanced levels and to conduct the focus discussion group session.

Data analysis

The collected data was analyzed using SPSS V. 23 for PC and Excel XL. The quantitative data was analyzed using descriptive measures, for which the means and standard deviations were computed. The hypothesis was tested using various inferential statistical tests. The relationship between adult education and self-efficacy was assessed using linear regression. To find out if there were differences among the four groups (primary basic, primary advanced, secondary basic and secondary advanced) in their self-efficacy, independent samples Kruskal-Wallis and median tests were done. The independence of the categorical variables, i.e., age, socioeconomic status, ethnicity and religion, were assessed using Pearson’s chi-squared tests. The qualitative data was manually analyzed for emerging themes, and presented in a narrative form.

RESULTS

To test the relationship between adult education and self-efficacy, measures of central tendency were computed, the means of the participants at the different levels of participation compared, the effect of confounding variables on that relationship tested, and the hypothesis presented earlier on the association between participation and self-efficacy examined. No coherent pattern was observed in the self-efficacy scores with the primary basic and the secondary advanced groups scoring higher, with a mean of 34.70 and std. deviation of 4.596 for primary basic and a mean of 35.08 and std. deviation of 4.132 for secondary advanced. All the groups however fell into the high efficacy category. These results are shown in table 3.1. The effects of age, ethnicity, socioeconomic status and religion did not seem to have a remarkable moderating effect on the self-efficacy of the women participants in the adult education program. The P-values obtained for Age (0.84), ethnicity (0.116), Socioeconomic Status (0.473) and Religion (0.299), did not reach significance levels (0.05). The researcher used linear regression to trace what relationship being in the adult education program had on participants at the different levels of the program. The regression test results showed slight changes at different levels of participation in the adult education program; (Y=b0+b1x (self-efficacy =33.288+0.169 (education)) from the Primary basic: Self-efficacy =33.288+0.169 (1) =33.457, the primary advanced: self-efficacy =33.288+0.169 (2) =33.626 secondary basic: 33.288+0.169 (3) =33.795 and secondary advanced: 33.288+0.169 (4) = 33.964. The differences at the different levels was however not significant (0.814). These results are displayed in Table 3.2.

A discussion with the respondents about their confidence in being able to tackle their roles in the community yielded varied responses also. For some the experiences in class led to self-doubt about being able to accomplish what they thought they could. “every day I come I learn things, but when I come the next day I can’t remember what I learnt, it is very frustrating, I really don’t know whether I can do this”—a respondent from primary basic. For others participation provided a forum to prove what they claim to have known all along “I am a very capable person, I was a bright child, I just lacked the opportunity to go to school, I can do great things, and I know I will when I finish school”— a respondent from secondary basic. Differences in the distribution of participant’s scores were tested using the Independent Samples Kruskal-Wallis Test and the Independent Samples Median Test. The values of .590 and .363 from the two tests did not reach the significance level of .05. The researcher concluded there were significant differences in the self-efficacy scores of women participants in the adult education programs at the different levels of participation examined. The results are displayed in table 3.3.

DISCUSSION

The findings in view of other studies

The convivial aspect which requires a revision of one’s belief systems was examined in this study under self-efficacy beliefs (Bandura, 1986). In seeking to determine the extent to which participation in an adult education program is related to perceived personal competence or self-efficacy beliefs in women, the researcher noted mixed reports from the interviews and focus group discussions. Some of those interviewed were doubtful of whether they were now more capable that they were previously of participating in community activities. Some were noncommittal about their feelings saying “time would tell”. Regression coefficients also showed only slight, insignificant increments of self-efficacy scores at the different levels of participation. These results are in harmony with the findings of others who failed to trace greater self-efficacy outcomes as a result of participation. Yusuf (2013) reported women expressing doubts on their ability to compete effectively with men on the political arena, Deshpande& Ksoll (2015) noted a decrease in confidence among the women who had participated in a literacy and numeracy program as opposed to those who hadn’t, while Burchfield, Hua, Baral, &Rocha (2002) found a decrease in both confidence and interest in political participation among women who had gone through a literacy program for an average of three years.

Unlike these studies, this study was not longitudinal in nature and further research using a longitudinal design, in which the self-efficacy of participants is traced over a longer period of time is needed to provide greater insights into the long term psychological benefits of participating in a program of this nature. No major differences were noted among the three age groups in their responses though those in middle age did score slightly higher on self-efficacy scores. Other studies showed self-efficacy to be positively correlated with age, and in an educational setting, older students showed greater self-efficacy than the younger ones (Witt-Rose, 2003, Santos, 2014), Self-efficacy in younger students was however more malleable, showing greater improvement that that of older ones (Chyung (2007). The sample used in this study was pretty small and a more inclusive sample in terms of age categories is needed in future researches to establish these differences. Among the major ethnic groups studied, differences were noteworthy though insignificant. Those classified as others showed notably higher self-efficacy scores than the other ethnic groupings.
Other studies showed a relationship between ethnicity and self-efficacy with the greater the identity ties to one’s ethnic group, the higher the self-efficacy scores (Smith, Walker, Fields, Brookins, & Seay, 1999; Gushue, 2006). The distribution of ethnic groups in this study was however not adequate to make conclusion on ethnic effect, since those classified as other included several ethnic groups. An evaluation of these as separate groupings in further research would give clarity on the effect observed. A review of scores from the two socioeconomic groups did not show any coherent patterns. Other studies reviewed showed socioeconomic status seems to be a significant factor especially in mediating other factors that are associated with self-efficacy (Davis-Kean, Huesmann, Justin, Jager, Collins, Bates & Lansford, 2008). A higher socioeconomic status is associated with greater social support, which is a significant factor in building greater self-efficacy (Han, Chu, Song, & Li, 2015). A negative correlation was found between self-efficacy and both unemployment and being on public assistance (Boardman & Roberts, 2000).

The two socioeconomic groupings in this study were not distinct enough and further research in this area using more comprehensive groupings is needed to explore the socioeconomic effect on self-efficacy. A few slight differences were observed between the distribution of self-efficacy scores between catholics and protestants and muslims, with more protestants falling in the medium self-efficacy category and no muslims in the high self-efficacy category. This study did not assess the differences between conservative and liberal positions of religious beliefs, which factor was shown to be of significant influence in other studies. Farshad, Farrahbaksh & Salmabadi (2015) discovered a strong positive association between devout religious practices and self-efficacy in a conservative setup while Syeda & Ali (2015) only found a weak positive correlation between the two in a less conservative setting.

McEntee (2013) found none in a more liberal setting. Further exploration of this area in light of those perspectives is therefore recommended.

### The findings in view of Transformative learning theory

In order for transformation to occur, a disorienting dilemma, which is anything that causes a disruption in a person’s life, critical reflection and dialogue or rational discourse must take place. The researcher sought to find out during the interview sessions whether the participants went through these three key elements for transformation. Under the question “What have been your experiences since you joined?” the researcher specifically enquired about a possible personal crisis, critical reflection of the crisis situation and dialogue with fellow adult learners and instructors. Personal efficacy is said to stem from four main sources; personal accomplishments, which are perhaps the most important source, vicarious experiences or watching others perform successfully, verbal persuasion that one is able to perform a certain task and states of physiological arousal for example anxiety, based on which an individual may judge their vulnerability to stress and their ability to perform. Successful negotiation of life tasks, an interaction with positive models and verbal affirmations form the foundation to an efficacious approach to future tasks. Dialogue is therefore necessary for the third component of self-efficacy development; verbal persuasion, to take place, and for eventual transformation. This component of the adult learners’ experiences in the program was however missing. The participants reported being too busy, or unable to engage others in conversation since everyone seemed to mind their own business. Time constraints also seemed to be a hindrance with participants always rushing through their classwork and out of class to go and take care of their own affairs at home or at work. There were expressions of a desire to have meaningful conversations with other participants though none, especially

### Table 3.1. Self-efficacy scores according to level of participation

<table>
<thead>
<tr>
<th>Education</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Basic</td>
<td>34.70</td>
<td>10</td>
<td>4.596</td>
</tr>
<tr>
<td>Primary Advanced</td>
<td>32.14</td>
<td>7</td>
<td>4.059</td>
</tr>
<tr>
<td>Secondary Basic</td>
<td>32.42</td>
<td>12</td>
<td>7.128</td>
</tr>
<tr>
<td>Secondary Advanced</td>
<td>35.08</td>
<td>13</td>
<td>4.132</td>
</tr>
<tr>
<td>Total</td>
<td>33.74</td>
<td>42</td>
<td>5.236</td>
</tr>
</tbody>
</table>

Source: The researcher 2017

### Table 3.2. Regression coefficients on Education and self-efficacy

<table>
<thead>
<tr>
<th>Column1</th>
<th>Column2</th>
<th>Column3</th>
<th>Column4</th>
<th>Column5</th>
<th>Column6</th>
<th>Column7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Unstandardized Coefficients B</td>
<td>Std. Error</td>
<td>Standardized Coefficients Beta</td>
<td>t</td>
<td>Sig.</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>33.288</td>
<td>2.068</td>
<td>.037</td>
<td>16.100</td>
<td>.000</td>
</tr>
<tr>
<td>Education</td>
<td>.169</td>
<td>.712</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: The researcher 2017

### Table 3.3. Hypothesis tests on Adult education and Self-efficacy

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>Test</th>
<th>Sig. Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 The distribution of self-efficacy scores/40 is the same across all levels of education</td>
<td>Independent Samples Median Test</td>
<td>.363</td>
</tr>
<tr>
<td>2 The medians of self-efficacy scores/40 are the same across all categories of education</td>
<td>Kruskal-Wallis Test</td>
<td>.590</td>
</tr>
</tbody>
</table>

Source: The researcher 2017
the younger participants were willing to initiate those conversations. The participants also reported experiencing states of physiological arousal that were daunting. Feelings of anxiety especially when tasked to do something in class were overwhelming for most. There were no reports of reassurance over this anxiety or of verbal affirmations over executed tasks, both of which are necessary for development of self-efficacy.

Conclusion

In view of the results observed, this study came to the conclusion that adult education, as offered in the case program reviewed has no significant relationship with women’s self-efficacy. The experiences of adult women in the case adult education program suggests that adult education programs as carried out do not provide a forum for the women to challenge their own understanding of themselves and revise their beliefs about their capabilities. The critical reflection and informed interaction among the adult learners and instructors that may lead to a shift of consciousness that alters understanding of self seems to be missing in the program.

Acknowledgement

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REFERENCES


Deshpande, A., Maertens, A., & Ksoll, C.2015. Adult education, knowledge and confidence. Political Weekly 50 (50), 73-76.
McEntee, K. 2013. The Effects of Religiosity on Stress, Self-Efficacy and Autonomy among CollegeStudents. (Master’s Thesis) retrieved from http://hdl.handle.net/10788/1625