Assessment of self-efficacy beliefs and academic performance for sources and implications in high and low achieving secondary schools in Mbarara district, Uganda

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ABSTRACT

The major purpose of the study was to assess the relationship between self-efficacy beliefs and academic performance between high and low achieving secondary schools in Mbarara District. The study also explored the sources related to the academic gap that informed implications towards narrowing the academic gap between high and low achieving secondary schools. The study was mainly quantitative and used the sequential explanatory paradigm. Questionnaires were used to gather data from three hundred participants. Interview responses were analyzed to supplement the information collected through the questionnaire. Data were analyzed using the computer package known as Statistical Package for the Social Sciences version 20. The findings of the study showed that there are very weak negative correlations between self-efficacy beliefs and academic performance in low achieving secondary schools r (148) = -.163, p=.047) while high achieving have weak corrections r (148)= -0.203, p=.013) which is significant. The study, therefore, recommends that students could be encouraged to practice adherence to moral self-sanctions while teachers evaluate and consult on performance so that students gain confidence and assurance to achieve academic success. Furthermore, the findings of the study have sources for differences in principal passes that effect inequitable admission to public universities. Also, the findings informed implications towards narrowing the academic performance gap between high and low achieving secondary schools.

Keywords— Assessment, Self-Efficacy Beliefs, Academic Performance, Sources, Implications, Achieving

1. INTRODUCTION

The type of school a child attends influences academic achievement (Newhouse & Beegle, 2005, Kwesiga (2002), Portes, Macleod (1996) & Sentamu (2003). Better understanding of the effect of type of school on academic performance is important because public policy often than not influences characteristics of public schools, as well as the cost of private schools through lead striking facts. Academic performance according to the Cambridge University Reporter (2003) is frequently defined in terms of examination performance. In this study AP is generated from principles, and subsidiaries obtained at examinations of senior six at Uganda National Examinations Board. The board does not only give feedback on students' performance in an examination but also shows gaps among students and amongst schools. Irrespective of school type, feedback is likely to build tension in some students who might have difficulty with concentration on academic activities (Hinshaw, 1992; Dunne, et al, 2007; Malinauskiene, Vosylis & Zukauskene 2011).

Schools are social institutions in which groups of students are brought together to share educational experiences that breed positive or negative influence (Sentamu, 2003). Much as it is normal for students in an educational institution to perform well and others poorly, even after receiving the same services, those in high achieving schools are valiant to success while the ones in low achieving schools feel apprehensive about their failure or that of peers. What follows, then, self-estimates of ability after an experience of failure, threaten and create uncertainty about student's capability to perform well on subsequent basis (Thompson, Davidson & Barber, 1995).The quality of students' passes obtained from UNEB examinations upon which tertiary or universities base their admission (Nshemerirwe, 2005) characterize the school performance as high or low achieving. In this case, the school's level of performance is determined by how students are ready to take responsibility for their own learning (Zimmerman, 2000). Students have got to be strategic, self reflective and enduring in ability so as to meet constraints of their learning and challenges of life (Haddoune, 2009). In this study, the researchers set out to assess the relationship between self-efficacy beliefs and academic performance between high and low achieving secondary schools in Mbarara District-Uganda. The study also explored the sources related to the academic gap that informed implications towards narrowing the gap between high and low achieving secondary schools.

2. METHODOLOGY

Borrowing from Bandura (1997, 2006) the performance subscale was generated from the participants' passes at the 2011 senior six national examinations. Each individual participant's passes were computed to constitute the school's performance. Thus the passes are presented as Principal A=6; Principal B=5; Principal C=4; Principal D= 3; Principal E= 2 and Total Subsidiary Percentage (TO) =1. The quality of principal passes ranged from six (6) the high to one (1) the weak. What emerges is that the total passes for each school category constituted total principal passes and total subsidiary passes. The total passes were the basis for obtaining percentage of the represented passes from A to TO. The obtained percentage in comparison to 300 the total number of participants on self-efficacy beliefs guided representativeness of students assigned to Principal A through to total subsidiary percentage for a school category. The two school categories differed in participant population at 2011 senior six national examination results. Each school category's performance provided for relating with self-efficacy beliefs. School performance is preferred to student performance because it is the school to play an active role in the development and implementation of programs designed to nurture students' self-efficacy beliefs.

A Pearson Correlation test was used to assess how well the relationship between self-efficacy beliefs and academic performance in high and low achieving secondary schools measured on a Likert scale (a 5- point scale from "strongly agree" through to "strongly disagree").

3. PRESENTATION OF RESULTS

We performed a Pearson correlation to test whether a relationship existed between self-efficacy beliefs and academic performance in high and low achieving secondary schools in Mbarara district. Choice of the correlation test originated from high and low achieving secondary schools not having a normally distributed sample. Based on the sixth year of secondary school national examination feedback, participants rated on a five-point Likert scale their self-efficacy beliefs
The results are presented in Table 1.

Table 1: Self-Efficacy Beliefs and Academic Performance in High and Low Achieving Secondary Schools

			Low Achieving	High Achieving
Pearson (r)	**Self-efficacy beliefs**	Correlation Coefficient	-.163*	-.203*
		Sig. (2-tailed)	.047	.013
		N	150	150

In Table 1 above results reveal that there are very weak negative correlations between self-efficacy beliefs and academic performance in low achieving secondary schools r (148)= -.163, p=.047) while high achieving have weak corrections r (148)= -0.203, p=.013) which is significant. By these results there is a significant relationship between self-efficacy beliefs and academic performance in high and low achieving secondary schools in Mbarara district. The weak correlations between self-efficacy beliefs and academic performance imply that on ground much effort is put on academics with minimal emphasis on psychological resources such as self-efficacy beliefs which energize students to focus on academic activities which in turn lead to satisfactory academic performance.

A self-efficacy beliefs scale enabled grouping participants for high, moderate or low levels of self-efficacy beliefs. The study targeted participants that had high or low levels of self-efficacy beliefs for interviews. Responses from interviews of 78 and 51 participants who had high and low levels of self-efficacy beliefs respectively guided assessment on sources associated with high and low levels. Responses from the two interviewed groups were manually analyzed and are presented below in Table 2.

Table 2: Exemplary Responses on Sources of High and Low Efficacy Beliefs

Sources of High Efficacy Beliefs	Sources of Low Efficacy Beliefs
Effective and responsible teachers	The school's history of poor performance in past years
Hardworking, committed and serious revision	I lead my friends to make noise when the lesson is in progress
Regular evaluations through tests, assignments and activities	I prefer looking after animals to concentrating on studies
Enhanced confidence in academic activities through organized spiritual retreats and conferences on term basis	My friends do not like reading books so do I
Focused discussions with peers and sharing knowledge about our passing	Irregular attendance
Consulting teachers	I write poorly
Adherence to basic principles (rules and regulations) guide application of capabilities	I hate my combination
Being exposed to motivational talks and testimonies for accurate thinking about examination pressure (modeling for success)	Thinking that the questions will be strange makes me believe that I will fail in final examinations
I have the ability/ believe in my abilities	It is because I have little luck towards success
Responsive to career guidance	Teacher tells me that I am a failure
Adequately prepare students for national examinations	I have a forgetful mind

Aiming at achieving set goals	I take discussion groups to be a waste of time
Practice on question interpretation and answering	Underrating peers' performance
Proper time management	Dodging of classes /indiscipline
Design and execute a schedule for activities (someone without it is like a vessel without a compass)	Immobilized through past failures in academic activities (term and yearly points)

(Source: Field Data 2012)

Results in Table 2, not only indicate the sources but also give a deeper understanding on the obstacles and inequities associated with high and low levels of self-efficacy beliefs. Notably, the results show that participants derive high efficacy beliefs from teachers' persuasive messages, responsiveness, proper time management, adequate preparations, hard work and achievable goals. Contrarily, low efficacy beliefs are derived from the history of the school, inattentiveness, lack of interest in studies, peer influence, poor handwriting, inaccurate thinking, fate, and past failure.

4. DISCUSSION OF RESULTS

The study findings in Table 1 indicated very weak negative correlations between self-efficacy beliefs and academic performance. The weak correlations could have inferred from participants' dominant weak principles and subsidiary passes obtained at 2011 UACE level. The study results on weak principles and subsidiary passes are in agreement with Zimmerman, Bonner and Kovach (1996) that low tendencies subvert academic pursuits towards poor performance. That is participants with a low sense of self-efficacy for learning are less efficacious which translates into poor academic performance. Altogether, low tendencies and being less efficacious induce in participants a feeling of helplessness at academic tasks and surmounts to poor performance (Betz, 2004). Proponents of self efficacy beliefs including Bandura (1986, 1997b); Pajares (1996) and Zimmerman (2000) espoused that those participants who perceive themselves as less efficacious are likely to cease their efforts prematurely and fail on tasks. We associated such a kind of failure on tasks to what takes place in low achieving secondary schools. Such understanding of how self-efficacy beliefs relate to academic performance raises a fundamental question "What could be done to boost students' self-efficacy beliefs in order to narrow the academic performance gap between high and low achieving secondary schools?"

In an attempt to provide answers to the above question, understanding variations in students and schools' academic performance is borne of self-efficacy which permeates assessment of utility and options (Rosen, Glennie, Dalton, Lennon and Bozick, 2010). If the assessments report that students do not know with any degree of accuracy what it is they are expected to do (Zimmerman, 2000) the concerned students should observe and imitate the behavior of someone who is already competent at the task (Bandura, 1986). Imitating those who are competent at a task would eventually enable participants across high and low achieving secondary schools forestall ill defined tasks and poor judgment. Irrespective of high or low achieving secondary schools, students sometimes hold erroneous beliefs about social environments (Snyder, 1992). Such students should be exposed to literature that boosts self-efficacy beliefs which in turn influence other concepts to affect academic performance. With time, participants exchange good practices (Strecher, DeVellis, Becker & Rosenstock, 1986) for improved academic performance. Back to students that hold erroneous beliefs, Gollwitzer (1999) argued that one should translate vague, general intentions into specific, concrete and binding goals. That is performing clear intentions enhances ones sense of personal commitment to the goal, and it also heightens ones sense of obligation to realize the goal. A part from performing clear intentions towards goal realization, Oettingen and Gollwitzer (2001) espoused that linking behavior to specific situational cue is likely to initiate the goal behavior when the critical situation is encountered. This means that one has to make a specific plan to counteract a bad intention. On this point of a bad intention, Aarts and Dijksterhuis, (2000) emphasized creation of new habits or routines in one's life. Therefore, we add that students have to mentally link their intended behaviors to specific situational cues. In the same line of thought, a participant from the Education Standards Agency pointed out that schools could orient students through tasks that demand application of abilities and competences in order to realize success (Pers. Com., 2012). Students who have had orientations on applications and competences are likely to utilize trailblazers on successful persons in topical subject areas. In turn students could identify with persons who appreciate and recognize that they can triumph over obstacles and inequities in academics. In the same trend of thought that one can triumph over obstacles, all of the UNEB research officials posited that students should share experiences on benefits of believing in own capabilities, potentials and abilities. We envisage that in the long ran the shared experiences would translate into peer or personal evaluations on sustaining or setting up interventions towards excellent academic performance. We also agree with Kuh, 2007; Meyer, 2010; Ruggs and Hebl, 2012 on the point that students investigate matter than simply receive instruction and readily embrace many tasks in which beliefs are boosted for excellent academic performance.

Still on what could be done to close the academic performance gap between high and low achieving secondary schools, three fifth of the Director of Studies and three quarters of the alumni emphasized audits of personal and school success basing on beliefs of I can do academic tasks. Meanwhile, a good number of the head teachers posited that students identify with role models through accessing the school's database. Such a kind of study findings calls for formation of specific implementation intentions (Verplanken & Faes, 1999). What emerges from the aforementioned views is that boosting students' self-efficacy beliefs would lead to reaching solutions and finding answers through personal exercise of critical thinking towards excellent academic performance.

5. IMPLICATIONS TOWARDS NARROWING THE ACADEMIC PERFORMANCE GAP

The study results revealed that majority of the participants were below the threshold of high levels of self-efficacy beliefs compared to the few deemed highly efficacious. These results relayed on Goethals and Darley (1977); Suls and Miller (1977) that efficacy beliefs diminish by alleged low normative standing but also heighten by alleged performance superiority in relation to group norms. Tendencies are that the small number of high efficacious participants could lose their credibility to the moderate and low efficacious ones. Loss of credibility is likely to render high efficacious students obtain poor academic performance.

When audits of participant beliefs are skewed to low levels of self-efficacy beliefs with a likelihood of ceasing their efforts prematurely, respondents should associate with competitors who will raise beliefs. But respondents, whose audits reveal tendencies of doing academic tasks, should be encouraged to set up sustaining strategies towards satisfactory academic performance. Audits withstanding, subjective ratings of self-efficacy beliefs inform the effort to be expended on academic demands and translate into excellent performance. Besides, self –efficacious participants do not only perform audits but also believe they can execute academic demanding behaviors that have important consequences associated with examinations. Therefore, self-efficacious participants marshal better information about academic and examinations to provide more compelling justifications to perform in examinations according to acceptable standards. Since academic success is the ultimate goal, self-efficacy trainings are pertinent to elevate participants from moderate levels; harboring self-doubts and dwelling on personal deficiencies when difficulties in form of examinations arise (Chambliss & Murray, 1979). Hence self-affirming beliefs derived from feedback on working hard or need to work hard from time to time helps students seek proficient peers and models who possess the competences needed to raise their performance (Bandura, 1994; Hattie & Timperley, 2007). Additionally, teachers need to investigate matter than simply give instruction and readily orient students through many tasks in which beliefs are boosted for academic success.

About social practices, high and low achieving secondary schools have to adapt to evaluative social practices which compel students to compare their rate of progress against that achieved by others. More so, exposing students to actual or symbolic models who exhibit useful competences raises students' beliefs in their own capabilities (Schunk, 1987). Irrespective of high or low achieving secondary schools, database on successful alumni should be constructed and accessed to students because if the alumni voice faith in their capabilities for self-improvement as they struggle with problems, they can directly model efficacious thinking in students (Bandura, 1997). Schools that are not electronically connected, could disseminate information on successful alumni on assembles and through posters so that students who are unsure regard the alumni as more similar to themselves. The augmenting factor is that through perseverant effort students can reduce the negative import of failure or setbacks by demonstrating that perseverance eventually brings success (Schwarzer & Fuchs, 1995; Pajares, 1996). Additionally, schools could engage in visits to attainments of many individuals so that students have a reasonable basis for increasing their own sense of efficacy.

6. CONCLUSIONS AND RECOMMENDATIONS
The moderate negative association between self-efficacy beliefs and academic performance could bog down students, deter their level of concentration, or inhibit selection and pursuit of viable goals leading to failure in academics. Derived from the self-efficacy beliefs sub-scale, slightly above half of the students had moderate levels of self-efficacy beliefs originating from students' past failures in related academic tasks, irregular attendance and underrating own or peer performance. Moderate levels of self-efficacy beliefs represent constructs of negative affectivity on students who in turn do not steadily open to new ideas.
The weak negative relationship between self-efficacy beliefs and academic performance could bog down students, deter their level of concentration, or inhibit selection and pursuit of viable goals leading to failure in academics. This calls on schools, parents and teachers to give students support which could lift the moderate levels of efficacy beliefs to high levels of self-efficacy beliefs so that students invest in the support and continue to search for solutions to academic problems.

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