

THE INFLUENCE OF MASTERY ORIENTATION AMONG AFRICAN UNDERGRADUATE STUDENTS IN THE USA ON ACHIEVEMENT OF POSSIBLE SELVES: AN ANALYSIS OF DEMOGRAPHIC FACTORS

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ABSTRACT: *Students' focus being in control of tasks within their environment enables the desire to acquiring new knowledge an aspect that is key to academic performance. Mastery oriented students are usually in control and tend to be more satisfied with their work than those who are influenced by other external performance indicators like marks or scores. They will therefore get involved in mainly those activities that will add to their knowledge. This paper, taking this aspect into consideration explains the influence of mastery orientation among African undergraduate students living in the United States on their achievement of possible selves. The study was carried out in institutions of higher learning in the United States. It involved undergraduate students registered in any of the semesters in the Spring semester, 2007 and the year 2006. The study consisted of a conveniently sampled size of 204 students drawn from undergraduate programs in four schools in the Southeast United States. Data collection was done by means of a questionnaire which was later subjected to analysis through descriptive means and multiple regression. The demographic variables identified in the study included age, length of stay, subject majors, school classification, financial support by family and schools. It was concluded that these aspects positively influenced achievement of possible selves as the higher the variable the significant the influence it had on the students.*

KEYWORDS: Possible selves, demographics, African students, United States, Acculturation, Self Identity, Mastery orientation

INTRODUCTION

Possible selves are the selves one believes might become in the near or the more distal future. They can be influenced by various factors ranging from Physical, intellectual, emotional and social in individual environments. Gender is one of the significant factors that influence self identity and possible selves apparently discussed in this paper. These factors taken together are as well important determinants of academic success. The practical significance of results from this study includes the ability to focus on the most influential variables in refining predictive models for African immigrants in the United States.

The past decade has seen a proliferation of research exploring possible selves. The possible selves perspective is based on the seminal work of Markus and Nurius (1986), who posit that self-conceptions are personal theories about our own personality, and that there are three interrelated sets of self perception: the perceived self, the ideal self, and a set of social identities (Marcus & Cross, 1991). Each of these perceived selves is grounded and given meaning by what one knows about one's cognitive, motivational, and attentional processes (James, 1890;1950, cited in Oyserman, 1999).

Lewin (1935) and Frank (1939) may have been responsible for re-introducing the idea of the self in temporal terms to modern psychology (Oyserman & Fryberg, 2005). They traced this idea to William James (1890/ 1950). James argued that individuals narrow down various possibilities for the selves they might become only as needed, having a natural tendency to incorporate as much as possible into the self. Lewin and Frank's ideas formed the historical basis for possible selves, which Carver, Reynold and Scheier (1994) define as, "the component selves that one believes that one can, or will, realistically become" (p.134). Accordingly, hoped for selves are aspired selves, component selves that one feels the possibility of becoming while feared selves are possible selves that one does not want to, but fears the possibility of becoming. The theoretical perspective of possible selves assumes that everyone has possible selves (Markus & Nurius, 1986). It also assumes that although possible selves are dynamic (Kerpelman & Pitman, 2001), they are representations into adulthood. For example, Ryff (1991) found that older adults did not differ in their past and future assessments of autonomy.

Possible selves originate from different sources. They can originate from one's own experience and past behavior or accomplishments, what important others believe one should become and one's own values (Oyserman & Fryberg, 2005). Oyserman and her colleague further explained that when possible selves are based on past successes and failures, they are social because these successes and failures are frequently successes and failures relative to attainments of comparable others. They further argued that when possible selves are based on one's values, ideals and aspirations, they are social, because these values, ideals and aspirations are importantly shaped by consensual stereotypes about what people like me (a boy, a rural kid, an American Indian) can become.

LITERATURE UNDERPINNING

Gender Differences

Puberty carries with it gendered changes, both in what one looks like and in social demands, expectations and responses (Elliott & Feldman, 1990). Gender differences have also been considered in respect to time and goal orientation. Gjesme (1979) found that girls were higher than boys on total Future Time Orientation (FTO), anticipation and occupation. Furthermore, for girls, the highest FTO scores were associated with high scores on motive for success and with low scores on motive to avoid failure. This may contrast McInerney's (2004) findings that males have more hopes and fears into the future in the career domain whereas females have more socially oriented hopes and fears.

Men are more likely than women to acquire the psychological tendency of self enhancement (Markus & Kitayama, 1991). This is probably due to the nature of self-relevant situations. These situations may be systematically different for men than for women such that male-made situations are more conducive to self-enhancement than female-made situations. Nurmi (1991), however, found women more future time oriented than men reporting greater detailed future plans about relationships and families.

Similarly, Rothspan and Read (1996) found greater gender differences in future time orientation. They postulated that future time orientation could be useful in the initiation of safer sex behaviors. Accordingly, people who are high in future orientation were more likely to inquire about a partner's sexual history, delay or abstain from sexual intercourse and have a

lower number of both lifetime and recent (i.e. during the past six months) sexual partners. Furthermore, they found that as future orientation increased, males demonstrated a significant decrease in the number of reported recent and lifetime partners, whereas women showed virtually no change.

In interviews to assess Latino boys and girls on content, priority, optimism, internality, and specificity of students' hoped-for selves, Yowell (2000) found that students show high educational and occupational aspirations and high rates of optimism and internal control across five domains of hoped-for selves. The occupational domain was found to be a greater priority for boys than for girls. Girls reported more constrained views of their futures than the boys.

Practical Contributions of Possible Selves

Possible selves have been researched across a wide variety of contexts, and results indicate its utility ranging from health behavior to the work place. Aloyse-Young, Hennigan and Leong (2001) used possible selves to assess how possible selves were related to smoking and drinking. They studied 1,606 students in sixth through ninth grades and asked the students to list their possible selves and report their cigarette smoking and alcohol use. Their analyses showed that cigarette and alcohol use were negatively related to the number of positive possible selves and the balance between expected and feared selves. They also found a stronger positive relationship between the number of positive expected selves and the smoking and drinking of eighth and ninth graders than that of sixth and seventh graders. Quinlan, Jaccard and Blanton (2006) argued that conceptualizations of possible selves could predict both binge drinkers and non-binge drinkers. Others have used the concept to increase adherence to an exercise program (Ouellette, Hessling, Gibbons, Reis-Bergan, Gerrard, 2004; Whaley and Shrider, 2005). Frazier, Cottrell & Hooker (2003) even went further. They used the construct as a therapeutic mechanism for adaptation to Parkinson's and Alzheimer's diseases.

On the other hand, researchers have used the possible selves construct as a framework to predict or decrease negative behavior. Among these were Markus and Kitayama (1991) who used it to help crisis victims to cope with their troubled past. Abrams and Aguilar (2005) also used the construct to help youth offenders to identify negative trends in their lives that led to criminal behavior.

Others have used it in institutions and the workplace. For example, Cameron (1999) used group memberships to bolster students' possible selves for new college students. Martz (2001) proposed the use of possible selves to help career and employment counselors to extend empathy to their clients while Broderick, Donaghue and Patterson (2003) used it to assist people to prepare for the transition to retirement.

The Socio-cultural Perspective and Self Conceptions

According to Erikson (1968), during the middle school years, group identities begin to form. As adolescents form their identities, they are guided not only by their parents and teachers but also their peers. The perception of how an individual is perceived by others as is critical in the formation of this identity. Most psychologists agree that identity is constructed through socio-cultural interactions (Holland & Quinn, 1987; James, 1890/1950; Markus & Nurius, 1986; Vygotsky, 1986). Vygotsky (1986) further argued that a child's development could only be understood by examining the external social world in which the individual had developed.

Views about self identity and culture have been diverse among researchers. Triandis (1989), for instance, viewed each person's self as having three aspects: (a) the private self-cognitions that involve traits, states, or behaviors of the person, (b) the public self-cognitions concerning the generalized other's view of the self; and (c) the collective self-cognitions concerning view of the self that is found in a collective. On the other hand, there is interdependence. This is self-concept which takes the premise that the person is connected to others, so that the self is defined, in part by important roles, group memberships, or relationships. For individuals with this self concept, representations of important relationships and roles share the self-space with abstract traits, abilities, and preferences. To maintain and enhance this interdependent view of the self, individuals will tend to think and behave in ways that emphasize their connectedness to others and that strengthen existing relationships (Cross, Bacon, & Morris, 2000).

However, Singelis (1994), defined interdependence (collectivism) as a flexible, variable self that emphasized: (a) external, public features such as statuses, roles, and relationships, (b) belonging and fitting in, (c) occupying one's proper place and engaging in appropriate action, and (d) being indirect in communication. In contrast to the independent self, the interdependent self depends on others, his or her relations with others, and contextual factors to regulate behavior.

Collectivism (interdependence) was viewed by Hui and Triandis (1986) as a syndrome of feelings, emotions, beliefs, ideology and actions related to interpersonal concern. They believed that it could be shown in seven categories: (1) consideration of implications (costs and benefits) of one's own decisions and/or actions for other people (2) sharing of material resources (3) sharing of nonmaterial resources (such as time and effort) (4) susceptibility to social influence (6) self-presentation and face-work (7) sharing of outcomes and (8) feeling of involvement in other's lives.

On the other hand there is individualism (independence). This is belief in: (1) self reliance with competition (2) low concern for In-groups, and (3) distance from In-groups (Triandis, Bohtempo, Villareal, Asai & Lucca, 1998). Singelis (1994) defines an independent self construal as a bounded, unitary, stable self that is separate from social context. This emphasizes: (1) internal abilities, thoughts, and feelings (2) being unique and expressing the self, (3) realizing internal attributes and promoting one's own goals and (4) being direct in communication.

The constructionist theory goes even further. Proposed by Kitayama *et. al.* (1997), it states that cultural views (such as independence) are transformed into psychological tendencies. These include self enhancement and self criticism. Markus and Kitayama (1991) showed that the tendency to maintain and bolster one's self esteem may develop in individuals socialized in a cultural group in which an independent view of self is elaborated and sanctioned, but this same tendency may often reverse itself in those socialized in a cultural group in which an interdependent view is elaborated and sanctioned.

Self identity is developed differently across cultures and races. Markus and Kitayama (1991) posited that North Americans and Europeans have an independent self construal. This, they explained, is the premise that the person is essentially separate from others. The important components include one's unique traits, abilities, preferences, interests, goals, and experiences. These are differentiated from social contexts, interpersonal relationships and group memberships.

Asian cultures have been found not to highlight the self of each individual, according to Kitayama, Markus, Matsumoto and Norasakkunkit (1997). These cultures, they stated, highlight social meanings and practices that promote the connectedness among individuals within a significant relationship (e.g. family, workplace, and classroom). In these cultures, the self is made meaningful primarily in reference to those social relations in which the self is participating. Beattie (1980) also showed that Africans are extremely sensitive to the interdependencies among people and view the world and others in it as extensions of one another. The self is viewed not as closed but as open.

Age differences have had mixed results among theorists. Many researchers have found that the extension of future time perspective does not change much with age. Lennings, Burns and Cooney (1998) had similar findings. They all found that differences in temporal profiles as persons move from adolescence to adulthood do not occur. However, Nuttin and Lens (1985) found that the extension of FTP considerably diminishes with age. Age differences in FTP, according to Fingerman and Perlmutter (2001) were more a function of stage of life than the actual amount of time a person had lived.

An obvious limitation of this study is the lumping of Africans thus assuming a homogeneous people. It is understood that there are variances among Africans from different countries and regions. For the study to be possible, however, some generalizations were necessary. While many factors contribute to one's future outlook, gender and the racial-ethnic identity socialization play a central role (Mullis, Brailsford & Mullis, 2003). Studying the racial-ethnic identities and gender differences will, therefore, help us better understand differences in educational achievement and opportunity and create a further understanding of the population under study.

MATERIALS AND METHODS

Data was collected in the Spring Semester of 2007. Criteria for participant selection called for: (a) undergraduate students registered in any of the semesters in the Spring semester, 2007 and the year 2006 (b) African students are those whose both parents were born in Africa. (c) Willingness to participate in the study. Questionnaires were used for data collection and participants asked to complete the instruments during a single 30-minute session at a mutually agreed upon location and time.

The study used descriptive and multiple regression methods in data analysis and presented inform of Percentages, frequencies, and inferential statistics were used to answer the research question. Data from the PALS was in three sub-categories; mastery, performance-approach and performance avoidance goals. All items were scored on a 5-point likert scale with 1= not at all true and 5= very true. Responses were grouped according to the sub-categories. There were 5 Mastery (MGO) items, 5 performance approach (APGO) and 4 performance avoidance (AVGO) items. Scores from each sub-category were counted and their means calculated accordingly. Possible selves balance was regressed on all the demographic variables other than gender and racial ethnic identity. This was to identify the significant demographic variables. Only Length of Stay and attending a Large University were found to be significant.

RESULTS AND DISCUSSION

Demographic Data

African undergraduates ($N = 204$) from four post-secondary schools located in the Southeast United States participated in this study. Twelve questionnaires had missing or incomprehensible responses and were removed from the dataset, resulting in 192 useful questionnaires with complete response sets.

The majority of the students were primarily from Kenya (see Table 1). Because the sample was so skewed, a decision was made to use the Kenyan sample and drop the other participants from the analysis, resulting in a final sample size (N) of 170. This helps in approximating the similarity in culture and beliefs since Africa is a vast continent with many diverse peoples given the different tribes with diverse cultures in any country.

Table 1. Frequency and Percentages of the Participants by Countries of Origin

Country	Frequency	Percent
Kenya	170	88.54
Nigeria	10	5.21
Cameroon	4	2.08
Tanzania	3	1.56
Uganda	2	1.04
Mali	1	0.52
Ghana	1	0.52
Gabon	1	0.52
Total	192	100.00

Within this sample most of the students were between 19 and 23 years of age, lived in the United States between three and seven years, and were studying in medical or business related fields (see Table 2). A majority of the students were enrolled at a four-year university or two year junior college, and were evenly distributed among academic classification.

Table 2. Descriptive demographic information

Variable	Frequency	Percent
Age	40	23.5
19 – 23	121	71.2
24 – 30	6	3.5
31 – 40	2	1.2
41 – 50	3	1.6
51+	1	.5
Length of Stay		
Less than 6 months	10	5.9
Between 6 months and 3 years	42	24.7

Between 3 to 7 years	89	52.4
More than 7 years	29	17.1
Majors		
Medical	78	45.9
Business	47	27.6
Others	45	26.5
Classification		
Freshman	34	20.0
Sophomore	46	26.6
Junior	45	25.0
Senior	45	28.1
Schools		
Large University	78	45.9
4-year Colleges	29	17.0
Community College	63	37.1

As previously cited, goal orientation values by Midgley and her colleagues (2000) have yielded values for mastery goal orientation ranging from means of 4.03 to 4.57 and Cronbach alphas from .70 to .81. For performance approach, they found means ranging from 2.62 to 3.59 and Cronbach alphas from .55 to .60. Their performance avoidance values revealed means ranging from 2.56 to 3.16 and Cronbach alphas of .75 to .86. This study reflected means and alphas that were similar to those from that study.

Relationship between Possible Selves and Demographic Variables

Regression analyses were conducted to assess the relationship between possible selves and goal orientation and how they varied by racial-ethnic identity and gender among African undergraduate students in the United States while controlling for the demographic information (age, length of stay, majors, school classification, financial support by family and schools). A regression analysis identified the relationship between demographic variables and possible selves. Results from this analysis produced a significant model (see Table 3). The two significant predictor variables within this model are length of stay in the United States and attending a four-year university. A possible explanation is that the longer the students live in the United States the more they acculturate thereby becoming more individualistic. Individualism has been associated with goal directedness (Overman, 1997). The students' length of stay also means that they are more focused in the management of their possible selves as they age (Cross & Markus, 1991; Frazier, Hooker, Johnson & Kaus, 2000). Attending a four year university increases their possible selves balance since at the time they are in the university, they have declared their major and are able to anticipate their academic and career future hoped- for- selves more clearly.

This would indicate that as African students continue to live in the United States, their possible selves balance increase. This could be a result of them becoming more individualistic from societal influence. Cultural differences have been found to inform possible selves. According to Waid and Frazier (2003), individualism has been found to influence increase hoped-for selves while collectivism was found to increase feared possible selves. The longer the stay, the study suggests the more the enculturation into an individualist.

The finding that being in a large university increased possible selves than being in a Junior college can be explained by the fact that a majority of the students in junior colleges are taking pre-requisites and thus they may not have a good sense of future direction while many of the students in large universities have already declared their majors and most of them even have an idea of when they will graduate. Thus, studying at a major university significantly increases their balanced possible selves.

Table 3. Summary of Regression Analysis for Demographic Variables Predicting Possible Selves

Variable	<i>B</i>	<i>SE B</i>	β	ΔR^2
Length of Stay in US	.49	.10	.39**	
Financial Support by Family	-.07	.06	-.09	
Age	-.09	.12	-.06	
Four-Year University	.44	.21	.03**	
Two-Year Community College	.05	.22	.03	
Class Level	-.04	.07	-.04	
Medical Majors	.16	.18	.08	
Business Majors	.09	.20	.04	

Note: * $p < .05$; ** $p < .01$

$R^2 = .186$, $F(8, 161) = 4.585$, $p = .000$

Possible selves balance was regressed on the goal orientation sub-constructs of mastery goal orientation, performance approach goal orientation and performance avoidance goal orientation. This produced a significant main effect with mastery goal orientation as the only significant predictor variable of balanced possible selves. This indicates that an increase in mastery goal orientation is related to increased number of balanced possible selves (see Table 4). This is inconsistent with Anderman and colleagues' (1999) findings that possible selves were related to performance approach goal orientation and not mastery goal orientation. They explained their finding by claiming that during the middle school years' students and teachers in the United States focused on performance goals and less on mastery goals than in other years. These findings indicate that this is not the case for African students enrolled in college.

Table 4. Summary of Hierarchical Regression Analysis for Mastery Orientation Variable Predicting Possible Selves

Variable	<i>B</i>	<i>SE B</i>	β	ΔR^2
Length of Stay in US	.46	.09	.37**	
Four Year University	.40	.14	.21**	
Connectedness	-.14	.14	-.09	
Embedded Achievement	.04	.16	.02	
Awareness of Racism	.02	.08	.02	
Gender	.08	.14	.04	
Mastery Orientation	.47	.17	.21**	
Perform.Approach Orientation	.06	.09	.06	
Perform. Avoid. Orientation	-.06	.07	-.07	
				.043*

Note: * $p < .05$; ** $p < .01$;

Step 1: $R^2 = .167$, $F(2,167) = 16.699$, $p = .000$

Step 2: $R^2 = .168$, $F(6,163) = 5.492$, $p = .000$

Step 3: $R^2 = .211$, $F(9,160) = 4.748$, $p = .000$

CONCLUSION

Demographic data indicated a significant positive relationship between length of stay in the United States and balanced possible selves. This is indicative of their acculturation into the American individualistic society. Demographic data further indicated a significant relationship between the type of educational institution attended in the United States and the number of balanced possible selves. These results appear to indicate that studying at a major research university significantly increases the number of balanced possible selves.

Multiple regression analyses indicated that there is a significant positive relationship between balanced possible selves and mastery goal orientation. It is conceivable that as students balance their possible selves, they think about their hoped for selves and feared selves to balance then they develop strategies to get to the hoped for selves and avoid the feared selves.

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